# Landscapes of Urban Health Inequities in Saint John, New Brunswick

by

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Bachelor of Arts, major in Political Science, 2021.

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

Master of Arts

in the Graduate Academic Unit of Political Science

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This thesis is accepted by the Dean of Graduate Studies

THE UNIVERSITY OF NEW BRUNSWICK

August 2023

## Abstract

This master's thesis contributes to the urban politics and health literature through an examination of health inequities at the neighborhood level in Saint John, New Brunswick. The thesis draws on eco-social theory and critical political economy. The thesis problematizes the mainstream perspectives in urban design and health policy because they do not address the way power relations shape the city and urban residents' health. The research examines how structures of power become embodied into people's health through the policymaking that shapes the city. The thesis argues that the sprawled urban design in Saint John under neoliberalism has contributed to the rise of health inequities through gentrification and the prevalence of dominant sectors of the global economy in the shaping of cities at the expense of marginalized urban residents' health. The research relies on a survey conducted with urban residents across various neighborhoods in the city of Saint John.

## Acknowledgments

A big thank you is extended to Dr. Joseph Aicher. Dr. Aicher helped inspire this research through his work in both medicine and urban planning and funding the Health and Environmental Research Experience (HERE) Award, in memory of his late sister Rosemary. The thesis was also supported by the Social Science and Humanities Research Council (SSHRC) funding for the projects 430-2017-00747 and 892-2021-3002.

I also want to extend my deepest gratitude to the community organizations that let us use their space to conduct the surveys. At the heart of this work was our community members. The wealth of knowledge you provided this research cannot be emphasized enough. I hope I do your voices and experience justice in this work, while keeping in mind no one tells your story better than you do.

This work would not have been possible without Dr. Hepzibah Munoz Martinez, my supervising professor for my thesis and co-investigator. She has been one of my biggest supporters in this work.

I am incredibly lucky to have been supported by my parents, Steve and Gloria, and my brother, Alex, during this process. They have always been my biggest cheerleaders and believed in my vision. Lastly, I want to thank my partner, Michael, and my (bonus) child, Karter. Michael grew up in Crescent Valley and has always been my sounding off board, providing deep insight into the historical and present dynamics of the North End. Thank you to Karter, the best kid anyone could ever have the privilege to meet, who sat in coffee shops and adventured in urban spaces with me while I worked on this thesis.

# TABLE OF CONTENTS

# List of Figures

# Chapter One

## Introduction: Health-City Nexus

Health inequities in Canadian cities have been on the rise since the 1990s, particularly in the province of New Brunswick (Canadian Institute for Health Information, 2015). This rise in health inequities coincides with the rise of neoliberalism within Canadian federalism. The city of Saint John, located in the province of New Brunswick, has been characterized by high levels of poor health outcomes and rising rates of poverty (Human Development Council, 2023). The urban design of Saint John has historically relied on sprawl (City of Saint John, 2014). In recent years the city tried to increase density which has resulted in gentrification that has exacerbates conditions of marginalization (City of Saint John, 2014). This research seeks to understand the way urban design and policymaking impact health inequities and conditions of social marginalization in the city of Saint John. In particular, the research asks how are the urban design and policymaking in Saint John from the 1990s to 2022 implicated in the distribution of health inequities within inner city neighborhoods? The research focuses on urban issues since the 1990s as this coincides with the emergence of neoliberalism in Canada. The thesis argues that the sprawled urban design in Saint John under neoliberalism has contributed to the rise of health inequities through gentrification and the prevalence of dominant sectors of the global economy in the shaping of cities at the expense of marginalized urban residents' health.

The topic of urban design and policymaking in the Maritime province of New Brunswick has been studied in isolation from questions of health. Additionally, research on health has neglected to consider the urban context in which city residents live. One

research study conducted in 2009 by the Conservation Council of New Brunswick investigated the distribution of disease, in particular respiratory diseases, across Moncton, Saint John, and Fredericton. The research revealed that Saint John had the highest rate of respiratory diseases (i.e., lung cancer) when compared to Fredericton and Moncton, and rates that were higher than the national average (Milewski & Liu, 2009). This research however did not focus on the design of the city. Rather, the research pointed to large industry polluters and employment patterns within the city. Other research on Saint John and urban design has focused on decision-making in the city during the 20th century, and the rise of sprawled design during this period (Horak & Young, 2012). However, this research does not answer questions regarding the health of urban residents and conditions of marginalization. Rather, it focuses on the decision-making processes and actors situated within the process that hold power (i.e., politicians, civil servants, industry, and business professionals, etc.).

This master's thesis seeks to contribute to the urban politics and health literature through an examination of the distribution of health inequities at the neighborhood level in the city of Saint John. The thesis draws on eco-social theory and critical political economy. Eco-social theory provides a framework of analysis that seeks to understand the way the body politic (i.e., policies, processes, programs, decisions, systems, and hierarchical structures) is downloaded and embodied in the health of urban residents. Health in this thesis is not merely the absence of disease but rather a state of complete physical, mental, and social wellbeing (World Health Organization, n.d.). Political economy provides insights into the way economic forces shape city politics and their

design. The research seeks to showcase how larger structures of power become embodied into the health of urban residents through policymaking shaping the city.

The discussion on urban design, policymaking, and health inequities within the city of Saint John is important for three reasons. First, the post-World War II construction of urban neighborhoods have resulted in urban sprawl (Horak & Young, 2021). Urban sprawl has contributed to the erosion of the natural environment and increasing conditions of marginalization through car-centric design and single-purpose neighborhoods (Montgomery, 2013; Jacobs, 1961; Frumkin, Frank, and Jackson, 2004). This form of urban design has implications on the health and access to essential services of urban residents. Sprawl has historically been positioned as a design mechanism to prevent poor urban health outcomes in city cores (Moses, 1945; Jacobs, 1961; Cervero, et., al., 2017). However, sprawl has contributed to the lack of access to essential health promoting resources and mobility for residents without cars (Jacobs, 1961; Coburn, 2013; Brenner & Theodore, 2002). Sprawled urban design also depletes the governments' (i.e., municipal and provincial) ability to service the city (Hortas-Rico, and Solé-Ollé, 2010; City of Saint John, 2014).

Second, in response to urban sprawl, the city of Saint John has seen the rise of gentrification in neighborhoods historically characterized by poverty and marginalization (CBC, 2020). Gentrification in critical perspectives is defined as the reliance on the displacement of urban residents and demolition of infrastructure that are considered to be undesirable (Bâelanger, 2012). These displaced urban residents and demolished infrastructure are replaced by higher income residents and quality infrastructure, respectively (Bâelanger, 2012). The justification for gentrification is

based on the need to increase density and the tax base. This has contributed to the displacement of those who have historically resided in these neighborhoods (Bâelanger, 2012).

Third, neoliberalism exacerbates these environments of sprawl and gentrification. Neoliberalism refers to policies that privilege the market as the mechanism for service provision which requires incentives such as no to low taxation and regulation, and public subsidies to large companies (Brenner & Theodore, 2002; McKenna, 2015; Harvey, 2005). Governments are discouraged from taxing and regulating large companies and encouraged to maintain balanced budgets. The result is the governments withdrawal from providing the public services, such as housing and transportation (Brenner & Theodore, 2002; McKenna, 2015; Harvey, 2005). These services then become dependent on powerful private actors from dominant sectors of the global economy which are concerned with profit rather than affordability. Governments then prioritizes setting attractive investments sites for private actors from dominant sectors of the global economy, in particular real estate, industrial factories, and financial service and companies (Brenner & Theodore, 2002; McKenna, 2015; Harvey, 2005). In turn, the latter's interests become the centre of policy making.

Due to these three reasons, an analysis of both the health inequities and urban design in the city through eco-social theory and political economy is important. Health analyses devoid of the political and economic factors disconnect the health of urban residents from the injustices they experience. This has resulted in blaming those urban residents whose realities have been shaped by these power structures. It is important to differentiate between health inequities and socio-economic inequalities. Health

inequities are structured differences in health outcomes of different groups (Birn, Pillay, Holtz, & Basch. 2009; World Health Organization, 2010). Whereas socio-economic inequalities refer to the differences in social class, education, housing type, and household income, across groups (Woods, Rachtet, & Coleman, 2006). Socio-economic inequalities contribute to health inequities. The compounding effect of systems of marginalization which shape socio-economic inequalities become embodied in people's health, resulting in health inequities (Birn, Pillay, Holtz, & Basch. 2009).

The research was inspired by my family and my own activism in the province of New Brunswick. My parents grew up in Saint John during the 1960s-70s (Figure 1). My paternal grandmother Charlotte passed away 20 years before I was born. My attachment to her has always been through visiting places I knew she lived and hearing stories about her life. My dad's family lived in the Central Peninsula (Figure 2) before moving outside of the city, Red Head, in the 1970s. I question whether my grandmother ever felt lonely and how being so far away from the city core without a car made her feel.

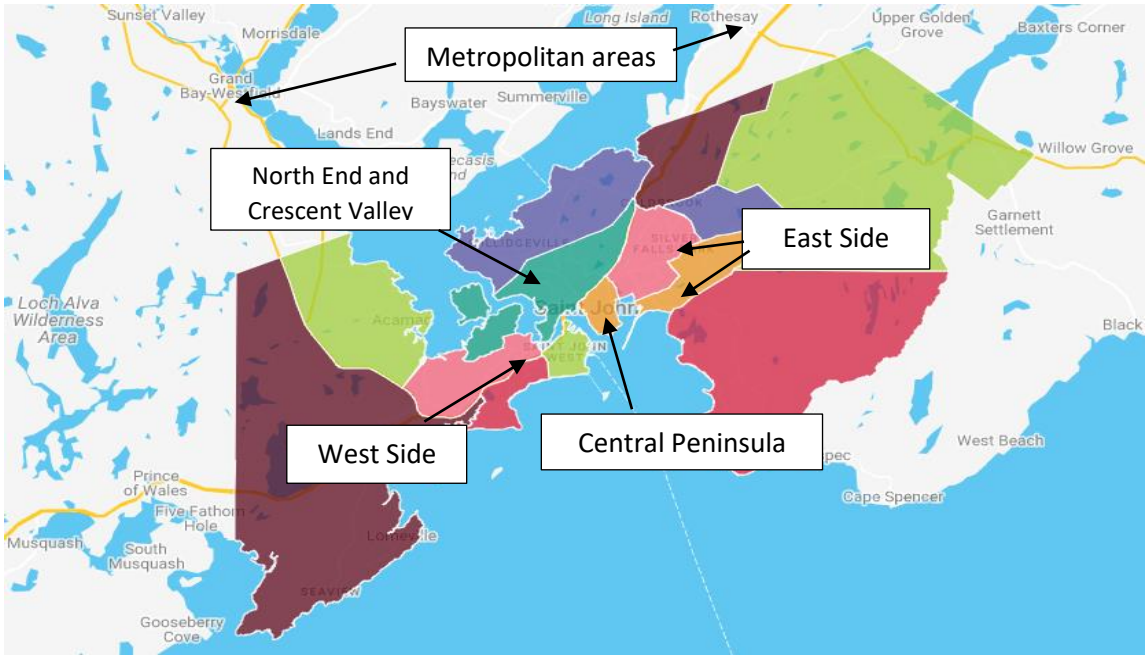


*Figure 1 Map of the City of Saint John. The areas of the map in colour mark the municipal boundary lines of the city.*

My mother, on the other hand, was born in Bloomfield, Prince Edward Island and lived on the family potato farm until she was four years old. My mother's family had to leave the farm and move to the city of Saint John to escape poverty. They landed in the Old North End (also known as Indiantown) of the city and lived in a flat. The Old North End of the City had a mix of multi-unit residential, commercial, and recreational spaces with many intersecting blocks (Figure 2). Many families were living in overcrowded conditions in the Old North End. In my mom's experience, her family of nine lived in a two-bedroom flat. My grandfather traveled often for work which meant my grandmother was caring for seven children on her own. My maternal grandmother Myrtle struggled with physical disabilities for all her life after contracting Polio as a child. Living in the Old North End meant she was within a short walking distance of everything she needed.

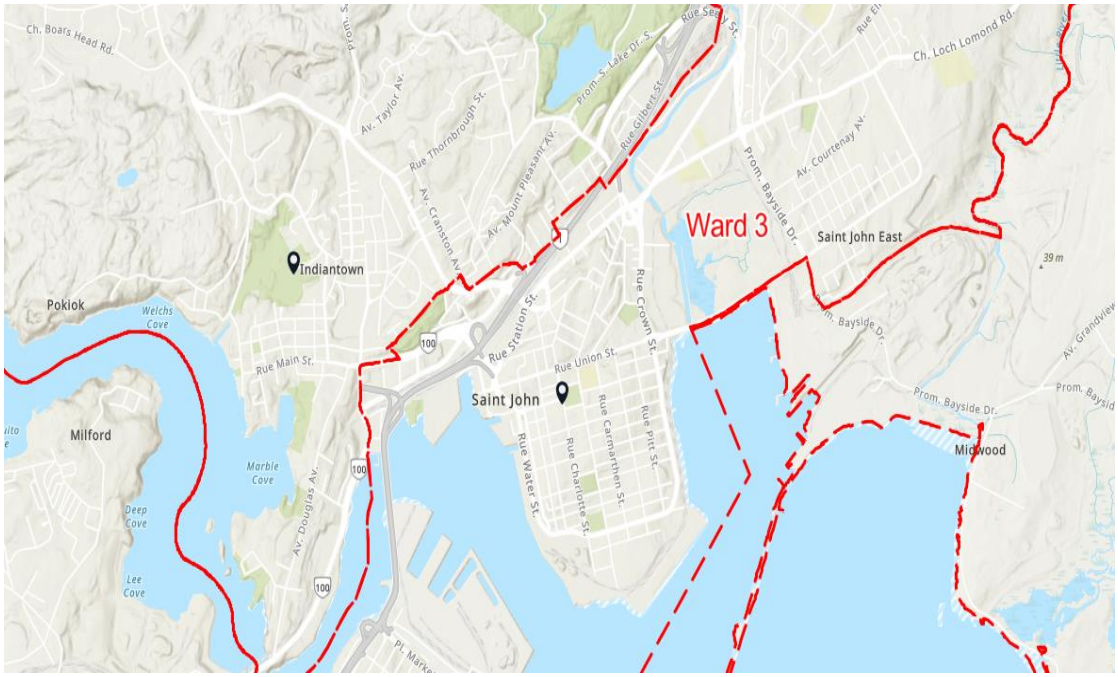


*Figure 2 Map of the Old North End, Central Peninsula and surrounding neighborhoods.* The Pin drop beside "Indiantown" is part of the Old North End. The Pin drop beside "Saint John" refers to the Central Peninsula. The word "Ward 3" is situated on the East side.

Both of my parents' families left the Central Peninsula and North End during the period of urban renewal in Saint John (Wright, 2018). Urban renewal during the 1960s-70s led to the redevelopment of inner-city neighbours which involved slum clearing and the rise of suburban communities (Tucker, 2019). The East Side became an attractive place for families due to the presence of single-family homes, green lawns, and ease of connection by car to other areas of the city (Figure 2). My mom has told me that my grandmother Myrtle would come to regret this move as she was isolated from the resources they needed. My parents' stories, and more specifically, their interpretations of both my grandmother's experiences of relocating to the East side have inspired me to understand the historical context of Saint John and the rise of sprawled urban design in the city.

Additionally, my own activism and experiences have inspired this research. In March of 2020, people in Canada were forced to stay home because of the pandemic measures. Many provincial governments, including New Brunswick, placed moratoriums on evictions from rental housing to ensure people could remain housed and isolated while mobility restrictions remained in place. During this time, New Brunswick became an attractive place to live and invest in rental housing. Landlords began listing their apartment buildings and selling them for high prices. This was the beginning of extreme rent increases and the rise of evictions, namely evictions to conduct renovation. The moratorium on evictions became a short-lived venture in New Brunswick, and by May 2020, the moratorium was lifted. The result was widespread evictions of low to moderate income tenants who were already struggling to stay housed prior to the pandemic.

In my own experience as a renter, my partner, bonus son, and I were living in a two-bedroom basement apartment on the East side of the city. Our apartment was filled with black mold, water damage from flooding every time there was heavy rain, and drafts from the deteriorating window framing. Yet, our rent was reasonably affordable which was the main reason we continued to live there. Once the COVID-19 pandemic hit and lockdowns were enforced, we became trapped in an apartment that we could not leave. I worried how living in this apartment could be exacerbating my bonus sons' asthma. This stress was also deteriorating my own physical and mental health.

In May 2020, I began an internship with a local food bank, and I joined the board of directors and volunteered weekly onsite. In this experience it became more apparent how my own issues were more common than I expected when speaking with community

members at the food bank. In January 2021, I saw a posting about attending an online meeting to help organize around tenant rights and the right to housing. The meeting was about the creation of a New Brunswick tenants union called ACORN NB, a provincial chapter of a national tenant's union that lobbied for social and economic justice. After that first meeting, we began organizing online and in-person protests. We called for rent control, a ban on renovictions, improvements to health and safety standards, and an overhaul of the New Brunswick Residential Tenancies Act (RTA) to take a human rights lens. In May of 2021, the government of New Brunswick published a rental review report and stated there is no housing crisis in the province (Government of New Brunswick, 2021). However, in my work with ACORN I was actively seeing the housing crisis play out across communities in the province. In particular, I was seeing the connection between unaffordable and unhealthy housing, and the negative impact of urban design on physical and mental health. I have gone into tenants' homes within days of them receiving rent increases, renoviction notices, and instances where they need to file complaints. I have witnessed firsthand entire buildings of people be renovicted with little recourse to keep their homes. I have seen how inequities in urban landscapes create mental distress. I have heard contemplations of suicide from tenants who are at risk of homelessness. I have heard from seniors and persons with disabilities who cannot find affordable and accessible places to live. I have heard from parents who have become homeless, and their children are now in foster care. These housing conditions become compounded by urban design and planning that does not consider the most marginalized, such as lack of transportation, childcare spaces, and income equality.

I have also sat in many "consultation" meetings with government on housing and have testified before a federal parliamentary committee to represent tenants' interests. Here, we are often treated as part of a checklist for government communications teams to state tenants' rights groups were consulted. In many cases, we have been invited on short notice, with meetings being scheduled for only thirty to forty-five minutes. And while we were able in most circumstances to provide feedback, there is no implementation of our suggestions in many cases. Additionally, I have seen how public consultation is only available to those who have access to a device and internet, can read the questions and provide responses, and are aware of the survey. The most marginalized are often not consulted. This is important for issues of urban planning and policymaking because this lack of consultation with marginalized community members can intensify health inequities.

With this knowledge as an activist, a resident of Saint John, and a political science student, my methodology seeks to incorporate these intersecting experiences. Specifically, I will use the methodologies of Feminist Standpoint Theory (FST), Critical Ethnography, Action Research, and Activist Scholarship. FST positions knowledge as being socially situated (Bowell, n.d.; Kourany, 2009). It theorizes that marginalized groups are socially situated in ways that allow them to be more aware of issues than non-marginalized groups (Bowell, n.d.; Kourany, 2009). Marginalization refers to the sociopolitical process that produces the exclusion of individuals or groups who are unable to meet basic needs, access services, or engage in systemic processes (Hall, 1999). Thus, marginalization is the consequence of uneven power relations that produce oppressive systems and conditions of vulnerability (Hall, 1999). FST prioritizes the

experiences of marginalized populations in research on power relations. It places emphasis on the relationships between political and social power and knowledge (Bowell, n.d.; Kourany, 2009). This methodology has allowed me to centre the experiences and knowledge of marginalized community members as the focal point of this research.

I use FST to understand the experiences and health of marginalized groups in Saint John, New Brunswick, because this understanding is lacking in policymaking. Although the research relies on FST methodology, I place emphasis on conditions of marginalization in relation to poverty and income rather than gender or race. I focus on marginalization in relation to income as this research serves as a starting point to deconstruct the power relations and notions of neutrality in urban policymaking. However, the research recognizes that gender and racialization are central to issues of urban policymaking and notes this as a limitation of the study. It is important to recognize that feminist methodologies, such as FST, is not exclusive of research that focuses on gender and/or women. In particular, FST has been used in research on economic inequality because it centres the experiences of the most marginalized (Adrill, 2019). Thus, this research positions feminist theories such as FST as central to understanding issues of marginalization across systems of oppression.

FST also requires that I use reflexivity to both acknowledge and deeply understand and deconstruct my own positions of power and privilege within this research process. My experience is shaped by my intersecting identities of power. I am a cis-gendered woman from a middle-class settler-European ancestry (i.e., white) and have a post-secondary education. I work in community social pediatric research as my day job

where I have been given trauma informed trainings. Indeed, historically, and presently political research has largely centered experiences and perspectives of people who look like me. Without being reflexive, I risk as a researcher replicating the problematic power relations that this research actively seeks to challenge. I also risk causing harm or retraumatizing participants without being trauma-informed in this process. The conditions of poverty and marginalization are innately traumatic. While doing the surveys, I utilized trauma informed trainings. I did not set a number of minutes for how long I would sit with someone to do the survey. Although the surveys *could* have taken 15 minutes to complete, in many cases I sat with participants for multiple hours, listening to their stories and experiences from a trauma informed perspective. This requires following the participants lead, validating their feelings, picking up on queues of being overwhelmed, and pausing the survey to take breaks for coffee or stepping outside with them while they smoked a cigarette. I did not want my participants to feel that I was here to simply extract knowledge and leave them to pick up the pieces of discussing, in some cases for the first time ever, their trauma.

The methods of the survey intended to produce primarily quantitative analysis. The survey included 30 questions with a mix of multiple choice, multi-select, and free text responses (Appendix: Survey). The survey was conducted in person to mitigate digital or literacy barriers and to answer questions of participants while they did the survey. Participants were given the option to conduct the survey on their own or with the researcher. Once I began conducting the surveys, it became apparent that participants wanted to elaborate on their responses by telling me about their experiences. The survey in many cases became ethnographic work. Through critical ethnography, which

included participant observation and an ethnographic journal, I was able to document the stories and experiences of participants. Critical ethnography is a research approach that seeks to challenge power relations within society to produce social change (Palmer & Caldas, 2015). With this methodology I relied on participant observation which is the process where the researcher observes, records, and analyzes the participants activities and/or statements (Palmer & Caldas, 2015). In this research, I recorded in my written research notes the participants verbalized statements. However, I did not use a recording device during this process and therefore transcript analysis was not possible. Rather, the research notes were analyzed to identify themes that were emerging within the study that were not captured in the quantitative responses. This provided further context to the experiences behind the quantitative data.

Action research allows me to contextualize and question the systems of power that are currently in place. Action research work involves looking retrospectively at why current policies, systems, and practices were put in place (Sousa & Au-Yong-Oliveira, 2021). I also include activist scholarship. This allows me to draw on my own activism experiences in the city to support the knowledge of participants in this research (Koirala-Azad & Fuentes, 2009). My activism has deeply shaped my understanding about the system, the politics of decision making and policy development, and the real-world implications of inequitable policies.

The thesis is organized in the following way. Chapter two explores the dominant debates and perspectives in the literature on urban design and health. Specifically, it presents the market-oriented and institutionalist perspectives in urban design literature, and the biomedical and behavioural model in understanding health. The chapter critiques

these perspectives and questions how these perspectives have supported sprawl and gentrification with negative consequences on health. The chapter shows how political economy and eco-social theory allows for a critical understanding of the relationship between urban design and health. In this chapter, I argue that decision-making at various levels of government has relied on institutionalist and market-oriented perspectives which have contributed to sprawl and gentrification. I also argue that biomedical and behavioral models of health and disease do not consider the embodiment of structures of power and the body politic as contributing factors to disease and illness. Government reliance on these perspectives has enabled the privatization of cities and urban infrastructure, resulting in increased conditions of marginalization and weathering of urban residents' health.

Chapter three shows how the Canadian federalist system under conditions of neoliberalism has contributed to increased marginalization of urban residents by reproducing sprawl and gentrification. I discuss the division of powers in relation to urban design and its transformation under neoliberalism. I present the decline in spending and investment into public services by federal and provincial governments during the 1980s and 1990s onward. I begin by looking at Canada's integration in global economy through neoliberal policies. This has also included federal and provincial governments downloading responsibility onto municipal governments. I illustrate this through the case study of the February 6$^{th}$, 2023, Saint John Common Council meeting. I argue that since the 1990s the Canadian federal and provincial governments have downloaded more responsibility onto municipal governments, which hold less funding, power, and resources. This has led to the reliance on powerful private actors to shape

and provide urban infrastructure. I review the larger structures of power to contextualize the way people live in cities and how policymaking is embodied into people's health.

Chapter four presents the results from a survey conducted in Saint John, New Brunswick from May 2022 – May 2023. Recruitment of participants (N=108) for the survey was conducted in collaboration with local community organizations. A concerted effort was made to ensure surveys were collected from urban residents living in neighborhoods with high levels of marginalization. The chapter seeks to examine the way urban design (specifically, sprawl and gentrification) and policymaking are implicated in the distribution of conditions of marginalization in neighborhoods in Saint John, New Brunswick and how these processes are embodied in the physical and mental health of marginalized urban residents. I argue that participants experience in the city under conditions of neoliberalism results in a high level of health inequities such as hypertension, diabetes, heart disease, and anxiety and depression.

In the concluding chapter I summarize the discussion of each chapter and how they support the main argument of the thesis. I position the content of this thesis into the context of government policymaking and the need to engage marginalized groups in the process. I reiterate how current policymaking under neoliberalism that draw on market-oriented and institutionalist perspectives of urban design and biomedical and behavioral models of health do not consider the urban-health nexus and power relations. To this end, the next chapter reviews the dominant debates in urban design and health and presents alternative frameworks of analysis which consider the urban-health nexus.

# Chapter Two

## Exploring perspectives in Urban Design and Policy

The chapter shows how urban spaces are often analyzed through market-oriented and institutionalist perspectives, which do not to consider the consequences of urban design on health. Additionally, the chapter presents the mainstream perspectives of health, namely biomedical and behavioral models. The latter neglect to consider the embodiment of power relations. In this chapter, I argue that policymaking related to urban issues has relied on institutionalist and market-oriented perspectives which have contributed to sprawl and gentrification. I also argue that biomedical and behavioral models of health and disease do not consider the embodiment of structures of power and the body politic as contributing factors to disease and illness. Government reliance on these perspectives has enabled the privatization of cities and urban infrastructure, resulting in increased conditions of marginalization and weathering of urban residents' health.

The chapter presents the market-oriented perspectives and its emphasis on efficiency and neutrality which ignores the need for government intervention and understanding the power dynamics of urban landscapes. Second, I discuss how the institutionalist perspectives focuses on the design of political and economic institutions, aesthetics, and comprehensive urban plans which overlooks power relations. I examine the biomedical model of health and its focus on family history of disease and genetics which does not account for how the urban environment contributes to family histories of illness. I also present the behavioral model's focus on individual lifestyles, choices, values, and habits which neglects how choices and lifestyles are shaped by the power

relations and its manifestation in urban design. The chapter shows the limits of these approaches in understanding the way power is manifested and embodied into health. For that reason, the chapter draws from eco-social theory and political economy to address the health, economic, and political power relations.

**Perspectives in Urban Design: Sprawl and Gentrification**

In Canada, sprawl and gentrification have historically guided urban planning. Urban sprawl is a form of design where the city is extended over a large geographic area (Seliske, Pickett & Janssen, 2012; Frumkin, Frank, & Jackson, 2004). This urban design relies heavily on private automobile as the main form of mobility in the city. Gentrification is a response to sprawl and includes the rebuilding or reshaping of existing neighborhoods in city cores through design and displacement (Bâelanger, 2012). Sprawl and gentrification are seen in different ways by the market-oriented and institutionalist perspectives.

The market-oriented approached has been prevalent in Canada since the mid 1900s. It places emphasis on the market as a mechanism to solve urban issues and guide planning practices in the city (Green, Filipowicz, LaFleur, & Herzog, 2016; Moses, 1945). Proponents of the market-oriented approach encourage limited government involvement in city planning outside of providing minimal services such as water and sewage (Gordon & Lee, 2003; Pennington, 1999). It places emphasis on supply and demand mechanisms to set the rental rates of housing and relies on private companies to design and construct the city (Gordon & Lee, 2003; Pennington, 1999; Bauer, 1945; Moses, 1945). In this process, private actors such as developers have the power to influence and build critical features of the city to promote economic growth in the form

of industries and housing development (Green, Filipowicz, LaFleur, & Herzog, 2016; Bauer, 1945; Moses, 1945). By increasing the level of private investment within the city, the market-oriented perspective argues this will automatically improve living conditions through job creation (Filipowicz, 2018; Green, Filipowicz, LaFleur, & Herzog, 2016; Bauer, 1945; Moses, 1945).

Proponents of sprawl assume that suburbs allow people to be isolated from the congestion of business districts and industrial parks, while remaining easily connected by private automobile (Filipowicz, 2018; Goldberg & Horwood, 1980; Moses, 1945). By using zoning and land-use planning, the market-oriented perspective argues this will protect urban residents health and quality of life as single-use residential neighborhoods offer more greenspace, privacy, and less exposure to pollution (Goldberg & Horwood, 1980; Moses, 1945). In other words, sprawl is considered central to protect people's health. This is evident in arguments blaming the core of cities as a core issue for crime, poverty, and disease. Within this view, sprawl design lowers density, and individuals are given more space to live through the sale of private property and single-family homeownership (Filipowicz, 2018; Goldberg & Horwood, 1980; Moses, 1945).

The market solutions to urban issues involve removal and displacement of waste, infrastructure, policies, and people in existing neighborhoods (Moses, 1945). This refers to gentrification, namely the process through which people and infrastructure deemed as barriers to development and growth are displaced (Filipowicz, 2018; Moses, 1945). This takes the form of land use planning to demolish slum housing and replaces it with expressways to decrease congestion of traffic or the development of high-rise buildings by private developers for wealthier income groups (Palmer & LaFleur, 2021; Moses,

1945). The assumption is that such displacement of people leads to economic stimulus and provides benefits to the city through decongestion and higher income tax bases (Filipowicz, 2018; Bauer, 1945; Moses, 1945). Gentrification in the market-oriented perspective also seeks to rebuild urban residential neighborhoods in the city core by removing derelict housing and replacing it with luxury housing for higher income groups. The market-oriented solution assumes this will improve quality of life in the city by improving housing conditions and attracting higher income groups to the city which will increase density and spur job creation and economic activity (Plan SJ, 2011; Moses, 1945). Proponents of the market-oriented perspective also argue that increasing the supply of luxury housing will simultaneously increase the presence of affordable housing because it will remove the demand for traditionally affordable buildings (GNB, 2021; Palmer & LaFleur, 2021; Green, Filipowicz, Lafleur, & Herzog, 2016).

The use of market-based solutions is connected to assumptions around neutrality. In other words, urban policy such as the intervention of private actors is seen devoid of power relations (Gillis, 2021; Higgs & Close, 2005). Assumptions of neutrality also rely on the use of standardized methods to analyze neighborhoods and diagnose issues (Gillis, 2021; Higgs & Close, 2005; Thacher, 2015). Here, neutrality means that urban space and policymaking does not have a historical, economic, and political context (Thacher, 2015; Gro Sandkjaer & Falleth, 2014). Technological fixes then becomes a tool to respond to the issues by implementing land-use planning, reducing taxes that hinder development, and/or zoning practices to treat the urban illness (Gillis, 2021; Higgs & Close, 2005).

The institutionalist perspective began to emerge in Canada toward the end of the 1990s and it also promotes sprawl and gentrifying urban design (Andrew & Graham, 2014; Galina, 2010). The institutionalist perspective places emphasis on the design of institutions, comprehensive urban plans, and aesthetics (Allan, Gordon, Hanniman, André, & Young, 2018; Galina, 2010). The institutionalists perspective contends that the rules that govern urban planning need to promote new urban developments, such as housing (Andrew & Graham, 2014; Scott & Roweis, 1977). Institutions, such as municipal administrations, have a vested interest in land development by powerful private actors because the former lacks the resources to shape the city. Therefore, the government and government-related institutions need to create conditions and incentives that encourage the role of the private sector in urban development (Allan, et., al., 2018; Graham & Andrew, 2014; Weinstock, 2014).

The institutionalist framework also places emphasis on the professionalization of urban planning, namely the increasing role of  experts and/or with professional credentials in the field of urban planning, such as developers, industry, and politicians (King, 2014; Scott & Roweis, 1977). In this view, urban planning becomes concentrated in the hands of a few expertise's to bolster growth in the city (Kudla, 2022; Gillis, 2021; Hoyt, 2006). In Canada, Business Improvement Districts, City Council Committees, and the Federation of Canadian Municipalities play this role. These bodies are comprised of private actors and city councillors with a focus on city planning and the development priorities of the city (Kudla, 2022; Gillis, 2021; King, 2014; Hoyt, 2006).

Emphasis in the institutionalist perspective is also placed on comprehensive city planning to create districts that are zoned by purpose for residential, industrial, and

commercial (Gillis, 2021; Weinstock, 2014; Scott & Roweis, 1977). In this perspective, institutions use zoning districts by purpose on the basis that certain parts of the city should serve specific purposes to maintain social order (Green, Filipowicz, Lafleur, & Herzog, 2016; Weinstock, 2014; Scott & Roweis, 1977). Here, land-use planning ensures that zoning in the city promotes appropriate social behaviors to mitigate crime and poverty and to allow access to resources such as locating grocery stores within close driving distance to residential neighborhoods (Green, Filipowicz, Lafleur, & Herzog, 2016; Scott & Roweis, 1977).

The institutionalist view promotes aesthetics to create pleasing architecture as a mechanism to improve social conditions through physical design (City of Saint John, 2014; Scott & Roweis, 1977). This can be considered a form of "moral environmentalism," as better design and aesthetics is central to improving living conditions in the form of crime reduction or reduction in poverty levels (City of Saint John, 2014; Bertaud, 2018; Coburn, 2009; Scott & Roweis, 1977). In some cities, these interventions can take the form of parks or access to waterfront locations. Here institutional incentives promote aesthetically clean, innovative, and high-quality architecture to draw people to the city core to engage in economic activity of consumption, production, or distribution (Bertaud, 2018; Government of New Brunswick, 2021; City of Saint John, 2014).

On the one hand, the market-oriented perspective is primarily concerned with removing barriers (i.e., people, infrastructure, and policies) that hinder economic growth promoted by private actors (Bertaud, 2018; Filipowicz, 2018; Goldberg & Horwood, 1980; Moses, 1945). Thus, the market-oriented perspective assumes that by allowing

private actors to control the type of development and price-setting, this will increase access to jobs, better housing, and the quality of life of urban residents (Bertaud, 2018; Filipowicz, 2018; Goldberg & Horwood, 1980; Moses, 1945). Further, the perspective emphasizes the need for space to be viewed through the lens of neutrality which relies on standardized processes to diagnose urban issues (Thacher, 2015). On the other hand, the institutional perspective is concerned with the design of institutions dedicated to promoting comprehensive physical plans for development that leads to social order, crime and/or poverty reduction (Green, Filipowicz, Lafleur, & Herzog, 2016; Weinstock, 2014; Scott & Roweis, 1977). While the two perspectives are distinct, the outcomes they produce are gentrification and sprawl that affects health and increases socio-economic inequality.

Both perspectives focus on the expansion of high-speed roadways and highways for efficiency of travel and require limiting diversity of primary functions in a space (Walmsley & Kading. 2018; Montgomery, 2013; Seliske, Pickett, and Janssen, 2012; Jacobs, 1961). Limiting diversity of primary functions requires zoning laws to enforce land-use planning for specific functions, such as residential, industrial, commercial, and green space. This creates a reliance on private automobiles to connect with the diversity of services and uses the city offers (Jacobs, 1961; Montgomery, 2013). Thus, efficiency of travel through the city is dependent upon urban residents having private automobiles.

Both perspectives justify gentrification by emphasizing urban spaces as lands for private actors' development and investment. This neglects to consider that existing urban spaces are people's homes, spaces of caring, and social networking (Thacher, 2015). Arguments in favor of gentrification do not fix sprawl but rather exacerbate it.

Studies have noted that gentrification activities in the market-oriented perspective do not increase affordability through supply and demand of private market rentals (Hochstenbach, 2017; Coburn, 2013; Martin, 2014; Davis, 2007; Palen & London, 1984). Rather, they contribute to low- and moderate-income renters being pushed further out of the city to the periphery where even fewer resources are available (Hochstenbach, 2017; Bâelanger, 2012; Coburn, 2009; Davis, 2007; Brenner & Theodore, 2002). Similarly, the institutionalist perspective's gentrification tactics of "beautifying the city" have also resulted in low-income renters being displaced. This is because the actions of institutionalists are also based on the concept of diagnosing urban ills through a neutral lens. As the space changes without the specific intention of remaining affordable members of those communities are displaced as the neighborhood begins to attract higher-income groups (Hochstenbach, 2017; Martin, 2014; Bâelanger, 2012; Palen & London, 1984). As a result, sprawl becomes replicated through the exchange of low-income renters onto the periphery of cities, with higher income groups being concentrated at the centre (Bâelanger, 2012; Verderber, 2012; Coburn, 2009; Davis, 2007; Brenner & Theodore, 2002).

Both institutionalist and market-oriented frameworks incorporate ideas of "neutrality' into urban planning which is framed as an "abstract analytical concept rather than a sociohistorical phenomenon" (Scott & Roweis, 1098, 1977; Gillis, 2021; Moses, 1945). In this view, planning is a process of applying rational decision-making procedures to guide social change (Scott & Roweis, 1977). As such urban space is seen as neutral and therefore universal methods of urban planning can be applied to the landscape through a goal-oriented process shaped by experts (Scott & Roweis, 1977). In

turn, policymaking dismisses the experiences of city dwellers which results in consultation processes that do not contextualize the needs of the community in the planning process (Gillis, 2021). Consultation becomes a formality rather than real engagement because expertise on urban spaces is not extended to residents. Rather, expertise on how urban spaces should be used remains with private actors that shape the design of the city due to their social, political, and economic power. This contributes to gentrification because consultative processes place less value on the perspectives and needs of marginalized urban residents. The result has been the centering of powerful private actors as knowledge holders in the planning process while neglecting urban residents, particularly those that are socially excluded and/or live in poverty (Gro Sandkjaer & Falleth, 2014; Coburn, 2013; Birn et., al, 2009; Crume, 2019). Such notions of neutrality conceal the social and power relations behind the design of urban spaces (Brenner & Theodore, 2002; Butler, 2012; Thacher, 2015).

**Perspectives in Health: Biomedical and Behavioral**

There are two mainstream frameworks that examine health issues, namely the behavioral and biomedical models. The behavioral and biomedical models view health outcomes as the direct result of individual behaviours, biology, values, and choices (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). On the one hand, the behavioral model places emphasis on health as the result of individual or household choices, lifestyles, values, and ultimately behaviours (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). For example, a diagnosis of diabetes would be viewed as the result of poor choices and lifestyle habits such as unhealthy diets, sedentary lifestyles, and other commonly known risk factors. In the behavioral model practitioners may encourage patients to modify

their diets or take up more exercise to reflect a healthier lifestyle (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). On the other hand, the biomedical model places emphasis on biological causes of diseases (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). In the case of diabetes, family history or genetics may be considered as the risk factor, which is viewed to be compounded by the individual's lifestyle choices. In this model, the body is viewed as a machine that can be fixed through technological remedies such as insulin injections (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). Yet, such technological fixes do not get to the root causes of preventing diseases.

The behavioral and biomedical models have historically been used to justify the construction of hierarchical power structures for gender, class, and race (Birn et., al, 2009; Krieger, 2011; Krieger, 2021). For instance, any health issues that arise in Black households reliant on government assistance become associated with "lifestyles" (Birn et., al, 2009; Block, 2015; Lewontin, Rose, & Kamin, 2017). In this same example, the biomedical model has been used to associate dark bodies with higher pain tolerances which has been used to dismiss or minimize pain (Birn et., al, 2009; Block, 2015; Lewontin, Rose, & Kamin, 2017). Dark skin becomes a marker to explain certain social circumstances as innately biological rather than socially and politically constructed. These models have been used historically to pathologize poverty as inherent biological and behavioral issues, namely as the result of individual choices of laziness. Thus, health inequities are blamed on individuals living in poverty because of their choices (Birn et., al, 2009; Mills, 2015; Krieger, 2011; Krieger, 2021).

The behavioral and biomedical perspectives can offer some valuable insight into risk factors associated with certain behaviours and genetic characteristics. Yet, on their

own they do not consider the societal, economic, and political power structures. Thus, the behavioral and biomedical model are rooted in understandings that the individual is separate from the power structures and world around them, including their neighborhood and the urban environment. In turn, health is solely a matter of individual responsibility (Krieger, 2021; Kriger, 2011; Coburn, 2013; Birn et., al, 2009).

The biomedical and behavioral health perspectives overlap with the market oriented and institutionalist perspectives in urban design. In turn, they view marginalization and poor health as the sole responsibility of individuals (Krieger, 2021; Kriger, 2011). They neglect to consider the way structures of power shape the choices, lifestyles, and genetics of urban residents, and how standardized and rationally set goals in urban design are the outcome of power relations (Krieger, 2021; Kriger, 2011; Coburn, 2013; Birn et., al, 2009).

Dominant models in health and urban policy rely on technological fixes to the body or the city to solve urban and health issues. As a result, considerations for health in urban planning and vice versa are neglected. For example, marginalized urban residents in unhealthy housing that experience respiratory issues may be told to move to improve their health. What is neglected to be considered is that gentrification actively makes it more difficult for urban residents to relocate to healthy housing at an affordable price. Thus, marginalized urban residents experiencing health related issues as a result of unhealthy homes bare the blame for their poor health as they are viewed as *"choosing"* to live in those environments. Therefore, land-use planning in the city is devoid of serious concerns for the health and needs of urban dwellers when the individual is

blamed rather than the design and manifestation of power relations (Krieger, 2021; Friel, Hancock, Kjellstrom, McGranahan, Monge, and Roy, 2011; Coburn, 2009).

The reliance on private automobiles as a part of sprawl is a case in point (Hassen, 2021; Seliske, Pickett, and Janssen, 2012; Frumkin, 2004; Lopez, 2012). Car-centric urban design has neglected the need for active and public transportation methods such as pedestrian design (i.e., sidewalks) and cyclists (i.e., bike lanes) and public transportation (i.e., buses and trains), which are important inclusion, equity, and health promoting features in cities (Hassen, 2021; Munoz-Martinez et., al, 2021; Seliske, Pickett, and Janssen, 2012; Lopez, 2012). Reliance on private automobiles forces the reallocation of municipal resources to repair roadways at the expense of funding public transportation systems that can connect residents with different areas of the city. Also, urban design centred on private automobiles is linked to non-communicable diseases such as hyper-tension due to the stress associated with constant driving and obesity due to the lack of physical activity (Hassen, 2021; Montgomery, 2013; Verderber, 2012; Frumkin, 2004). Sprawled urban design creates the need for a private vehicle to access city amenities and services (Hassen, 2021; Bâelanger, 2012; Verderber, 2012; Friel, & et., al, 2011; Coburn, 2009; Davis, 2007; Brenner & Theodore, 2002). In turn, more financial resources must be used to incur the higher costs of travel associated with living further from the urban core (Munoz-Martinez, et., al, 2021). Fewer financial resources are therefore available to individuals for food and health (Walmsley, & Kading, 2018; Grady, 2012).

The consequence of this urban design exposes urban residents to pollution from private vehicles which contribute to respiratory illnesses, such as COPD and asthma

(Servadio, et., al., 2019; Lopez, 2012). Cities with increased presence of roads and parking lots are often considered "heat islands" which have serious health consequences (Negev, Khreis, Rogers, Shaheen, Erell, 2020; Friel, Hancock, Kjellstrom, McGranahan, Monge, & Roy, 2011). Through the market oriented and institutionalist frameworks, urban planning and political decision making have largely been studied in isolation from health. As questions of health remain isolated from urban planning practices, city design is also isolated from health and social policies (Coburn, 2013; Lopez, 2012).

On the one hand, market-oriented and institutionalist perspectives on urban design do not account for the power relations situated within the realm of urban design and urban policy. These perspectives often remain silent on how urban development, through sprawl and gentrification, directly impact the health of urban residents and conditions of marginalization (Palmer & Lafleur, 2021; Allan et., al, 2018; Gagnon, 2009). On the other hand, behavioral and biomedical approaches to health do not consider the structures of power that cause health inequities, particularly in relation to urban health. In order to fill this gap, the chapter draws on eco-social theory and political economy to incorporate economic, political, and societal structures of power which become embodied in the health of urban residents (Krieger, 2021).

**Critical Perspectives in Urban Health: Eco-Social theory and Political Economy**

Eco-social theory offers an understanding of the way humans and natural environments embody structures of power, which ultimately influence our health and survival (Krieger, 2005; Krieger, 2011; Krieger, 2021). Eco-social theory gives us a framework to understand the way humans and natural environments embody injustices and equity. It illustrates how injustices and equity can shape the health of individuals,

the population, and the planet (Krieger, 2005; Krieger, 2011; Krieger, 2021). In this approach, explanations for population health patterns reside in "the body politic" (Krieger, 2005; Krieger, 2011; Krieger, 2021). The body politic refers to the priorities, policies, and practices of political and economic power structures, which influences and governs the everyday life of individuals (Krieger, 2005; Krieger, 2011; Krieger, 2021). This is positioned against biomedical and behavioral perspectives, which view population health patterns as residing in the choices and biology of the individual (Krieger, 2005; Krieger, 2011; Krieger, 2021). Krieger argues (2021) that the body politic is not an ad hoc system that is disconnected from the individual and population. Rather, the body politic and the structures of power it produces directly shape and influence the perceived choices and behaviours individuals have in their daily life (Krieger, 2005; Krieger, 2011; Krieger 2021).

Both eco-social and biomedical/behavioral models recognize that singular random events can also impact population and individual health (Krieger, 2005; Krieger, 2011; Krieger, 2021). However, eco-social theory positions the impacts of these events as socially constructed by the power relations in the body politic which results in embodiment (Krieger, 2021). The concept of embodiment refers to the way individual and population health is impacted by ideas, policies, and laws. In this view, structures of power and injustices become directly implicated in the health of communities and marginalized groups which challenges the notions that health is the result of individual choices and lifestyles or genetics alone (Krieger, 2005; Krieger, 2011; Krieger 2021). The concept of embodiment speaks to the actions taken by institutions, corporations, and

individual actors and how they can cause direct harm on the health of the population (Krieger, 2005; Krieger, 2011; Krieger 2021).

For example, in cases of urban design and planning, gentrifying activities that displace urban residents causes hardship (both economically and socially) and deteriorates people's health. Government and private actors' decision making that prioritizes gentrification becomes embodied in the health of marginalized urban dwellers. While the market oriented and institutionalist perspective view these decisions as neutral and rational, eco-social theory sees these decisions shaped by power relations which become embodied into the health outcomes of populations (Krieger, 2005; Krieger, 2011; Krieger, 2021). The concept of embodiment also addresses intersecting processes of marginalization (i.e., race, gender, class, etc.,) Therefore, injustices of racism, sexism, classism, ableism, etc., are not experienced in isolation but rather at once (Krieger, 2021; Crenshaw, 1991). The injustices created from the body politic impact those who experience at once several processes of marginalization (Krieger, 2005; Krieger, 2011; Krieger 2021).

The everyday experiences of individuals and populations, and the decision making of those in power, are intertwined and downloaded onto human bodies (Krieger, 2005; Krieger, 2011; Krieger 2021). The human body becomes the canvas that showcases the impacts of the body politic through the manifestation of disease, illness, or sickness. As such, eco-social theory rejects concepts of biological essentialism and strict determinism and challenges the idea that individuals' health is solely determined by innate biological factors or poor vales/choices (Krieger, 2005; Krieger, 2011; Krieger 2021). Instead, it places health in the context of structured chance, historical factors, and

the possibility that these structures of power and injustice can change (Krieger 2021). In this view, health and disease are the result of circumstances that are structured by power relations in societies that influence exposure to injustices and the embodiment of them (Krieger, 2005; Krieger, 2011; Krieger 2021). In the context of urban design, power structures are dispersed throughout government institutions such as, municipal, provincial, and federal governments, regional and service planning commissions, and large corporations such as housing developers and dominant sectors of the global economy (Coburn and Riley, 2016; Brenner & Theodore, 2002). This is tied to national and global economic forces (Krieger, 2005; Krieger, 2011; Krieger 2021).

I also draw from political economy to understand the larger structures of neoliberalism in Canada. Neoliberalism replaced Keynesianism in the late 1980s and early 1990s. Neoliberalism encourages favourable conditions to large companies and dominant sectors of the economy such as little regulation and low taxation (Brenner & Theodore, 2002; Butler, 2012). At the same time, government reduces social spending to decrease "disincentives" in the market (Luxton & Bzanson, 2006; Meehan & Strauss, 2015; Sawer, 2017). Over the last 30 to 40 years, neoliberalism has resulted in massive concentration of wealth in the hands of privileged individuals and corporations, at the expense of rising rates of inequality seen through increasing poverty, homelessness, and health inequities (Brenner & Theodore, 2002; Butler, 2012; Luxton & Bzanson, 2006; Meehan & Strauss, 2015; Sawer, 2017). Urban neoliberalism takes the form of declining government investment in public services such as active and public transportation infrastructure and constrains municipal budgets through low taxation and the need for balanced budgets (Brenner & Theodore, 2002; Butler, 2012; Luxton & Bzanson, 2006;

Meehan & Strauss, 2015; Sawer, 2017). This will be further analyzed in the next chapter. For these reasons, it becomes important to analyze the urban landscape through eco-social theory and political economy to understand the way power relations manifest in the city and people's health.

## Conclusion

The market-oriented perspective focuses on market solutions by large corporations and dominant sectors of the economy, with an emphasis on growth and neutrality. The institutionalist perspective focuses on the design of institutions, aesthetics of the city, efficiency, and comprehensive urban planning. These perspectives remain limited as they neglect to recognize the power relations behind urban design and urban policy. The biomedical model places emphasis on genetics as root causes for diseases. Whereas the behavioral model focuses on individual lifestyles and habits as the reason for disease. Both perspectives neglect to consider the way lifestyles and family history have been shaped in the realm of power relations, including those that shape cities. In turn, the lack of critical analysis of these perspectives and their continuous influence in city planning reproduces urban health inequities and vice versa. As a result, government reliance on these perspectives has enabled the privatization of cities and urban infrastructure, resulting in increased conditions of marginalization and weathering of urban residents' health. For these reasons, the next chapter focuses on Canadian federalism under neoliberalism.

# Chapter Three

# Federalism and the City

## Introduction

Under Canadian federalism state the provinces have jurisdiction over the policy areas that impact city design. Municipalities jurisdiction is over land use planning and zoning (Gagnon, 2009; Smith, 2014; Gagnon and Poirier, 2020). What is less understood in the field of urban design and politics is the way federalism influences the design of cities and by extension, urban dwellers health. Since the 1990s neoliberalism has impacted the way the Canadian federalist system responds infrastructure in cities. I argue that since the 1990s the Canadian federal and provincial governments have downloaded more responsibility onto municipal governments, which hold less funding, power, and resources. This has led to the reliance on powerful private actors to shape and provide urban infrastructure.

First, the chapter begins by reviewing the powers that each level of government holds in the Constitution Act of 1867 to show how they influence urban design and policies (Gagnon, 2009; Smith, 2014; Gagnon & Poirier, 2020). I discuss the division of powers in relation to urban design and its transformation under neoliberalism. Second, the chapter shows how Canada's integration into the global economy and neoliberalism has resulted in federal and provincial government divestment from social policies and urban development in New Brunswick and Saint John (Luxton & Bzanson, 2006; Meehan & Strauss, 2015; Sawer, 2017). Third, the chapter reviews the role of provinces in urban issues under conditions of neoliberalism to highlight the centrality of urban

competitiveness rather than health and inclusive cities (Harrison, 2005; Brunet-Jailly & Martin, 2010; Inwood, Jones & O'Reilly, 2011; Bakvis & Skogstad, 2020; Gagnon & Poirier, 2020). Fourth, I illustrate the impacts of this on municipalities through a case study of the February 6th, 2023, Saint John Common Council meeting. I illustrate this case by drawing on political economy which provides a framework to deconstruct the power dynamics that arise under conditions of neoliberalism.

**Division of Powers and Urban Design**

An understanding of the division of powers in the Canadian Constitution is important because this sets the jurisdictional responsibilities for urban policy. The Constitution Act of 1867 enshrines the division of powers under section 91 and 92 for the federal and provincial governments (Gagnon, 2009; Smith, 2014; Gagnon & Poirier, 2020). The division of powers grants the federal or provincial government exclusive autonomy over policy areas which allows government to shape policy priorities without the interference of another level of government (Gagnon, 2009; Smith, 2014; Gagnon & Poirier, 2020).

One of the most important powers of the federal government for urban design is spending power (Gagnon, 2009; Verrelli, 2014; Smith, 2014; Gagnon & Poirier, 2020). Spending power allows the federal government to act on policy priorities in areas outside its Constitutional jurisdiction. Spending power relates to urban design policies as the federal government played a major role in enabling homeownership and constructing affordable rental housing during the post WWII era to improve standards of living and reduce poverty in urban areas, particularly for white settler's (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). This was made possible as the federal

government allocated monies to the provinces specifically for infrastructure, transportation, social programs, health, and housing projects (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). By using spending power, the federal government was able to intervene in housing which was outside its jurisdiction to help build the provinces fiscal capacity (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017; Gagnon & Poirier, 2020). However, this emphasis on single-family ownership contributed to sprawl design and placed pressure on provincial and municipal governments to use lands outside the urban cores. This shows how federal spending plays a significant role in the construction of cities and the services available within them.

Provinces have jurisdictional authority over most areas of urban planning and policy including management and sale of provincial public lands, direct taxation within the province, property rights, natural resources, and health and social policy (Harrison, 2005; Inwood, Johns, & O'Reilly, 2011; Gagnon & Poirier, 2020). These areas have a direct impact on urban issues. These areas of provincial jurisdiction are also central to attracting global investment into their municipalities. Many scholars argue that provinces hold considerable power in the Canadian federalist state because their jurisdictional responsibility shapes the health and social outcomes of communities (Bakvis & Skogstad, 2020; Brunet-Jailly & Martin, 2010; McAllister, 2004).

Municipalities are not recognized as a constitutional order of government (McAllister, 2004; Brunet-Jailly & Martin, 2010; Bakvis & Skogstad, 2020). Instead, provincial legislatures delegate powers to municipalities. Thus, provincial governments have considerable discretion over the powers they download to cities which shapes

urban design (McAllister, 2004; Brunet-Jailly & Martin, 2010; Bakvis & Skogstad, 2020). In many cases provinces have delegated zoning powers and land use planning to municipalities, as well as water, waste, road and sidewalk infrastructure, and public transportation with the expectation the latter will fund these services (McAllister, 2004; Brunet-Jailly & Martin, 2010; Bakvis & Skogstad, 2020).

Analyses on constrained municipal budgets, federal spending power and federal-provincial jurisdictional authority has largely been devoid of consideration of neoliberalism (Harrison, 2005; Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). Neoliberalism is critically important for understanding urban design, social, and health policies in Canada as it has resulted in provincial and federal government devolution in these policy areas (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). Under neoliberalism, federal, and provincial governments have focused on setting investment conditions in Canada for private actors from dominant sectors of the global economy (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). In this context, municipalities have become a commodity for provinces to sell to private actors in dominant sectors of the global economy (Brenner & Theodore, 2002; Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). Understanding the historical rise of neoliberalism is important for analyzing urban inequities as it has led to all levels of government prioritizing the interests of private actors from dominant sectors of the global economy which may not be compatible with the interests of communities.

## Federalism in the Era of Neoliberalism

From the 1940s to 1980s, the federal and provincial governments played a critical role in providing direct services and subsidies to urban residents for social needs such as housing and public transportation (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). These policies became prevalent under the welfare state model of governments providing social safety nets through taxation (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). However, in the mid-1980s and early 1990s Canada underwent an economic shift to neoliberalism (Luxton and Benzanson, 2006; Smith, 2014; Meehan and Strauss, 2015; Sawer, 2017).

Proponents of neoliberalism advocate for government divestment from public services and social safety nets, deregulation and low taxation of industry, reducing labour rights, free-trade, balanced budgets, and privatization (Harrison, 2005; Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). Advocates of neoliberal policies argue that social safety nets are disincentives to work and therefore, should be limited as much as possible. Instead, neoliberal policies advocate for the government subsidies and preferential tax treatment to large corporations and investors because of the trickle-down benefits of investment to the rest of society (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). Under this lens, large companies and dominant sectors of the economy becomes responsible to provide resources like transportation, childcare, and housing (McKenna, 2015).

Neoliberalism is important for understanding Canadian federalism as the federal and provincial priorities shifted towards international trade and investment (Harrison, 2005; Luxton and Benzanson, 2006; Gagnon, 2009; Smith, 2014; Meehan and Strauss,

2015; Sawer, 2017). During this period, Canada entered free-trade agreements, such as North American Free Trade Agreement (NAFTA) in the 1990s. Since the 1990s Canada has sought to create regulatory and taxation environments that can increase investment in the country, particularly in the real estate industry. For example, Real Estate Investment Trusts (REITS) receive preferential tax treatment in the federal income tax act which exempts them from paying income tax at the corporate or entity level (Government of Canada, 2021). This has resulted in REITs assets growing from $80 million in 1993 to $75 billion in 2020 (August, 2020). This increase in wealth also coincides with a lack of provincial regulation of rent increases which allows REITs and corporate actors to pass on costs to tenants (August, 2020). This becomes exacerbated when provincial governments do not download the power of inclusionary zoning to municipalities (Montgomery, 2013). In turn, municipal governments have been downloaded increased responsibility to address urban issues such as housing without the powers to respond. This is important for understanding urban design because land ownership by powerful private actors allows them the power to shape urban design.

While creating a preferential tax and regulatory environment for dominant sectors of the global economy, the federal government simultaneously divested from areas of social, policies such as housing, transportation, and childcare (Luxton and Benzanson, 2006; Brunett-Jailly & Martin, 2010; Meehan and Strauss, 2015; Sawer, 2017). From the 1990s onward the federal government has been characterized as using "negative spending power" by cutting social programs and downloading responsibility back onto the provinces (Luxton and Benzanson, 2006; Meehan and Strauss, 2015; Sawer, 2017). As areas of social policy were downloaded back to provinces, the federal

government simultaneously reduced the level of federal transfer payments to provinces (Inwood, Johns, & O'Reilly, 2011; Austin, Ford, Araos, Parker, & Fleury, 2015; Flood, Lahey, & Bryan, 2017). The lack of federal transfer payments resulted in provinces' implementation of neoliberal practices by reducing funding to municipalities, public services, and creating a deregulated low taxation environment to spur private sector and financial growth (McAllister, 2004; Weinstock, 2014; Hughes, Kwasniak, & Lucas, 2016; Gillis, 2021).

Provincial government divestment directly impacted urban design and public services as municipalities became increasingly reliant on private actors in dominant sectors of the global economy to provide critical urban infrastructure (Walmsley & Kading, 2018; Krause, 2013). This trend became more evident in sprawled design cities which are unable to service the large geographic area with a declining population (Montgomery, 2013). Thus, neoliberalism further intensified health inequities and social inequalities in cities in particular for those who were living in poverty as cities became sites for wealth accumulation rather than social goods such as recreation, childcare, and green spaces, within the planning process (Coburn, 2013; Austin et., al, 2015; Meehan and Strauss, 2015; Sawer, 2017; Flood, Lahey, & Bryan, 2017; Saint John Common Council, 2023). This environment becomes even more apparent when situated within the context of "province building" that under neoliberalism has changed the nature of funding to provinces in Canada and contributed to the rise of concerns of in provincial competitiveness in the policy agenda.

**Provincial Competitiveness under Neoliberalism**

From 2006-2015, Canada moved away from "collaborative federalism" which requires provinces and the federal government to work together through cost-sharing agreements. Instead, the federal government moved to "open federalism" (McFarlane, 2017; Anwar, 2007). Open federalism holds that the federal and provincial governments should remain within their delegated jurisdictional authority in the Constitution in order to take unilateral action (McFarlane, 2017; Anwar, 2007). This replaced collaborative practices through intergovernmental agreements or cost-sharing suggesting that the federal government should not engage in using spending power to produce their policy goals (Gagnon, 2009; McFarlane, 2017). This form of federalism is premised on the argument that the use of spending power by the federal government is an unconstitutional mechanism to intervene in provincial jurisdiction (Gagnon, 2009; McFarlane, 2017). Open federalism relates to neoliberalism as it divested the federal government from social policy areas even further, whereas they previously intervened through collaborative negotiations (McFarlane, 2017). The point of highlighting the different forms of federalism used in Canada is not to state which is better, but rather to point out this shift takes place in the context of moving from welfare-Keynesian to neoliberal state policies.

The focus of the federal government during this period emphasized a reduction in government spending particularly in areas of social and health policy. Instead, federal dollars were redirected to paying down the national debt and subsidizing dominant sectors of the global economy, such as the fossil fuel industry who received $60 billion in subsidies from the Canadian government in 2015 (Coady, Parry, Piotr-Le, and Shang,

2019). The subsidization of dominant sectors of the global economy has come at the expense of provincial and municipal governments being able to provide services to communities (Gro Sandkjaer & Falleth, 2014; Harrison, 2005; Hochstenbach, 2017). This has created dependency on private sector to develop and provide necessary urban features. In turn, essential urban features become investment portfolios that extract wealth from communities and foster conditions of marginalization.

The most notable use of open federalism within the Canadian government during this time was the unilateral reforming of fiscal transfer payments to provinces (Anwar, 2007; McFarlane, 2017; Béland, Lecours, Marchildon, Haizhen, & Olfert, 2017). The result was per capita funding models and unconditional grants instead of intergovernmental agreements (McFarlane, 2017; Béland, Lecours, Marchildon, Haizhen, & Olfert, 2017). The move to unconditional grants gave increased autonomy to provinces to use federal dollars which replaced intergovernmental agreements which have some conditional funding requirements (McFarlane, 2017; Béland, Lecours, Marchildon, Haizhen, & Olfert, 2017). The issue with lack of provincial accountability to use federal funds for specific purposes, such as transportation, housing, and healthcare, allows provinces considerable autonomy to implement neoliberalist policies. Specifically, this allows provinces to divert federal dollars to pay down provincial debt and subsidize private actors in dominant sectors of the global economy at the expense of funding essential urban features (Poitras, 2023; Jones, 2023b).

Per-capita funding models directly impacted small cities and provinces as their access to funding became tied to the population base. In turn, provinces and municipalities with small populations saw less funding than previous years (McFarlane,

2017; Béland, Lecours, Marchildon, Haizhen, & Olfert, 2017). In sprawled cities, per-capita-funding models further limit their fiscal capacity to adequately service urban residents due to the large geographic area that urban residents are sprawled over and limited funding streams (Hortas-Rico & Solé-Ollé, 2010; Kushner & Ogwang, 2017; Munoz-Martinez, et., al, 2021). Therefore, public transportation became less and less feasible in sprawled environments which exacerbates conditions of marginalization for urban residents that cannot afford a private vehicle (Munoz-Martinez, et., al, 2021; Krause, 2013). This is particularly true when provinces have downloaded the responsibility to fund public transportation to municipalities.

The province of New Brunswick has downloaded public transportation servicing and funding responsibility to municipalities without necessary resources. Saint John has struggled for years to expand access (i.e., service times and routes) to reliable public transportation options. At the same time, the Government of New Brunswick in 2021 posted a record-breaking budget surplus of $777.3 million (Poitras, 2022). However, the province stated they could not commit to spending more money in future budgets because the surplus was mostly generated due to temporary COVID-19 funds from the federal government (Poitras, 2022). Instead, the province opted to paying down its debt, providing tax cuts for wealthy private actors, and increasing funding in some areas of social spending (Poitras, 2022; Poitras, 2023; Jones, 2023b). Even when provinces have surpluses of funding this does not mean the money becomes invested into services that assist the most marginalized community members. Rather, provinces download the funding responsibility of public services, such as transportation, to municipalities without increased resources. This has resulted in the city depending on urban residents

to have private means of transportation to meet their mobility needs (Munoz-Martinez, 2021).

Further, per-capita-funding models incentivize provinces to compete for growth of their population to acquire more federal funding (Howlett & Wilder, 2015). This growth competition also coincides with increasing the presence of large private corporations to attract workers to the province which in turn will increase the population and funding. Neoliberalism has placed increased emphasis on not only the federal governments competitiveness with other nation states, but also competition across provinces (Weinstock, 2014; Meehan & Strauss, 2015; Sawer, 2017). In particular, provinces compete for real estate development and industrial investment (Harrison, 2005; Bavkis & Skogstad, 2020; Gagnon & Poirier, 2020). The result of this has been provinces seeking to emulate or out-perform other provinces through deregulation, low taxation, and institutional incentives such as public subsidies (Harrison, 2005; Brunet-Jailly & Martin, 2010; Bavkis & Skogstad, 2020; Gagnon & Poirier, 2020). This is important for understanding the way federalism and neoliberalism have impacted urban design as it situates lands within cities as spaces for private actors from dominant sectors of the global economy to increase their profits. In turn, this incentivizes provinces and municipalities to center the interests of the former in policy making at the expense of urban residents' interests and health.

Provincial competitiveness has implications for urban design and policymaking. This is because municipalities become one of the selling points to set up shop and in turn, encourage competitions among municipalities across the country and within the same province (Gagnon, 2009; Weinstock, 2014; King, 2014). This encourages

provinces and municipalities to set preferential treatment to the interests of dominant sectors of the global economy (Inwood, Johns, & O'Reilly, 2011; Austin et., al, 2015; Allan et., al, 2018). For example, in 2021 and 2022 the New Brunswick provincial government positioned non-owner-occupied property tax reductions as a mechanism to incentivize new residential development activity and help alleviate costs passed onto tenants in the form of rent increases (Sturgeon, 2022; Government of New Brunswick, 2021). At the same time, tenants in the province were calling for rent control in response to high rent increases. In 2021, the government of New Brunswick stated they would not create a permanent rent control system, citing a lack of desire to interfere with the "free market" and concerns that it would impact development (Government of New Brunswick, 2021). Although the government did implement temporary rent control measures in 2022 the province did not renew the policy for 2023 on the basis it was hindering development activity (Jones, 2022). Yet, the data used to justify this decision was misinterpreted as residential real estate development had increased during the rent control period (Jones, 2022). This decision was not reversed after the provincial government became aware of the misinterpretation of the data. Rather, they continued to cut property taxes for non-owner-occupied buildings (Brown, 2022). This is not to argue whether rent control alone can fix an affordable housing crisis. Instead, it is to highlight inconsistencies in policymaking under neoliberalism that pass benefits onto dominant sectors of the economy at the expense of low and middle-income urban residents and communities. This example demonstrates how policymaking emphasizes the concerns of corporate profit margins and private sector development activity at the expense of marginalized residents remaining housed.

Industrial lands in New Brunswick have also received cuts to property taxes. In 2022, the provincial government provided tax cuts to industrial lands and businesses, resulting in them paying millions less than they would have prior to the change, according to City of Saint John staff (Jones, 2022). In turn, the province and city have less revenue to sufficiently provide services such as public transportation (Jones, 2020; Jones, 2022). The provincial governments preferential treatment of large corporations impacts municipalities because the expectation is set for the market to shape the city which has resulted in municipalities receiving less funding to provide public services (Gagnon, 2009; Weinstock, 2014; King, 2014). This intensifies municipal governments reliance on private actors to shape the design of the city.

As municipalities become a commodity, governments have downloaded the burdens of financialized needs to cities and by extension to urban residents. The deregulation and low taxation reduce private sector accountability to cities and the potential benefits they could provide through the collection of tax dollars. This has resulted in municipalities passing tax dollar recovery onto urban residents which further intensifies inequities as they become the wealth extraction for both governments and private actors (Gro Sandkjaer & Falleth, 2014; Harrison, 2005; Hochstenbach, 2017). This downloading of cost onto urban residents has contributed to growing rates of social inequalities in cities through increasingly unaffordable housing and food, lack of public and active transportation services, reduced green and recreational spaces, and exposure to industrial pollution (Birn, Pillay, Holtz, and Basch, 2009; Botchwey, 2019; Coburn, 2016). Social inequalities have increased as federal and provincial governments have reduced regulation and taxation while increasing subsidization of these dominant sectors

of the global economy (Heaven, 2023). This demonstrates how the increased downloading of responsibility to municipal governments without increased resources and powers places more responsibility onto urban residents for accessing social goods such as housing, transportation, and childcare (McKenna, 2015; Harvey, 2005).

Although since 2015 federal and provincial governments have re-entered into relying on intergovernmental and cost-sharing agreements this has not necessarily remedied issues within urban landscapes. Intergovernmental agreements present several issues because provinces still hold considerable bargaining power within these agreements (McDougall, 2009; Gagnon, 2009; Scholz & Feiock, 2010; Smith, 2014; McFarlane, 2017). In some cases, provinces may not enter or delay entering into an agreement when they disagree with the policy or do not see the benefits/need of signing on. This has been a criticism of intergovernmental agreements because provinces are not obligated to enter into them, which can result in provincial inequities, especially in the realm of social, and urban policy (McDougall, 2009; Gagnon, 2009; Scholz & Feiock, 2010; Smith, 2014; McFarlane, 2017; Flood, Lahey & Thomas, 2017).

An example of this considerable provincial power in relation to cost-sharing and intergovernmental agreements was the federal COVID-19 transit funding. During the COVID-19 pandemic the province of New Brunswick did not apply for federal public transportation cost-sharing funding (Webb, 2022). This contributed to municipal transit systems continuing to accrue considerable operational losses. The transportation funding required cost-sharing between the province and federal government, but the funding agreement had loopholes (Webb, 2022). One of the loopholes in the funding agreement allowed provincial governments to consider monies already allocated to municipalities

for COVID-19 relief as part of the cost-sharing, even if the funding was not for transit purposes (Webb, 2022). The lack of federal funding for municipalities in New Brunswick resulted in decreased ridership, particularly in Saint John. The decline in ridership and funding makes it difficult for municipalities to service the large geographic which contributes to reliance on private automobiles in cities especially in cases of sprawl design (Verderber, 2012; Walmsley & Kading, 2018; Yeakey, 2012).

The impacts of neoliberal policymaking are often felt by those living in poverty and conditions of marginalization. Previous studies on transportation in the city of Saint John demonstrate that low waged workers rely on public transportation to get to work and face difficulty navigating the city with increasingly reduced hours of service (Munoz-Martinez et., al, 2021). The case of COVID-19 transit funding demonstrates the limited application of spending power by the federal government and the power of provinces that rely on neoliberal policymaking to shape urban infrastructure. It also illustrates the constraining of municipal governments to provide public services under conditions of sprawl and neoliberalism. This becomes implicated in land use and zoning in the city of Saint John which is illustrated in the case study of a February 6th, 2023, land use and zoning applications before the city council.

**The Case of Saint John**

In the case of Saint John, the city has been reliant on private actors from the private real estate industry to construct housing developments in the city resulting in the latter's interests being centred in decision making (City of Saint John, 2014; Saint John Common Council, 2023). I will illustrate this with the case study of the February 6th, 2023, city council meeting. This case study shows how the voices and social needs of

urban residents are not heard in urban policymaking. In particular, the case demonstrates the implications of provincial devolution on municipal decision making under conditions of neoliberalism.

On February 6th, 2023, the Saint John city council approved a rezoning application that allowed a new housing development while maintaining an existing doctor's office and adding a retail pharmacy into the commercial building on site (Saint Common Council Meeting, 2023; Growth & Community Service (1). 2023). The developer stated to council that the housing development would not move forward without the approval of the retail pharmacy (Saint Common Council Meeting, 2023). The approval of the application resulted in the eviction of a daycare that was occupying the commercial space reserved for the new retail pharmacy. Yet, that housing development did not guarantee affordable units and community members expressed that the loss of the daycare space would negatively impact the community, particularly due to the lack of spaces in the city (Saint Common Council Meeting, 2023). Further, community members stated that there are already five pharmacies within proximity to this space and that they do not see the need for the pharmacy. However, the city staff and Mayor of Saint John answered that the need for daycares is not within the scope of the application, the city does need more housing units, and that alike businesses in a development area are not assessed in the planning process (Saint Common Council Meeting, 2023).

This case demonstrates is that governments have become reliant on private actors in dominant sectors of the global economy to shape cities and urban infrastructure. In turn, the interests of the latter become centered in the planning process while being

devoid of the needs of urban residents. In this case, setting affordability conditions on land and development in the planning process was not possible because the government of New Brunswick has not delegated the power of inclusionary zoning to municipalities. Inclusionary zoning allows cities to set conditions regarding affordability requirements in residential real estate developments (Montgomery, 2013). Without this legislative power, private actors have considerable power to shape the availability of services in cities and the type of housing (Montgomery, 2013). In turn, the city prioritizes the interests of those who have the power to construct urban infrastructure (Montgomery, 2013). In particular, priority is given when the interests of private actors from dominant sectors of the global economy align with the interests of municipal governments, such as increased property tax revenue and conforming to municipal plans of density (Brenner & Theodore, 2002; Butler, 2012; City of Saint John, 2014). As a result, municipalities depend upon private actors from dominant sectors of the global economy to meet their planning goals and increase revenue streams.

The case also shows how municipal governments do not consider the number of alike businesses within an area of development which contributes to the domination of primary single use spaces, a core feature of sprawl (Jacobs, 1961). This also can result in essential services such as daycares being overlooked in the analysis of community development (McKenna, 2015). In this case, community members concern in the hearing implied that the lack of consideration of other pharmacies in the neighborhood replicated services in an area at the expense of a daycare (Bertaud, 2018). This demonstrates neoliberalization of urban planning because the city views childcare spaces

outside the planning process and prioritized the interests of the private developer for the land use.

The daycare also applied for rezoning of land to relocate in a residential neighborhood (Growth & Community Service (2), 2023). However, residents on the street where the daycare was seeking to relocate were concerned with traffic, emergency vehicle and snow plough access, lack of sidewalk ploughing, and safety for children at the daycare and who live on the street (Growth & Community Service (2), 2023; Saint John Common Council, 2023). This area of the city is mostly comprised of single-family homes and public transportation and sidewalk maintenance is minimal. The traffic and parking issues all became reasons for denying the daycares rezoning application (Saint John Common Council, 2023). The lack of funding for services such as public and active transportation prevented the municipality from reaching planning goals, in particular to create mixed-use spaces. This demonstrates the impacts of sprawl and neoliberalism on the level of public services cities can provide to urban residents, such as transportation, childcare, and housing (Brunett-Jailly & Martin, 2010; Weinstock, 2014; Meehan and Strauss, 2015; Sawer, 2017; Bakvis & Skogstad, 2020). Thus, planning in cities under neoliberalism becomes devoid of community's social needs as municipalities are unable to appropriately mitigate the issues neoliberalism and sprawl design have created.

This also involves the participation of the provincial government in urban design and in the concerns raised in the applications before council. It demonstrates how the lack of provincial funding on active and public transportation shape the ability of the city of Saint John to respond to land use applications (Verderber, 2012; Walmsley &

Kading, 2018; Yeakey, 2012). In this case, many of the concerns raised by resident's on the street where the daycare attempted relocate were related to private automobiles and pedestrian safety (Saint John Common Council, 2023). These concerns regarding traffic and parking could have been mitigated if the city was able to invest in public and active transportation at the level required. This is because public transportation carriers more individuals to urban spaces than private automobiles which can reduce the presence of cars on the road (Munoz-Martinez, et., al, 2021). By neglecting to fund public transportation the city becomes less able to meet planning goals of reversing sprawl and increasing the presence of mixed-use neighborhoods (Verderber, 2012; Walmsley & Kading, 2018; Yeakey, 2012).

This level of service responsibility presents issues for small and sprawled cities because of constrained budgets. Constrained budgets emerge in sprawl designed cities due to urban dwellers living across a large geographic area which impacts a municipality's ability to adequately service the city, particularly with public transportation. During the land use application hearing, city staff stated that assigning ploughing priority levels to sidewalks is based on the resources available to them (Saint Common Council Meeting, 2023). Therefore, the city cannot service all sidewalks of the city, particularly in residential areas, resulting inequities emerging for urban residents that are dependent on active and public transportation as their main method of transportation (Munoz-Martinez, et., al, 2021). As a result, the lack of municipal resources impact urban development activities as cities cannot expand servicing to active transportation infrastructure which incentivizes reliance on private automobiles.

Although the daycare was a small business serving a social purpose in the city, the prioritization of the developer's interest for the pharmacy was favoured because of its impacts on housing (Saint John Common Council, 2023). This case shows how land use in the city places emphasis on urban spaces as sites of consumption at the expense of other community social needs, such as childcare (Bâelanger, 2012; Brenner & Theodore, 2002). This also shows how the city of Saint Johns relies on investors in dominant sectors of the economy to shape the design of urban spaces, and by extension the services available within space. The urban spaces in these applications were viewed through a neutral lens of standardized rules and practices by not considering the need for daycare. Rather, the city emphasized that the site development plans aligned with the Municipal Planning goals instead of urban residents need for childcare. This shows how neoliberal urbanism forces the city to appease the interests of private actors from dominant sectors of the global economy to meet planning goals at the expense of urban residents needs (Brenner & Theodore, 2002; Butler, 2012; Bâelanger, 2012). This case demonstrates how provincial and federal devolution from transportation and housing result in municipal governments relying on private actors to meet municipal planning goals. In turn, other essential urban infrastructure are isolated from the land use planning process which impacts marginalized urban residents access to services.

## Conclusion

Urban design policies are complex and multi-dimensional crossing jurisdictions under the Canadian federalist system. The federal government's main role in urban development and design has been through their use of spending power to enable provinces and cities to build necessary infrastructure (Harrison, 2005; Gagnon, 2009;

Inwood, Johns & O'Reilly, 2011; Smith, 2014; Bakvis & Skogstad, 2020). However, over the last three decades the federal government has been implicated in using "negative spending power" by divesting from social policy areas that largely influence the design of cities (Luxton & Bezanson, 2006; Meehan-Strauss, 2015; Sawer, 2017). This is due to the emergence of neoliberalism which encourages governments to divest from the welfare state and increase the capacity of private actors from dominant sectors the global economy to build essential features and services in cities (Luxton & Bezanson, 2006; Gagnon, 2009; Weinstock, 2014; Meehan-Strauss, 2015; Sawer, 2017). The result has been an uneven distribution of power in urban development as provincial governments also engaged in neoliberal practices by downloading increased responsibility onto municipal governments (Weinstock, 2014; King, 2014).

Moreover, municipal governments due to their lack of constitutional order in Canada are constrained in their ability to service and construct essential features of the city due to their lack of powers and funding (McAllister, 2004; EnviroEconomics, 2009; Brunet-Jailly & Martin, 2010; Gillis, 2021). This is increasingly problematic considering municipalities across Canada, especially small cities, face increased downloading of responsibility without increased resources. As more responsibility is passed down to municipalities and they are unable to meet urban residents needs, the reliance on private actors from dominant sectors of the global economy becomes more likely (Luxton & Bezanson, 2006; Gagnon, 2009; Weinstock, 2014; Meehan & Strauss, 2015; Sawer, 2017). This gives the latter increased power in setting priorities and negotiating urban development activities within municipalities and provinces leading to increased inequities within cities. These conditions of inequities have become embodied truths in

the health of marginalized urban residents which is explored in the next chapter that presents the results and discussion from a community-based survey in Saint John, New Brunswick.

# Chapter Four

## Embodying the City: Experiences from Saint John

This chapter presents the results and discussion of the mixed-method community-based survey in Saint John, New Brunswick (NB). The purpose of this survey is to bring forward the experiences and voices of marginalized urban residents in Saint John, NB as they are often neglected from planning processes. Conditions of marginalization such as gender, race, sexuality, etc., are important in the context of urban planning. However, the chapter focuses primarily on income because this was consistently reiterated by participants as a driving force behind conditions of marginalization in Saint John. In particular, low- and moderate-income urban residents needs, and perspectives are often not considered within the context of urban design under conditions of neoliberalism. Instead, planning processes centre on the interests and expertise of private actors from dominant sectors of the global economy. Therefore, this research seeks to challenge the current dynamics of the urban planning by focusing on experiences of people living in poverty. This is important for policymaking as decisions that are devoid of consideration for the most marginalized in communities can intensify health inequities in the city. Specifically, this occurs when the needs of urban residents are viewed in isolation from each other in the policymaking and planning process. However, the urban needs of residents are not isolated from one another. Rather, they are an interconnected web that can either intensify or ameliorate conditions of marginalization in the city. The chapter analyzed the health needs of marginalized residents in relation to urban design, and policymaking. I argue that participants

experience in the city under conditions of neoliberalism results in health inequities such as hypertension, diabetes, heart disease, and anxiety and depression.

First, the chapter presents demographic characteristics and comments on how marginalized urban residents perceive policymaking in the city. Second, the data is divided into six subsections: income, housing, transportation, food, health, and community needs. I present the results in each subsection at the level of the city and neighborhood. I discuss the implications of the data in each section. In particular, I discuss the implications of sprawl and gentrification in the results and how this has implications for conditions of marginalization and health inequities. Third, the chapter analyzes the data through the lens of eco-social theory, particularly the process of embodiment, and political economy with an emphasis on neoliberalism.

The data is analyzed through the lens of eco-social theory and critical political economy. Eco-social theory provides a framework to examine how urban residents embody policymaking, particularly urban policy. This process of embodiment becomes displayed in the rising rates of inequities and negative health outcomes. The rising rates of inequities can be connected to injustices that are downloaded onto urban residents from the body politic (i.e., policies, programs, laws, regulations, etc.).

**Who is represented?**

A total 108 community members from Saint John and surrounding areas participated in the survey. The areas are highlighted in the Figure 1 map in Chapter one. Participants were recruited from all areas of the city (i.e., West, East, Central Peninsula, and North) and from Metropolitan areas (i.e., Rothesay, Quispamsis, Hampton, Grand Bay) (Figure 3). Focus was placed on hearing from urban residents' experiences living in priority neighborhoods. Priority neighborhoods in Saint John are areas of the city with high levels of poverty. The East side was also included because it is an area of the city with poverty but lacks the social service infrastructure seen in other neighborhoods. In recent years those same neighborhoods have seen gentrification in the form of an increase in luxury housing, as well as rents, and a rise in unhealthy housing conditions. Therefore, the chapter highlights the perspective of urban residents and what sprawl, and gentrification activities mean for them. This is important because it demonstrates the impacts on marginalized communities of urban planning under neoliberalism.

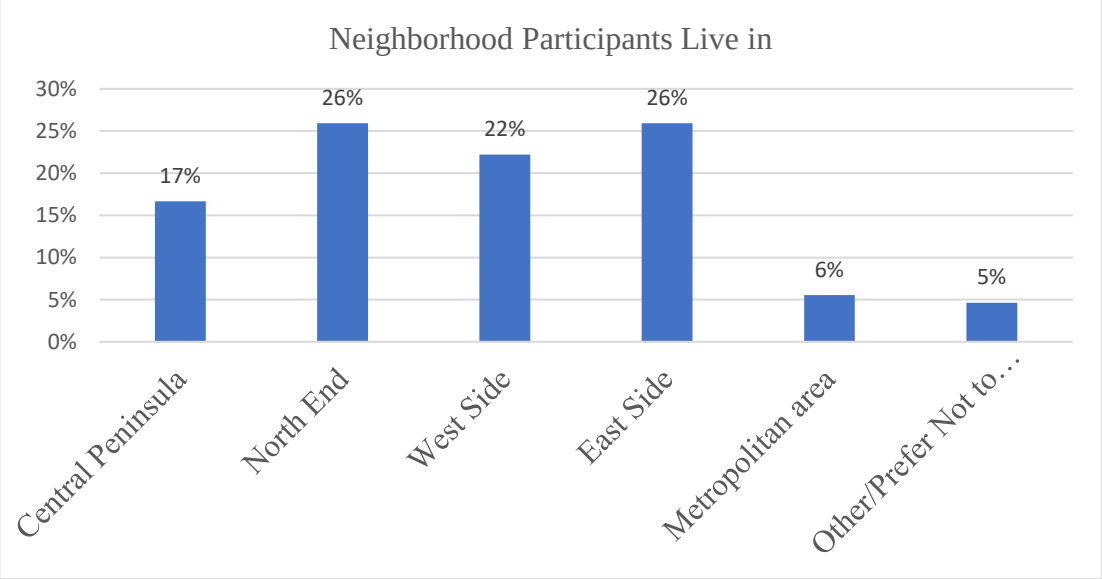


*Figure 3 Reported Neighborhood of participants:* This represents the reported neighborhood participants lived in at the time of the survey.

As an overview of who the survey represents, 56% of participants identified their gender as “female” in the study (Figure 4). A high percent (40%) of participants indicated having some form of a disability. Participant ages ranged from 19-80, with the majority (54%) of participants being between the ages of 19-40. Most (95%) of the participants identified as being born-Canadian citizens and 73% of participants did not identify as a racialized person. Answers in the survey not only represent the experiences of 108 participants but also 125 children and 117 additional adults in our community as the survey also asked how many people live in the same household.

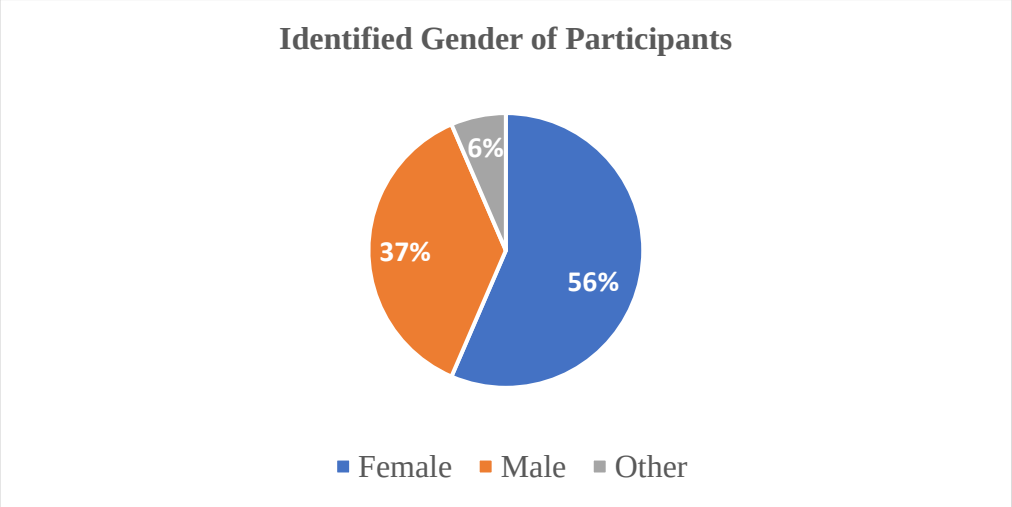


*Figure 4 Identified Gender of Participants:* This represents the identified gender of participants (n=108) in the entire study population. Other includes gender diverse individuals and people who did not specify their gender.

Understanding *who* is represented in the survey is important. The high representation of people who identify as women relates to historical data that reports women as the largest percentage of persons living in poverty in New Brunswick and Saint John (Dutton & Emery, 2019). When conducting surveys in the North End, women often came together in groups. In one instance, one participant told the other women to share their experiences so “they tell can the government what is really going on.” It is worth nothing the importance of long-term community engagement. The participants in

Crescent Valley and the Central Peninsula were willing to share their knowledge because of my familiarity with the former and my work in the latter. This contrasts with government consultations which usually are done with the assistance of experts in the form of consulting firms who have not previously engaged with marginalized groups. Further, it demonstrated how current consultations often lack the inclusion of these communities in the policymaking processes. In the surveys, community members stated that the lack of inclusion has resulted in the development of urban policies that does not account for peoples needs. This was conveyed when one woman in Crescent Valley stated:

*"They keep trying to make things better, but for who? Because it has never been for us."*

These feelings of exclusion are reflected in other participants experiences. In several instances, community members found talking about their experiences comforting. The dynamics of exclusion in policymaking is important because the harshest impacts of policies are downloaded onto the most marginalized. This raises questions about the absence of inclusion in policy consultation of those who are marginalized, namely individuals living in poverty.

There is an interesting dynamic in the data regarding percentage of racialized and non-racialized persons. This question evoked strong feelings from participants, particularly those who presented and identified as white. In some instances, individuals who presented as white felt that they should select yes to being racialized because they feel they are discriminated against. In other instances, individuals with darker skin felt they did not identify as a racialized person. The intention of asking whether or not participants identified as a racialized person was to not impose racial constructs or

categories onto people. What these conversations conveyed is that participants feel strongly that they are discriminated against in urban settings, even in instances where they present as white. When investigating further what type of discrimination participants perceive to have experienced, many indicated it was based on previous or current experiences of homelessness, the neighborhood they live in, their gender identity, and/or being poor. Individuals who identified as racialized conveyed they do face discrimination based on race, but rather discrimination based on income is more pronounced in the city.

**Income**

At the level of the city, 39% of participants indicated their income source came from social assistance which represented the most frequently reported source of income among the population. This was re-confirmed at the neighborhood level where social assistance was the most frequently reported income source by participants in the North End (36%), Central Peninsula (50%), East Side (39%), and West Side (46%). Of the participants from the Metropolitan areas, all reported some form of employment as their main income source (100%) (Figure 6). This is an important indicator of marginalization because social assistance in the province of New Brunswick is considerably lower than what people need on a monthly basis which contributes to poor health. In turn, these conditions of low incomes become embodied into the health of urban residents as their ability to meet basic needs becomes severely limited.

At the neighborhood level participants were asked to report their estimated household monthly income after tax. Of the participants (N=81) who reported their household monthly income, the average was calculated by neighborhood. The Central

Peninsula represented the lowest average monthly incomes at $1081.62/month. Conversely, the Metropolitan area participants reported the highest average monthly income at $3458.33. The East side average monthly income was $1972.05, North end was $1493.86, and West side $1378.47 (Figure 5).

In this case, the Central Peninsula residents have the lowest incomes of all neighborhoods. The NB provincial governments decision to keep social assistance rates and wages low become embodied in people's health. Low income reduces access to healthy food. This illustrates the importance of considering the income levels of marginalized urban residents in planning because neglecting this increases the risk of marginalization. This is because planning devoid of income considerations in the city can lead to gentrifying tactics that push poor urban residents out of the city core.

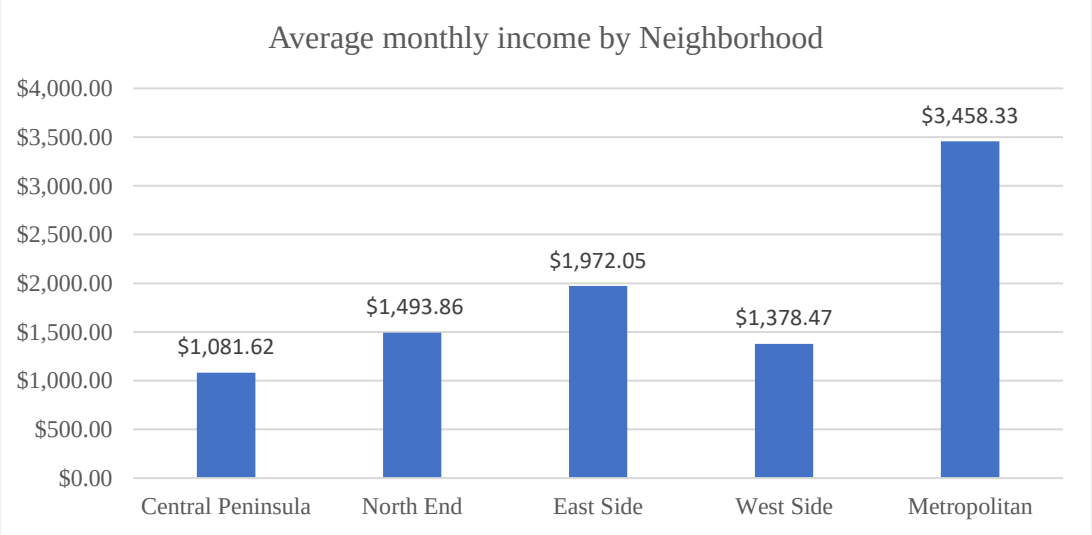


*Figure 5 Most frequently reported income source type:* Figure 5 represents the average monthly income by neighborhood.

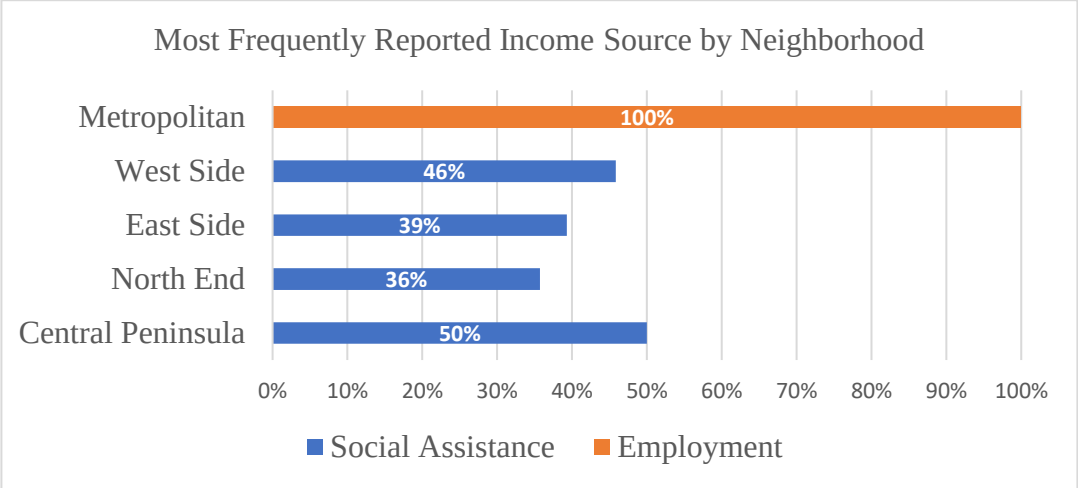


*Figure 6 Most frequently reported income source type:* Figure 6 represents the most frequently reported income source type. Social assistance was the most commonly reported income source in the population living in the city.

*"Minimum wage and other wages such as mine, are still too low to have a decent or comfortable lifestyle / living situation. Such as healthy food and housing, which are not too affordable even when making more than minimum wage." – Participant from Metropolitan Area*

The participants quote demonstrates the compounding effect of low and moderate wages on accessing resources and services that promote health. In particular, it demonstrates how healthy housing and food become unattainable for urban residents who have low incomes under conditions of sprawl and gentrification. Specifically, policy becomes implicated in the data as governments set the rate of social assistance and minimum wages. Therefore, as governments have neglected to implement a living wage for both social assistance and waged employees, this has health impacts as people are unable afford healthy food and other resources. Neglecting to raise social assistance rates to a liveable income follows neoliberal policymaking because the low rates reduce households' ability to acquire their health needs. This is meant to disincentivize reliance on social assistance and increase participation in the waged labour. Conversely, large

corporations' benefit from low minimum wages because this allows them to increase profits by not paying a living wage. This illustrates that governments have used neoliberal policymaking to protect of the interests of large corporations at the expense of urban residents. In turn, the interplay of governments not raising wages/incomes and planning practices not considering those who live in poverty contributes to marginalization in the city.

**Housing**

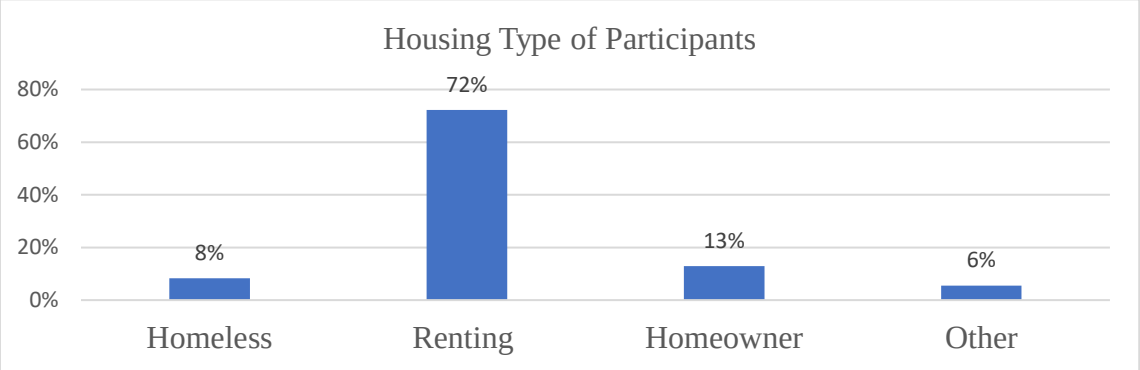


*Figure 7 Reported Housing situation of participants:* This represents the reported housing situation of participants at the time of the survey.

The majority of participants in the study identified as renters (72%). A smaller percentage identified experiencing some form of homelessness (8%) (i.e., couch surfing, sleeping rough, shelter usage, sleeping in cars, etc.,) and being a homeowner (13%) (Figure 7). Renting was also the most commonly reported housing situation across neighborhoods in the city (Figure 8). The type of housing situation participants identified is important for understanding the risks associated with gentrification in the city. This is because renters and homeless populations are at increased risk of being further marginalized by gentrification that reduces the availability of affordable rental housing and social services in communities.

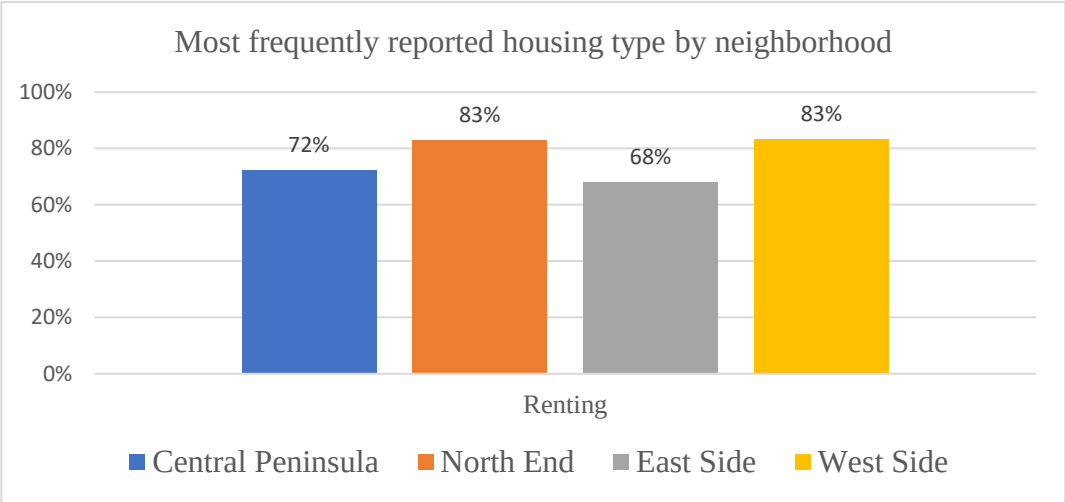


*Figure 8 Most frequently reported housing type:* Figure 8 represents the most frequently reported housing type. Renting was the most commonly reported housing type across neighborhoods.

This situation of unaffordability worsened during and in the aftermath of the pandemic. Participants were asked their rental costs pre-pandemic (March 2020) and now (May 2022-2023). The average increase in rental costs for individuals in market rental housing (i.e., housing owned and provided by a private landlord) was 20%, and in subsidized/public housing (i.e., housing that is either subsidized by government or owned and provided by government) was 6%. The increasing cost of rents in this data for market rental housing is supported by Canada Mortgage and Housing Corporation (CMHC) data which has indicated rents across the province have increased at the fastest and highest rate in the country (Jones, 2023a).

Reduced access to affordable housing depletes the income of urban residents which contributes to poverty, leaving fewer resources that promote health like food. Gentrification in the city resulting from the lack of regulation on rental housing has become embodied in people's health. Embodiment occurs as conditions of homelessness and displacement in the city can lead to long-term physical and mental health consequences such as depression, anxiety, and premature death (Fazel, Geddes, &

Kushel, 2014). For women, youth, and trans identifying people in particular, homelessness and precarious housing conditions presents a high risk for exposure to violence which also has physical and mental health implications (Hwang & Cheung, 2004; Heerde & Patton, 2020; Drescher, Griffin, Casanova, Kassing, Wood, Brands & Stepleman, 2021). In turn, governments decision making that neglects to consider or protect the most marginalized from gentrifying tactics becomes embodied in the long-term health outcomes of poor and marginalized urban residents.

The percentage of income dedicated to housing was calculated based on the average reported income and housing costs (i.e., rent or mortgage) of participants (N=81). Urban residents spent 64% of monthly income on housing costs. This is important because the affordability standard in Canada recommends that people pay 30% or less of their income towards housing. This illustrates that participants are living in unaffordable housing conditions. Therefore, there is not disposable income left to access other resources that are central for health needs such as food and healthy housing.

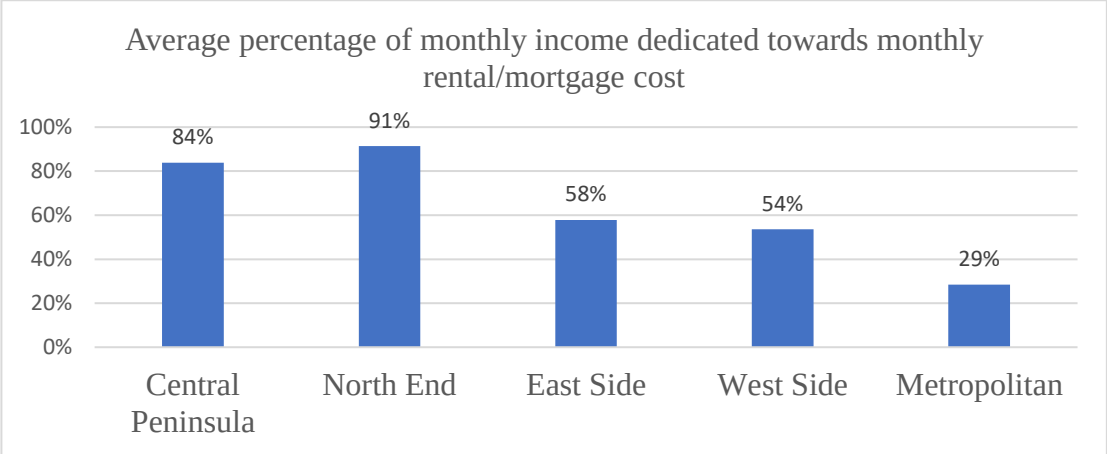


*Figure 9 Average percentage of monthly income dedicated toward monthly housing costs by neighborhood*

At the neighborhood level, participants in the North End had the highest percentage of income towards rental costs, representing 91% of their monthly income on

average. In some instances, participants were paying more in rent than their monthly income. The Central Peninsula participants on average were also dedicating a high percentage of their income toward housing at 84%. The East side and West side participants reported that 58% and 54% of their income, respectively was spent on housing. The Metropolitan area participants paid the least on average percentage of income toward housing costs at 29% which represents 1% lower than the affordability threshold of 30% income dedicated toward rent (Figure 9). In some cases, participants indicated their rent includes the cost of utilities. However, we did not ask participants in the survey for details on their utility costs or whether their utilities are included in the rent.

Across all neighborhoods in the City residents were paying significantly higher than the affordability threshold for housing. The compounding impacts of urban residents with low incomes paying high percentage to housing costs exacerbates conditions of marginalization. In particular, the high percentage of income toward housing leaves little room for urban residents to accommodate rent increases and conditions of displacement. Displacement in this case becomes even more problematic for urban residents in poverty because all areas of the city are experiencing unaffordable conditions. In turn, the impact of gentrification in the city results in fewer housing choice for urban residents that are poor. Therefore, government policymaking under neoliberalism has placed the health of urban residents at risk by neglecting to protect affordable housing in the city. Some of these health impacts were stated by participants during the survey. Specifically, participants stated they have experienced increasing

anxiety and stress with the current gentrification activities happening in their neighborhoods and the displacement of their friends, families, and themselves.

These experiences of anxiety, toxic stress, depression, and suicidal ideation associated with losing your home are common (Smith, Groves Langellier, Keene, Rosenberg, & Blankenship, 2022; Sullivan, 2017). These experiences are lost in the perceived benefits of gentrification which position new developments or renovations of old developments as being good for the community (Palen & London, 1984; Nykiforuk, Schopflocher, Vallianatos, Spence, Raine, Plotnikoff, Vanspronsen, and Nieuwendyk, 2013; Martin, 2014). In many cases, the benefits of these renovations or new developments have not been extended to the people who have historically lived there (Palen & London, 1984; Nykiforuk, Schopflocher, Vallianatos, Spence, Raine, Plotnikoff, Vanspronsen, and Nieuwendyk, 2013; Martin, 2014). Instead, those who have historically lived in the neighborhood are passed down the harshest and most burdensome aspects of these developments through displacement.

*"Before pandemic lived in large house with garage, and now living in small unit without laundry and heat/lights not included in rent. Was laid off during pandemic after working for […] for 10 years. During Covid I have lost my job and moved three times due to owner selling home."* - *Participant from the Central Peninsula*

Evictions, lead to communal trauma (Smith, Groves Langellier, Keene, Rosenberg, & Blankenship, 2022; Sullivan, 2017). In some studies, experiences of evictions have resulted in people displaying symptoms of Post-Traumatic Stress Disorder (PTSD) (Robles-Ortega et., al, 2017; Tsai, Jones, Szymkowiak, et., al, 2021). Policymaking and lack of intervention to support marginalized urban residents is therefore embodied into their mental health as they attempt to cope with these compounding conditions of housing unaffordability and insecurity. Through this lens,

government decision making that prioritizes the interest of private actors in dominant sectors of the global economy has direct implications on the health and wellbeing of urban residents living in poverty.

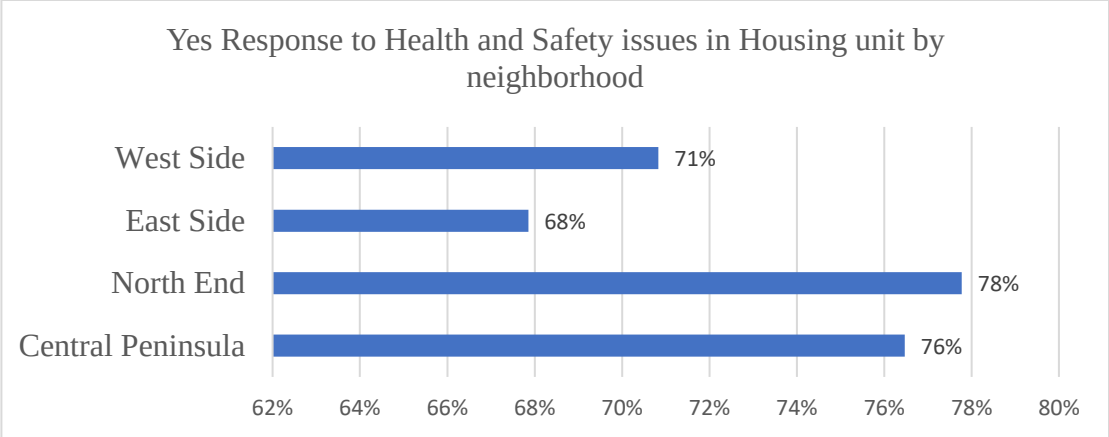


*Figure 10 Presence of Health and Safety issues in home by neighborhood:* Figure 10 represents the percentage of participants by neighborhood that indicated they have one or more health and safety issues in their home.

Also, a high rate of participants had health and safety issues in their homes. Of all participants in the study, 69% indicated they have some form of health and safety issue in their home from mold, radon, broken windows, pests, drafts and ventilation issues, etc. At the neighborhood level, participants in the North End had the highest percentage of respondents that reported having health and safety issues in their housing at 78%. Participants living in the Central Peninsula (76%), West Side (71%) and East Side (68%) all had high rates of yes responses to the presence of health and safety issues in their units (Figure 10).

The nexus of unaffordability and unhealthy homes increases the potential for illness. This is because urban residents have less income to access health promoting needs and are living in conditions that put their health at risk. Even though participants experienced high rent increases and unaffordable conditions they were living in homes

that put their health at risk. Advocates of gentrification argue the increased supply of new, often luxury, housing will create affordable conditions in older or less desirable housing. However, the dynamic across neighborhoods in Saint John suggests otherwise. Rather, participants with low incomes are paying the highest percentage of their incomes on average for unsafe and unhealthy housing regardless of the increased presence of gentrifying development activity, particularly in the North End. This demonstrates that gentrification and neoliberal policies promoted by institutionalist and market-oriented perspectives do not resolve issues of affordability or healthy conditions through increased supply.

**Food**

Forty-four percent of study participants reported being unable to access healthy food in their neighborhood. First, participants indicated they often did not have access to healthy foods in their neighborhoods which reflects issues related to sprawl-design creating single-primary purpose neighborhoods. Single-primary purpose neighborhoods result in the overrepresentation of one land use, such as neighborhoods that only have housing, business and commercial, etc. Neighborhoods that do not incorporate mixed-uses, such as housing and healthy food sources, in the same area increases barriers to healthy food sources and connection with other health resources.

Second, participants explained that even when they could get to healthy food in the proximity of their homes, their incomes could not cover the purchasing costs. This demonstrates how sprawl and gentrification have led to conditions of unaffordability which create a context where urban residents become either unable to access or unable to afford food. In 2022 Statistics Canada indicated there are growing rates of food

insecurity in New Brunswick (PROOF, 2022). When reviewing the data, New Brunswick rates of food insecurity dropped in 2020 and increased significantly by 2022. These changing scenarios are connected to income support programs during the COVID-19 pandemic and the termination of the programs (Polsky & Garriguet, 2022). This demonstrates how conditions of marginalization, namely low incomes and food insecurity, are created by neoliberal policymaking which reduces government support to urban residents.

Lack of access to healthy food is also reflected at the neighborhood level (Figure 11). The neighborhood with the highest rate of "no" access to healthy food responses was in the Central Peninsula (67%). Participants living on the East Side represented the second highest "no" response to accessing healthy food, at 57%. Alternatively, the West Side had the highest reported "yes" response to accessing healthy food at 54%. Forty-three percent of participants in the North End reported "yes" they had access to healthy food, and 36% reported "no."

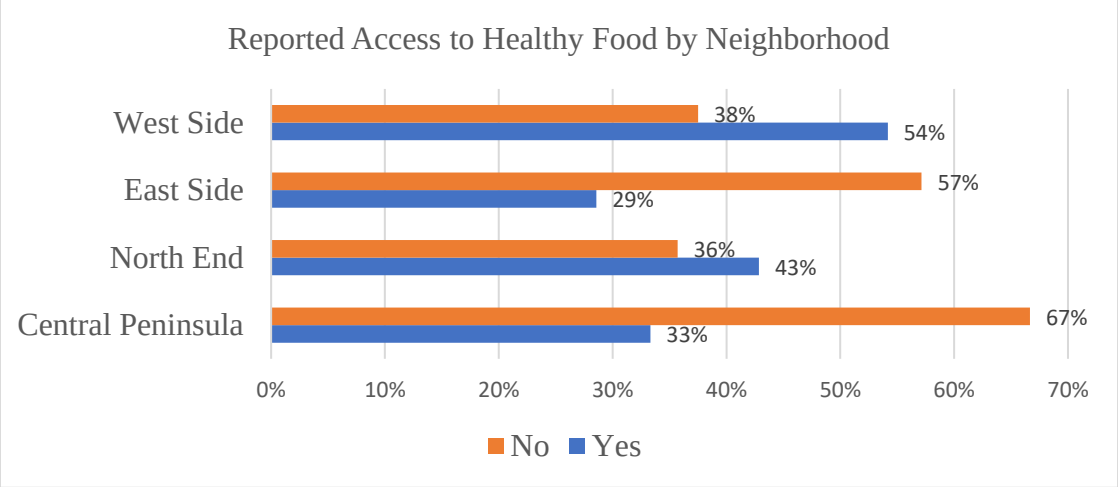


*Figure 11 Reported Access to Healthy Food by Neighborhood:* Figure 11 participants perceptions in percentage of whether they did or did not have access to healthy food in their neighborhood. The Central Peninsula represents the highest "no" response (67%).

The lack of healthy food access in the Central Peninsula is an on-going issue. There are two small grocery stores in the vicinity. Yet, one grocery store closes early and is expensive, and the other one has limited produce and poor quality. In turn, Central Peninsula residents face barriers associated with accessing food in their neighborhood because of the lack of affordable and healthy food spaces, and lack of incomes. While the area also has community gardens, they only provide food for a certain period of the year. Therefore, the present form of community gardens are not long-term solutions.

Healthy food is an essential factor to maintaining good health and preventing disease. Research on food insecurity has demonstrated these conditions create chronic and non-communicable diseases such as diabetes, hypertension, and heart disease (Tarasuk, McLaren, et al., 2013; Tait, L'Abbe, Smith, et al., 2018; Kirkpatrick, McIntyre, & Potestio, 2013). There are also mental health impacts associated with lack of healthy food and food insecurity, such as anxiety, depression, suicidal ideation, and behavioral issues (McIntyre, Williams, Lavorato, et al., 2013; Jessiman-Perreault & McIntyre, 2017; Shafiee, Vatanparast, Janzen, et al., 2021). In children and youth, food insecurity symptoms can present as behavioral issues due to lack of nutrients to help the body regulate and the anxiety associated with not knowing when/what they will eat next (McIntyre, Wu, Kwok, et al., 2017) Research has also demonstrated children and youth in food insecure households have higher levels of suicidal ideation and anxiety (McIntyre, Williams, Lavorato, et al., 2013). This illustrates how urban design intensifies conditions of marginalization in the form of food insecurity which become embodied into our health.

**Transportation**

The main method of transportation through the city reported by participants was by car (32%). The bus was the second most commonly reported form of transportation (30%), walking was the third (27%) and some participants relied on a mix of cars, walking, taxi, and the bus. Bike usage was the least commonly reported answer. The high level of car usage among participants was interesting given that the majority also relied on social assistance or had low incomes. This speaks to the reliance of sprawled cities on cars, which forces those who are living in poverty to acquire a private vehicle.

At the neighborhood level, participants more frequently reported relying on walking as their main method of transportation in the North End (46%) and Central Peninsula (50%). In contrast, the reliance on a car was more frequently reported among participants from the East Side (50%) and Metropolitan areas (100%) (Figure 12). The neighborhood with the highest proportion of respondents that relied on public transportation was the West Side (58%). These results can be attributed the design mechanisms of these spaces but also the income levels of these neighborhoods. The North End and Central Peninsula are more walkable which is likely due to the street design of these neighborhoods remaining similar to pre-WWII design. The North End does have single purpose neighborhoods in some areas but there are grocery stores and shopping plazas within walking distance. However, for persons with physical disabilities this disconnection of land uses can present mobility barriers, particularly due to the low incomes and lack of public transportation options (Munoz-Martinez, et., al, 2021). Similarly, the Central Peninsula has a diversity of uses. However, the diversity of uses is largely in the Uptown area of the Central Peninsula which represents the higher priced

apartments and homes. As a result, urban residents with physical disabilities in the South End also face mobility barriers, particularly in the wintertime when sidewalks are not ploughed (Munoz-Martinez, et., al, 2021).

The design of the East side reflects the many characteristics of sprawl with large shopping centers and parking lots making up the core while residential neighborhoods surround the area. This design makes walking difficult as parking lots proliferate the east side which separates pedestrians from the sidewalk and stores. Attempting to walk to get groceries and back home in this setting takes up even more time which promotes car usage over walking or public transportation (Morland, et., al, 2002). Residents of the East side that do not have private automobiles face barriers associated with access to food and services because of the inaccessibility of walking and the cost associated with owning a vehicle.

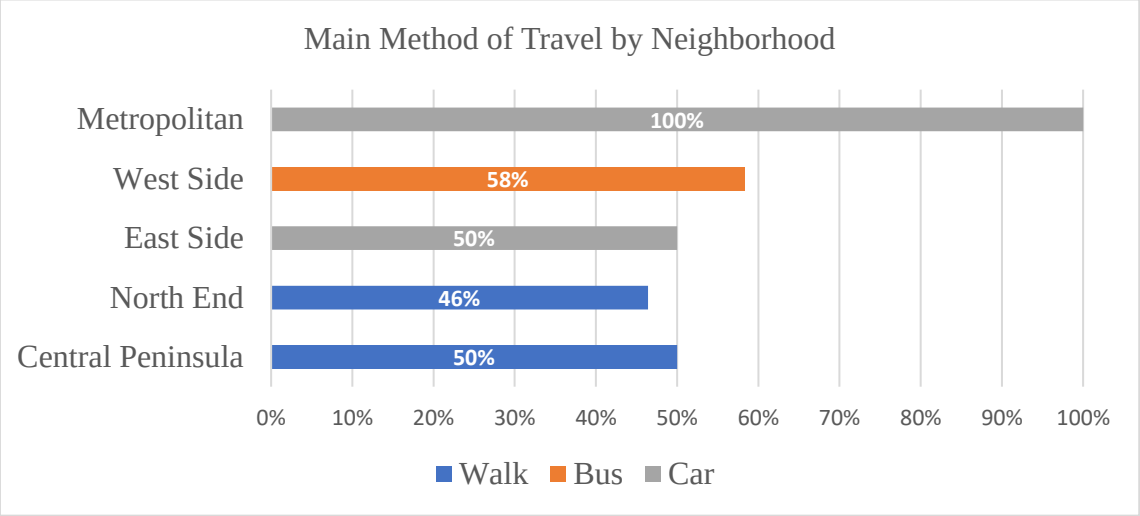


*Figure 12 Main Method of Travel by Neighborhood:* Figure 12 represents the most frequently reported method of travel by neighborhood. Central Peninsula N = 16, North End N = 27, East Side N = 28, West Side N = 24, Metropolitan N = 6.

The design of the city creating a reliance on a private automobile is reflected in the barrier's urban residents reported when trying to move through the city. The most

commonly reported barriers in the city were lack of a driver's license (39%) and gas prices (39%). Other identified commonly reported barriers were lack of income/low income (32%), cost of maintaining a vehicle (25%), lack of income/credit to finance or lease a vehicle (20%), bus times not being frequent enough (19%), and sidewalks being poorly maintained (17%) (Figure 13).

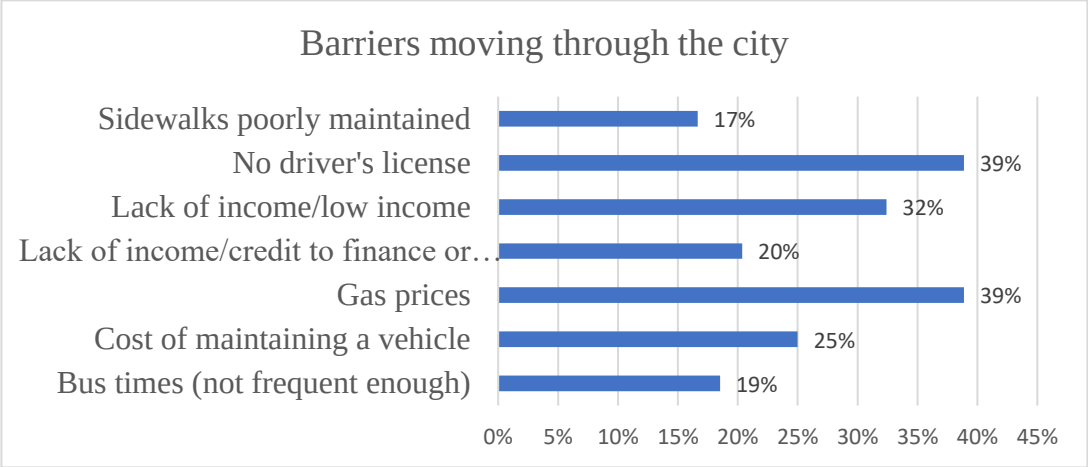


*Figure 13 Barriers moving through the city:* Figure represents identified barriers to moving through the city. Gas prices and no driver's license were the top reported barriers.

This data reveals the consequences on mobility imposed by sprawl. First, the lack of  a drivers' license in a sprawled city actively creates mobility barriers. Thus, communities with car centric design actively produce conditions of marginalization for those who do not have a license or private vehicle. Second, increases in gas prices reduce people's incomes, particularly those with low earnings and paying high rents. This creates further marginalization which may contribute to health inequities as people have to spend more on travel costs rather than their health.

Participants living in the Central Peninsula's reported that the barriers to traveling through the city was low/lack of income (62%) and no driver's license (62%). Additionally, participants in the Central Peninsula frequently reported that cost of

maintaining a vehicle (46%), poorly maintained sidewalks (38%), cost of driver's training (38%), and lack of income/credit to finance or lease a vehicle (38%) as barriers to moving through the city (Figure 14). People living in the North End (Figure 15) and West side (Figure 16) shared similar experiences regarding urban mobility barriers. Participants on the East side of Saint John differed slightly in their reported barriers compared to the West side, North End, and Central Peninsula. The most frequently reported barrier among East side participants was gas prices (61%). Cost of maintaining a vehicle (36%), lack of income/low income (29%), and no driver's license (29%) were all also reported to be barriers experienced by East side residents (Figure 17).

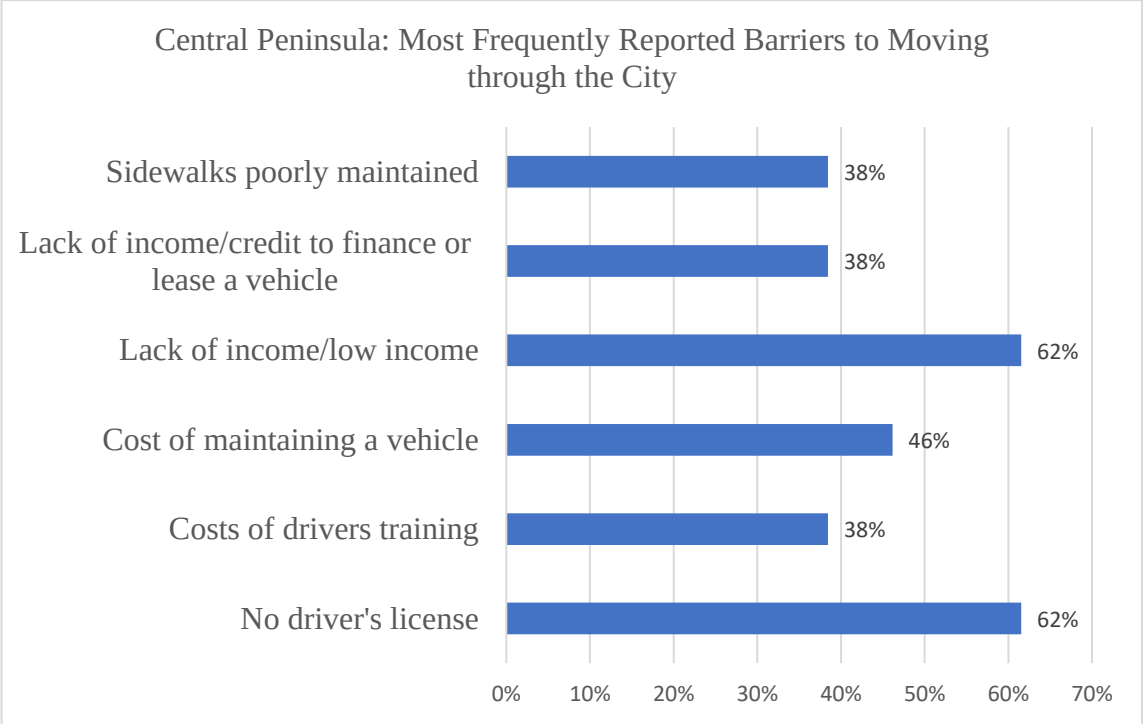


*Figure 14 Most Frequently Reported Barriers to Moving through the city (CP):* Figure 14 represents the most frequently reported barriers participants in the Central Peninsula face when traveling through the city.

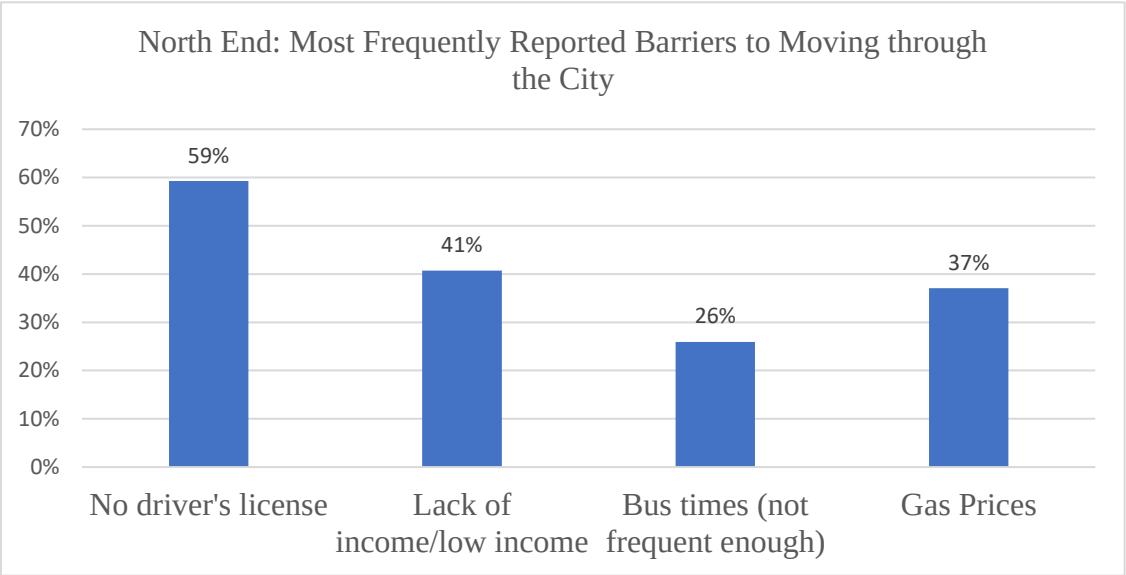


*Figure 15 Most Frequently Reported Barriers to Moving through the city (NE):* Figure 15 represents the most frequently reported barriers participants in the North End face when traveling through the city.

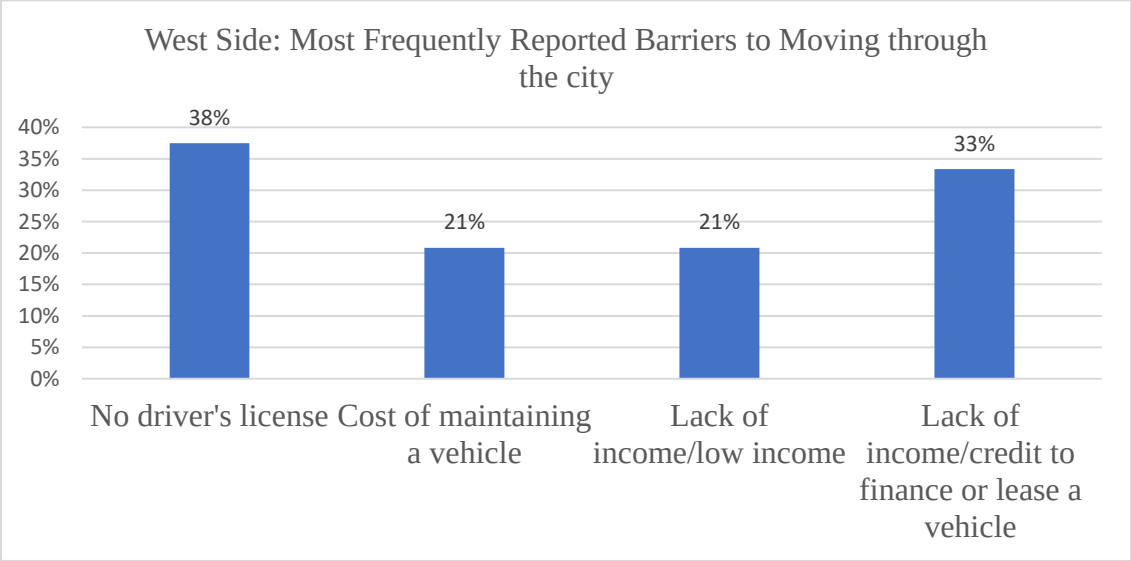


*Figure 16 Most Frequently Reported Barriers to Moving through the city (WS):* Figure 16 represents the most frequently reported barriers participants on the West side face when traveling through the city.

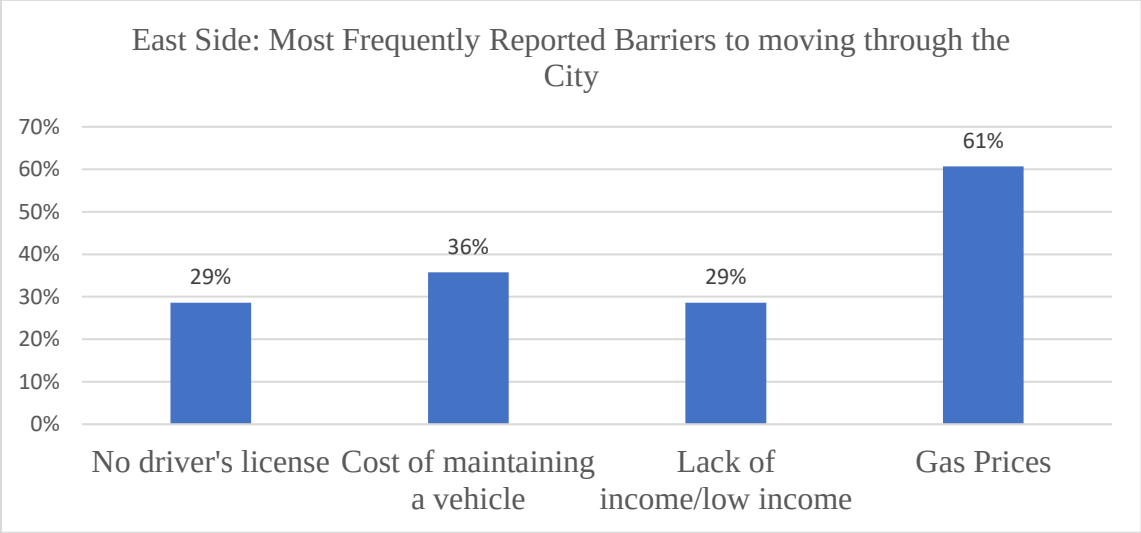


*Figure 17 Most Frequently Reported Barriers to Moving through the city (ES):* Figure 17 represents the most frequently reported barriers participants on the East side face when traveling through the city.

This data reveals two important points related to transportation and neighborhood design. First, the Central Peninsula participants relied on walking as their main method of transportation and as previously mentioned, the neighborhood lacks a diversity of grocery store spaces with affordable healthy food options. For that reason, people in those neighborhoods have to purchase foods from large grocery stores in other areas of the city. This is not an accessible or feasible solution for those who rely on walking and have fixed or low incomes. Therefore, without access to a car, participants in the Central Peninsula have limited food options. This is exacerbated by the urban design of sprawl in the city, low incomes, gentrification activities, and the location of food sources. This is reflected in the food access data because participants in the Central Peninsula had the highest no response to accessing healthy food. Second, the East side residents primarily relied on car usage and reported gas prices as one of their biggest barriers.

In this case the residents of the East side are incurring high costs of gas and having a car, which can reduce the ability to acquire healthy foods. In these two cases the implications of sprawled design impact residents differently. On the East side, participants face the high cost of sprawl reducing their incomes through automobile usage. At the same time, the East side had the highest reported income. Yet, they also had the second highest rate of being unable to access healthy foods and were more reliant on private vehicles. In the Central Peninsula, participants are impacted by sprawl because of the lack of food sources in their neighborhoods. This becomes compounded by the lack of active and public transportation infrastructure that can take them to other areas of the city where food sources are located. Participants in the Central Peninsula are walking not solely due to choice but also due to income levels that reduce their ability to acquire a private vehicle.

In both cases, lack of access to healthy food is shaped by neighborhood design. This is exacerbated by low incomes and the city design relying on private automobiles. This suggests that sprawl design intensifies conditions of marginalization for individuals on low to moderate incomes because individuals living in poverty rely on private automobiles which reduces disposable income for healthy food. While some may point that they could sell their vehicles, this is not feasible under sprawl design and the lack of accessible and efficient public transportation. In some cases, walking also is not accessible because of the prevalence of roads, parking lots, and harsh cold climates. This is particularly the case in low-income neighborhoods in the city where one study revealed the lack of sidewalk maintenance in the winter severely reduces mobility of poor urban residents (Munoz-Martinez et., al, 2021). This demonstrates how choice of

method of transportation is largely influenced by the urban design and income, and how policy in urban settings can create further conditions of marginalization when attempting to access health promoting resources.

**Health**

Participants were presented with a list of health conditions, specifically non-communicable diseases, and were asked to select the health conditions they have been diagnosed with. The list was derived from the top causes of death in New Brunswick. Thirty-three percent (N=36) of participants identified having one or more of the health conditions listed (Figure 18). Of those who had a health condition, high blood pressure (18%) was the most frequently reported. High blood pressure, also known as hypertension, has often been studied through the lens of behavioral and lifestyle choices. However, this neglects to consider that exposure to chronic stress over an individual's life is one of the most common determining factors contributing to hypertension in particular for marginalized groups (Spruill, 2010). These stressors can be related to housing unaffordability and instability, trauma, financial difficulties, employment types, and dynamics of oppression such as classism, racism, and sexism (Spruill, 2010). Additionally, diabetes is also commonly analyzed through the lens of behaviors and lifestyles which neglects to consider how conditions of marginalization prevent access to healthy foods due. This is compounded by sprawl and gentrification, as sprawl disconnects urban residents from food sources and gentrification makes it increasingly difficult to purchase healthy foods due to reduced incomes. The lack of active transportation options intensifies this because more income must be dedicated to travel that could be saved if the city sidewalks efficiently carried residents from one area to the

other (Munoz Martinez, et., al, 2021; Lopez, 2012). Also, active transportation promotes physical activity which is essential for reducing negative health outcomes (Munoz Martinez, et., al, 2021; Lopez, 2012). The data reveals there is a concerning level of non-communicable diseases among community members that participated in the research. It also shows presents issues with how conditions of marginalization and policymaking become embodied into our health.

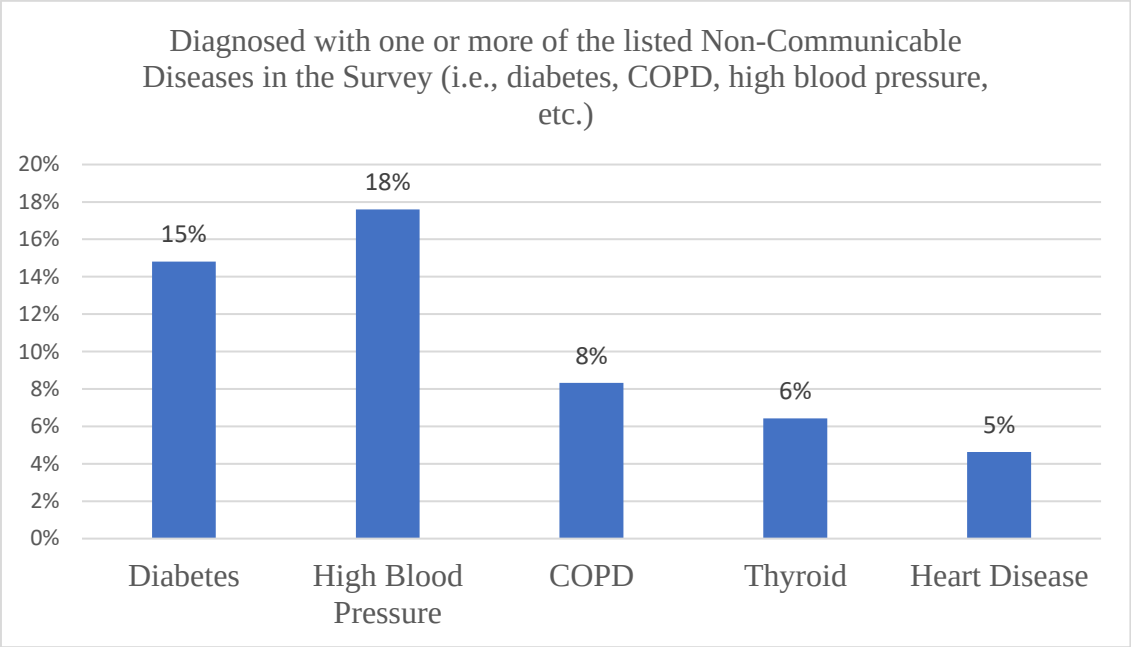


*Figure 18 Diagnosis of a Non-Communicable Disease:* Figure represents (N=36) participants that identified having a diagnosis of one of the conditions provided in the survey. High blood pressure was the most commonly reported disease (18%), followed by diabetes (15%).

Further, the data reveals potential indirect health consequences associated with sprawl. In particular, the province of New Brunswick has 18,000 kilometers of highways and roads (Government of New Brunswick, n.d.). This high presence of paved roads has serious implications for health. On the one hand, the reliance on private automobiles in the city and province exposes urban dwellers to pollution (Munoz-Martinez, et., al, 2021). In the city of Saint John, this pollution exposure is intensified by the presence of large industry, such as Canada's largest oil refinery (Milewski & Liu, 2009). As a result,

urban residents experience further exposure to pollution which increases the risk of negative health outcomes such as COPD, cardiovascular disease, and lung cancer (Milewski & Liu, 2009; Schraufnagel, et., al, 2018; Franklin et., al, 2015).

On the other hand, the implications of the large presence on concrete can intensify pre-existing health issues for urban residents during heat waves or even hot summer days (Cardoza, et., al, 2020; Ebi, Capon, Berry, Broderick, de Dear, & Havenith, 2021). This becomes exacerbated when urban residents live in housing with health and safety issues, such as poor ventilation (Chen, 2019). Groups that are at higher risk for heat related illnesses and death are individuals with poor housing quality or in homelessness, elderly and young populations, and individuals with pre-existing health issues, in particular high blood pressure, diabetes, heart disease, and COPD (Schwarz, Castillo, Chan, Brennan, Sbrioli, et., al, 2022; Westphal, Childs, Seifert, Boyle, Fowke, Iñiguez, & Cook, 2015; Gayle, Quint, & Fuertes, 2021; Botchwey, 2019). This demonstrates that sprawled urban design and policymaking have significant implications on the health of urban dwellers.

At the neighborhood level, participants who reported one or more diagnoses from the list were assigned a score of 1 to reflect a "yes" response. Those who selected "none of the above" or "prefer not to answer" were assigned a 2 to reflect a "no" response. The West Side had the highest reported "yes" response to diagnoses from the non-communicable disease list at 50%. The presence of large polluters, such as industrial factories, on the West side could be a contributing factor to the high levels of

poor health outcomes. However, further research is needed to understand the impacts of air pollution exposure on the West side resident's health.

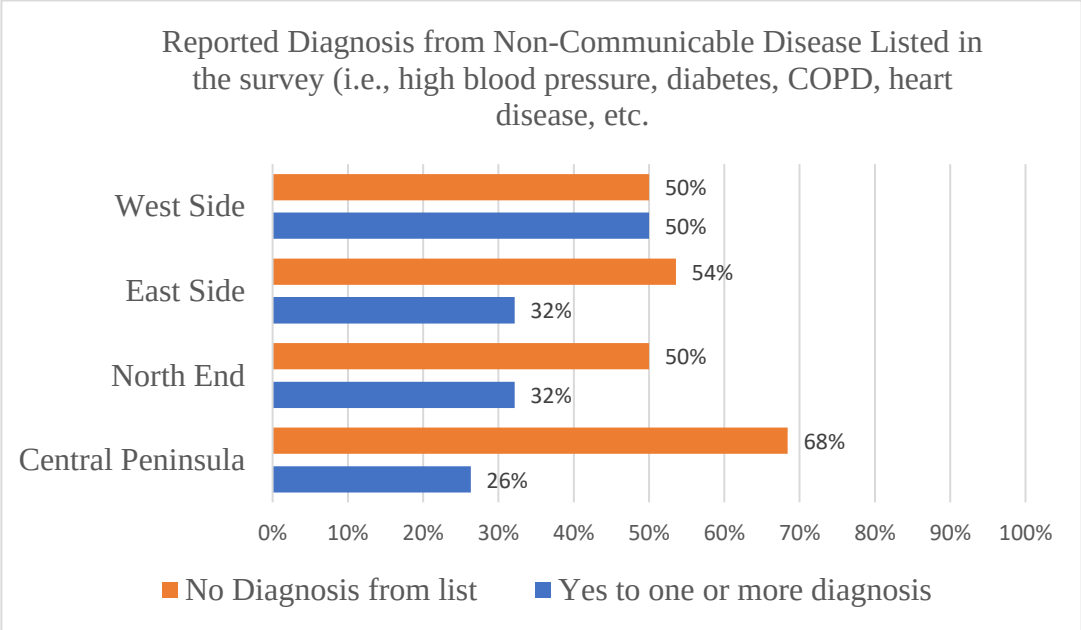


*Figure 19 Reported Diagnosis from Non-Communicable disease list by neighborhood:* Figure 19 represents the percentage of participants by neighborhood that indicated they have one or more of the non-communicable diseases in the list presented to them. The metropolitan area was excluded from this analysis as there was significantly less participants in the study from this area, which could produce an inaccurate picture of health in this community.

Community members across neighborhoods placed a particular emphasis on mental health in conversations rather than physical health. Many pointed to the lack of affordable and healthy housing, poverty, and low incomes as contributing factors to the increase in mental health issues within the community.

*"Social problems are leading to mental health problems. It is hard right now, I bet the suicide rate is through the rough with how stressful it is." – Participant from the North End*

This participant also spoke about their own experience of how unsafe conditions in rooming housing exacerbate mental health and substance use issues. This experience highlights that unsafe and unhealthy housing conditions have implications for the mental

wellbeing. These conditions are derived from the provincial and federal government divestment from housing, and municipal governments inability to fill this policymaking gap.

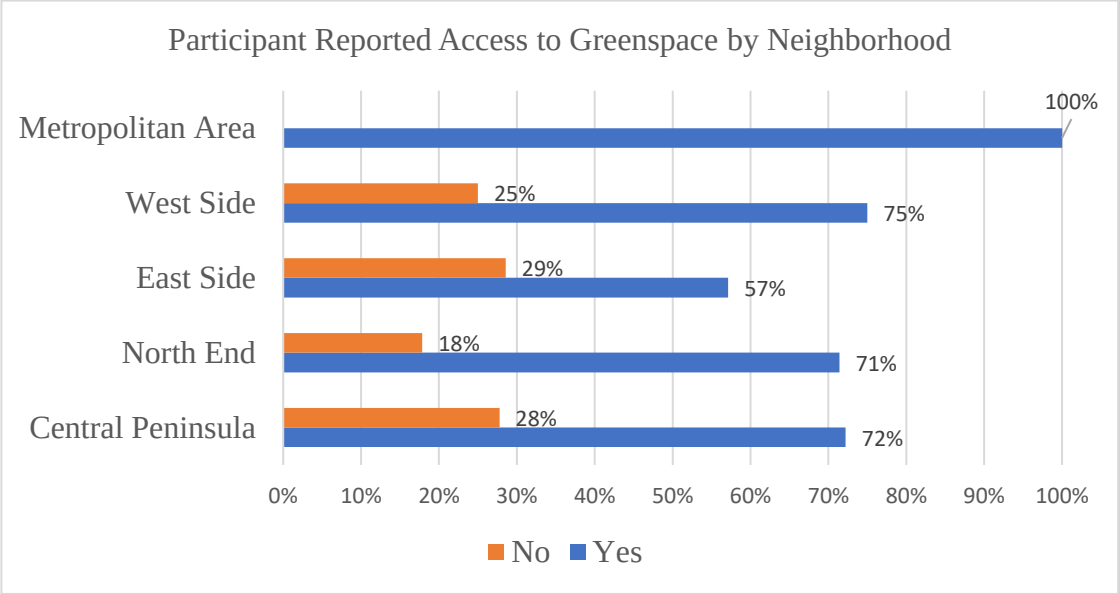


*Figure 20 Reported Access to Green Space by Neighborhood:* Figure 20 participants perceptions in percentage of whether they did or did not have access to green space in their neighborhood.

Participants across neighborhoods reported high levels of "yes" responses to access to green spaces such as parks, trees, and trails in the neighborhoods. Access to greenspace was viewed fairly positively among participants. The East Side represented the lowest number of respondents reporting yes to access to greenspace at 57% (Figure 20). Green space is important in cities as they can promote connection with nature that is often lacking in urban spaces (Coburn, 2013; Crume, 2019; Friel, Hancock, Kiellstrom. McGranahan, Monge, & Roy, 2011). Importantly, trees protect residents from the sun on hot days in the summer. Public green spaces are important when living in housing that has ventilation issues or experiencing homelessness because it provides urban residents spaces that can help with body temperature regulation (Coburn, 2013; Crume,

2019; Friel, Hancock, Kiellstrom. McGranahan, Monge, & Roy, 2011). This is particularly important given that Saint John has 1160 lane kilometres of lane roads in total, which can cause heat islands/heat domes in the city (City of Saint John, n.d.; Nuruzzaman, 2015).

**Needs in the City**

Participants were asked to select from a list of community health items the top issues within the community they would like to see addressed. Of all listed community health needs, the top five most frequently selected responses were: poor quality housing (63%), affordable housing (56%), poverty (43%), unemployment (32%) and difficulty accessing healthy food (32%) (Figure 21). Other community health needs identified by participants were urban design being unsafe for seniors and persons with disabilities (21%), the community requiring a car to access most services (20%), lack of public transportation (18%), and poor air quality (15%). All of these community health needs reflect how sprawl and gentrification contribute to increasing marginalization. In particular, this marginalization manifests through unhealthy and unaffordable homes, poverty through increased costs being passed down to those with the least, and difficulty in accessing resources such as food. The lack of government investment into these health needs become embodied into people's health as sprawl makes it increasingly difficult for participants to access their needs and incur additional costs. Further, gentrification contributes to increased costs of housing while still living in conditions that exacerbate negative health outcomes (Figure 21).

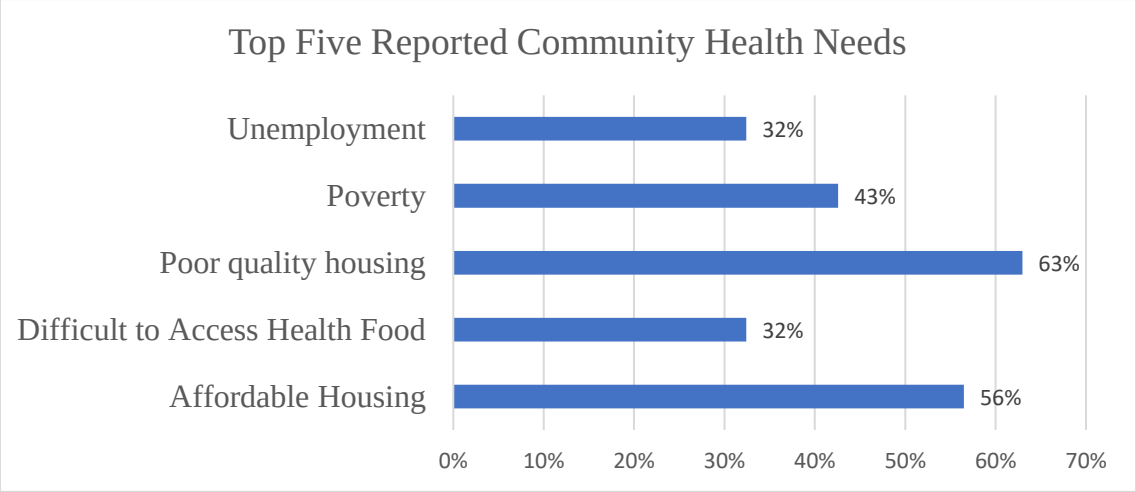


*Figure 21 Top Five Reported Community Health Needs:* Figure 21 represents the top five most frequently reported community health needs. Poor quality housing and affordable housing were the top two most frequently reported community health needs.

The top three reported community health needs by neighborhood are presented in the figures below. Poor quality housing was one of the top-rated community health needs in the Central Peninsula (76%; Figure 22), North End (59%; Figure 23), and West side (58%; Figure 24). Affordable housing and poverty were also highly rated community health needs participants in the Central Peninsula (71%; 71%), North End (48%; 52%) and West Side (54%; 33%). The most frequently reported community health needs from the East side of the city were poor quality housing (64%), affordable housing (54%), and difficulty to access healthy food (39%) (Figure 25).

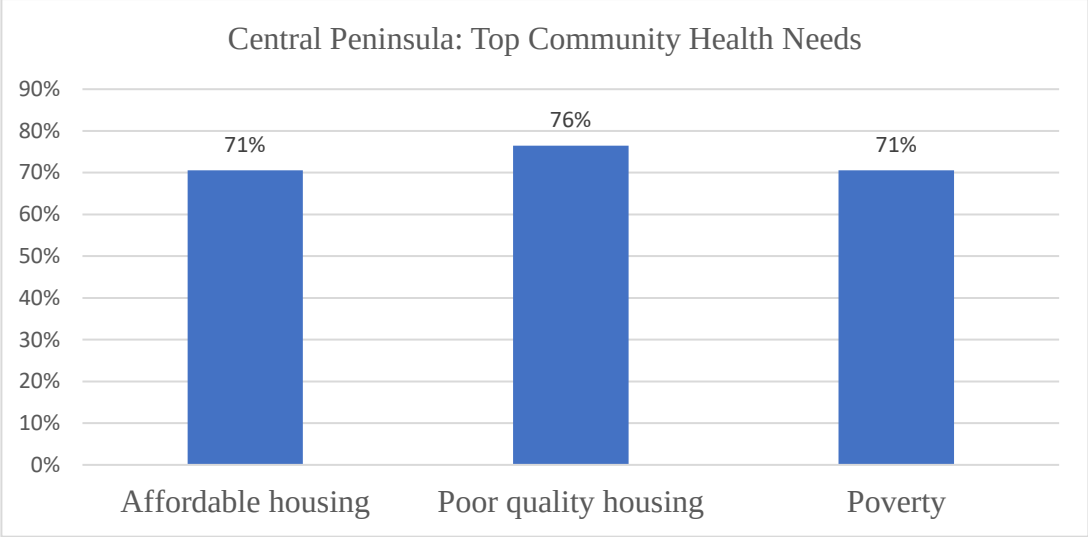


*Figure 22 Reported Top Three Community Health Needs by Central Peninsula Participants:* Figure 22 represents the three most frequently reported community

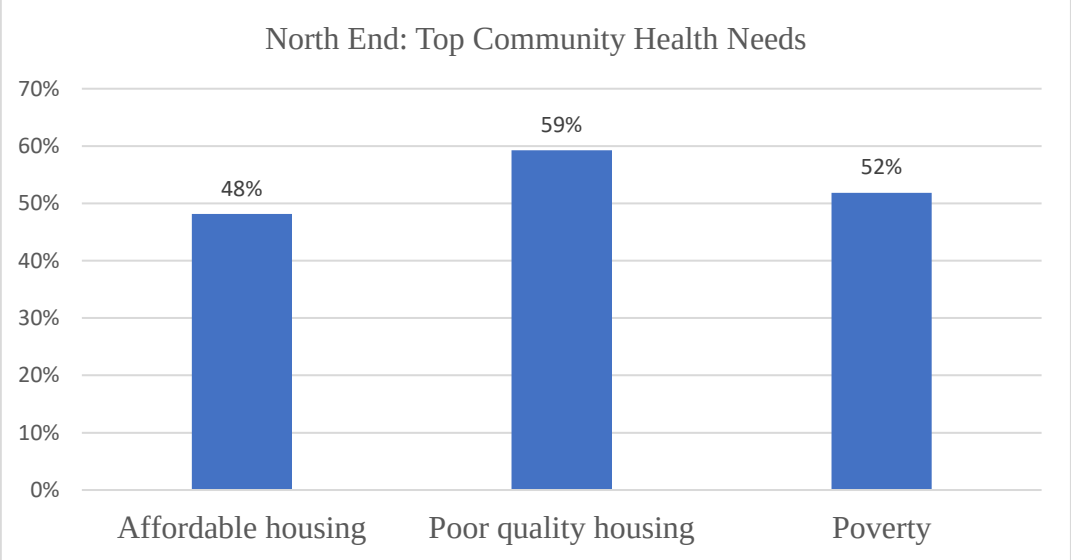


*Figure 23 Reported Top Three Community Health Needs by North End Participants:* Figure 23 represents the three most frequently reported community health needs by participants in the North End.

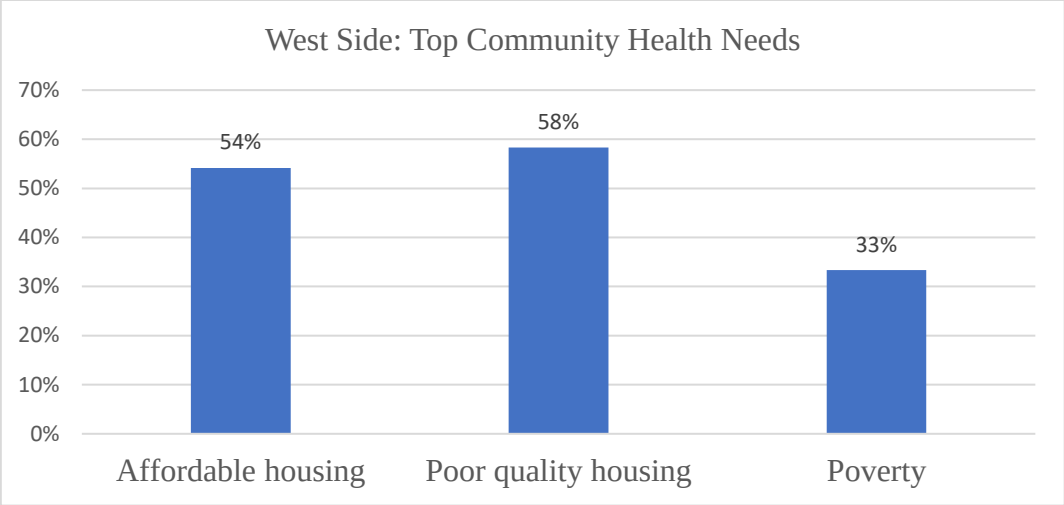


*Figure 24 Reported Top Three Community Health Needs by West Side Participants:* Figure 24 represents the three most frequently reported community health needs by participants on the West Side.

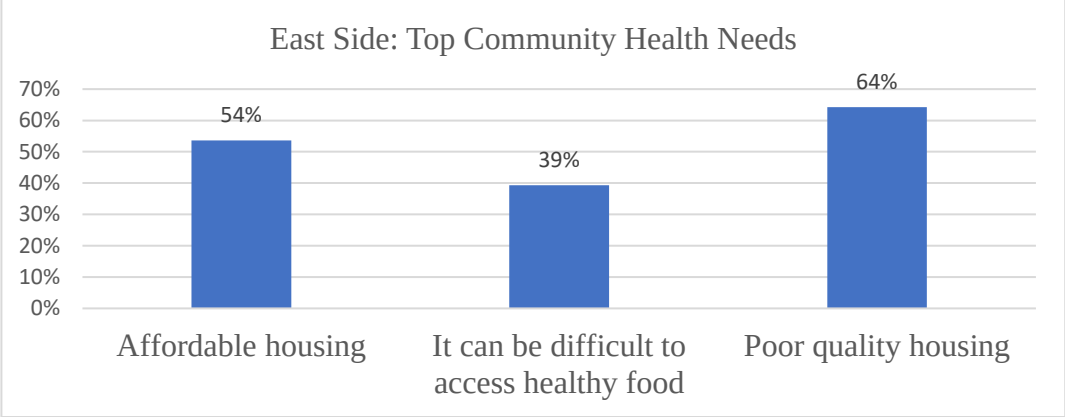


*Figure 25 Reported Top Three Community Health Needs by East Side Participants:* Figure 25 represents the three most frequently reported community health needs by participants on the East Side.

Many community members provided comments during the survey regarding the compounding stress, anxiety, and depressive episodes they face in the context of increasing cost of living, in particular related to housing and food. Other's spoke to the fear they feel at the prospect of potentially being evicted or facing a rent increase, and the pain they feel when seeing their community members and neighbors displaced. For these reasons many expressed the need for healthier and more affordable housing.

*"We are in a crisis and need more housing units, displacement is real." – Participant from Central Peninsula*

*"People pay lots of money in taxes and it doesn't seem like it is being put back into the community." – Survey Participant from Saint John, NB*

The data reveals that across neighborhoods community members are reckoning with the fast-paced gentrification and financialization of housing. This suggests that it is becoming increasingly difficult for community members to simply move when evictions and rent increases occur. This is because unaffordable and unhealthy housing is proliferating the city which reduces choice for marginalized urban residents. Additionally, the process of displacement in the city compounds other issues identified in the data, such as low incomes, lack of healthy food access, and transportation barriers. These are political and economic outcomes that become embodied in people's health as revealed by survey participants. The results of the survey demonstrate how neoliberal policymaking neglects to consider health issues within urban planning. The results illustrate how marginalization is compounded under sprawl because of the reliance on private automobiles for mobility and single-use spaces that separate urban residents from health needs such as food. It also demonstrates how gentrification in the city intensifies marginalization by creating increasingly unaffordable and unhealthy housing. Aspects of gentrification such as beautification through bike lanes, recreational spaces, green spaces, and parks can improve health. However, the problem is gentrification actively displaces marginalized populations that may benefit from access to these health promoting features in their neighborhoods. Therefore, the benefits of beautification under gentrification are often not experienced by marginalized community members. This shows how viewing community health in isolation from planning practices and policymaking neglects to consider how the urban landscape shapes conditions of

marginalization which is intensified by the lack of municipal resources to adequately service the city. In turn, planning under neoliberalism becomes devoid of considerations for the most marginalized and exacerbates inequities in the city.

**Embodying the City and Policymaking under Neoliberalism**

The data shows how the body politic becomes implicated in these conditions of marginalization experienced by urban residents in Saint John. The data highlights how forces beyond the individual level are implicated in the growing rates of health inequities and marginalization across neighborhoods in Saint John. Further, the data reveals that urban residents embody government policymaking that has resulted in the latter divesting from urban infrastructure, such as housing and transportation.

The data reveals important questions regarding health, community needs, and who is responsible to provide public services. Under neoliberalism, it is the individual's responsibility to meet their need in both the city and related to health. In both the health and economic perspective of these debates, blame lies at the feet of those who are marginalized. In turn, governments neglects to appropriately respond as the solutions lay within the individual. The data also reveals the city is highly dependent on private actors from dominant sectors of the global economy to construct and provide the necessities of life such as housing. The province and city have prioritized the interests of large companies and investors in dominant sectors of the economy on the basis they hold expert knowledge in urban design. This is reflected in participants responses of feeling excluded from policymaking which results in urban design and planning not meeting the needs of marginalized urban residents. In turn, these urban residents are not positioned as knowledge holders regarding their neighborhood needs. Rather, insight is acquired

from private actors who apply neutrality to urban neighborhoods in the city which intensifies health inequities. As a result, the exclusion of marginalized urban residents in urban planning and policymaking becomes embodied in their health, particularly when they are displaced from neutral land use planning.

The study shows how health is at risk because of the significantly low incomes in the city which become exacerbated by high rents, single-primary use spaces, and car centric design. The majority of participants income is paying for housing which reduces disposable income to cover other health needs. Those who pay the most for their housing are also forced into conditions that simultaneously deteriorate their health through exposure to mold, radon, drafts and poor ventilation, etc. The interplay of low incomes, and unaffordable and unhealthy homes increase conditions of marginalization and negative health outcomes for urban residents in poverty. Here, the cost of sprawled urban design and gentrification have been passed onto those that live in poverty. The data challenges notions that under neoliberalism standards of living will improve in deregulated environments. As a result, government divestment from urban policy has become embodied in people's health.

As well, the body politic under conditions of neoliberalism has actively contributed to conditions of marginalization through a lack of investment in public and active transportation and promoting sprawl-design which requires a car for urban mobility. In turn, the choice to not sufficiently invest in public and active transportation reduces urban dwellers incomes and access to everyday needs, such as food and recreational spaces. This data also shows how mobility influences access to healthy food and how urban design as well as income influence mobility. It also shows how the city is

highly dependent on residents to use private methods of travel to access services and food. This is because sprawl and neoliberalism have created an environment where municipalities must service a large geographic area with minimal budgets. This has led to insufficient funding of public transportation and other services. In turn, this lack of funding for public and active transportation becomes embodied in the health of urban residents as they struggle to afford the costs of private automobiles, and access food which is intensified by significant portions of their income paying for housing.

The data reveals how viewing housing, transportation, food, income, and urban planning in isolation creates conditions of marginalization. Cities need to consider housing, income, transportation, health, and urban planning as interrelated factors. Without these everyday needs being co-located in mixed use spaces urban residents face increased financial pressures which contributes to marginalization. In turn, their health is placed in jeopardy as lacking one of these needs can create a ripple effect for accessing others. The city of Saint John continues to see conditions of marginalization and negative health outcomes because of government devolution from providing public services and urban planning practices reliant on private sector neglect to consider health needs as a whole rather than in isolation.

## Conclusion

The data shows that the design of cities and urban policy matter for the health and marginalization of urban residents. It demonstrates how sprawl and gentrification under neoliberalism separate urban residents' health from the design of the city. This occurs when government policymaking views individuals as responsible for meeting their daily transportation, housing, income, and food needs. As a result, the urban

landscape and policymaking neglect to consider these factors as interrelated to the design of the city. The data also demonstrates how government devolution from providing public services intensifies inequities in cities, particularly for urban residents in poverty. This is important as policymaking devoid of consideration for the most marginalized results in cities that intensify health inequities. Viewing urban needs in isolation from each other during the planning process compounds government devolution from public services. This is because it becomes increasingly difficult for individuals living in poverty to acquire and afford these needs due to low-income urban residents' reliance on private vehicles to connect with single-primary use spaces. This is intensified by government reliance on gentrification to ameliorate sprawl which reduces housing options for low-income urban residents. Without considering these health needs as interrelated to the design of cities, policymaking and urban design contributes to the deteriorating health of urban residents.

# Chapter Five

## Concluding Thoughts – where do we go from here?

The case of Saint John is important in relation to urban health and policymaking. First, the city has historically relied on sprawled design which reduces the disposable income and mobility of marginalized urban residents, namely due to the reliance on private automobiles for mobility and the domination of single-primary use spaces. In recent years, gentrification practices have been used to ameliorate the conditions of sprawl in the city. However, gentrification has created a reliance on large companies and dominant sectors of the economy such as real estate in shaping the city and planning practices. This results in urban policy that are devoid of community social and health concerns. As a result, marginalized urban residents of Saint John have embodied this injustice that are derived from sprawl and gentrification. Neoliberalism has intensified these inequities through government divestment from areas of urban policy and the prioritization of setting attractive sites for private sector investment in Saint John.

The thesis argued that the sprawled urban design in Saint John under neoliberalism has contributed to the rise of health inequities through gentrification, and the prevalence of dominant sectors of the global economy in the shaping of cities at the expense of marginalized urban residents' health. I demonstrated this in each chapter by illustrating how urban planning practices are isolated from health, and vice versa. The thesis adds to the urban design and health policy literature by combining both urban and health issues to illustrate how planning devoid of considerations for social and health concerns intensifies the social, political, and economic power relations in Saint John, New Brunswick. The thesis shows how health inequities are shaped by urban landscapes

and power relations which become embodied into the health of urban residents, particularly those who are living in poverty.

In chapter two I argued that decision-making at various levels of government has relied on institutionalist and market-oriented perspectives which have contributed to sprawl and gentrification. I also argued that biomedical and behavioral models of health and disease do not consider the embodiment of structures of power and the body politic as contributing factors to disease and illness. I illustrated the gaps in the market-oriented and institutionalists perspectives problematic reliance on market-oriented solutions to urban issues, neutrality, and efficiency, and the design of political and economic institutions, aesthetics, and comprehensive urban plans, respectively. Both perspectives have contributed to sprawl and gentrification because they prioritize the interests of powerful private actors in urban planning which overlooks the need for government intervention to improve inequities derived from power relations in cities. I examined the biomedical behavioral models of health which focus on family history of disease and genetics, and individual lifestyles and choices, respectively. Both perspectives do not account for how family histories of illness and lifestyles are shaped by the historical and present-day power relations within urban spaces. The chapter showed the limits of these approaches in understanding the way power and policymaking in the city is embodied into health. For those reasons, I presented eco-social theory and political economy because they situate health and marginalization as the result of the body politic and economic forces which provides more explanatory power for the root causes of inequities in cities and mechanisms to address them. The chapter supports the main argument of the thesis by setting the stage for how policymaking in the Canadian

federalist state is shaped by market-oriented and institutionalist perspectives of urban design and biomedical and behavioral models of health.

Chapter three also supports the main argument of the thesis. In this chapter I argued that since the 1990s the Canadian federal and provincial governments have downloaded more responsibility onto municipal governments, which hold less funding, power, and resources. This devolution has led to the reliance on powerful private actors to shape and provide urban infrastructure. The chapter shows the division of powers in relation to urban design and its transformation under neoliberalism to contextualize the intersection of various levels of government in urban development. I presented the decline in spending and investment in public services by federal and provincial governments during the 1980s and 1990s onward by illustrating the shift to neoliberalism and Canada's emergence in the global economy. As a result, policymaking has prioritized creating institutional incentives such as reduced taxation and regulation and increased public subsidies for powerful private actors at the expense of funding public services in cities. I explain how concerns on provincial competitiveness under neoliberalism has downloaded increased responsibility onto municipalities without the necessary resources and powers to respond. This has enabled large companies and dominant sectors of the economy in developing urban infrastructure which I illustrate through the case study of the February 6$^{th}$, 2023, Saint John Common Council meeting. This case demonstrated issues with neoliberal policymaking in urban planning and the funding of urban services that can reduce sprawl and gentrification. I focused on policymaking in the Canadian federalist state under neoliberalism because it traces the rise of inequities in cities which contextualizes the urban-health nexus. This supports the

main argument of the thesis by contextualizing how neoliberalism has contributed to the centring of private developers and conceiving urban needs in isolation from each other which contributes to marginalization.

In chapter four I argued that marginalized urban residents' experiences in the city of Saint John under conditions of neoliberalism has resulted in a high level of health inequities such as hypertension, diabetes, heart disease, and anxiety and depression. I did this by presenting the results from a community survey in Saint John, New Brunswick at the level of the city and various inner-city neighborhoods. The results revealed how the sprawled design of the city has intensified health inequities through car-centric design and single-primary use neighborhoods. This disconnects urban residents without access to cars from health promoting resources such as food, particularly due to the lack of public and active transportation in the city. The results of the survey also revealed how gentrification in the city has placed increased pressure on marginalized urban residents' incomes, particularly due to the high presence of unaffordable and unhealthy housing. In turn, government policymaking under neoliberalism has contributed to negative health outcomes and marginalization of urban residents as they embody the design of the city. Specifically, urban residents embody the power relations that have contributed to sprawl and gentrification as planning practices in the city do not consider their health needs. I focused on the experiences of marginalized urban residents in Saint John because they are socially situated in ways that allow them to be more aware of issues than non-marginalized groups. In turn, this case is important because it illustrates why the needs of marginalized urban residents should be considered in urban policymaking. In particular, it shows that urban health needs should not be viewed in isolation from each

other but rather as an interrelated web. This supports the main argument of the thesis as it illustrates how sprawl and gentrification under neoliberalism have intensified health inequities and marginalization in the city.

The thesis demonstrates how sprawled urban design in Saint John, New Brunswick under neoliberalism has contributed to the rise of health inequities through gentrification, and the prevalence of dominant sectors of the global economy in the shaping of cities at the expense of marginalized urban residents' health. Planning practices in the city should seek to incorporate community health needs within the land use process, particularly by engaging over the long-term with marginalized urban residents. Additionally, provincial and federal governments should consider moving away from relying on neoliberal policymaking which contributes to municipal governments being unable to service the city to meet urban residents' health needs. All levels of government must look to address the power relations that have manifested in cities, such as Saint John, which situate urban lands as sites for wealth extraction rather than communal healing. Urban planning and policymaking devoid of these considerations' risks increasing conditions of marginalization and health inequities in cities across the country, which will require increased spending dedicated to remedying these issues in the future if they are not addressed in the present. The thesis does not offer specific policy solutions. Rather, it introduces relevant points of discussion that marginalized communities want to express to policymakers and people in power. Policy solutions need to be developed with marginalized communities. Additionally, policy solutions need to be rooted in best practices that promote health equity and the interests of marginalized stakeholders.

The thesis has limitations because of the primary focus on income rather than gender, race, disability, sexuality, etc. However, the thesis provides a starting point for future studies to consider the intersection of these aspects with income and urban health inequities. Future studies could examine health inequities through an intersectional analysis of citizenship, class, race, ethnicity, gender, disability, and sexual orientation which would provide deeper insight into the way power relations impact various groups. Also, a replication of this study with government administrative data could produce a more power analysis of the negative health outcomes in the city. Qualitative research that involves participatory mapping or other mixed media with urban residents would also provide insight into the social, political, and economic context of power relations in the city from the perspective of marginalized residents.

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# Appendix: Survey

1. What gender do you identify as?
    - [Free Text Answer]
2. Which age range category do you belong to?
    - 19-25
    - 26-30
    - 31-35
    - 36-40
    - 41-45
    - 46-50
    - 51-55
    - 56-60
    - 61-65
    - 66-70
    - 71-75
    - 76-80
    - 80+
3. Do you have a disability?
    - Yes
    - No
    - I don’t know
    - Prefer not to answer
4. Please select what best describes you:
    - Born Canadian Citizen
    - Permanent Resident
    - Naturalized citizen (immigrant)
    - Economic Immigrant
    - Family stream Immigrant
    - Refugee stream
    - Asylum seeker
    - Migrant worker
    - International student
    - Prefer not to answer
    - Other (please specify):
5. Which area of Saint John do you live in?
    - East side
    - Central Peninsula (South End)
    - Central Peninsula (Waterloo Village)
    - Lower West side
    - Upper West side

- Milford
- Old North End
- Mount Pleasant
- Crescent Valley
- Millidgeville
- Metropolitan area (Grand Bay, Hampton, Rothesay, Quispmasis)
- Other (please specify):
- Prefer not to answer

6. Do you identify as a racialized person? (racialized meaning you could be discriminated against because of your skin colour/religious practices).
    - Yes
    - No
    - I don't know
    - Prefer not to answer
7. How many adults live in your household?
    - Only me (1)
    - Two (2)
    - Three (3)
    - Four (4)
    - Five (5)
    - Six (6)
    - Seven (7)
    - Eight (8)
    - Nine (9) or more adults
8. How many children live in your household?
    - No children
    - One (1)
    - Two (2)
    - Three (3)
    - Four (4)
    - Five (5)
    - Six (6)
    - Seven (7)
    - Eight (8)
    - Nine (9) or more children
9. How many bedrooms are in your home?
    - None
    - One (1)
    - Two (2)
    - Three (3)
    - Four (4)

- Five (5) + bedrooms

10. What is your housing situation?
    - Shelter
    - Couch surfing
    - Sleeping rough (i.e., outside)
    - Market rental housing (i.e., private landlord)
    - Public or subsidized housing
    - Own home
    - Other (please specify):
    - Prefer not to answer
11. Does your housing have any of the following structural or safety issues? Select all that apply
    - Mold
    - Water damage/leaks
    - Water boil order
    - Heating issues
    - Exposed electrical wiring
    - Exposed insulation
    - Broken windows
    - Hole in floor or ceiling
    - Pests (silver fish, mice, rats, bed bugs, etc.)
    - Asbestos
    - Radon
    - Drafts
    - Smoke damage
    - Poor ventilation
    - Other (please specify):
12. Before the pandemic, how much did you pay for your housing every month? *Tell participant "before the pandemic" refers to pre-March 2020.*
    - [Free text answer]
13. How much do you pay for your housing now every month?
    - [Free text answer]
14. What is your estimated household monthly income after deductions? Income can be from sources such as: social assistance, disability, Canada child benefit, refugee assistance, employment, Canada Pension Plan, etc.
    - [Free text answer]
15. What was your main source of income in 2021?
    - Waged employment
    - Salary full-time employment
    - Salary part-time employment
    - Self-employment

- Employment insurance (any kind)
- Social assistance
- Resettlement Assistance Program (federal government)
- Cash jobs (under the table work)
- Retirement/Investment income
- Disability benefits
- Other (please specify):
- Prefer not to answer

16. What is the highest level of education you've completed?
    - Less than high school
    - GED
    - High school diploma
    - Some university, community college diploma, or trade
    - Bachelor's degree
    - Graduate degree/professional degree
    - Prefer not to answer
17. Did you complete your highest level of education in Canada or in another country?
    - In Canada
    - In another country
    - Prefer not to answer
18. During the pandemic, were you able to access healthy food at an affordable cost in your neighborhood?
    - Yes
    - No
    - I don't know
    - Prefer not to answer
19. Do you feel you can easily and safely walk or bike to greenspace from your home? (i.e., parks, walking trails, playground, etc.)
    - Yes
    - No
    - I don't know
    - Prefer not to answer
20. How do you get around the city most of the time?
    - Bus
    - Car
    - Walk
    - Bike
    - Taxi/Cab
    - Electric wheelchair
    - Para-bus service

- Electric scooter
- Other (please specify):
- Prefer not to answer

21. What is your mode of transportation to healthcare services during the daytime?
    - Bus
    - Car
    - Walk
    - Bike
    - Taxi/Cab
    - Electric wheelchair
    - Para-bus service
    - Electric scooter
    - Ambulance
    - Friend/family/someone drivers me
    - Other (please specify):
    - Prefer not to answer
22. What is your mode of transportation to healthcare services during at night?
    - Bus
    - Car
    - Walk
    - Bike
    - Taxi/Cab
    - Electric wheelchair
    - Para-bus service
    - Electric scooter
    - Ambulance
    - Friend/family/someone drivers me
    - Other (please specify):
    - Prefer not to answer
23. Do you have difficulty moving through the city?
    - Yes
    - No
    - I don’t know
    - Prefer not to answer
24. What barriers do you face when trying to move through the city?
    - No driver’s license
    - Gas prices
    - Cost of maintaining a vehicle
    - Lack of income/credit to finance or lease a vehicle
    - Costs of drivers training
    - Lack of income/low income

- Sidewalks poorly maintained
- Cost of using the bus (bus rates)
- Bus routes not in my area
- Bus times (not frequent enough)
- Inability to access bus stops
- Lack of bike lanes
- Lack of safety for bikes
- Discrimination
- No barriers
- Prefer not to answer
- Other (please specify):

25. Do you have a family doctor or nurse practitioner?
    - Yes
    - No
    - I don’t know
    - Prefer not to answer
26. If you don't have a family doctor or nurse practitioner, how do you access primary care? Please select the most common option you use.
    - Emergency room
    - Walk-in clinic
    - Telehealth
    - Online private healthcare provider
    - Pharmacy
    - Non-profit services
    - Other (please specify):
    - I don’t access primary care
    - Prefer not to answer
27. What is your proximity to healthcare services from your home? (i.e., the hospital)
    - Near (less than 10km)
    - Far away (more than 10knm)
    - Prefer not to answer
28. Have you received a diagnosis from a doctor or experienced any of the following health conditions? (Check those that apply)
    - High blood pressure
    - Diabetes (type 2)
    - COPD (Chronic Obstructive Pulmonary Disease)
    - Stroke
    - Colorectal Cancer
    - Lung cancer
    - Heart disease

- Thyroid Problems (hypothyroidism or hyperthyroidism)
- None of the above
- Prefer not to answer

29. In your opinion, what are the most urgent community health needs in your area? (Please check all the apply)
    - Poor quality housing
    - Our community requires a car to access most services
    - Urban design is unsafe for seniors or people with disabilities
    - It can be difficult to access healthy food
    - Affordable housing
    - Loss of agricultural land
    - Lack of public transportation
    - Poor water quality
    - Urban design is unsafe for children
    - Poverty
    - Unemployment
    - Poor air quality
    - I don’t know
    - Prefer not to answer
    - Other (please specify):
30. Do you have other comments you’d like to leave us regarding your experience with the city and health?
    - [Free text answer]

# Curriculum Vitae

Name of Candidate: Sarah Lunney

Universities Attended:

University of New Brunswick, 2019-2021, Bachelor of Arts Major in Political Science

Mount Allison University, 2015-2017, Bachelor of Arts (transferred to UNB)

Publications: N/A

Conference Presentations:

International Network on Health and Hepatitis in Substance Users (Oct 2023, Geneva)

- Presenting “AN ANALYSIS OF PUNITIVE INCOME SUPPORT POLICIES AND THE IMPACTS ON BIRTHING PARENTS WHO USE SUBSTANCES."

Canadian Children, Youth, and Communities | Equity Conference (Oct 2023, Online)

- Presenting “From top to bottom: Creating Equitable Change for Birthing People that Use Substances during their Birthing Experience in New Brunswick Hospitals."

Atlantic Provinces Political Science Association Conf. (2022, Halifax)

- Presented “ Implications for our health and environment: Exploring perspectives in urban design and policy."

New Brunswick Health Research Conference (2021, Fredericton)

- Presented “Communities Acting on Research Evidence (CARE) Database: A Review of Collective Impact Models.”