# PLANNING FOR COMPLETE COMMUNITIES

## AN ANALYSIS OF FOOD ACCESS IN DOWNTOWN WINNIPEG

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A practicum submitted to the Faculty of Graduate Studies of the
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# ABSTRACT

Many North American cities are struggling with a phenomenon called a “food desert”, known as a particular area of a city that fails to provide its residents with access to nutritious food. Due to recent closures of grocery stores, this title of a ‘Food Desert’ is often applied to parts of Downtown Winnipeg. In light of current efforts to further develop Winnipeg’s downtown core, planners and developers are taking a closer look at the issues behind food access for urban residents. Much of the current literature on food access in urban settings focuses primarily on the challenges for low-income households. However, poor food access is also an issue for non-low income residents, who may not be dependent on convenience stores, but must drive long distances in order to purchase groceries, causing unsustainable shopping habits as well as a loss in local consumer dollars. This research focuses on the issues of food access from the perspective of a diverse urban community with a range of incomes. The research aims to address the gaps in food desert literature by providing a better understanding of the challenges behind food access for different types of residents in urban areas, as well as how improved food access can in turn contribute to a complete community.

Keywords: [Food Desert, Winnipeg, Access, Downtown, Urban, Community]

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# 1.0 INTRODUCTION

Many Winnipeg residents today find themselves downtown for work, school or social events; however, it is often not considered a complete community, a true neighborhood, or even a home (Food Matters Manitoba, 2013). A complete community is a neighborhood that provides access to all necessary amenities for all of its residents, regardless of their income, gender or race. As of recently, urban designers and planners are focusing their efforts towards creating a complete community in Downtown Winnipeg, and therefore creating a case for residential living. Much like other cities in North America, downtown Winnipeg has undergone a significant decline in food retail, a key amenity for downtown residents. Small-scale local retailers have been replaced by larger chain supermarkets, instead locating themselves on the suburban edges of the city. More recently, over the past five years, the downtown area has seen closures of three full service grocery stores, creating a major gap in the availability of food in the area. According to the 2013 study conducted by Food Matters Manitoba, the distance to grocery stores has increased by 50 percent since 2011. This decrease in amenities is occurring simultaneously along with the design and planning of several new residential developments throughout the downtown landscape. With so much investment going towards making downtown a home for Winnipeg residents, it is important that the issue of food access is addressed.

## 1.1. RESEARCH OVERVIEW

Food deserts have appeared throughout history as a result of decentralization and disinvestment from the urban core. Access to nutritious food is a basic human right, yet food desertification has forced many low-income urban residents subsist on unhealthy products sold at small, local convenience stores (Smith, 2013). Studies show that those living in areas without a supermarket, or some form of grocery store, are 30-55% less likely to have a good quality diet (Whitacre, 2009, p.28), and due to our society's growing dependence on processed 'convenience' foods and lack of food education, many residents do not know what a healthy meal looks like (Steel, 2009, p.251). The current literature on food access in urban settings focuses primarily on these challenges for low – income households. However, this practicum focuses on the issues of food access from the perspective of a diverse urban community with a range of incomes. It is apparent that when access to food is limited, community health and well-being suffers. However, much of the research regarding food deserts has focused solely on the individuals affected, or seemingly affected and not on their surrounding environment (Whitacre, 2009, p.27). This ignores the important aspect of how the surrounding urban environment in turn, affects the decisions individuals make around food choices.

When researching issues of food access, it is important to address the driving forces in urban neighborhoods that contribute to the lack in food availability in urban settings (Whitacre, 2009, p.11). This research addresses these issues by exploring in detail the current literature addressing the driving forces behind poor food access in urban areas, as well as the issues with current food access research practices. In order to support a diverse community with a wide array of incomes, such as Downtown Winnipeg, it is important to explore the availability of food based on the many different barriers of access.

This practicum includes a detailed site audit of the food retail landscape in Downtown Winnipeg, exploring aspects of availability, access and affordability. The audit categorizes grocery stores based on what kinds of foods they sell, and evaluates the cost of food retail in the downtown core, using a food basket price comparison. The second component of the research involved conducting surveys with downtown residents (approximately 180) in order to explore how they access their basic grocery needs, and perceive food access in their community. The survey provided residents of downtown Winnipeg an opportunity to express their thoughts and perspectives on food access in their community. Ultimately, the research aims to provide a better understanding of the challenges behind food access for different types of residents in urban areas, as well as how improved food access can contribute to a complete community.

## 1.2. KEY RESEARCH QUESTIONS

This practicum explores the current food retail environment in downtown Winnipeg, and addresses the relationship between food access and the grocery shopping patterns of downtown Winnipeg residents. The following are the key research questions that guided the research conducted in this practicum:

1. What is the food retail environment in downtown Winnipeg?
2. How do downtown Winnipeg residents access food?
3. How do downtown Winnipeg residents perceive food access in their community?

## 1.3. SIGNIFICANCE OF RESEARCH

This research is relevant to planning practice, as good access to food is an important factor in creating a complete community. It is important to the well-being of society, as lack of access to nutritious food can lead to many costly health issues, such as diabetes, obesity and heart disease (Ladner, 2011), affecting all residents at a large scale. Often, poor food access leads to a decline in the well-being of its residents in terms of health, crime and safety and children, which can be major barriers in planning a vibrant community. The practicum attempts to address the gaps in food planning research that local health activists, urban planners, municipal officials and others can use towards improving food access within their community (Corapi, 2014).

The research also contributes to current planning initiatives for downtown Winnipeg revitalization. The Downtown Winnipeg BIZ envisions a "thriving downtown neighborhood vibrant with people, seven days a week and at all hours of the day". Lack of grocery store access pose a major barrier to growing a vibrant downtown core, and until relatively recently, urban planners have failed to address local food access (Scully, 2011). This research could aid in the Downtown Winnipeg BIZ's initiative to transform downtown Winnipeg into a vibrant, diverse and thriving community and raise the profile of the Faculty's engagement with key policy-makers and organizations. The research also contributes to current urban design initiatives for downtown revitalization, by developing a framework geared to improving food access strategies that maximize social justice and community self-reliance in Winnipeg. Lessons learned may also have applications to other Canadian cities as well as other areas of study such as urban planning, public health, nutrition and economics and geography (Whitacre, 2009). Ultimately, this practicum could help contribute to policy development and inform the promotion of healthy, complete, pedestrian oriented downtown communities.

## 1.4. STRUCTURE OF DOCUMENT

Chapter 1 first introduces the main research problem, key research questions, as well as a brief overview of the practicum research and it's significance. Chapter 2 gives context to the research, by observing the Downtown core area of the City of Winnipeg in terms of demographics, land use, major investments as well as the current status of food retail. Chapter 3 consists of a review of the current food desert literature, focusing on issues with food access put in a broader context. The literature review also touches on current initiatives in North America that address poor food access in urban settings. Chapter 4 explains the research methods used in the practicum. Chapters 5 & 6 focuses on displaying the findings of the research, including the grocery store site audit (Chapter 5), and the online surveys (Chapter 6). Each chapter also discusses the limitations to the respective research method. Chapter 7 focuses on analyzing the data, comparing statistics and discerning any trends from the findings of the research conducted. This chapter also attempts to answer the proposed research questions, suggests recommendations for further research, and brings to light any new research questions arising from the practicum. Lastly, Chapter 8 discusses the implications for planning practices within the City of Winnipeg.

# 2.0 RESEARCH SITE

The research site was chosen based on the official downtown Winnipeg boundaries defined by the Downtown Winnipeg BIZ, which can be seen in Figure 2.1. The site is bordered by both the Assiniboine and Red Rivers, extending as far North as Higgins Avenue, and as far West as Spence Street. The study area reaches approximately 16 neighborhoods within this boundary.

## 2.1. DEMOGRAPHICS

According to a 2015 survey conducted by the Downtown Winnipeg BIZ, approximately 16,000 people reside downtown, making up approximately 2.5% of Winnipeg's total population. As shown in **Figure 2.1**, 80% of these residents are concentrated in three neighborhoods within the Downtown; Broadway-Assiniboine, Central Park, and South Portage. Neighborhoods such as Portage and Main, The Forks, and the Civic Center do not yet have a population large enough to register on the Downtown Winnipeg Census, however as of recently are beginning to see more residential development. According to the 2011 Downtown Winnipeg census, significant portion of downtown Winnipeg residents are between the ages of 25-35. Although the majority of downtown Winnipeg residents drive as their primary mode of transport, substantially more residents walk (24%), compared to the City of Winnipeg as a whole (6%) (City of Winnipeg, 2011). The average household income for Downtown Winnipeg is lower ($37,296) than that of the City of Winnipeg ($72,612), except for the Exchange District, which features a significantly higher (+165%) household income then the rest of the downtown area (City of Winnipeg, 2011). The majority of downtown Winnipeg households are non family and 1 person, whereas the majority of households in the City of Winnipeg are 2-4 person family households. The majority of dwellings

in downtown Winnipeg are rented (86%), while the majority of dwellings are owned (66%) in the City of Winnipeg. In addition, each day approximately 70,000 people commute downtown to work, and more than 16,000 students visit downtown each day to attend the University of Winnipeg, Red River College as well as CDI College (Downtown Winnipeg BIZ, 2012).

## 2.2. LAND USE ZONING

According to the Downtown Winnipeg Zoning ByLaw, the research site is divided into four sectors; Multiple - Use sector, Character sector, Residential Living sector, and the Riverbank sector, as shown in **Figure 2.2.** Each sector contains its' own land use regulations, with the multiple use sector being the most permissive, and the riverbank sector being the most restrictive. Residential development is encouraged in the downtown area, and is permitted in all sectors excluding the riverbank sector. Parking is not required for new developments within the downtown boundary.

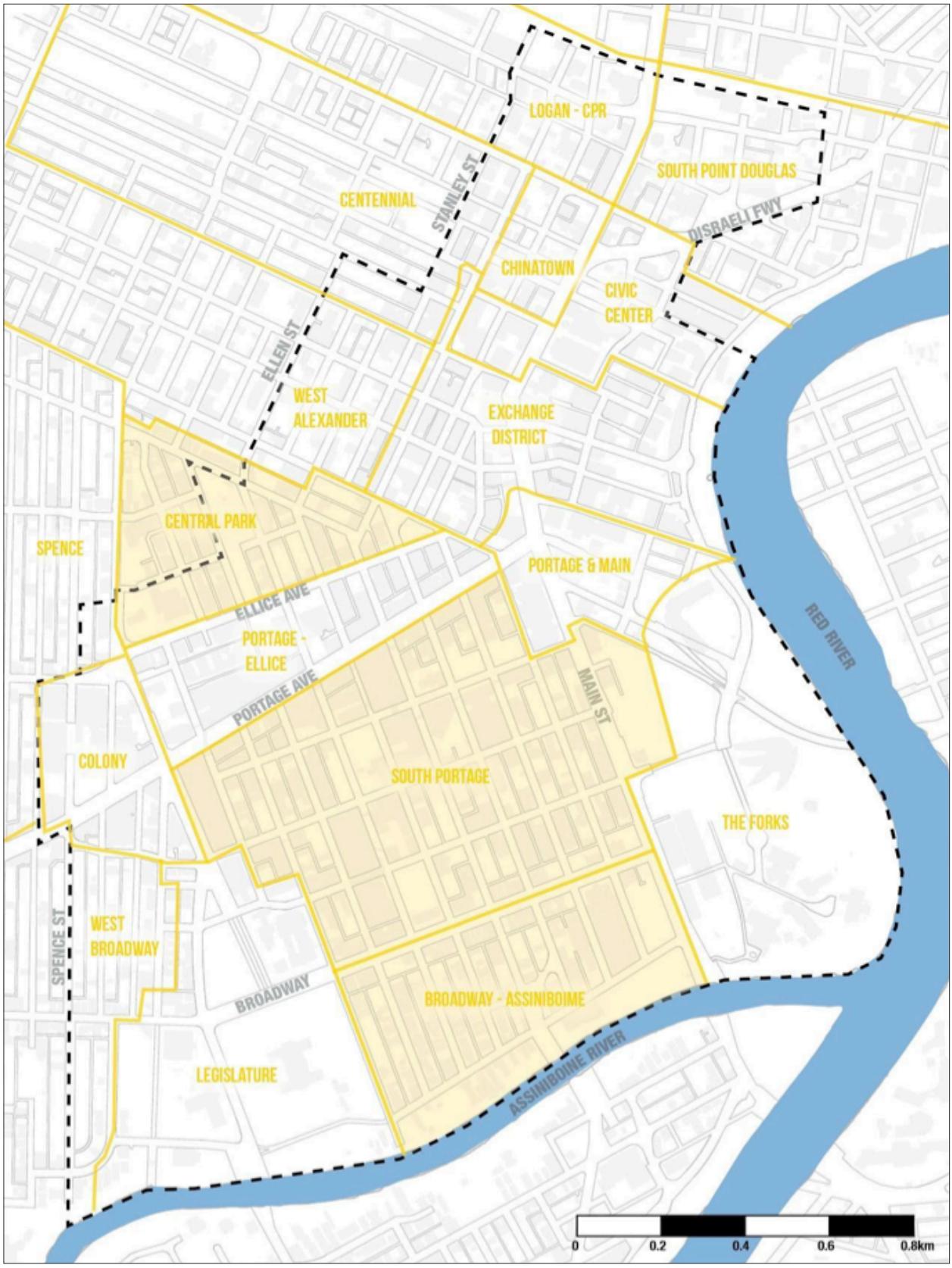


**Figure 2.1** Research Boundary

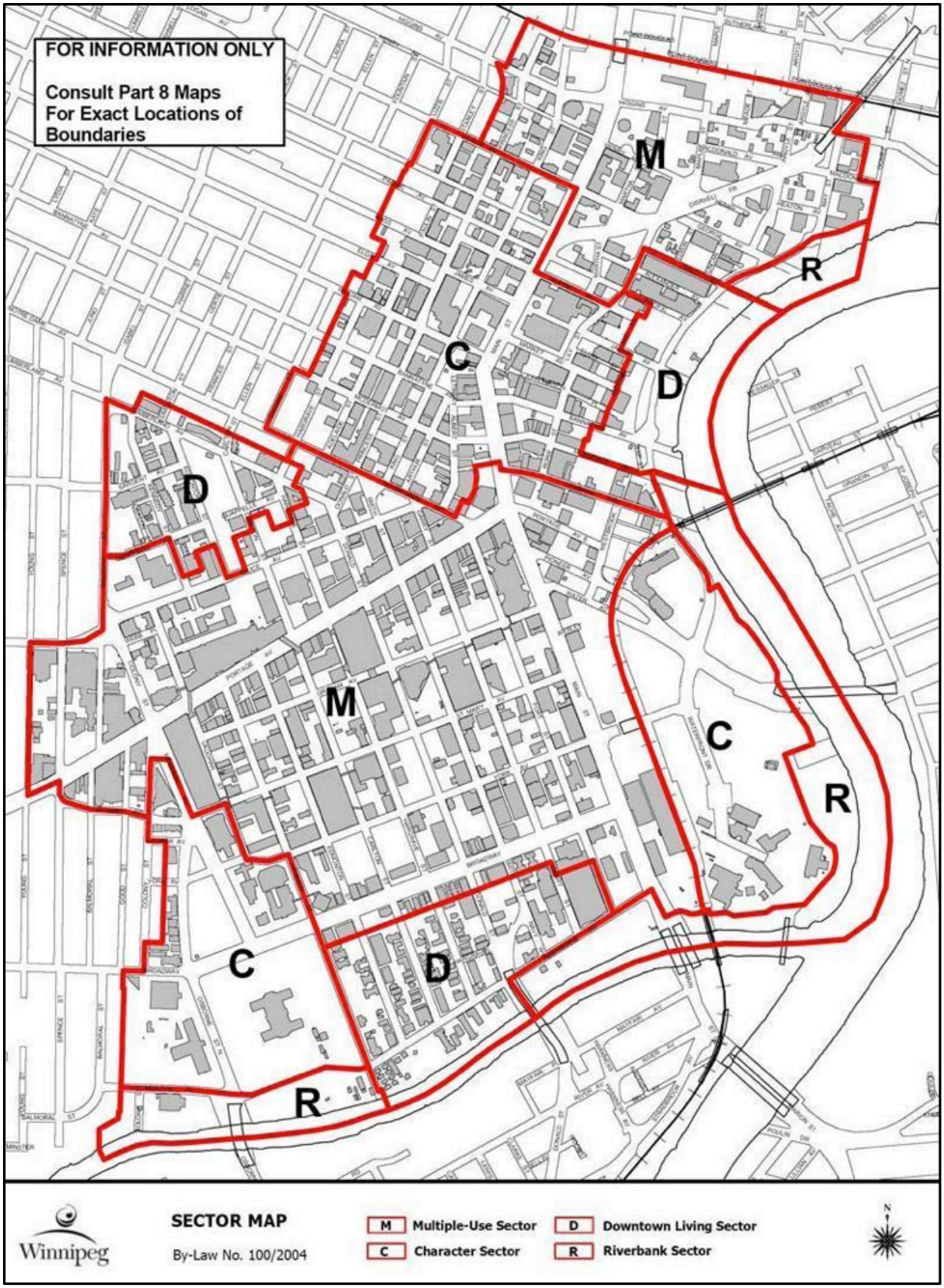


**Figure 2.2** Downtown Winnipeg Sectors

## 2.3. DOWNTOWN INVESTMENTS

Although the non-residential population exceeds the current residential population, there has recently been a high amount of investment going into making downtown a home for Winnipeg residents. According to the Downtown Winnipeg BIZs Downtown Trends (2016) there has been a total of 1.98 billion dollars invested to date, with another 544.9 million dollars planned. This includes 2,895,604 sq.ft. of Commercial/Office/Institutional space as well as 700,000 sq.ft. of Education/Museum space. In addition to these new investments, downtown Winnipeg has experienced a sustained population growth of 10% over the last decade. In conjunction with this rising population, the downtown area has also seen a major an increase in residential units. Between 2005-2015, there were a total of 1,442 residential units built downtown, as well as $1902.06 million dollars of worth of investment. As of June 2016, there are 1,214 residential units currently planned downtown, exceeding the number of units built in the last ten years (Downtown Winnipeg BIZ, 2016). There are currently over $1264.8 million dollars' worth of investments planned for Downtown Winnipeg, depicted below in **Figure 2.3.**

| | |
|---|---|
| INVESTMENT (COMPLETED) | 1.98 BILLION |
| INVESTMENT (IN PROGRESS) | 918 BILLION |
| INVESTMENT (PLANNED) | 544.9 MILLION |
| TOTAL # OF RESIDENTIAL UNITS (COMPLETED) | 1442 |
| TOTAL # OF RESIDENTIAL UNITS (IN PROGRESS / PLANNED) | 1213 |
| TOTAL SQ. FT COMMERCIAL / OFFICE / INSTITUTIONAL SPACE (BUILT/CONSTRUCTION) | 2,759,604 |
| TOTAL SQ FT EDUCATION / MUSEUM SPACE (BUILT) | 700,000 |
| TOTAL SQ FT COMMERCIAL (PLANNED) | 136,000 |
| TOTAL # HOTEL ROOMS (UNDER CONSTRUCTION) | 221 |
| TOTAL # HOTEL ROOMS (PLANNED) | 400+ |
| TOTAL # BUILT DEVELOPMENTS (2005 - 2009) | 39 |
| TOTAL # BUILT DEVELOPMENTS (2010 - 2015) | 57 |
| TOTAL # BUILD DEVELOPMENTS (2005 - 2015) | 96 |

**Figure 2.3** Downtown Winnipeg Investments

## 2.4. DOWNTOWN FOOD RETAIL

The food retail environment in Downtown Winnipeg has experienced a dramatic shift over the past 50 years. As larger chain supermarkets that cater mostly to the automobile user began to appear throughout the city in the 1970s, the number of small-scale grocery stores within the downtown area experienced a steady decline in business, coinciding with a decline in population. In total, since 1970, there has been a 65% overall decrease in grocery stores and a 48% decrease in specialty food stores in the active core (Lennon, 2015). However, in contrast, the total number of convenience stores has increased by 388%, reflecting not only the changing demographics of the downtown area, but also changes in residents' shopping behavior patterns, as shown in **Figure 2.4** (Lennon, 2015).

As it stands today, downtown Winnipeg is commonly referred to as a "Food Desert". According to CBC New's 2015 article which conducted an analysis that mapped out where the major grocery stores are located in Winnipeg, there is a vast area at the core of the city in which no major grocers operate, giving the articles name "Buying groceries a long trek for family in Winnipeg food desert" (Nicholson, 2015). Other news articles focus on the recent closures of existing downtown grocery stores, and their effect on downtown development. According to an article published by The Uniter (2012) titled "Impending downtown grocery store closures leave "food desert' in their wake", this decrease in fresh food availability has become a major concern for the future, as grocery stores are an invaluable component in producing a vibrant downtown core (Hammond, 2012). Coining downtown Winnipeg as a food desert is not just a local perception, but is known in other parts of the country as well. National Post published an article on commercial real estate, comparing grocery store locations in Canadian cities such as Toronto, Vancouver, Montreal, Carlgary, Edmonton, Winnipeg and Ottawa. Amongst them, Vancouver and Toronto were identified as having the best access to food, with Winnipeg being noted as the least accessible (Duggan, 2015). "Food Deserts are a huge problem in Winnipeg" – Craig Patterson, University of

Alberta. Whether downtown Winnipeg can truly be coined as a true food desert or not remains up for discussion, however, this perception - or not, of a food desert is a real issue for the city's urban core today.

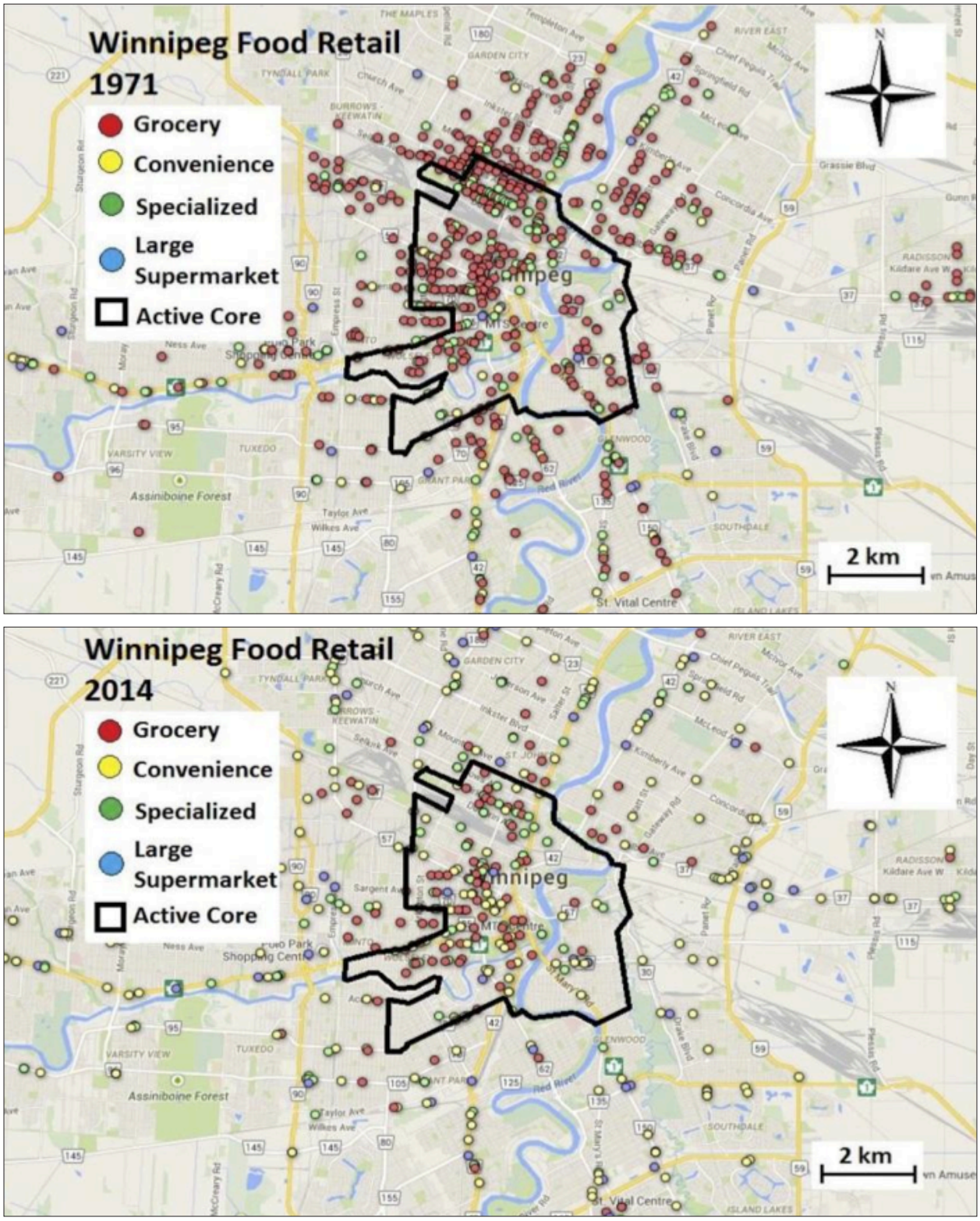


**Figure 2.4** Winnipeg Distribution of Food Retail by Type (1971-2014)

# 3.0 LITERATURE REVIEW

Much of the current literature exploring food access in urban settings focuses mostly on challenges for low-income communities. However, in diverse urban neighborhoods, having access to food can mean something different to each individual. This is why solving the issue of food access in urban settings is much larger and more complex than inserting a grocery store into a food desert. In order to better understand why, one must understand the underlying effects of poor food access on neighborhoods, as well as how the surrounding community chooses to access food. Although this practicum cannot truly fill this large gap in research, this literature review examines food access through different lenses such as availability, affordability, accessibility and adequacy. Often, poor food access leads to a decline in the well being of residents in terms of health, crime and safety and children, which can be major barriers in creating a vibrant community (Ladner, p.190, 2011). The review provides background and context to the issue of food access, as well as explore how better food access can help achieve a complete community. There have been many initiatives taking place throughout North America that work on improving food access in under-served urban areas such as the development of new grocery stores, corner store rehabilitation, and farmers markets. The review assesses some of the benefits and challenges of these initiatives as well as their effects on urban communities, in terms of economic prosperity, environmental protection and social wellbeing.

## 3.1. DEFINING FOOD ACCESS

This section explores possible reasons for the decline in grocery stores in downtown neighborhoods in North America, as well as the barriers that many urban residents face when accessing food. One of the issues with current literature surrounding food access is that it is often assumed that food deserts are only present in low-income communities. These residents with limited incomes might have fewer transportation options to access groceries, however, poor food access is an issue that affects people of all incomes. Having good access to food can mean different things to different people. In order to support a diverse community with a wide array of incomes, it is important to explore the many different barriers of access that exist in urban settings.

*Availability - The presence, or lack of food retail in urban neighborhoods*

Availability, in this practicum is defined as the presence, or lack of food retail in urban neighborhood. Issues with availability in food deserts revolve primarily around the closures of grocery stores in urban settings, leaving a major gap in food available for purchase in certain neighborhoods. Research on food desertification began in the 1960s, when grocery stores abandoned cities in North America in the wake of increasing urban sprawl (Whitacre, 2009, p.30). Many urban areas, especially those in less dense cities lacking food retail outlets, struggled to entice new businesses to locate in the core of the city. With a declining inner city population, growing dependence on private vehicles, and negative public perceptions, there was no longer much incentive left for a grocery store to locate in these areas (Larsen & Gillian, 2008, p.2).

In the past, when cities featured local neighborhood markets, grocers' food was able to reach every part of the city, through fine-grained distribution networks that were supported by the wholesale trade (Steel, 2009, p.230). At this time, trains were used to transport people long distances across the country in a short period of time (Elliot, 2008). In the 1960s-70s, unlimited space combined with rising affluence gave rise to the suburbs (Steel, 2009). With the private vehicle being a new tool for freedom, people were able to get to places more quickly and efficiently,

and this efficient mode of access allowed cities to grow further outside their boundaries and to make a case for suburban living (Steel, 2009). As many families began leaving the city to live out the "American Dream," grocery stores followed suit and relocated to the fringes of suburban neighborhoods, causing them to become larger, and scarcer (Donohue, 1997). This low-density suburban lifestyle was perfect for large chain supermarkets, and due to the convenience of having a private automobile, people no longer had to make frequent, smaller trips to the grocery store (Steel, 2009). They were now able to make one trip to the supermarket, load up their vehicles with a few weeks worth of food, and take it home, not having to think about groceries until the next big shopping trip (Steel, 2009, p.219). However, these left behind a major gap in amenities to service the remaining inner city residents who chose not to, or could not afford to, relocate to suburbia. The literature by Richard Longstreth provides an in-depth look at how food retail has changed throughout history. Although based in the United States, Longstreth's research focuses on the early development of two different types of retail spaces, which can be applicable to Canadian cities (Longstreth, 1999). The first is external, which are the spaces devoted to the automobile and it's circulation, such as drive-in markets, and the other is internal, which is considered the single story supermarket, and was designed to contain a high volume and selection of products (Longstreth, 1999). According to this research, these were key spaces in the evolution of food retail since the 1940s, and have since then greatly affected the urban landscape (Longstreth, 1999).

There is also a wide range of literature that explores how reliance on vehicular transportation has contributed to the lack of grocery store availability in urban areas. As space in downtown neighborhoods is limited and generally more expensive than other areas of the city, it is more likely to find smaller, local grocery stores than a large-scale supermarket. Most of these small-scale downtown grocers cannot provide space for parking, therefore limiting their customer base (Peg, 2015). Many people are also not necessarily comfortable walking to their local inner city grocery store, due to perceived crime in the area (Ladner, 2011, p.399). It is also difficult for owners to find employees, if they are not comfortable working in an environment where robbery

and assault may arise (Ladner, 2011). The costs of providing adequate security are high, especially if the store cannot attract customers to provide them with enough business (Ladner, 2011, p.401). Public perceptions of the Downtown core that may not necessarily be a reality are one of the many reasons for the closures of many inner city grocery stores over the years.

*Accessibility - The ability to physically access food retail*

Accessibility, in this practicum is defined as the ability to physically access food retail. Although food retail might be available in certain neighborhoods, these can still be considered food deserts, as many residents are not physically able to reach it. Ideally, nutritious food would always be within walking distance, especially in downtown areas where walking is considered a primary mode of transport (City of Winnipeg, 2011). However, this is not always a feasible option. In many Canadian cities, access to fresh food is limited (Ladner, 2011). In Montreal, 40% of the population cannot walk to a grocery store with an adequate supply of fresh food (Ladner, 2011, p.395). Lack of close access may not be a big issue for those who can simply get in their car and drive to the nearest superstore. However, many people who reside in the inner city do not have that option, as they cannot, or choose not to own a vehicle. The Public Health Effects of Food Deserts Workshop Summary (2009) argues that because people get to choose where they live, they also have get to choose their proximity to a grocery store (Whitacre, 2009, p.32) Often, if residents have access to a car, proximity to food may not influence which neighborhoods they choose to reside in. However, not everyone gets to choose where they live. Some residents choose neighborhoods because it is the only place they can afford, and others choose neighborhoods because it is close to where they work. In these cases, these residents rely on walking and public transit, taxis or other modes in order to access their groceries, or rely on local restaurants nearby. However, it is not always feasible for a family with small children, in which the parents are working several jobs, to find the time to take transit service to the nearest grocery store. This also poses a problem for seniors and those living with limited mobility, which is becoming a major topic in planning cities for the future. As stated in a 2015 article on “How cities can design for Aging Baby Boomers”, published by Next City,

seniors often want the same things as the younger population. “They want to be mobile and social, with easy access to bus stops, grocery stores, parks, pharmacies and hospitals” - Ted McClelland (Stanley, 2015). Improving access for these residents might also involve small-scale urban design changes such as better wayfinding and widened sidewalks. Although a grocery store might be close by, to someone with limited mobility, getting there could still be a challenge, and could be made much easier if the neighborhood that surrounds them became more walkable. Further, when these options are not feasible, some residents might also require additional assistance as programs in which a shuttle service takes them to purchase their groceries.

*Affordability - The ability to afford proper food retail*

Affordability, in this practicum, is defined as the ability to afford proper food retail. Although proper groceries might be present and within walking distance, the food sold at this store might not be affordable for all. As much as spatial characteristics play a major role in the existence of food deserts, food challenges in downtown areas go far beyond geography (Food Matters, 2013,). Many economic barriers also contribute to the way residents’ access food. A large percentage of downtown residents live with limited incomes (City of Winnipeg, 2011), making where they live much more of a highly constrained choice rather than a preference. These residents tend to rely on what is available locally; however, in many downtown neighborhoods, very little fresh produce is available at local convenience stores (Peters and McCreary, 2008, p.80). Instead, food that is high in fat, sodium and sugar is being sold (Steel, 2009, p.230). Consumption of these items over an extended period of time, together with a relative lack of nutritious food, takes an incredible toll residents’ health. Just as the availability of healthy food within these stores might impact the food consumption patterns of surrounding residents, these food patterns might also impact what kinds of foods are available in these stores (Ladner, 2011). Much of the local food environment varies according to socioeconomic, racial, and ethnic compositions of neighborhoods. In a study of multi-ethnic atherosclerosis (Whitacre, 2009, p.28), it was noted that real grocery stores selling fresh food items were less common in lower income areas, which featured mainly convenience

stores and liquor marts instead. That being said, the diet of individuals within the neighborhood also has an effect on what kinds of foods will be sold (Ladner, 2011). Owners of these small-scale convenience stores will do what they need to in order to survive (Ladner, 2011). As with most local businesses, in order to survive they must meet the needs of their core local customers (Whitacre, 2009, p.30). With such a high percentage of these residents' income being spent on housing costs to keep a roof over their heads, they will need to budget what is left over to spend on food and other basic human needs (Ladner, 2011, p.365). This often leads to the purchase of cheaper, mass-produced items of lower nutritional value (American Nutrition Association, 2011). If this is the demand, store owners will fill their shelves accordingly, as it is more expensive to have proper refrigeration and perishable goods.

These economic barriers present in food deserts result in less access to healthy, nutritious food, which contributes to the decline in health of individuals. It is hard to miss the relationship between food deserts and the income of its surrounding neighborhood. This begs the question; how can we make nutritious food more affordable to everyone? Addressing affordability could be part of a much larger issue. Food Matters Manitoba (2013) states that an increase in minimum wage, employment and income assistance rates could help ensure everyone has adequate income to be able to afford their basic needs such as food and housing.

*Adequacy - The ability to access culturally and nutritionally adequate food*

Adequacy, in this practicum, is defined as the ability to access culturally and nutritionally adequate food. Often, out of the food that can be accessed in urban settings, much of it is either poor quality, does not provide adequate nutritional value, and does not meet the cultural needs of a diverse urban neighborhood. As much as food desertification is driven by geospatial and economic barriers, the value we place on food also influences the way we access it. Steel (2009) argues that technological advancements were designed to make it easier to connect our cities with food, and instead they have actually had the opposite effect. In her literature, she draws attention to the

paradox being that the industry supplies us with cheap food at an abundance to satisfy our needs, but has also made us ignorant of the effort it takes to feed us (Steel, 2009). This has caused many people to stop valuing food, and place less importance on exactly what they are putting into their bodies (Steel, 2009, p.252). This is a major issue contributing to high rates of diabetes and other diet-related chronic illnesses everywhere in North America (Ladner, 2011). One third of American children born after 2000 will get diabetes and ten percent of Canadians have a risk of getting diabetes by 2020 (Food Matters, 2013).

Due to the modern food industry now controlling where all our food comes from, it also controls what and how we eat, and as a result, many of us are losing our connection to food (Steel, 2009, p.160). Due to busy schedules and other issues accessing foods, many residents living in food deserts have looked for fast and convenient ways to eat, and in turn, have developed a dependence on fast foods (Food Matters, 2013). The idea of cooking from scratch is intimidating and many of us have stopped cooking altogether; instead relying on pre-made, nutrient-lacking meals, also known as "convenience foods" (Steel, 2009). Steel also makes an interesting statement regarding another paradox of convenience food: "The 'added value' is all in the part we could easily do ourselves (cooking), but what we cannot provide (raw food) is what we are most reluctant to pay for" (Steel, 2009, p. 220). Not only does it lack nutritional adequacy, but convenience food retail is generally much more costly, which might make sense for those who can afford it, but for those with a limited income, it makes no sense at all (Steel, 2009).

Lastly, poor access to adequate food retail can be an issue in supporting a diverse community, as cannot carry on the traditions of their families as have not been raised to cook the foods in their cultures, because they are not able to access the resources and necessary foods to do so. Urban food retail draws people together by providing a neighborhood meeting place, a social experience that urban residents who are lacking food access often missing out on (Cameron et al, 2010). Being able to access culturally acceptable food is also important in supporting newcomers into urban

neighborhoods, as it allows them to connect with their community and feel at home, ultimately building a stronger, and more connected community.

A person will take action related to health if he/she believes that they can effectively take this action (Whitacre, 2009, p.59). Residents of the downtown core with poor access to healthy foods may not perceive the benefits of eating well, if they do not feel as though they have proper means to achieve it (Rosenstock et al, 1988, p.176). Characteristics of the food environment within cities can be seen as aspects that encourage the consumption of certain types of food and deter from consumption of other types (Steel, 2009). Rather than spending time, effort and money to entice grocery stores to locate in food deserts, perhaps the issue regarding the health of residents should be addressed by providing proper food education for residents who have lost connections with their culture, as well as those who are plagued with bad diets (Steel, 2009). The issue is not as simple as stocking grocery stores with nutritionally adequate and culturally acceptable food, but also using planning strategies to encourage residents to make better decisions regarding food consumption (Whitacre, 2009, p.27).

*Summary*

The geospatial, economic, and epidemiological forces driving food desertification each relate to the question of individual decision-making, constraint on choices, and how decisions intersect with policy and resource constraints. Food desertification is driven as much by geographic access as it is by the decisions we make, or have to make as individuals. Living in close proximity to a grocery store becomes meaningless, if food is not affordable (Steel, 2009). Affordable food is meaningless, if it is not culturally or nutritionally adequate (Steel, 2009). Although they have some overlapping qualities, each driving force behind food access affects neighborhoods to a certain degree, which is why their consideration is integral to planning for improved food access. There also needs to be a significant emphasis on better health education programs that teach the skills needed for buying and cooking healthy foods (Food Matters, 2013). Public spending to make fresh food accessible in food deserts can be justified by the economic savings in health care from diet-related illnesses (Ladner, 2011. P.379). Through urban design and planning strategies, improved

access can be accomplished, thereby allowing residents to perceive the benefits for their own social well being as well as improvements to their community as a whole. (Rosenstock et al, 1988, p.176).

### 3.2. BETTER FOOD ACCESS FOR COMPLETE COMMUNITIES

How does one define food access? As shown in the literature, food access cannot be coined with one single definition. This is why, when planners are addressing food deserts, it is not enough to think in the realm of 'if you build it, they will come' (Levitt, 2011). Often, although implementing a new grocery store improved perceptions of the area; it does not necessarily contribute to better food access or an increase in the health of the community. Planners need to think more about policies that help bridge the gap between perception and action in under served neighborhoods (Levitt, 2011).

Food access is arguably one of the most important, yet least addressed issues in creating complete communities. A crucial aspect in addressing issues of food access is taking into account how the surrounding environment affects the individuals who occupy it, and the decisions that they make (Shannon, 2014). This type of social ecology is evident when observing the overall health of a community (Shannon, 2014, p.250). How does better access to food make for a healthier community? This area of research has been looked at traditionally in terms of individual health impacts, however, less addressed is the economic and community benefits of improving food access (Hagan et al, 2013, p.3). Improved access to food keeps money within the local economy, allowing the community to benefit in turn (Hagan et al, 2013, p.5). When a community lacks access to proper food retail, residents will often drive outside of the neighborhood to a large supermarket to purchase their groceries. This affects the local economy because these residents end up spending more money outside of the neighborhood on things that they would typically buy locally (Hagan et al, 2013). Often, it leads to other existing local businesses failing, due to lack of popularity (Hagan

et al, 2013, p.6). If there were more food retail options within the neighborhood, more consumer dollars would remain in the local community. Increased food access therefore also allows the value of the community to increase, as many homes increase in value when they are located within walking distance to food retail (Hagan et al, p.6). These economic benefits can also lead to more vibrant and dense neighborhoods. By making food more accessible, there is less emphasis on car dependence, and further emphasis on walking and alternate modes of transportation, making for a healthier community overall. This brings up the question of how to improve food access in urban areas, in order for communities to gain these benefits. The purpose of the next section of the literature review is to take a critical look at three different strategies geared towards improving food access in under served urban communities; developing new grocery stores, corner store rehabilitation, and farmers markets (Flournoy et al, 2005, p.18). These approaches were formulated in response to many socio-economic issues surrounding poor food access.

*Developing New Grocery Stores*

Many communities across Canada and the United States are known as food deserts, which are defined as areas that fail to provide their residents with access to nutritious food retail (Scully, 2011). Often, when the community is large enough, these untapped markets provide an opportunity for grocery store development, especially when accompanied by incentive programs (PolicyLink, 2005). The Pennsylvania Fresh Food Financing Initiative is known as one of the most successful strategies in attracting grocery stores to under served areas (Karpyn, 2010). In order to fund the program, the state contributed 30 million dollars (Karpyn, 2010, p.473). The initiative launched in 2004 as a public-private partnership, and has helped both improve and develop 78 food retail outlets in both rural and urban areas throughout Pennsylvania (Karpyn, 2010, p.473). This has helped create over 5000 jobs for these communities and is said to have improved access to healthy food for over 400,000 residents in Pennsylvania (Hagan et al, 2013). The program is known for its long-term economic development benefits. (Hagan et al, 2013, p.7).

Benefits to developing new grocery stores in under served areas include the creation of employment

opportunities for local residents as well as temporary construction jobs during the development process (Flournoy et al, 2005). They also help with community economic development by keeping consumer dollars within the community. New developments such as grocery stores often attract other services such as pharmacies, restaurants, and other retail, providing more opportunities to capture consumer dollars that would otherwise be spent elsewhere (Flournoy et al, 2005, p.21).

The development of new grocery stores also benefits communities in terms of physical revitalization. Often, new developments replace vacant land or abandoned buildings, bringing new life and density to dull and empty areas of a neighborhood (Flournoy et al, 2005, p.21). As it can be difficult to entice larger, big-name supermarkets to locate to under served urban areas, most new grocery stores in urban areas tend to be smaller, locally owned businesses (Whitacre et al, 2009, p.57). Although large chain supermarkets are often the preferred choice of food retail for many residents, locally owned grocery stores can greatly improve the perception of the surrounding area by adding character to the community. This would be hard to achieve with generic supermarket chains that look the same in every city. Character communities are often very desirable for urban residents, increasing the residential interest within that area.

These locally owned grocery stores could also benefit the local food system. Smaller food retailers often purchase their food from local farmers as they cannot keep up with the bulk demand of ordering from large chain suppliers, so when consumers purchase from these smaller grocers, the farmers benefit along with the local business owner (Hagan et al, 2013 p.9). Lastly, local grocery stores also often volunteer their time in support of their community by participating in initiatives and programs in order to help support food access in the neighborhood. The local chain, “New Seasons Market” in Portland, Oregon has donated more than 1000 tons of food to food banks in Oregon, as well as volunteered their hours towards community services (Hagan et al, 2013, p.9). This has helped the community grow stronger in terms of support and development.

As beneficial as new grocery store development can be for a community, attracting this type of business can be a lengthy and complex process (Flournoy et al, 2005). Many retailers do not want to position themselves in these areas as they perceive them to be unprofitable (Flournoy et al, 2005, p.22). Common challenges include locating appropriate sites to serve as many people as possible (Flournoy et al, 2005). These grocery stores rely on a high volume of customers in order to make their presence worthwhile, so they often require the attraction of shoppers from beyond the neighborhood, posing a potential conflict with other smaller, local grocers (Flournoy et al, 2005).

Another challenge is that these grocery stores may not be able to meet all the needs of a diverse community (Flournoy et al, 2005, p.20). Finding culturally acceptable food can be a challenge for many people in under served areas, and often grocery stores do not carry these specific food retail options. When developing a new grocery store, it is important to conduct a market analysis of the community demographic in order to best service local residents (Flournoy et al, 2005, p.24). However, even so, new grocery stores do not always improve food access for all, as one grocery store may not service an entire community from a pedestrian perspective. Although new grocery stores in urban areas may be preferable due to more selection, these stores are not always accessible to all residents (Corapi, 2011).

Lastly, finding appropriate funding can be a major challenge towards new grocery store development, as they often cost millions of dollars. Without the help of governments and private funders, grocery store initiatives such as the Pennsylvania Fresh Food Financing Initiative would not be possible (Flournoy et al, 2005, p.23). Many cities in Canada lack these types of funding initiatives to achieve the goal of developing new grocery stores in under served areas.

*Corner Store Rehabilitation*

Attempting to attract grocery stores to under served communities is not always a feasible option. This is often the case in urban food deserts, where the community may not be able to support a full service grocery store due to parking restrictions, available space, and population density. However, these areas tend to be littered with small-scale convenience stores that service many of the community's grocery needs. A major issue with these convenience stores is that they often do not sell any fresh produce, or healthy food retail options (Almaguer et al, 2014, p. 3). Small-scale stores are also often located within less costly, older buildings that may not be properly maintained, creating a perception that it may not be safe to visit these retailers.

This is what spurred the initiative of improving existing small food retail stores. These corner store expansion projects provide incentives for store owners to increase their availability of healthy food retail options, as well as the addition of a fridge or freezer in which to store meats and dairy products. (Whitacre et al, 2009, p.57). Rehabilitation also often includes exterior façade improvements to increase the appeal of these local businesses (Almaguer et al, 2014, p. 8). This type of food access improvement strategy can be implemented through the use of local policies such as zoning ordinances and tax incentives (Hagan et al, 2013, p. 8). Often, urban areas have an abundance of corner stores, creating many opportunities for implementing this strategy. As these stores already exist, they do not require new land and new managers, making the costs of the operation much lower than new grocery store development (Flournoy et al, 2005, p.19). An example of this type of initiative is New York City's 2006 Healthy Bodegas Initiative. The project targeted neighborhoods with a high demand for healthy foods, often situated in low-income areas (Bansal, 2012). The reason for targeting these smaller scale stores is that they make up a significant proportion of the food retail in the area (Bansal, 2012). Yet out of these stores, only 2-4% sold leafy green vegetables, proving the need for an increase in nutritious food options (Hagan et al, 2013, p. 9). These corner store rehabilitation projects have been implemented in many neighborhoods in the United States, but are also underway in Canada as well. In 2014, the Toronto Food Policy

Council launched a pilot project with a convenience store owner in East Scarborough who was willing to sell more healthy and affordable food (Hancock, 2017). Through working with the local community, the pilot project helped strengthen relationships between the store owner and customers, while providing business planning and marketing tools (Hancock, 2017).

One of the benefits of this strategy is that it encourages a more sustainable lifestyle amongst residents in the area. In most urban food deserts, many residents do not have a grocery store within walking distance, however, they will most likely always be in walking distance to a convenience store. If these small-scale stores were provided with the necessary resources to sell more healthy food options, local residents would then be able to access their food retail without the need for transportation. In cities such as Vancouver, with good pedestrian access to food, many urban residents choose to walk to their nearest store to purchase their groceries, leaving their car at home. This is beneficial to the environment by cutting down carbon emissions, but also beneficial to the health of urban residents, due to the increased level of exercise. Being able to walk to a grocery store also creates more sustainable shopping habits. This is a key difference between shopping in urban areas versus shopping in suburban areas. In suburban areas, many people drive to the grocery store once per week, which often leads to over purchasing, as they do not want to make another trip. This type of shopping behavior leads to the unsustainable issue of residential food waste (Charles et al, 2010, p. 816). In urban neighborhoods where residents walk to their local store to purchase groceries, they often end up making multiple trips per week, as they can only carry so many groceries. This way, people tend to only purchase what they need, leading to less food waste. Improving food access through corner store initiatives creates less dependence on cars, therefore contributing to a more economically sustainable and healthy lifestyle for urban residents.

Although corner store rehabilitation can create significant economic benefits for a community, setting up these initiatives is easier said then done. Improving existing small stores can be challenging, as they have to compete with larger stores that often carry more selection. In

many cases, urban residents are comfortable with their shopping routines, making it difficult to attract a variety of people to these new small stores. These residents also tend to not shop locally due to negative perceptions of under performing stores (Ladner, 2011).

Corner store improvements require a willing tenant, who can be convinced to change their product selection and practices in order to accommodate a better selection of food retail (Flournoy et al, 2005, p.29). According Hagan & Rubin's 2013 article, out of the 55 corner stores that were rehabilitated through New York City's Healthy Bodegas Initiative, 78 percent reported that sales of healthy foods had increased (p.9). Yet Whitacre & Mulligan's 2009 article states that owners of local convenience stores have tried to increase their selection of fresh produce, but found that it actually caused a loss in profits, as their customer base did not purchase these items (p.47). In many cases, these tenants do not have much experience in expanding their business and require small business development resources in order to better meet the needs of their local customers, and to ensure that they are profiting as well (Flournoy et al, 2005, p.30). Although not without its challenges, expanding existing small stores can be a more feasible option than the development of a new grocery store as the process is less complex, less costly and requires less time (Flournoy et al, 2005, p.19).

*Starting and Maintaining Farmers Markets*

Urban farmers markets have become very popular across North America as a strategy to bring more fresh food into cities. Markets support local entrepreneurship, creating low-cost start up venues for farmers to sell their goods directly to consumers (Hagan et al, 2013). This, in turn benefits the community economically, because the money that the farmers make gets reinvested into the local economy where they purchase their seeds and other materials from local businesses (Hagan et al, 2013 p.12). An advantage of farmers markets is that they see results sooner as they are less complex and require less time and money than developing a new store or rehabilitating an existing store in an under served community (Flournoy et al, 2005). To start up, they only require a public space for a short period of time, such as a parking lot or a blocked off street. (Flournoy et al, 2005, p.19).

Farmers markets are often criticized due to issues of gentrification, and the fact that they tend to attract many high-income residents (Whitacre et al, 2009, p.65). However, urban farmers markets can also be a vital source of food access for lower income residents within the community. Because farmers are selling directly to their consumers, they are able to offer prices on fresh produce that are often much lower than the organic produce found at grocery stores (Flournoy et al, 2005). According to Flournoy et al (2005), studies show that savings at farmers markets can range between 10-18 percent in comparison to the organic produce sold at supermarkets (p.32). This is why they have the potential to become a great option for lower income residents to purchase their groceries. Another benefit of farmers markets is that they help create spaces that encourage social cohesion within communities. Many residents often state that their main reason for attending farmers markets is to socialize with other people in their community (Flournoy et al, 2005, p.33). Because of the high social aspect involved in this type of food retail, markets also provide opportunities for learning that many urban residents are not able to find at a grocery store. In under served areas, it is common for many residents to lack the proper food education to make them want to purchase healthier food items (Story et al, 2008, p.261). Farmers markets provide a good setting for these people to learn about food, which can lead to more demand for healthier food options. In addition to supporting the purchase of healthier foods, farmers markets also provide the opportunity for local residents to sell their own items such as baked goods or crafts, as they do not require high start up capital (Flournoy et al, 2005, p.32). These could be good outlets for low-income residents to move forward within their community. Markets have also begun to accept nutrition assistance benefits, which increase the purchasing power of low-income consumers (Cole et al, 2013). This has helped many of these consumers who may not be able to afford enough groceries to feed themselves, or their families. The Broad Street Farmers Market in Providence, Rhode Island services low-income residents who depend on Supplemental Nutrition Assistance Programs (SNAP) (Hagan et al, p.12). Before the opening of Broad Street, these residents had difficulty finding food that is culturally acceptable, as well as affordable fresh produce (Maxwell et al, 1993, p.40). Through these programs, the market has provided these

residents with the opportunity to purchase these foods at an affordable price. The market also has the third highest redemption of SNAP vouchers in the United States (Hagan et al, p.12). The market continues to better the community, by offering nutrition classes and promoting the preparation of healthy food, for those who may not have had the education to do so (Steel, 2009).

Farmers markets are known for creating vibrant and healthy communities through social cohesion, but face the challenge of attaining the necessary customer base to sustain the market, as well as raising funds to organize the market (Flournoy et al, 2013). Often, these markets require a large amount of community support and organizing. In lower income communities, farmers markets will often require subsidies to promote the market as well as recruiting farmers to participate (Cole et al, 2013). It is often also difficult for markets to achieve a sustainable balance between enough farmers to attract customers and enough customers for the farmers to make a profit (Flournoy et al, 2005, p.33). Another challenge in using farmers markets as a strategy to improve food access in under served areas is that they can be temporary. In many cities with colder climates, farmers markets can only be feasible during the warmer months of the year, creating a gap throughout those colder months. Farmers rely on what is in season, or what they have saved up from their growing season. Therefore in cities with a short growing season, farmers markets can only exist temporarily. For those who rely on farmers markets to purchase their groceries, it can be stressful not knowing if this food source will be around next week.

In order to be successful, farmers markets require massive support from volunteers and community run initiatives (Flournoy et al, 2005). When these resources are available, urban markets successfully improve many urban communities economically, benefiting residents of all types of incomes.

*Summary*

Improving food access in under served communities has proven to be a complex issue that many cities struggle to solve. A major reason for this struggle is that each neighborhood has wants and needs depending on the make up of its residents, making these strategies very context specific. In some urban areas, new grocery store development would be costly at first, but serve the most benefit to the community in the long run. However, in other urban neighborhoods, with a less dense population, a farmer's market or corner store rehabilitation project would better serve the residents in that community, as they are generally lower risk. That being said, a major barrier confronting all three of these strategies is that they rely heavily on consumer shopping patterns and preferences (Adams et al, 2010, p.58). Without the support of local residents, these businesses would not be able to sustain themselves within the community. In many mixed income communities, it is not enough to only gain support from in-need residents, however, there are many factors of the food environment that influence the types of food retail that residents will choose to access (Morland et al, 2002, p.1766). New grocery store development, corner store rehabilitation and farmers markets all require the support of the entire community in order to create successful long term socio-economic improvements (Whitacre et al, 2009, p.57).

# 4.0 RESEARCH METHODS

This practicum employs a mixed methods approach, of both quantitative research, through a downtown Winnipeg grocery store audit and qualitative research through surveys in order to help answer the research questions. These are depicted in **Table 4.1**.

| | RESEARCH QUESTION | RESEARCH METHOD |
|---|---|---|
| 1 | What is the retail food environment in downtown Winnipeg? | Downtown Winnipeg Grocery Store Audit |
| 2 | How do downtown Winnipeg residents access food? | Survey |
| 3 | How do downtown Winnipeg residents perceive food access in their community? | Survey |

**Table 4.1** Research Questions and Methods

Previous research on food access is often mapped and illustrated based on calculating walking distance to the nearest grocery store. Although this provides a good idea of the physical barriers to accessing groceries in under served neighborhoods, if used on its' own, there are several limitations to this type of study. For example, previous studies on this topic in Winnipeg have used a 1km distance to refer to 'good access'. However, the average distance to be considered "walkable" is 400-800m (5-10 minutes), especially for a city with cold temperatures such as Winnipeg. The elderly, and those with limited mobility may also experience difficulty accessing a destination farther than a 5-10 minute walking distance. It is also common in geographic mapping to use the Shortest Network Path (SNP) to measure distance (Adams et al, 2010, p.60). This measure uses a predetermined radius, in order to determine the travel distance between a food retailer and resident. However, as seen in **Figure 4.1**, radius does not provide an accurate proximity, as pedestrians cannot travel in straight lines to reach their destination.




**Figure 4.1** Air Distance vs Walking Distance (Image Source: http://usa.streetsblog.org/2014/02/24/two-maps-show-how-we-designed-walking-out-of-the-suburbs/

A more accurate measure of distance is using the Ground-Truthed method, which takes into account existing road networks and store positioning, allowing for a more accurate representation of walking distance (Adams et al, 2010, p.60). Lastly, Adams et al (2010) identifies a limitation with mapping distances between neighborhoods and food stores, being that human behavior is "creative" and "highly unpredictable" (p.60). Spatial mapping is beneficial as it provides clear defined boundaries of food access, allowing policy makers and planners to target specific areas (Shannon, 2014, p.249). However, because shopping is a social experience based on human choice, there are many other factors that to be taken into account when mapping food access in cities, such as personal preferences and food pricing (Adams et al, 2010, p.60). This research addresses this gap in research that is often left out of current food access studies in urban environments through a grocery store audit and survey analysis. Both research methods took place over the course of approximately one year, from July 2016 - February 2017.

## 4.1. GROCERY STORE AUDIT

The Downtown Winnipeg grocery store audit included an analysis of the downtown core to provide an overview of the status of food access in Downtown Winnipeg. The audit categorizes the grocery stores based on the availability and affordability of the food retail in the downtown core compared to elsewhere in Winnipeg. The audit was undertaken in two parts:

*Location & Classification*

First, downtown grocery stores were located and classified into categories based on type of business. Factors taken into account included; variety of food options, type of food available, store size, store ownership, and overall store format/layout. Different categories of food retail stores are shown in **Figure 4.2**, and have been adapted from the Downtown Grocery Store Feasibility Analysis (Kaufmann, 2013). The location of grocery stores are depicted in **Figure 4.3.**

**CONVENIENCE STORES**
Small stores selling snacks and drinks, with a vary limited or no supply of fresh produce / dairy products. These can be owned independently, or by a national corporation. (ex. 7/11)

**SMALL SCALE GROCERY STORES**
Small stores selling snacks and drinks along with some fresh produce / dairy products. These are usually independently owned and are not very common today. (ex. Sams Foodfare)

**FULL SERVICE GROCERY STORES**
Grocery store selling a wide variety of food including fresh produce / dairy products. They may also include a bakery / deli and are often owned independently. These are less common today. (Ex. Family Foods)

**SUPERMARKETS**
Store that sells a full variety of foods including fresh produce / dairy products, frozen meats, as well as other household items such as health products. These stores also offer a bakery and deli, and are typically owned by international companies. (Ex. Safeway)

**HYPERMARKETS**
Similar to a supermarket, but also expand way beyond food retail, often selling clothing, drugs and other medical care. (Ex. Walmart Supercentre, Costco)

**FARMERS MARKETS**
A market where farmers sell their locally grown produce and baked goods directly to consumers. Farmers Markets differ from public markets as they are seasonal, and typically consist of temporary booths/stands rather than year-round permanent structures. Farmer's Markets can be held both outdoors or indoors. (DT Farmer's Market)

**ONLINE DELIVERY**
Online Delivery consists of either larger grocery stores or local businesses which allow you to purchase your groceries online, and pay an extra fee to have them delivered to your door. (Ex. Save-on-Foods Delivery, CSA)

**Figure 4.2** Types of Food Retail Categories

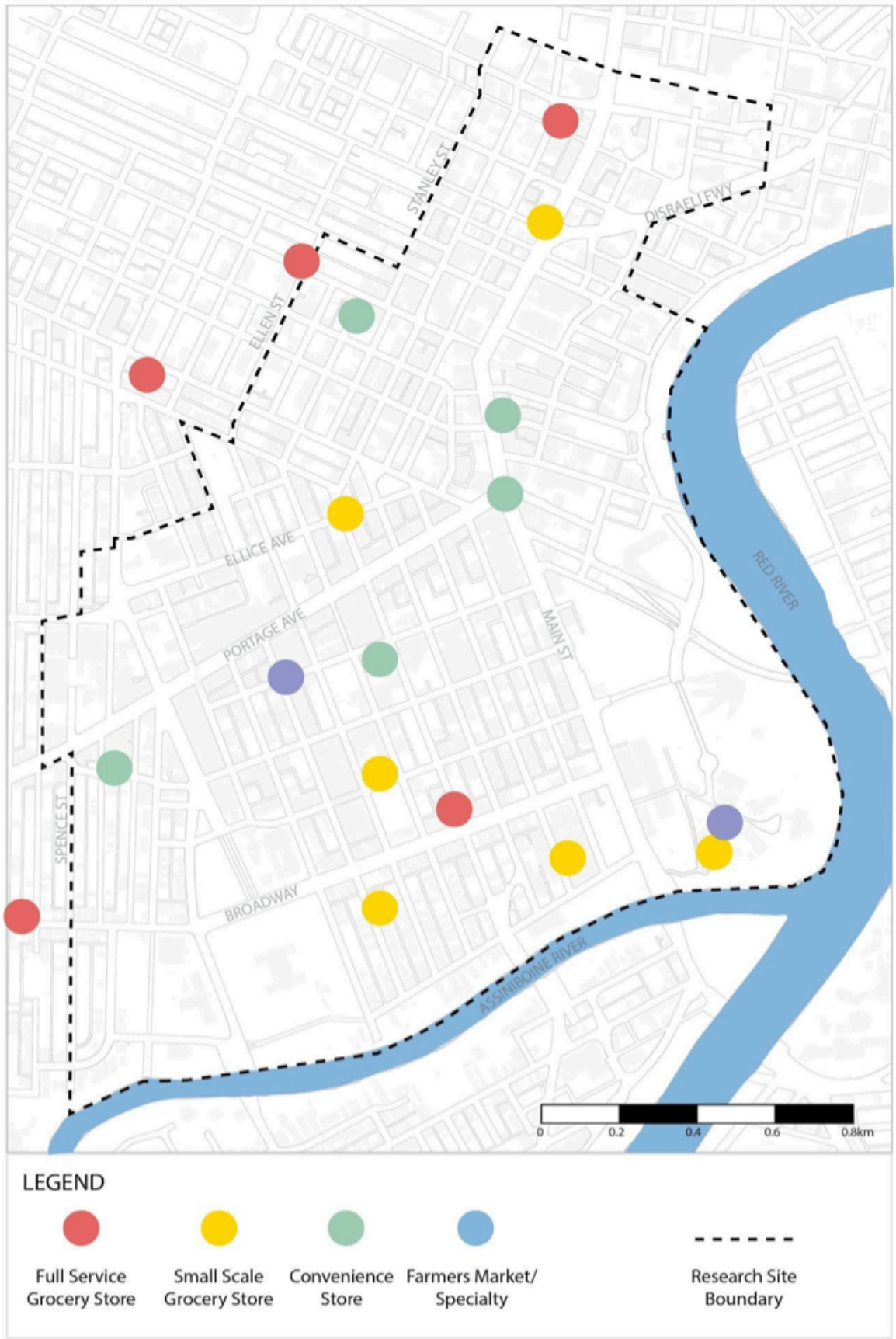


**Figure 4.3** Food Retail in Downtown Winnipeg

*Food Basket Price Comparison*

For the next step of the audit, the average pricing of food items sold in downtown grocery stores (milk, fresh produce, bread) was recorded and then compared to big box grocery stores. This was done by grouping the stores into their respective categories, and using the average price per food item in each food retail category, rather than per individual store. In 2013, Food Matters Manitoba conducted a study comparing food prices in downtown Winnipeg to market rate prices in typical grocery stores. As shown in **Table 4.2**, the average price of milk has been assessed in the downtown area, and then compared to other areas of Winnipeg.

| PRODUCT | DOWNTOWN | NORTH END | ELSEWHERE |
|---|---|---|---|
| Milk (2%) | $3.58 | $3.34 (-7%) | $3.17 (-13%) |

**Table 4.2** Milk Price Comparison

However, the 2013 Food Matters MB assessment only displays the results for calculating milk prices. For this practicum research, a basic nutritious food basket was used in order to determine the availability of these items within the stores, as well as their prices. Types of food retail included items such as bread, fresh produce and lean meats. The grocery store audits were conducted in person, by the principal researcher over the course of three months (June 2016 - August 2016). Each audit took approximately 20-40 minutes to complete, depending on the type of store. Prices were recorded based on the lowest price available for that particular item per weight/ amount. If the store did not carry an item, or the item did not include a price tag, no price was recorded. If the store carried the item but it was sold out, it was noted as unavailable and a price was not recorded. A copy of the grocery store audit form used for this portion of the research can be found in **Appendix A.** Individual store names and their food retail pricing have not been included due to privacy concerns.

*Analysis*

Upon completion, all grocery store audits were compiled into a spreadsheet and grouped into their respective categories (convenience stores, small grocery stores, farmers markets, etc). The prices were averaged by selecting the most common portion (Ex. 750g of yogurt). If the item was not available in that particular quantity, the price was adjusted to match that quantity. For example; $5.00 for 500g of yogurt = $0.01 per g of yogurt = $7.50 per 750g of yogurt. Prices for each food item were then averaged per category in order to determine the approximate retail price of that food item at that type of store. For example, at a small grocery store, the average price of yogurt was $4.04.

Next, using the average price per item, both the availability and cost of basic foods in the different types of downtown grocers were compared to two grocery stores elsewhere in Winnipeg. The grocery stores were chosen based on the results of the survey, and included Safeway on River Avenue and Superstore on St James Avenue, the top two stores located outside of the downtown boundary where downtown residents purchased their groceries. The complete findings will be discussed in Chapter 5.

## 4.2. SURVEYS

A major issue with much of the current food access research is that it often relies on geospatial analysis without looking at socio-economic and social ecology factors. The problem with this is that when solely evaluating the spatial characteristics of food access, only shopping opportunities are being taken into account, which fails to address shopping behavior (Adams et al, 2010, p.60). To complement the quantitative data collected in the downtown grocery store audit, surveys were distributed to residents of downtown Winnipeg.

According to Neuman (2000), surveys are appropriate for research regarding behaviors or self-reported beliefs (p.247). Descriptive surveys, described by Gray (2004) as surveys "designed to measure the characteristics of a particular population" (p.100). This method provided the opportunity to explore food access in terms of attitudes, opinions and values within the choices that individuals make (Gray, 2004, p.100). The surveys sought to better understand where these residents currently access their groceries (in the downtown neighborhood or elsewhere), as well how they access them (driving, walking, transit) and why they choose to do so.

*Distributing Surveys*

Residents that currently live within the boundaries of Downtown Winnipeg were recruited for this study. In order to explore the shopping behavior patterns, rather than perceptions, in Downtown Winnipeg's food environment, survey responses were only accepted by current Downtown residents. Accepted surveys were allowed a tolerance of two blocks outside the study area boundary. The boundaries chosen were based on the Downtown Winnipeg BIZ's Boundary Map.

Surveys were distributed to residents two ways: First, surveys were accessible online using Google Forms and advertised through various social media platforms such as Facebook, Twitter and Instagram. Organizations that helped promote the survey through social media platforms included the Downtown Winnipeg BIZ, as well as the University of Winnipeg Student Association. In order to reach those residents who may not access social media platforms, the survey was also advertised using posters put up in public institutions in downtown Winnipeg. Poster locations included both the Second Cup and the Millennium Library on Graham Avenue, as shown in **Figure 4.4.** A copy of the poster can be found in **Appendix B.**

Second, in order to attempt to reach a diverse range of residents, the surveys were distributed to various downtown community groups, identified and contacted using publicly available contact information. The U of W Student Association shared and promoted the survey via social media (Twitter)[1]. The Exchange District BIZ responded with interest in distributing the survey, but did not follow through. The Downtown Winnipeg BIZ did not distribute the survey directly, but shared the CBC news article via Twitter. The Beacon Hill Lodge Seniors care home was contacted, but chose not to have their residents participate in the survey. Lastly, the University of Winnipeg Residence Association, Knox Community Kitchen, Red River College, Paterson Global Foods Institute, and Central Park Womens Association were contacted via phone, email or Facebook, but did not respond.

*Survey Questions*

The survey questions sought to better understand where downtown residents get their groceries, if within the neighborhood or elsewhere, and how easily they are able to access them. Apart from demographic information (age, gender, marital status, etc.), Survey questions were adapted and modified from the Exchange District BIZ Grocery Store Needs Assessment (2013). However, the data collected from the Exchange District BIZ's 'Grocery Store Needs Assessment' focuses only on one area of the downtown core, whereas this survey was geared towards the downtown population as a whole. The survey was created using Google Forms, included a mix of multiple choice, short answer, rating, and long answer questions and was designed to take approximately 5 minutes to complete. In order to encourage a higher response rate, survey participants were also given the option to leave an email address or phone number in order to be entered in a draw to win a gift card to a downtown restaurant. The full survey can be found in **Appendix C.**

[1] CBC News contacted the researcher for an interview and published an online article, sharing the link to the survey. Additionally, WAVE Magazine contacted the researcher and advisor for an interview, and published a printed and online news article, further advertising the research.

*Analysis*

A total of 179 respondents participated in the survey. After removing the surveys completed by participants who did not reside within two blocks of the downtown boundaries, a total of 147 surveys remained to be used for this research. The data collected from the surveys was then analyzed to discern any trends or assumptions that can be made in regards to how different people with a wide range of needs access food in Downtown Winnipeg.




**Figure 4.4** Survey Poster Distribution Locations

# 5.0 GROCERY STORE AUDIT

The following section discusses the data collected from the Downtown Winnipeg grocery store audit. Findings are grouped based on the two components of this research method; locating and classifying grocery stores and a food basket price comparison. A total of 23 food retailers were audited for the purpose of this research. Individual names of local retailers have been left out of this practicum, in order to respect the privacy of the store owners. These stores will instead be discussed based on their respective category of food retail.

## 5.1. STORE LOCATION + CLASSIFICATION

Downtown Grocery stores were identified based on the responses from the survey, as well as an initial physical survey of the area. They were then grouped into their respective categories, based on the availability of the basic food basket items listed on the downtown Winnipeg grocery store audit form (**Appendix A**). In total, there were 7 convenience stores, 7 small grocery stores, 6 full service grocery stores and 3 farmers markets within the downtown boundaries that were audited, as well as 1 online delivery program. If stores had little to none of the food basket items available, they were considered a convenience store. If stores had most of the food basket items available, but lacked selection and quality (usually produce), they were considered a small grocery store. If stores had a full selection of all food basket items available, they were considered a full service grocery store. Stores that only carried seasonal and specialty items were considered a farmers market. Below are further findings from each category audited.

**Convenience Stores:** Convenience stores tended to be very small, approximately 200-400 sq.m., typically consisting of 1-3 aisles, 1-2 fridges/freezers and 1 cash register. If a fridge or freezer is available, it is often stocked with soft drinks, ice cream, and maybe the occasional small carton of milk, yogurt or a select fruit.

**Small Scale Grocery Stores:** Small-scale grocery stores that were audited were slightly larger than convenience stores, but still relatively small in size, approximately 400-600 sq.m. They typically consisted of 3-5 aisles, 3-5 fridges/freezers and 1 cash register. In these stores, most of the basic food basket items were available for purchase, but tended to lacked in fresh produce and proteins. Of the produce that was available, the selection and variety of these items tended to be scarce. However, often, these small scale grocery stores tailored their food retail to their customer base. For example, one store sold injera bread that they received weekly from a local Ethiopian restaurant, as the employee working stated it was a popular item amongst their customers.

**Full Service Grocery Stores:** The full service grocery stores tend to be larger in size, approximately 500-700 sq.m., although not comparable to a larger chain grocery store (ex. Safeway). These stores typically consisted of 5-10 aisles, 5-10 fridges/freezers and up to 4 cash registers. Audited small scale downtown grocery stores had all the items available, with selection and variety. The produce sometimes lacked in quality, depending on the type. Often, a bakery and deli were also available within the store. These stores were typically locally owned, and also tended to sell a selection of locally made food retail.

**Farmers Markets:** The farmers markets that were audited for the purpose of this research sold seasonal foods, and were only open in the summer months. They had a wide selection of produce and breads available, but in contrast to small scale grocery stores, did not sell as many of the other packaged food basket items. These farmers markets were set up in temporary locations such as park spaces and parking lots, and only ran once per week. They consisted of approximately 40-50 different vendors, consisting mainly of food retail, but also including some non-food retail.

**Online Delivery:** One online delivery option was audited for the purpose of this research. Previously, food delivery service generally revolved around restaurants and fast food establishments, but did not include the delivery of grocery store food items. Today, due to new innovations in the food retail industry, many full service grocery stores now offer a delivery service. Options for food delivery service in downtown Winnipeg include:

- Community Supported Agriculture (CSA): *Prepaying local farmers directly for a weekly box of fresh, seasonal produce*
- Chefs Plate: *Delivery of specific grocery store items to your doorstep, accompanied by a recipe in order to prepare a meal with the ingredients provided*
- My Farmers Market: *Delivery service that sources from local farmers and other local businesses that sell food items (ex. baking items, chocolate, dairy, etc.)*
- Local Delivery from Small Grocers: *Small local grocery stores tend to also offer delivery service of their specialty items such as meat from local butchers*
- Save-On-Foods: *Chain grocery store offering a delivery service of their entire selection of food items*

Although convenient, these types of services, depending on the types of foods that they deliver can be much more expensive then walking to the grocery store in person. Also, online delivery services do not allow the customer to control which food item that they receive in their order. Instead, customers are relying on another source to select their item at the store. The chain-store online delivery service audited for the purpose of this research had all the food basket items available for purchase. A 7 dollar delivery fee to the downtown area, is an added charge to the total purchase.

## 5.2. FOOD BASKET PRICE COMPARISON

The average price per food item was found for each store category, and then compared to two larger grocery stores outside of the downtown boundary, including Safeway on River Avenue & Superstore on St James Street. These stores were chosen as they were the two most frequented grocery stores outside of the downtown boundary by survey respondents. As it was also mentioned in the results of the survey as a place where residents access their groceries, prices for Save-on-Foods online delivery were included in the audit. $0.20 was added to each food item in this category, to account for the $7 delivery fee required to receive this service. Findings for price comparisons and availability of items can be found below in **Table 5.1**. The green price denotes the cheapest price found for that item, while the red price denotes the highest price for that item.

Based on these findings, although all basic food basket items are available at downtown Winnipeg retailers, their prices are slightly higher than those in grocery stores located elsewhere in Winnipeg. Based on the findings of the audits, as stores became larger and carried more items, the prices became less costly. For example, out of the items that they did sell, convenience stores proved to be the most costly per item. This was different then the costs of shopping at a farmers market, as these food items were considered either specialty or local seasonal produce, which is generally more expensive than other grocery stores. Small scale grocery stores and super markets in the downtown neighborhood were less expensive than convenience stores and farmers markets, but they were still more expensive than shopping at a larger chain restaurant. Online delivery items also proved to be one of the least costly means of accessing groceries, even with the added delivery fee.

Although not all residents will do their shopping at convenience stores, the spatial analysis shows that some neighborhoods might not be able to easily access the less costly food retail options. According to the spatial studies of the research, the downtown area is concentrated with

convenience stores and small-scale grocery stores, which make up 61% of the downtown food retail. The majority of convenience stores are located in the Exchange District, and Portage – Ellice neighborhoods, while small scale grocery stores are generally located in the South Portage, and Broadway-Assiniboine neighborhoods. The majority of full service grocery stores are generally only located on the fringes of the downtown research boundary, and only make up approximately one quarter of the food retail available in this area. There were no supermarkets or hypermarkets located within the site boundary.

| | SAFEWAY | SUPERSTORE | CONVENIENCE STORE | SMALL GROCERY | FULL SERVICE GROCERY | FARMERS MARKET | DELIVERY (+$7 Delivery Fee) |
|---|---|---|---|---|---|---|---|
| REFRIDGERATED | | | | | | | |
| Milk (2%) 2L | $3.05 | $3.20 | $3.83 | $3.25 | $3.41 | | $3.30 |
| Milk Alternative (2L) | $3.89 | $3.17 | | $5.26 | $4.14 | | $4.38 |
| Yogurt (750g) | $1.99 | $2.00 | $7.17 | $4.04 | $3.43 | $7.50 | $2.70 |
| Cheese (200g) | $2.38 | $2.10 | | $3.96 | $3.99 | $5.50 | $2.76 |
| Butter (454g) | $3.99 | $4.47 | | $4.58 | $3.98 | $5.99 | $3.97 |
| Eggs, (12 Large) | $1.99 | $3.13 | | $3.85 | $3.24 | $5.49 | $2.20 |
| BREADS / CANNED | | | | | | | |
| Whole Wheat/Multigrain Bread (1 Loaf) | $1.50 | $1.24 | | $2.64 | $1.82 | $3.93 | $2.67 |
| White Bread (1 Loaf) | $1.50 | $1.24 | | $2.62 | $1.82 | $4.25 | $2.67 |
| Gluten - Free Alternative Pasta (340g) | $2.09 | $2.48 | | $1.69 | $3.01 | $5.00 | $1.86 |
| Whole Wheat Pasta (375g) | $2.19 | $1.88 | | $1.99 | $2.34 | $3.99 | $2.09 |
| White Pasta (375g) | $1.34 | $0.53 | $2.09 | $1.35 | $1.46 | $1.69 | $2.09 |
| Rice (1kg) | $1.89 | $2.18 | | $4.11 | $3.54 | $13.86 | $5.10 |
| Oats (1kg) | $2.99 | $2.18 | $4.29 | $4.66 | $2.25 | $12.14 | $5.50 |
| Canned Tuna/Salmon (170g) | $1.49 | $0.88 | $2.10 | $1.99 | $1.55 | | $1.19 |
| Canned Legumes (Beans) (540ml) | $1.29 | $0.88 | | $2.17 | $1.23 | $2.29 | $1.69 |
| Peanut Butter (Natural? 750ml) | $3.88 | $3.97 | $5.99 | $6.47 | $4.47 | | $5.17 |
| FROZEN | | | | | | | |
| Frozen Vegetables (750g) | $2.29 | $1.88 | | $3.87 | $3.39 | | $2.19 |
| Frozen Fruit (600g) | $3.99 | $4.48 | | $7.44 | $4.74 | | $5.17 |
| Fresh/Frozen Chicken | $6.99 | $2.85 | $5.59 | $5.23 | $6.56 | | $10.93 |
| Fresh/Frozen Beef | $3.00 | $4.21 | | $5.68 | $5.53 | | $5.63 |
| FRUITS | | | | | | | |
| Bananas (1lb) | $0.79 | $0.77 | $3.37 | $1.48 | $1.59 | $0.99 | $2.20 |
| Apples (1lb) | $1.99 | $1.48 | $1.25 | $1.39 | $1.50 | $1.40 | $2.84 |
| Oranges (1lb) | $1.99 | $1.47 | | $1.99 | $1.32 | $1.89 | $1.96 |
| Cantaloupe (1) | $3.99 | $1.97 | | $2.99 | $3.23 | | $8.44 |
| Grapes | $2.00 | $2.28 | | $5.99 | $3.00 | | $2.95 |
| Pears (1lb) | $1.99 | $1.48 | | $1.29 | $2.49 | | $1.96 |
| VEGETABLES | | | | | | | |
| Sweet Potato (1) | $1.49 | $0.48 | | | $3.08 | | $2.97 |
| Potato (lb) | $0.79 | $0.37 | | $0.90 | $0.89 | $0.75 | $0.96 |
| Carrots, whole (2lbs) | $1.89 | $1.94 | | $2.54 | $2.57 | $2.66 | $1.52 |
| Romaine Lettuce (1 head) | $1.66 | $2.97 | | $1.99 | $1.98 | $1.91 | $1.70 |
| Broccoli (lb) | $2.99 | $2.28 | | $2.21 | $2.48 | $2.30 | $1.21 |
| Pepper (1) | $2.99 | $0.74 | | $2.36 | $1.46 | $1.24 | $1.30 |
| Cucumber (1) | $1.00 | $0.97 | | $1.99 | $1.73 | $1.66 | $1.19 |
| Celery (1bunch) | $2.50 | $1.98 | | $3.32 | $2.63 | $2.25 | $2.57 |
| Mushrooms (1lb) | $2.99 | $3.68 | | $2.00 | $5.42 | $2.99 | $4.04 |
| Onions (1lb) | $1.00 | $0.66 | $1.89 | $1.52 | $1.25 | $1.26 | $0.69 |
| Tomatoes (lb) | $2.29 | $1.27 | | $2.12 | $2.13 | $2.35 | $1.40 |
| | $88.06 | $72.54 | | $112.88 | $104.54 | | $113.16 |

**Table 5.1** Downtown Winnipeg Food Basket Price Comparison per Category

## 5.3. LIMITATIONS TO THE RESEARCH

One limitation to the research is that often it was unfeasible to record a price for a certain grocery store item, although it may have been available at that store, producing an incomplete audit form. In some cases, store owners requested to not have their prices recorded for the research project. Another issue was that a lack of visible price tags on food items made it difficult to discern what the price of that item was, or in some cases, items that are normally available may have been sold out. Another limitation to the research involves the seasonal availability and pricing. The price range and availability of some food retail items may vary depending on season, day of the week, and time of day. Each store was only audited once, and the foods that were present at that time were the ones recorded. Lastly, another possible limitation to the grocery store audit is that the methods in which the price per unit was measured, may not reflect the true pricing of that item. In order to keep the price comparison as consistent as possible, each item was measured using price per size. If the item was not available in that size, the price needed to be adjusted; this could result in issues with the accuracy of data. Additionally, some of the food items listed were often available in bulk format (ex. oats), which would result in a cheaper price per unit size. However, for consistency, only packaged items were recorded for the purpose of this research.

# 6.0 SURVEYS

The following section discusses the data collected from the surveys conducted with downtown Winnipeg residents regarding food access in their community. A total of 179 respondents participated in the survey. In order to obtain accurate information, surveys completed by participants who did not reside within the downtown boundaries were removed. After removal, a total of 147 surveys remained to be used for this research, which yielded a sample size of 0.92%, based on a downtown population of 16,000. The survey responses were then compiled into tables, charts and graphs in order to display the findings from each question. A copy of the full survey can be found in **Appendix C**.

## 6.1. DEMOGRAPHICS

Survey respondents varied in age groups, with the majority (39%) being between the ages of 18-30 years old (**Table 6.1**). The majority of respondents (84%) live either on their own or with one other person. In comparison to Winnipeg census data, there is a much larger presence of seniors than is represented by the survey results, which show to have oversampled responses from younger age groups (18-40). This is also represented in the fact that the survey yielded responses from no households of more than 2 people (**Table 6.2**). Although 1-2 family households show to be the most common household size in downtown Winnipeg, the 2011 downtown Winnipeg Census shows about 25% of households in the downtown area are between 3-6 people in size.

| AGE | DOWNTOWN GROCERY STORE SURVEY (%) | 2011 DOWNTOWN WINNIPEG CENSUS (%) |
|---|---|---|
| 18-30 | 39 | 26 |
| 31-40 | 31 | 17 |
| 41-50 | 12 | 14 |
| 51-65 | 12 | 17 |
| 66+ | 5 | 12 |

**Table 6.1** Age of Respondents

| HOUSEHOLD SIZE | DOWNTOWN GROCERY STORE SURVEY (%) | 2011 DOWNTOWN WINNIPEG CENSUS (%) |
|---|---|---|
| 1 | 43 | 55 |
| 2 | 41 | 25 |
| 3 | | 9 |
| 4 | | 6 |
| 5 | | 3 |
| 6 | | 3 |

**Table 6.2** Household Size

The majority of survey responses (91%) came from households with no children under the age of 18 (**Table 6.3**). Only 2% of respondents live with either 1 or 2 children. Although the majority of households in the downtown area are households without children, according to the 2011 downtown Winnipeg census, there is a much larger portion (approx. 30%) of households with 1-2 children then is represented by the survey results. This is most likely due to the majority of respondents falling within a younger age group.

The survey also seemed to oversample residents who had a higher household income (**Table 6.4**). Over half (53%) of the survey respondents made more than $50,000 as their average household income. This is a much higher income range than compared to statistics from the 2011 downtown Winnipeg census, which shows that the majority of downtown Winnipeg residents made approximately 15,000-25,000 as their average household income.

| HOUSEHOLDS WITH KIDS | DOWNTOWN GROCERY STORE SURVEY (%) | 2011 DOWNTOWN WINNIPEG CENSUS (%) |
|---|---|---|
| 0 | 91 | 56 |
| 1 | 1 | 22 |
| 2 | 1 | 13 |

**Table 6.3** Households with Kids

| HOUSEHOLD INCOME ($) | DOWNTOWN GROCERY STORE SURVEY (%) | 2011 DOWNTOWN WINNIPEG CENSUS (%) |
|---|---|---|
| 0-15,000 | 10 | 23 |
| 15,000 - 25,000 | 9 | 29 |
| 25,000 - 35,000 | 7 | 15 |
| 35,000 - 50,000 | 11 | 17 |
| 50,000 - 75,000 | 25 | 14 |
| 75,000 + | 28 | 7 |

**Table 6.4** Household Income

Lastly, respondents were also asked to state the name of the nearest intersection to where they currently live. These locations within the downtown boundary are depicted in **Figure 6.1**. Although responses came from all downtown neighborhoods, the majority seemed to be concentrated in the Broadway-Assiniboine area, and the Exchange District. This differs from the statistics for downtown Winnipeg residents, which depict that the majority of downtown Winnipeg residents are concentrated in the South Portage, Broadway-Assiniboine and Central Park areas (City of Winnipeg, 2011). This shows that the survey is lacking responses from residents in the Central Park and South Portage areas.

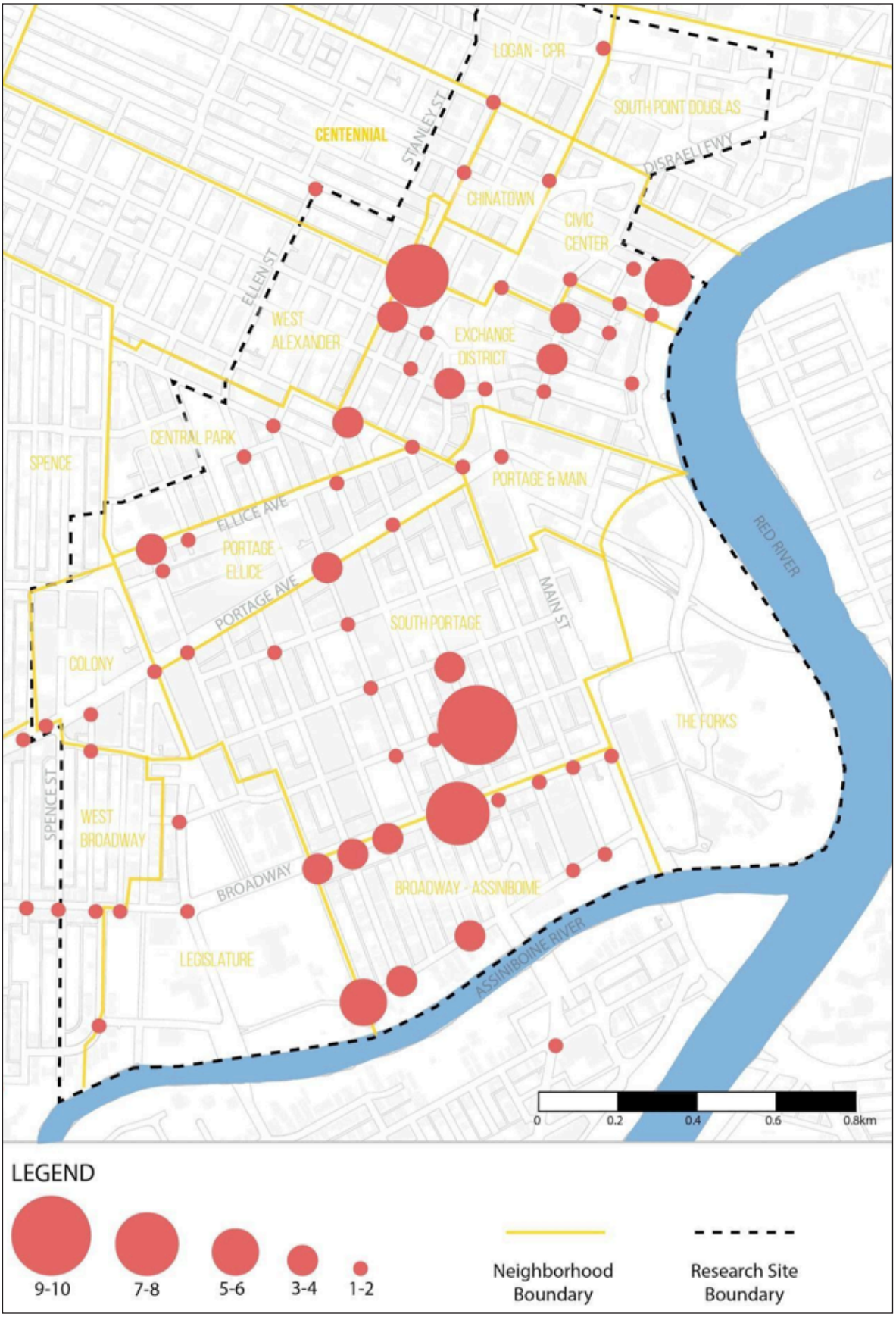


**Figure 6.1** Location of Survey Respondents

## 6.2. SHOPPING BEHAVIOR

The survey asked respondents to indicate the primary location as well as any secondary locations where they purchase their groceries. Based on the findings of the survey, 3 out of the 8 most frequently mentioned stores were located within the downtown boundaries. The most frequently mentioned store was outside of the study boundaries, the Safeway in Osborne Village, which was mentioned a total of 53 times, at an almost 50-50 split between primary and secondary location. The Family Foods on Donald was mentioned a total of 33 times, with 79% of participants indicating it as their secondary location. Other frequently mentioned stores include the Giant Tiger on Ellice, Superstore on St James, Safeway on Marion, No Frills on Notre Dame, Youngs on Market, and Neechi Commons on Main. The following maps depicted in **Figure 6.2 + 6.3** indicate the locations where groceries are purchased in Winnipeg and more specifically within the Downtown Boundary.

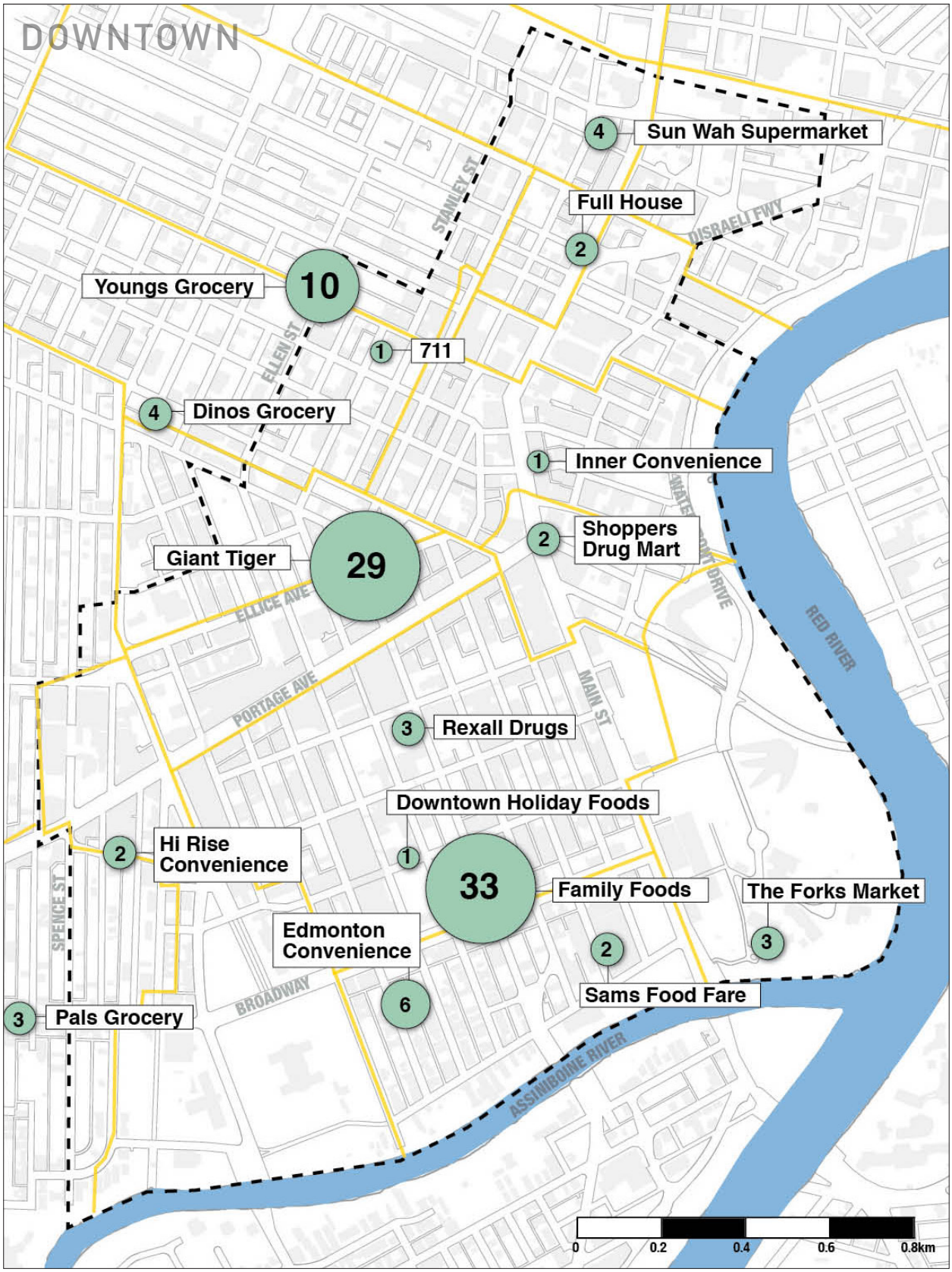


**Figure 6.2** Respondents Grocery Shopping Locations (Downtown)

# CITY OF WINNIPEG

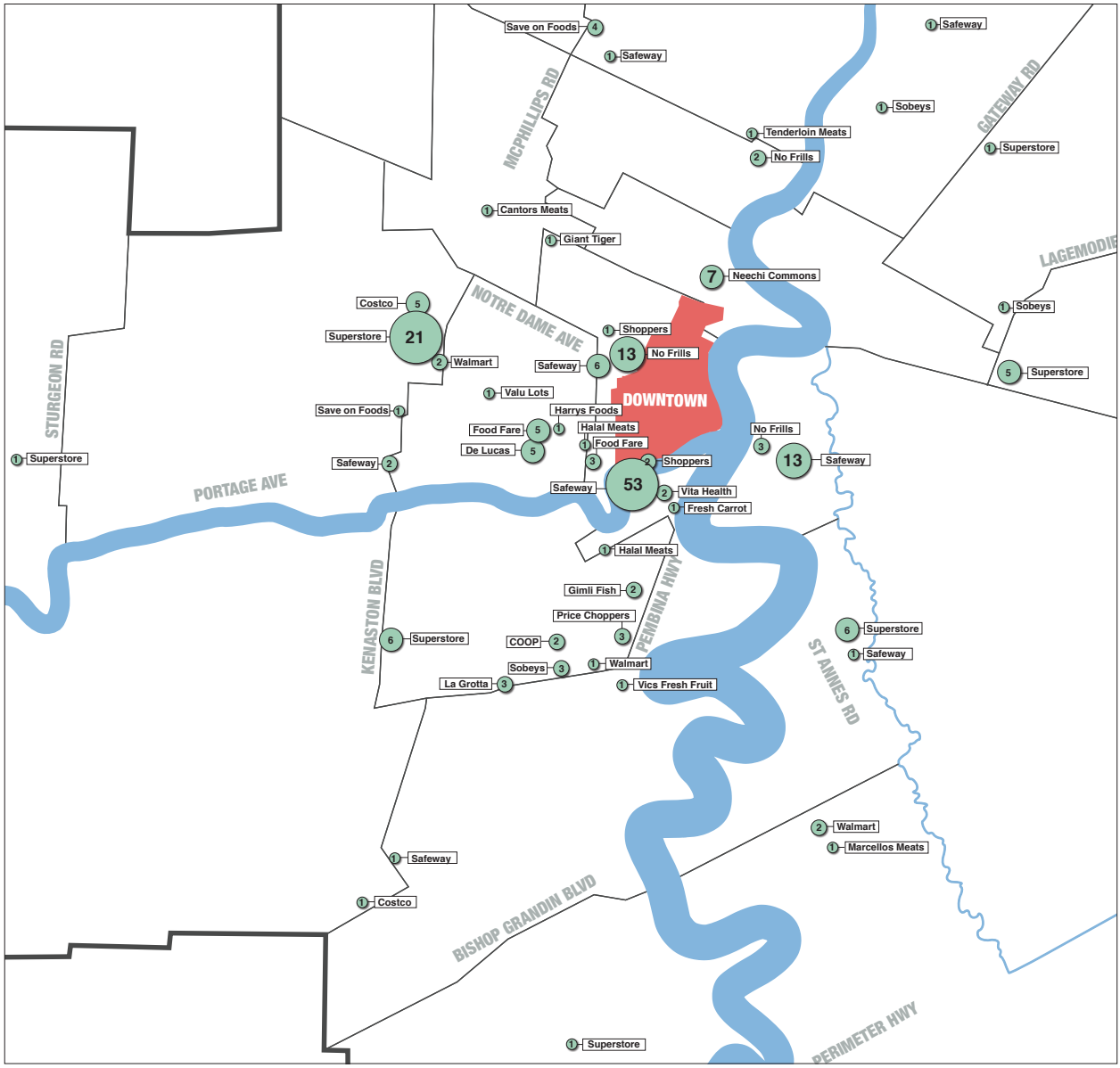


**Figure 6.3** Respondents Grocery Shopping Locations (Winnipeg)

PARTICIPANTS GROCERY SHOPPING LOCATIONS

# # of responses

Neighborhood Boundary

Research Site Boundary

The survey also asked participants to indicate any other means in which they might access food (**Table 6.5**). The majority of respondents (70%) stated that a farmers market was a place where they also accessed food, while 22% of respondents also got their groceries delivered, 16% of respondents also accessed food via a home garden or community garden, and 6% of respondents also accessed food from a food bank or church.

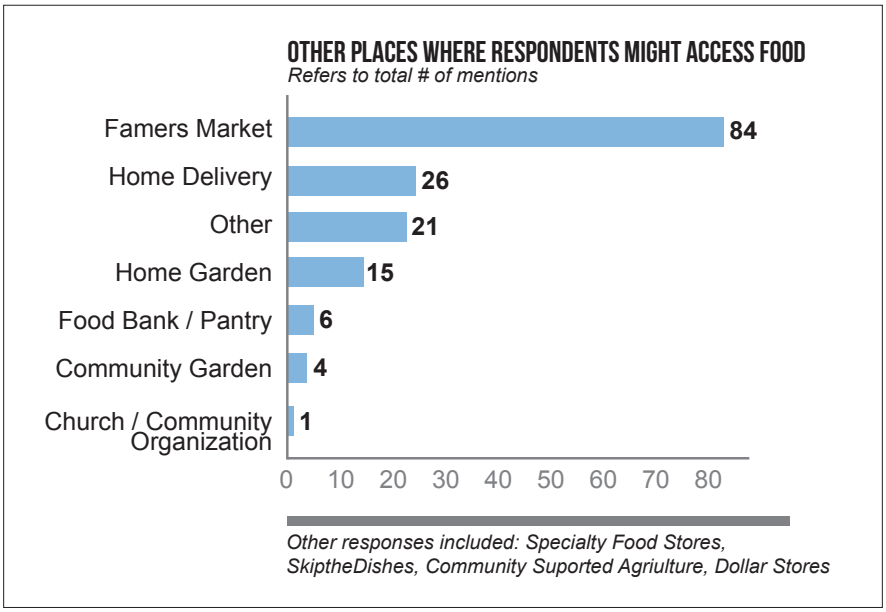


**Table 6.5** Other Places Where Respondents Access Food

The majority (50%) of respondents' trips to purchase their groceries (one way only) took between 11-30 minutes, while 38% of respondent's trips took less than 10 minutes, 5% took 31 minutes to an hour and 3% of respondents trips took over an hour (**Table 6.6**). The majority (44%) of respondents purchase groceries once per week, 27% of respondents purchase groceries twice per week, 19% of respondents purchase groceries less than once per week, and 9.6% of respondents purchase groceries three times or more per week (**Table 6.7**).

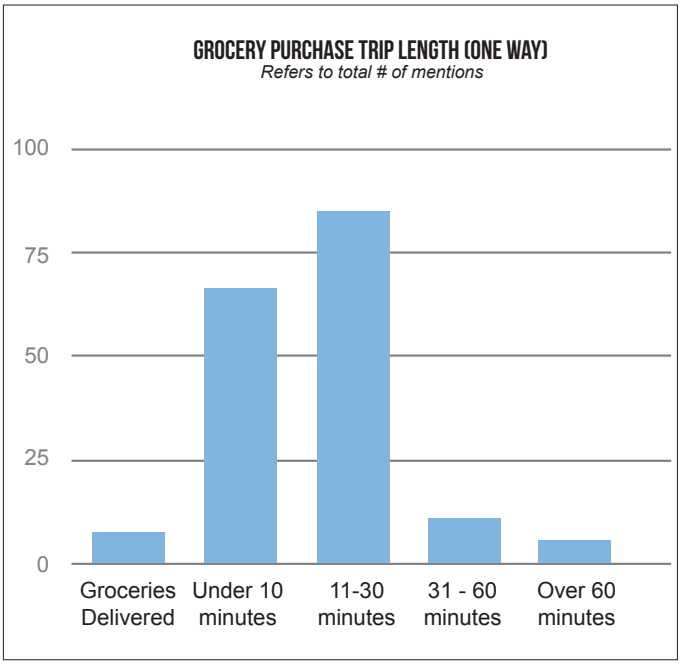


**Table 6.6** Grocery Purchase Trip Length

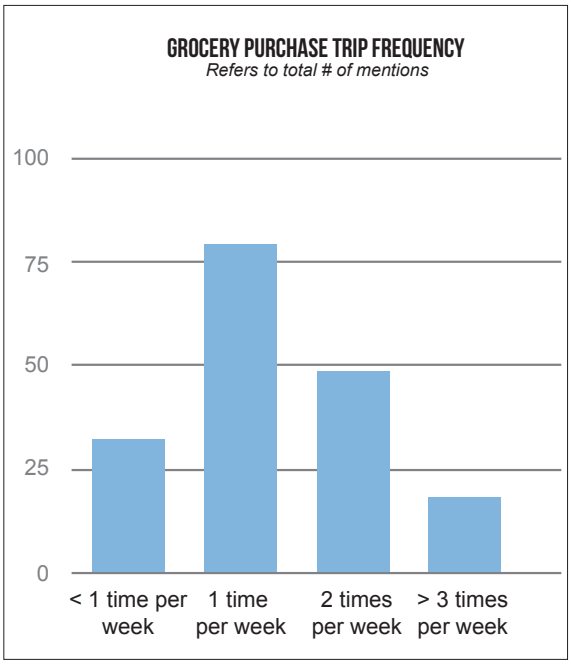


**Table 6.7** Grocery Purchase Trip Frequency

The majority (46.3%) of participants used their own vehicle as their mode of transport to purchase their groceries. Of the rest, 28.8% of participants walked, 9% took transit, 4% carpooled, 4% got their groceries delivered and 2% biked. 0.6% took a taxi (**Table 6.8**).

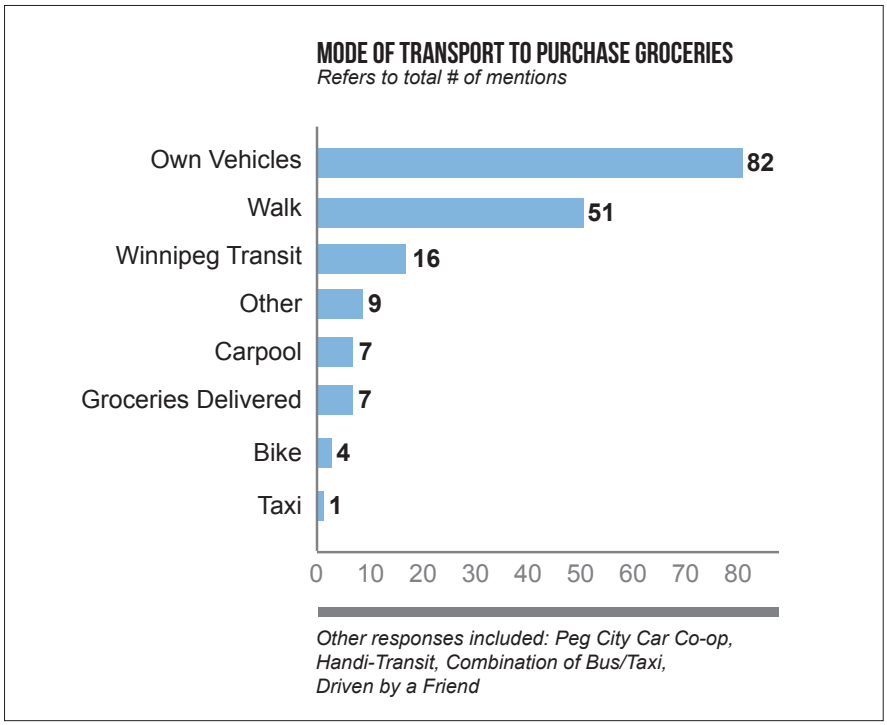


**Table 6.8** Mode of Transportation to Purchase Groceries

The majority (44%) of respondents spend an average of 50-100 dollars on groceries per week, while 26% of respondents spend 25-50 dollars and 22% spend 100-150 dollars. Only 6% of respondents spent over 150 dollars on groceries per week, and 2% spend less than 25$ (**Table 6.9**).

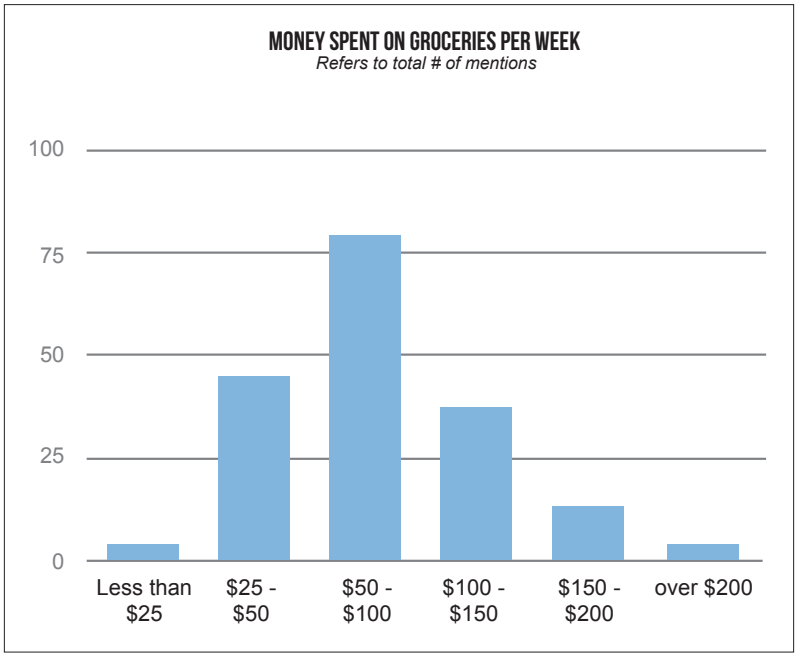


**Table 6.9** Money Spent on Groceries per Week

## 6.3. SHOPPING PERSPECTIVES

Respondents were asked about their opinions relating to how they perceive grocery shopping in their neighborhood, and what was important to them as far as accessing food retail in their community. When asked about the importance of parking, 35% of respondents stated that it was either very important, or important to have a parking spot available when they go to purchase their groceries, and 43% of respondents said that it was either not important or not applicable to have a parking spot when purchasing their groceries, while 22% remained neutral (**Table 6.10**). Respondents were also asked how far they would be willing to walk to purchase their groceries. Only 3% of respondents said that they would not be willing to walk to purchase their groceries. Otherwise, 59% of respondents would walk between 0-10 minutes to purchase their groceries, 33% of respondents would walk 10-20 minutes and 5% of respondents would be willing to walk over 20 minutes to purchase their groceries (**Table 6.11**).

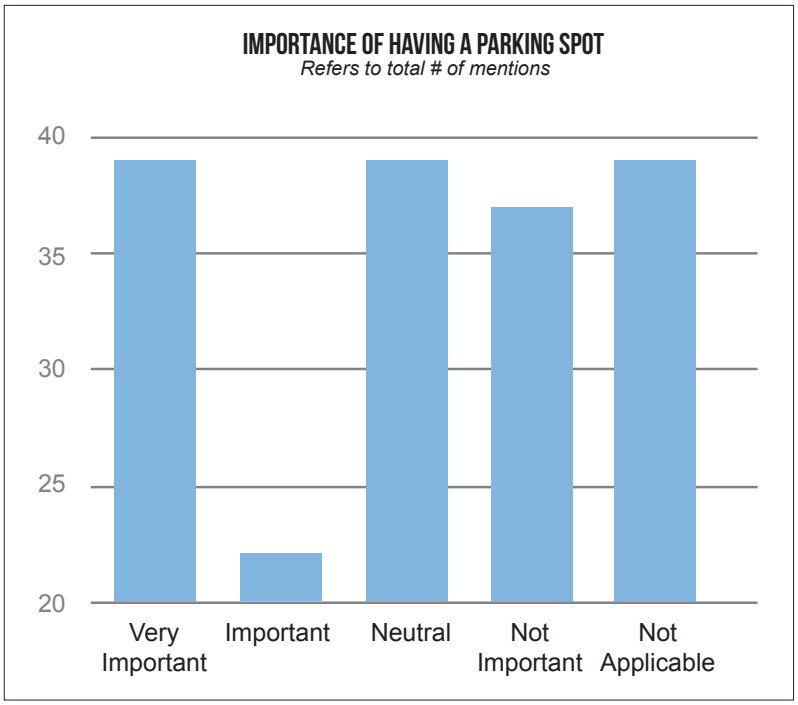


**Table 6.10** Importance of Having a Parking Spot

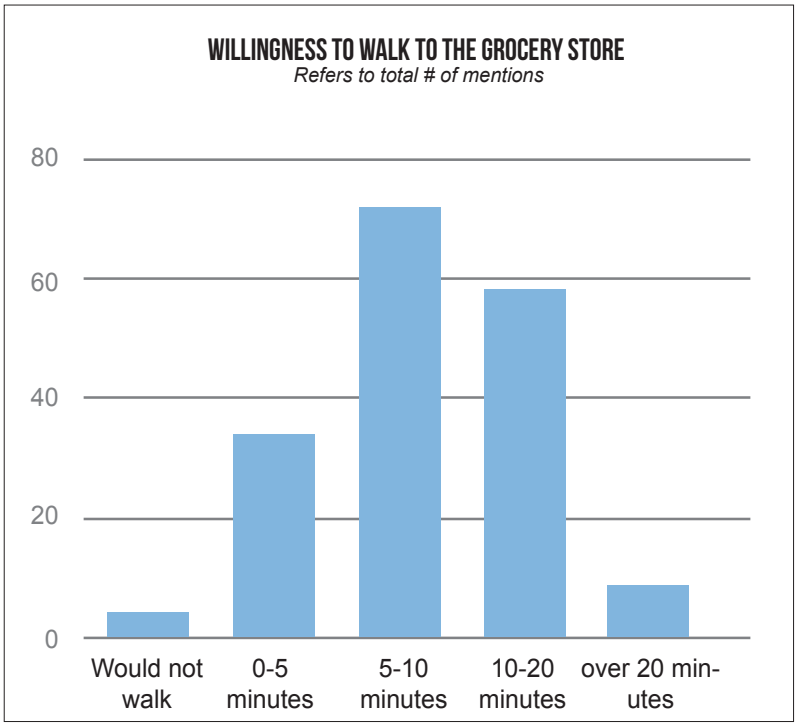


**Table 6.11** Willingness to Walk to the Grocery Store

To judge perceptions or values, respondents were asked how strongly they agreed, or disagreed with the following statement: **"There are many options for purchasing groceries in Downtown Winnipeg"**. 79% of respondents either disagreed, or strongly disagreed with the statement. 15% of respondents either agreed, or strongly agreed with the statement. 6% remained neutral (**Table 6.12**).

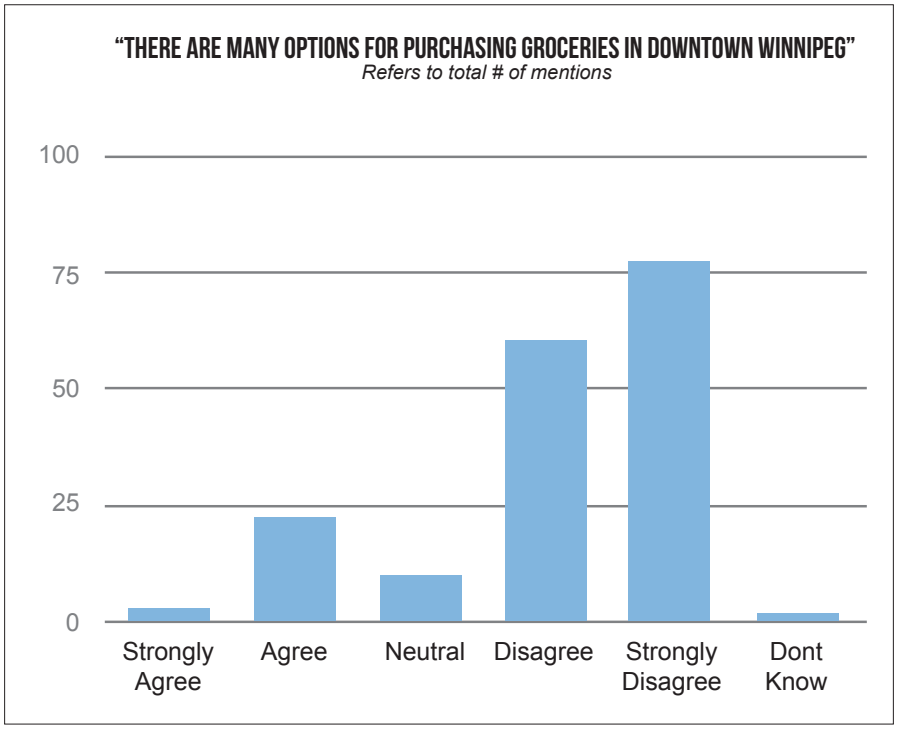


**Table 6.12** Respondents Perspectives on Food Access

When asked if respondents personally found it difficult to purchase groceries in their neighborhood, the majority (66%) of survey respondents stated that it was difficult to purchase groceries in Downtown Winnipeg. Out of these respondents, 69% stated that the distance to a grocery store was a main issue in accessing the foods that they need, 65% of respondents stated quality of food, 53.8% stated the cost of food,14% stated time required to shop, while only 17% stated safety as being an issue (**Table 6.13**).

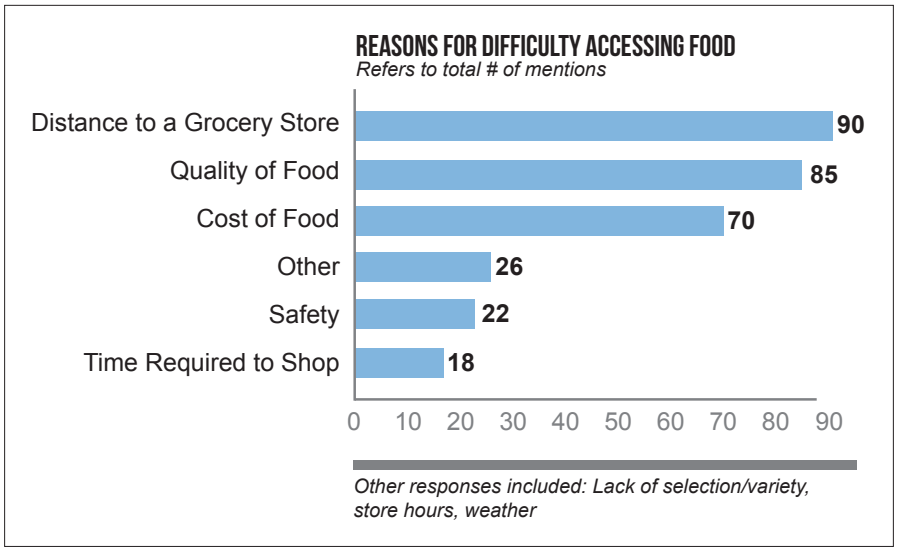


**Table 6.13** Reasons for Difficulties Accessing Food

Due to the nature of urban living, residents of downtown Winnipeg will have different needs then those who choose to live in less dense, car-oriented areas of the city. In order to better determine the needs of current downtown Winnipeg residents, the survey asked respondents what types of amenities they would like to see more of in their neighborhood. As a result, full service grocery Stores, farmers markets and more fresh food available at existing grocery stores were the top three items that respondents would like to see more of Downtown (**Table 6.14**).

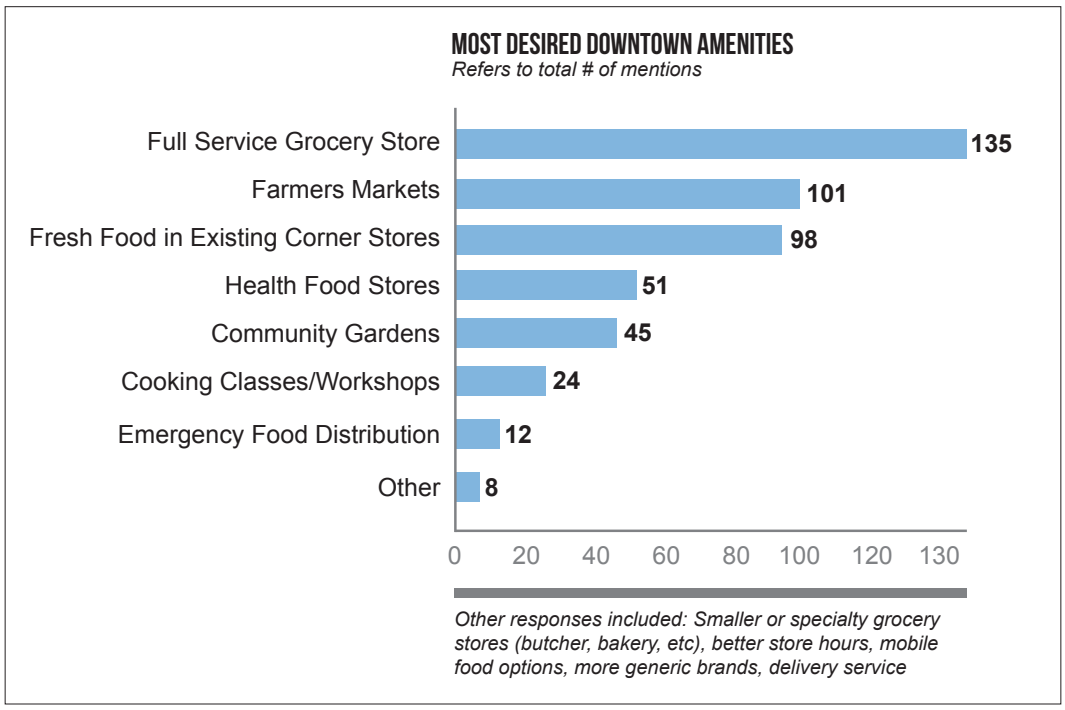


**Table 6.14** Most Desired Downtown Amenities

The survey also asked respondents if there were certain foods that they found were difficult to access in their neighborhood, to which 64% of respondents stated that there was. These respondents then also asked to be more specific as to which foods they found were missing from their neighborhood. Frequently stated foods items included fresh, quality produce, anything beyond convenience store foods, specialty items and affordable groceries. A complete list of items mentioned in the survey can be found below in **Table 6.15**.

| iTEM | # OF RESPONSES |
|---|---|
| Fresh/Quality Groceries | 76 |
| Anything beyond convenience store foods | 21 |
| Specialty Items | 11 |
| Affordable Groceries | 10 |
| Dairy Products | 9 |
| Bakery / Deli / Butcher | 6 |
| Pet Food / Cleaning Supplies | 5 |
| Vegan / Vegetarian Options | 4 |
| Healthier Option | 4 |
| Ethnic Cuisine (i.e. authentic Asian and Mexican foods) | 3 |
| Canned/Frozen Items | 3 |
| Different Brand Names | 3 |
| Affordable Family Packs / Bulk Items | 2 |
| Vegetables in Single Person Quantity | 1 |

**Table 6.15** Items Difficult to Access

Lastly, in order to give respondents a chance to express any last insights regarding food access in downtown Winnipeg, the survey asked respondents for any additional comments. Various overlapping themes emerged based on these responses. These themes are displayed in order of popularity in **Table 6.16** below.

| THEMES | # OF RESPONSES |
|---|---|
| Grocery stores downtown are too expensive and lack quality, causing respondents to leave the downtown to purchase their groceries instead. | 24 |
| There is poor availability of food downtown, a chain full service grocery store needs to be implemented. | 15 |
| There is poor availability of food downtown, but grocery stores should be smaller and locally focused. | 8 |
| Respondents would prefer to walk than use their own vehicle to purchase groceries if there were better food retail options available in downtown Winnipeg. | 7 |
| There is already sufficient food access in Downtown Winnipeg | 6 |
| There is a need for improved food access for seniors and those with limited mobility | 5 |
| Online delivery services have improved food access in downtown Winnipeg | 5 |
| More food retail stores should be open in the evenings, and should carry more basic items such as toiletries and pet food. | 5 |
| Car share programs and taxis are an option for accessing groceries when walking is not convenient | 4 |
| There is a specific need to improve food access in the Exchange District | 3 |
| There should be more farmers markets all season and community gardens | 2 |
| There is a specific need for more bike parking | 2 |

**Table 6.16** Additional Comments

## 6.4. LIMITATIONS TO THE RESEARCH

There are many limitations in general when using online surveys as a research method; due to the way different respondents might interpret certain questions. For example, when asked if it was important for the respondent to have a parking spot when purchasing their groceries, one respondent interpreted this as bike parking, when the survey was referring to vehicle parking. This is a common issue with anonymous surveys, as they do not allow for clarification when questions are unclear, causing inaccurate data that might vary per respondent. Another limitation with online surveys is that they tend to attract a biased sample size, and will often only get responses from those who feel as though they have an opinion that they want to be heard. As the issue of food access in downtown Winnipeg has been publicly discussed for many years now, the survey may have attracted more responses from residents who feel as though they are being under served, rather then those who do not feel as though this is an issue that currently affects them.

In regards to this survey in specific, a major limitation was that the survey produced a low response rate in comparison to the total population of downtown Winnipeg. In total, the survey yielded 147 responses, making up only 0.1 percent of the current downtown Winnipeg population. Although the survey did reach enough respondents to gain an understanding for the current needs of downtown residents, in order to obtain a truly accurate representation, a higher response rate would be required. Another limitation is of the respondents that were sampled, the majority came from the Broadway-Assiniboine and Exchange District Neighborhoods. In order to obtain a more diverse sample of residents, it would have been helpful to hear more responses from residents who live in the Central Park (one of the most populated neighborhoods in Downtown Winnipeg), and Chinatown neighborhoods. Another demographics group missing from the survey are seniors and families who live downtown. According to the downtown Winnipeg census, seniors over the age of 55 make up 29% of the population of downtown Winnipeg. It would have been useful to hear more of their perspectives on food access in downtown Winnipeg, as well as perspectives from families,

who face other barriers in accessing food than those without kids. Another limitation to the surveys regarded the non-responses from relevant groups. When distributing the survey to downtown residents, many of the organizations contacted did not respond, or were not willing to participate in the survey, making it difficult to receive a higher response rate. These groups included the University of Winnipeg Residence Association, Knox Community Kitchen, Red River College, Paterson Global Foods Institute, and Central Park Womens Association. Another limitation to the surveys involved the fact that there was some missing information in the survey responses. In order to remain consistent, respondents that did not include a location for their grocery store (ex. Safeway vs. Safeway in Osborne Village) could not be included in the survey results, as there are multiple Safeways in Winnipeg. In total, there were 7 grocery stores that could not be included in the survey analysis, due to missing information regarding location. Another key piece of missing information were respondents who did not specify what intersection was closest to where they live. Without this information, there was no way of telling if that respondent lived within the research boundaries, which caused that survey to be unusable for the research. In total, there were 4 respondents who did not provide enough information regarding where they lived. Lastly, as this survey was conducted between the months of January-March, generally colder months in Winnipeg, the survey responses might have reflected shopping patterns that only apply to that season. For example, when asked to indicate where residents purchased their groceries in the last week, there were no mentions of farmers markets, as they would not be in season during this time. However, when asked if there were other places where respondents often accessed groceries, farmers markets were one of the top responses. By providing questions that are more tailored to a specific season, or by conducting a second survey during the summer months, the survey might have portrayed a more accurate image of shopping behavior.

# 7.0 DATA ANALYSIS

The following section provides an analysis of the data findings presented in the previous chapters. This analysis explores the trends associated with food access in downtown Winnipeg by comparing the findings in the research, as well as downtown Winnipeg census information.

## 7.1. RESULTS + TRENDS

According to survey results, mode of transportation to purchase groceries remained generally consistent with the general modes of transportation for downtown Winnipeg residents (City of Winnipeg, 2011), however, the survey did not yield as many transit users. Based on the survey, a large number of survey respondents drove as their primary mode of transport to purchase groceries, yet many more residents walked in comparison to the city as a whole (**Table 7.1**).

| MODE OF TRANSPORT | DOWNTOWN GROCERY STORE SURVEY (%) | 2011 DOWNTOWN WINNIPEG CENSUS (%) | 2011 CITY OF WINNIPEG CENSUS (%) |
|---|---|---|---|
| Own Vehicle | 46 | 33 | 69 |
| Public Transit | 9 | 29 | 15 |
| Car Pool | 4 | 7 | 7 |
| Walk | 29 | 24 | 6 |
| Bike | 2 | 5 | 2 |

**Table 7.1** Mode of Transportation Comparison

According to survey results, the majority (79%) of respondents who shopped within the downtown boundaries walked as their primary mode of transport to purchase their groceries, while the majority (65%) of respondents who shopped outside of the downtown boundaries used their own vehicle as their primary mode of transport to get their groceries (**Table 7.2**).

| MODE OF TRANSPORT : SHOPPING LOCATION | | |
|---|---|---|
| | **Shopped Downtown** | **Shopped Elsewhere** |
| Bike | 0 | 2 |
| Walk | 23 | 15 |
| Transit | 3 | 12 |
| Own Vehicle | 3 | 54 |

**Table 7.2** Mode of Transport vs Shopping Location

Also, those who stated that it was either important or very important to have a parking spot available when they shop for groceries were those who used their own vehicle as their primary mode of transport to purchase their groceries. Alternatively, those who stated that it was not important or not applicable to have a parking spot when they purchase their groceries were mainly those that walked, biked, carpooled, took transit or got their groceries delivered (**Table 7.3**).

| DESIRE FOR PARKING : MODE OF TRANSPORT | | | |
|---|---|---|---|
| | **Very Important/ Important** | **Not Important/ Not Applicable** | **Neutral** |
| Walk | 2 | **38** | **7** |
| Own Vehicle | 39 | **5** | **20** |
| Winnipeg Transit | 1 | **13** | **4** |
| Car-Coop | 1 | **1** | **1** |
| Car-Pool | 1 | 6 | 3 |
| Bike | 0 | 3 | 1 |
| Taxi | 0 | 3 | 0 |
| Groceries Delivered | 0 | 6 | 1 |

**Table 7.3** Mode of Transport vs Desire for Parking

The survey also shows that those who walk as their primary mode of transport have different grocery shopping habits than those who drive. The majority of respondents who walk to get their groceries tend to shop more often per week (2x) than those who drive, who tend to only purchase groceries once per week. This is likely due to the fact that those who walk cannot transport as many groceries as those who drive. However, the majority of respondents who typically drive to purchase their groceries would be willing to walk up to 10 minutes to purchase their groceries (**Table 7.4**).

| SHOPPING FREQUENCY: MODE OF TRANSPORT | | |
|---|---|---|
| | **Walked** | **Drove** |
| < Once | 10 | 8 |
| Once | 13 | 33 |
| Twice | 15 | 20 |
| Three Times | 9 | 2 |

**Table 7.4** Mode of Transport vs Shopping Frequency

The most trips to purchase groceries taking under 10 minutes (one way) were taken by those who walk, whereas the most trips taking approximately 11-30 minutes (one way) were taken by those who drive. Alternatively, the most trips that took over an hour were taken by those who took transit. This shows that the current transit system might not be providing adequate connections to grocery store amenities for those living downtown (**Table 7.5**).

| LENGTH OF TRIP X FREQUENCY : MODE OF TRANSPORT | | | | |
|---|---|---|---|---|
| | **Walked** | **Drove** | **Bike** | **Transit** |
| < 10 min | 39 | 25 | 1 | 7 |
| 11-30 min | 33 | 52 | 5 | 14 |
| 31-60 min | 4 | 1 | 0 | 2 |
| 60+ min | 0 | 3 | 0 | 4 |

**Table 7.5** Mode of Transport vs time Spent Purchasing Groceries per Week

Together, respondents who shopped outside of the downtown boundaries estimated they spend approximately 7,812 dollars per week on groceries, whereas those who shop within the downtown boundaries spend approximately 1912.5 dollars per week on their groceries (**Table 7.6**).

| MONEY SPENT ON GROCERY'S PER WEEK : SHOPPING LOCATION | | |
|---|---|---|
| | **Downtown** | **Outside of Downtown** |
| < $25 | 1 | 2 |
| $25 - $50 | 11 | 36 |
| $50 - $100 | 13 | 36 |
| $100 - $150 | 4 | 22 |
| $150 - $200 | 0 | 6 |
| > $200 | 0 | 1 |
| **Total** | **$1912** | **$7,812** |

**Table 7.6** Money Spent on Groceries per week vs Shopping Location

The following maps depict the location of participants in coordination with their difficulties in accessing groceries in the downtown area. The area of residence of survey participants who stated that they had difficulties purchasing groceries due to concerns of safety were mapped out in order to determine if there are certain neighborhoods that might be less safe than others. However, based on the mapping result in **Figure 7.1**, the numbers of these respondents were few, and generally spread out amongst the downtown neighborhoods. This suggests that safety may not play as big of a role in the lack of food retailers in the downtown area as many think.

The location of survey participants who stated that the distance to a grocery store was one of the main reasons for their difficulties accessing food were also mapped out in **Figure 7.2,** in order to determine any specific neighborhoods that might be lacking in food access. These respondents seemed to be concentrated in the Exchange District, which is a newer residential area of the downtown that is generally known to be under served for food retail. This coincides with the Grocery Store audit, as it is one of the neighborhoods that had convenience stores but did not contain a small scale grocery store or full service grocery store.

Those participants who stated that the cost of food was a main reason for their difficulties accessing food were mapped out in **Figure 7.3** and compared to the average household income per neighborhood. The mapping shows that the majority of respondents were concentrated in South Portage, a medium income area and Central Park, a low income area. Coinciding, fewer respondents came from the Exchange District area, which has a higher average household income than the downtown area as a whole, as well as the City of Winnipeg.




**Figure 7.1** Concerns with Safety vs Place of Residence

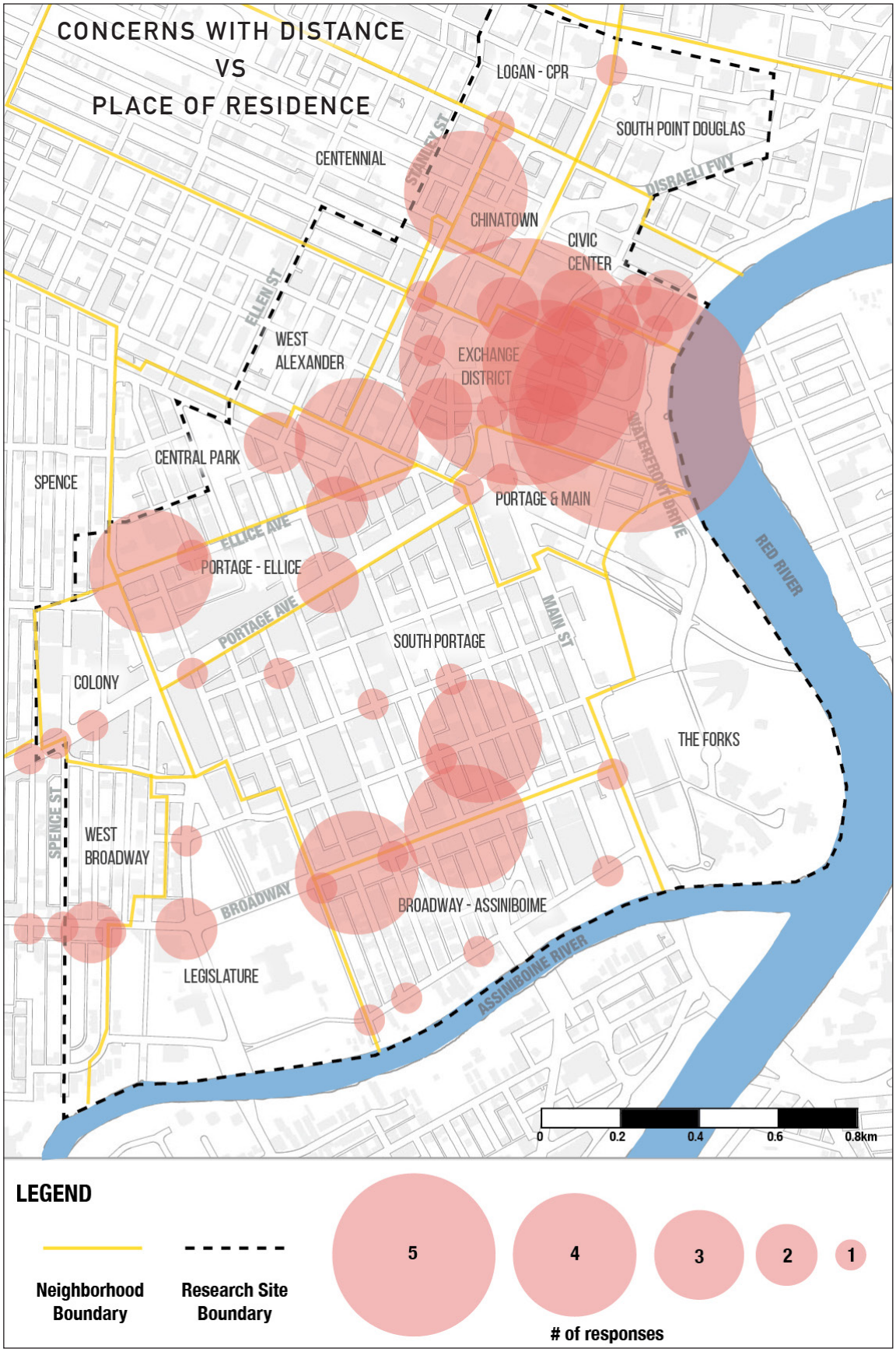


**Figure 7.2** Concerns with Distance to a Grocery Store vs Place of Residence

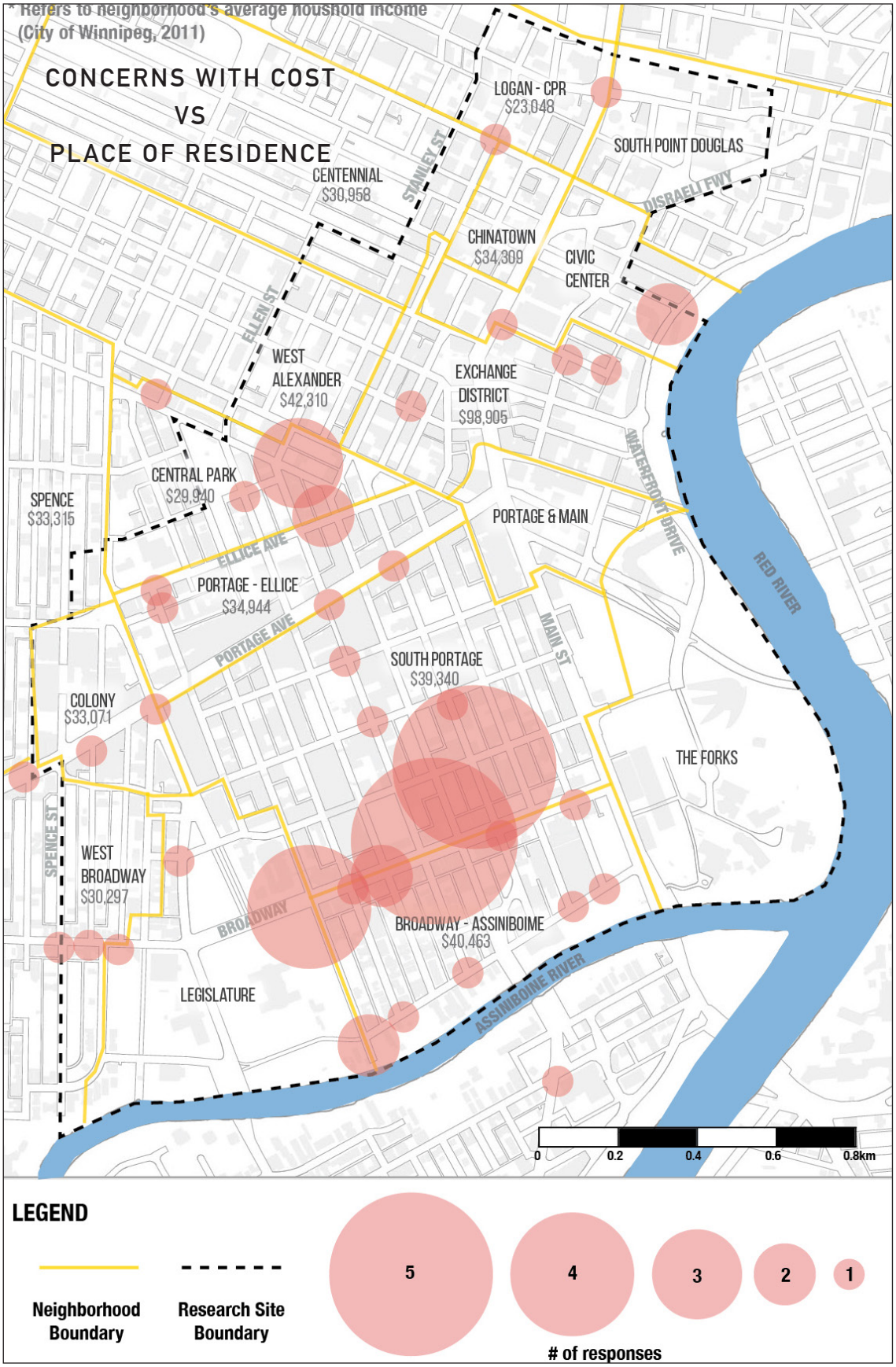


**Figure 7.3** Concerns of Cost of Food vs Place of Residence

## 7.2. ADDRESSING THE RESEARCH QUESTIONS

The following section addresses the research questions posed at the beginning of the practicum, using the findings and analysis from the downtown Winnipeg grocery store audit, and the downtown Winnipeg food access survey. This portion of the analysis will also be supported using quotes taken from downtown residents survey responses.

***What is the food retail environment in downtown Winnipeg?***

Based on the findings from the downtown grocery store audit, there seems to be a number of food retail outlets available across downtown Winnipeg that offer a full selection of groceries, such as Family Foods on Donald Street, located in the Broadway-Assiniboine and South Portage neighborhoods, Giant Tiger on Ellice close to the Central Park neighborhood, and Young's Market on William, located in the Chinatown neighborhood. Based on the spatial analysis of downtown Winnipeg food retail, although these grocery stores are accessible to most neighborhoods in the downtown area, certain neighborhoods such as the Exchange District are still under served. Another issue affecting residents that live downtown is the lack of stores open past five pm. As one respondent stated: *"Accessibility is not just distance but times. The exchange is closed on the weekends except for bars and restaurants. The city has created neighborhoods in the east and west exchange as well as downtown. We need urban services such as food accessibility as much as sewer and water".* This then affects those residents who do not have access to a vehicle, as they cannot easily leave downtown at these times, when buses run less frequently. In order to grow downtown Winnipeg as a complete community, this is an issue that needs to be addressed in the future.

Another issue with existing food retail in the downtown area is that these outlets are often more costly, as most of the food items found in the downtown grocery store audit were priced higher than that found at the grocery stores outside of the downtown boundary. As one respondent

noted, *"Food availability is not an issue downtown, but costs are high. Prices downtown are often inflated. Some products could be purchased for much cheaper elsewhere".* The food available at local grocery stores in downtown Winnipeg is also often inadequate, as many stores do not provide a variety of different options for each grocery item like one would see in a larger chain grocery store. Out of the items that are available in many downtown grocery stores, many of them are also poor quality. Out of the stores that do sell a selection of produce, it is often bruised, and many of the refrigerated items tend to be near their expiry date. As one respondent stated, *"I never buy packaged fresh spinach downtown because it goes bad within a day or two. Fresh vegetables are often reaching the limit of their shelf-life span as well; it's incredibly frustrating".*

***How do downtown Winnipeg residents access food?***

Depending on their mode of transport, residents of downtown Winnipeg access food in different ways. Based on the results of the survey, those who use their own vehicle to purchase groceries will mainly travel to their preferred chain grocery store outside of the downtown area, rather than choosing to shop at one of the local grocers in their neighborhood. These residents might also purchase their groceries as part of another trip they are making, such as driving to and from work. As one respondent noted, *"My drive to Superstore is about the same now, as when I lived in St Vital , I don't see that as a difference of [downtown] living"***.** In contrast, those residents who stated that they did not use their own vehicle to purchase groceries tended to walk, bike, carpool or use public transportation to access groceries. However, some residents will also change their means of accessing groceries based on the season. In the colder months, residents stated that they might use a car co-op program in order to access their groceries, while in the warmer seasons, those who normally drive their own vehicle will walk or bike to a nearby food retail outlet. Some also might opt for purchasing their groceries online through food retail outlets that will deliver their groceries directly to their doorstep. This demonstrates the potential big changes for the future in regards to the shopping patterns of downtown Winnipeg residents. Due to the flexibility of being able to shop for their groceries quite, literally, at their fingertips, residents no longer need to set

aside time for grocery trips. According to economist Rob Warren, "For grocery stores, this is the wave of the future" (Greenslade, 2016). As one respondent stated, *'The arrival of Save-on Foods in Winnipeg has completely changed how I feel about living where I do vis-a-vis the grocery store situation. I no longer stress about getting groceries - having to plan when I will have enough time to bus, shop and return; the weather; having to carry a heavy/bulky load. Now these aren't concerns anymore because Save-on Foods delivers to my apartment for a very reasonable fee".* Many stores have attempted to deliver grocery items in the past, but due to the lack of proper technology, this attempt failed to take off. However, today, it is becoming popular with young downtown residents, who spend less time grocery shopping, parents, who don't have as much time to grocery shop. (Greenslade, 2016). That being said, this may not solve accessibility issues for seniors, who may not be used to using the new technology required to purchase their groceries online.

Shopping patterns also vary amongst downtown residents. A common trend was that car users tend to shop less often than non-car users, possibly due to the convenience of having a car to carry larger loads. However, many of these residents stated that if they had the option to do so, they would choose to leave their car at home and make more trips to the grocery store instead. As one respondent stated, *"I walk to work and would be less inclined to use my car to buy groceries if I had the option to pop into a store and pick up a few things on my way home instead of a bigger weekly grocery trip".*

***How do downtown Winnipeg residents perceive food access in their community?***

Based on the results of the survey, there were mixed responses that came from residents regarding their personal opinions and specific needs. Some residents are satisfied with the amount of food retail options available downtown, and do not see this as an issue that affects them. As one respondent stated, *"We love downtown living. I'm sad when people say there are no grocery stores"*. There were also a number of respondents who are not satisfied with the food retail currently offered in the downtown area, due to various issues surrounding physical access, affordability

and quality of food, but do not believe that a chain grocery store is necessarily the answer to the problem at hand. These residents would rather see outlets such as a smaller, locally owned grocery store, improvements to existing corner stores, and local bakeries. This is shown by respondents who made statements such as, *"A grocery store doesn't have to be big like Sobeys or Loblaws - residential downtown neighborhoods need local stores. Small stores fit more with the ethos of this area, anyhow"*.

Lastly, some residents are extremely dissatisfied with the food retail available in their neighborhood, and wish to see a full-service, chain style grocery store established themselves in downtown Winnipeg. They see their neighborhood growing in the near future, and are concerned with the lack of food retail options available to service downtown residents. As a respondent stated, *"I'd like to see a grocery store added to the downtown neighborhood. Preferably one that offers full service deli, fresh produce options and health food options. Downtown is continually growing as a community and to meet that growth and demand for more food sources, a grocery store like Safeway or Save On Foods should be added to the downtown market"*.

Many of the senior residents and those with mobility issues also tend to have a negative perception of food access in their neighborhood. These people have more specific needs for accessing groceries, and are particularly affected during the winter season. As one respondent noted, *"There are many seniors on fixed incomes, immigrants and university students who do not have vehicles, seniors with mobility issues living downtown. It is a hardship not to have a full service grocery store in the area. It means that these residents pay more for food and do not have the choice of fresh foods or the variety offered by a full service grocery store"*. It should also be noted that different demographic groups have different opinions regarding food access in their community. A family with children will require more groceries at a time than will a young professional living on their own, and therefore might find it difficult to access groceries in their community if there are no large food retail outlets present. Lastly, based on the results of the survey, there are many residents who do not believe that they are heard in light of the conversation regarding food access in downtown Winnipeg. They have voiced their concerns that their neighborhood might change

based on perceptions of downtown Winnipeg that are not actually a reality for residents. This is shown by respondents who made statements such as, *"It is very irritating (and just bad policy development) that the conversation, as portrayed in the media, has not included people who actually live downtown"*.

That being said, these residents often realize the concern for proper food access in downtown Winnipeg, even though they might not experience it themselves. As one respondent noted, *"So while it isn't difficult for me to access groceries, I believe it IS quite difficult to access fresh food WITHIN the downtown boundaries."* (original emphasis). Many of the survey respondents live downtown for the convenience of urban living, such as being in close proximity to work, and short walking distances. These residents live downtown because it is their choice to do so, whether there is a full service grocery store available in the neighborhood or not. A key aspect of this issue of food access revolves as much around personal choice, as it does around the physical availability of food in the area. This concept is an often missed, but important factor that needs to be taken into account when planning for the future of downtown Winnipeg.

## 7.3. RECOMMENDATIONS FOR FURTHER RESEARCH

*Surveys*

In order to enhance the surveys conducted in this research, further survey questions could be added that address the lifestyles of downtown Winnipeg residents, and how this affects where they purchase their groceries. These questions would revolve around trip purpose, in order to determine if most residents shop for their groceries as part of another journey, such as on their way to/from work, or if they make a separate trip for the purpose of purchasing groceries. Also, if their primary mode of transportation is also the same as their primary mode of transportation to purchase groceries. From here, a mapping study of the respondent's food journeys could be conducted, providing a more accurate visual representation of the ways that downtown Winnipeg residents access food. Another aspect that was not addressed in this survey that would help address shopping

behavior is taking into account seasonal differences in shopping behavior. Do residents change the way they purchase groceries as the season changes? Given the varying seasonal temperature differences in Winnipeg, this is most likely the case. Providing further questions that isolate the warmer seasons from the colder seasons could provide a better understanding of how weather might affect downtown Winnipeg resident's shopping behavior.

Another interesting factor to take into account is if the survey were also distributed to non-downtown Winnipeg residents, in order to compare the difference between the perceived issues of food access in the downtown community and the issues that have been brought up by the residents.

*Interviews*

There are various opportunities for additional research relating to food access in downtown Winnipeg that would complement this practicum research. To enhance the results of the survey, interviews could be conducted with downtown Winnipeg residents in order to provide more insight to the issues that some are facing regarding food access in their community. These interviews could also take the form of a focus group, in order to allow more residents to participate and share their opinions. Another approach to this could be conducting targeted interviews with specific residents, such as senior residents only, in order to understand the needs of these residents and how they might differ from others. Interviews with other stakeholders such as local downtown grocery store owners would help provide insight as to how these businesses serve their local community, as well as the challenges that they face in order to maintain a steady customer base. Other key non-resident stakeholders might include Food Matters Manitoba,, who have conducted a community needs assessment in 2013, as well as Centreventure Development Corporation who have conducted a downtown grocery store feasibility study in 2013.

*Walking Distance Mapping Study*

Conducting a GIS based walking distance study using a ground-truthed method, which takes into account street layouts and walking paths, would also complement this research. As noted previously, most walking distance studies use the Shortest Network Path (SNP), with uses a predetermined radius in order to determine the travel distance between a food retailer and resident (Adams et al, 2010, p.60). Creating more accurate walking distance maps using proper GIS street layouts from within the research area would provide a better image of which neighborhoods in the downtown are within poor physical distance to a grocery store. This could be especially useful when looking at issues that seniors and those with limited mobility have with accessing food.

*Grocery Store Audits*

In order to enhance the existing grocery store audit conducted in this practicum, the study could be taken a step further in order to gain a more accurate representation of the downtown food retail landscape. Although the attempt was made to keep the study as accurate as possible, there were certain limitations to this research such as resistance from grocery store owners, missing price tags and varying product sizes. Conducting a more accurate audit and price comparison study using further resources would help create an enhanced image of the food retail landscape in Downtown Winnipeg. Another way that this study could be complemented is to take the food basket price comparison a step further, by expanding the healthy food basket list to include more food items and then calculating the average cost, per week, that it would take to feed a certain household size. In this case, a food basket would look different for a single person household or young couple, than it would for a family of four, or a senior living downtown. This study could also then be compared to the average incomes per neighborhood, in order to determine the affordability of food retail in their neighborhood. Although taking the grocery store audit to this level is out of the scope of this research, it would be an interesting way to expand on the issue of affordability of food retail in urban areas.

Lastly, due to the many survey responses that addressed the issue of a lack of downtown stores open late, it might be beneficial to incorporate this aspect into the downtown grocery store audit, by noting the store hours of each grocery store audited. This way, a mapping study could be conducted that includes a comparison of food access in downtown Winnipeg both during the day and in the evening hours.

## 7.4. RESEARCH QUESTIONS ARISING

Based on the findings from this research, a number of themes that spark new research questions have appeared as a result.

*How has online delivery changed perspectives on food access?*

How many downtown Winnipeg residents have tried purchasing groceries through an online delivery service? Previously, food delivery service generally revolved around restaurants and fast food establishments, but did not include the delivery of grocery store food items. Today, due to new innovations in the food retail industry, many full service grocery stores now offer a delivery service, such as Save-On-Foods, or local CSA Shares. This convenient service might change the future of the food retail landscape dramatically in North America and across the globe.

*How has urban revitalization affected food access in certain neighborhoods?*

Has it improved food access or worsened it? Neighborhood gentrification is a common outcome of urban revitalization. When older neighborhoods begin to shift and transform into trendy, dense new areas, housing prices also tend to increase along with it. This is already seen in Downtown Winnipeg, with the appearance of new condominiums throughout the downtown landscape. These new developments are often accompanied with newer, high end grocery stores that cater to the needs and wants of its new residents. However, these new stores do not always

improve food access for all, as many existing residents cannot afford to purchase their groceries at these establishments. Often, existing small retail outlets will be pushed out of the community by these newer, larger grocery stores, leaving these residents with less access to food than they originally started with. Looking at Winnipeg in the future, if this pattern of development seems to occur as it has in other cities across North America, it would be of interest to note how this either improves/or worsens food access for community residents.

*What role do farmers markets play in food access for urban neighborhoods?*

Another improvement to the city's existing food retail might include taking a closer look at the success of farmers markets in downtown Winnipeg. As previously stated, because this survey was conducted in the winter months, none of the respondents listed a Farmer's market as a place where they had accessed food within the last week. However, a farmers market was listed as the top option for other places that they might access food otherwise. As discussed earlier in the literature review, farmers markets are often controversial, as they tend to attract a higher income customer base. However, farmers depend on what is in season currently, and often it can be less costly than what one would find at a grocery store. It is also shown that in many cities, farmers markets can help foster a sense of social cohesion, which is an important element in creating a complete community. For this research, it would be interesting to examine the role that a farmers market might play in improving food access in downtown Winnipeg, as well as the feasibility of a potential all season farmers market.

# 8.0 CONCLUSION

How does good access to food contribute to a complete community? Food access is an issue affecting urban residents in many cities all over the world, including residents of downtown Winnipeg, as shown in this research. A complete community is a neighborhood that provides access to all necessary amenities for all of its residents, regardless of their income, gender or race. Having good access to food can also foster social cohesion and help keep communities more connected. There are many initiatives that have been implemented in cities in North America as an attempt to help improve food access in under served communities. As suggested in this practicum, there are many different reasons for difficulties in accessing groceries for residents of downtown Winnipeg. A proper solution will require a comprehensive approach with proper implementation that takes into account not only physical access to food retail, but shopping behavior patterns of the community as a whole.

## 8.1 IMPLICATIONS FOR THE CITY OF WINNIPEG

*Consultation with Existing Residents*

Due to their urban fabric, the downtown areas of North American cities will have different qualities than other areas of the city. Residents in many of these urban neighborhoods tend to be more connected due to residential proximity, causing their needs to be much different than those residing in other areas of the city (Montgomery, 2013. As such, downtown areas tend to have their own separate zoning by-laws than the rest of the city, which is the case for Downtown Winnipeg. It is important that the city recognizes that the needs of these residents in a more urban setting will be different than the needs of those residing elsewhere in the city, especially when addressing issues

of food access. Multiple survey respondents noted that they feel as though they have been left out of the conversation regarding food in their neighborhood, and feel as though most of the concern has been towards getting new residents to move to the community. However, as shown in this practicum, there is a strong relationship between shopping behavior and food access. Judging food access solely on physical distances to grocery stores fails to address the fact that grocery shopping is based on individual food choices. Most often, people will tend to stick to what is familiar to them, and that might not change based on where they live. When new residents move into the downtown community, they may not necessarily change where they typically purchase their groceries, especially if they tend to do so on their way to and from work. For downtown Winnipeg, it might be beneficial to expand their research regarding this issue, by hosting a public consultation or community forum with existing residents of the downtown area, in order to understand what their needs are, and how they can be better addressed.

*Full Service Grocery Store*

Although there were several respondents who do feel as though their food needs are adequately met, many respondents felt as though there is a strong need for better food access in their community. This is a prominent issue in the under served areas of downtown Winnipeg, such as the Exchange District. As stated in the literature review, these communities provide untapped markets for new grocery store developments. However, due to restrictions of space, larger chain supermarkets tend to have difficulties locating themselves in these neighborhood, which is why these are often not found in less dense urban areas such as downtown Winnipeg. Many young urban professionals also tend to grocery shop less, relying more heavily on restaurants in the area. However, this can become costly over time, and may not be an option for some lower income residents, or those with families. Although restaurants can play a role in creating a vibrant community, especially in the evenings, it is still necessary to provide residents with other, more cost-effective forms of food retail. In some cities, grocery stores might take on a more urban style with local ownership, a smaller building footprint and no surface parking lots. These urban style

grocery stores might help improve the perceptions of the area, and then attract other services such as pharmacies, restaurants and other retail to locate in the area, all further opportunities to capture consumer dollars. There may also be a market for a local grocery store in the downtown neighborhood that could service not only residents, but also those who commute downtown each day to go to work or to attend a post secondary institution.

That being said, it is difficult determine if the downtown landscape can support a new large scale full service grocery store, and would be something that requires further research and consultation. As stated in the literature review when researching new grocery store development in urban areas, these stores rely heavily on a high customer base in order to make it worth their while. Conducting an updated market analysis could be a next step in providing better food access to local residents, while improving the local economy of the area.

*Corner Store Improvements*

Based on the findings of the research, there are a number improvements that could be made to the existing food retail in the downtown area in order to improve food access for its' residents. As shown in the downtown grocery store audit, the downtown landscape contains several small scale grocery and convenience stores that carry many of the items in a basic healthy food basket. However, often, these items lack variety and are often poor quality. Increasing the amount of healthy food options in these existing grocery stores could help existing residents who primarily walk, have better access to groceries. These stores could also be improved by carrying more of the basic items such as toiletries, cleaning supplies and pet supplies, so that residents do not need to make multiple trips to other areas of the city. Lastly, many respondents identified opening hours as an issue. Having existing stores extend their hours would also be a good way to enhance the downtown community in the evenings, when most of these retail options are closed. Lastly, corner store rehabilitation could also include façade improvements, which could help draw more attention to the existing food retail in downtown Winnipeg. As stated in the literature review,

providing incentives for local store owners to increase their selection of healthy food could be an improvement with less risk than the development of a new grocery store. Although the majority of the small-scale grocery stores in Downtown Winnipeg are privately owned, the city still has a role to play in providing the public with proper access to food. Drawing attention to these smaller, community-focused grocery stores could help support local businesses, ultimately building a more resilient future downtown neighborhood.

*Accessibility and Affordability*

Another recurring theme shown in this practicum is that downtown residents with limited mobility such as senior residents tend to have difficulties accessing groceries. This is especially prominent during the colder months of the year, where there are more physical barriers regarding walking downtown. Although not as highly represented in the survey, seniors make up a large portion of downtown Winnipeg residents. Of the seniors who did participate in the survey, common concerns included a need for better sidewalks, intersections, and improved snow removal around bus stops. Other ways that the city could improve physical access is by using urban design strategies that would make walking more enjoyable for downtown Winnipeg residents. Through elements such as planting trees, widening sidewalks, enhancing storefronts could help those with limited mobility, while encouraging more residents who normally drive to purchase their groceries to leave their car at home. Many who do not walk to purchase their groceries tend to use public transportation or bike. As shown in the research, those respondents who used public transportation tended to have some of the longest commutes (over 60 minutes). The city could help these commuters by improving transit access based on the locations of food retail, as well as more frequent stops in the evening, after working hours. The same could be said for those who travel by bike, and could use improved bike infrastructure to travel to grocery stores, as well as improved bike parking. Lastly, another way that physical access to groceries can be improved is by expanding on the current online delivery services offered by food retailers in Winnipeg. Previously, food delivery service generally revolved around restaurants and fast food establishments, but did

not include the delivery of grocery store food items. Today, due to new innovations in the food retail industry, many full service grocery stores now offer a delivery service. This can be a new outlet in the future that will provide a solution for those who are not physically able to personally shop for their groceries. A large amount of respondents stated that they have used an online delivery service to purchase their groceries. Although this may not fully replace the experience of physically purchasing groceries in person, it could be worth conducting further research on. Lastly, a recurring theme in the research is that although there is food available in the Downtown area, the food retail is not affordable for all. This was a top reason for respondent's difficulties accessing food, and was also shown in the downtown Winnipeg grocery store audit as part of the food basket price comparison. Issues regarding the affordability of food retail stem from an area larger than the scope of this research, such as poverty and jobs, but there are ways that the city can help make food more affordable for those who are not able to seek out more affordable food retail. Creating a food policy for downtown Winnipeg would be a first step in tending to this issue.

*Education and Marketing*

Lastly, although there have been closures of many full service grocery stores in the downtown landscape over the past few years, there are still many food retail outlets that stand to service downtown Winnipeg residents. This is shown in the practicum through the downtown grocery store audit, as well as in the survey responses. However, many residents might not be aware of all of the food options that are available in their neighborhoods. For example, a survey respondent stated that some of the grocers in Chinatown, that cater primarily to that neighborhood specifically, have also started selling basic food items such as bread and milk. It might be beneficial for the city to work on providing a food retail map for the downtown area, for residents, workers who travel downtown everyday, and tourists alike, who might be staying at one of the downtown hotels. The Downtown Winnipeg BIZ had previously provided a "Conveniences" map for the downtown area, highlighting some of the food retail options. However, this did not include information on the types of items one might find at these stores, and did not differentiate between a full service

grocery store and a simple convenience store. By providing an improved food retail map with more detailed information, individuals will have a better impression of what they can access within walking distance. This would help promote local downtown businesses, while educating residents on what types of foods are available within walking distance that they might not have been aware of.

## 8.2 CLOSING

This practicum has investigated a very current (and controversial) planning topic for a specific context - food access in downtown Winnipeg. The purpose of the research from the beginning was not to offer a direct solution to the issue, but to investigate what the current issues are specific to Downtown Winnipeg residents. This practicum has reflected on these issues, discussing how they may be addressed in the future, providing implications for further research and acknowledging research questions arising as a result. That being said, this research has only dipped its toes into the wide range of research topics that represent food access in downtown Winnipeg's context.

How does food access contribute to a complete community? Having good access to food can bring communities together by building stronger, more resilient connections. Hopefully, this research will continue to spark the planning conversation in regards to building a more connected, sustainable and complete downtown Winnipeg community where everyone, regardless of their income or ability, has access to affordable, nutritious food.

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# APPENDICES

## A. GROCERY STORE AUDIT FORM

| STORE NAME: |
|---|
| ADDRESS: |
| DATE / TIME OF VISIT: |

| STORE LAYOUT |
|---|
| 1. How many aisles? |
| 2. How many fridges/freezers? |
| 3. How many Cash Registers? |

| Indicate if the store contains any of the following food items by filling in the cheapest brand and smallest unit | Variety | Price | Size | Notes |
|---|---|---|---|---|
| **REFRIDGERATED** | | | | |
| Milk (2%) | | | | |
| Milk Alternative | | | | |
| Yogurt | | | | |
| Cheese | | | | |
| Butter | | | | |
| Eggs, Large | | | | |
| **BREADS / CANNED** | | | | |
| Whole Wheat/Multigrain Bread | | | | |
| White Bread | | | | |
| Gluten - Free Alternative | | | | |
| Whole Wheat Pasta | | | | |
| White Pasta | | | | |
| Rice | | | | |
| Oats | | | | |
| Canned Tuna/Salmon | | | | |
| Canned Legumes (Beans) | | | | |
| Peanut Butter (Natural) | | | | |

| | | | | |
|---|---|---|---|---|
| **FROZEN** | | | | |
| Frozen Vegetables | | | | |
| Frozen Fruit | | | | |
| Fresh/Frozen Chicken | | | | |
| Fresh/Frozen Beef | | | | |
| **FRUITS** | | | | |
| Bananas | | | | |
| Apples | | | | |
| Oranges | | | | |
| Cantaloupe | | | | |
| Grapes | | | | |
| Pears | | | | |
| **VEGETABLES** | | | | |
| Sweet Potato | | | | |
| Potato | | | | |
| Carrots, whole | | | | |
| Romaine Lettuce | | | | |
| Broccoli | | | | |
| Pepper | | | | |
| Cucumber | | | | |
| Celery | | | | |
| Mushrooms | | | | |
| Onions | | | | |
| Tomatoes | | | | |

**B. SURVEY ADVERTISING POSTER**

# DOWNTOWN WINNIPEG RESIDENTS!

Complete a 5 MINUTE online survey regarding food access in Downtown Winnipeg, for a chance to win a **$50 Gift Card** to any Downtown restaurant of your choice!



www.tinyurl.com/dtwpgfoodsurvey

## C. DOWNTOWN WINNIPEG FOOD ACCESS SURVEY

Dear Resident,

Thank you for participating in this survey.

As part of the graduate research project looking into food access in Downtown Winnipeg, residents of your neighborhood are being asked to take part in a short survey. This survey explores resident's experiences with, and opinions of food access in their neighborhood. Some general questions are also asked about the characteristics of living situations in order to provide some context.

For your reference, below is a map showing the downtown boundaries being used for the purpose of this research. Please complete this questionnaire only if you reside within these boundaries, and are 18 years of age or older.




*Before beginning the survey, please read through the following page. It contains information about the project, your privacy, how I will use the collected information and how to ask any questions you might have.*

1

**Research Project Title:** Targeting Winnipeg's Food Desert - Planning for Food Access in Downtown Winnipeg

**Researcher:** Larissa Blumenschein, Graduate Student, University of Manitoba.

This consent form is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully to understand any accompanying information.

**Background:** This practicum examines the issues of food access in Downtown Winnipeg. Over the past five years, the downtown area has seen closures of three full service grocery stores, creating a major gap in the availability of food in the area. According to the 2013 study conducted by Food Matters Manitoba, the distance to grocery stores has increased by 50 percent since 2011. This decrease in amenities is occurring simultaneously along with the planning of several new residential developments throughout the downtown landscape. With so much investment going towards making downtown a home for Winnipeg residents, it is important that the issue of food access is addressed.

**Research Procedures:** You are being asked to participate in my research. If you agree to participate, you will be asked to complete a short questionnaire of approximately 20 questions. It should not take more than ten minutes of your time.

**Risk and Benefits:** This project does not involve any more risk than you would experience in your everyday life.

**Confidentiality:** Your privacy is important. The information collected through the questionnaire cannot be linked to a name or specific address, as you will not be asked to provide either. Should you choose to provide an email address for the prize draw, or to request survey results, it will only be used for the stated purpose. Your email address will not be used for any other purpose, and will never be shared with anyone or published. This information will be stored digitally, in password-protected files on the researcher's personal computer and will be permanently deleted one year after the thesis defense (estimated August 2017).

**Feedback:** If you would like to see the survey results once they are collected and summarized, you may request a copy. To do this, you may enter an email or postal address on the last page of the survey.

To thank you for participating, you will be given an opportunity to enter your name into a draw for a $50 gift card to a downtown restaurant of your choice. At the end of the survey, please enter an email address or phone number to be entered into the draw. This information will be used for no purpose other than to notify the winner. Please enter by February 1st, 2017.

**By checking the box below**, you are indicating that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers or involved institutions from their legal and professional responsibilities. You are free to refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

☐ I understand the information regarding participation in the research project and agree to participate as a subject.

**Lets begin! This survey should take no more than ten minutes of your time.**

1. **In the past week, where did you shop for the majority of your grocery needs? Indicate store name and intersection.**

.....

2. **What was your mode of transportation to purchase your groceries?**
*Mark only one oval.*

- ◯ Own Vehicle
- ◯ Carpool or Drop off
- ◯ Walk
- ◯ Bike
- ◯ Taxi
- ◯ Winnipeg Transit
- ◯ Groceries were delivered
- ◯ Other: .....

3. **How long was your trip (one way) to purchase your groceries?**
*Mark only one oval.*

- ◯ Did not travel (groceries were delivered)
- ◯ Under 10 minutes
- ◯ 11-30 minutes
- ◯ 31minutes to 1 hour
- ◯ Over 1 hour
- ◯ Don't know

4. **Are there any other stores that you shop at for your grocery needs? Indicate store names and intersections.**

.....

5. **On average, how often do you purchase groceries per week?**
*Mark only one oval.*

- ◯ Less than once per week
- ◯ Once per week
- ◯ Twice per week
- ◯ Three time or more per week

6. **On average, how much do you spend on groceries per week?**
*Mark only one oval.*

- ◯ Less than 25$
- ◯ $25 - $50
- ◯ $50 - $100
- ◯ $100 - $150
- ◯ $150 - $200
- ◯ over $200

7. **How important is it to have a parking spot available when you go to purchase groceries?**
*Mark only one oval.*

- ◯ Very Important
- ◯ Important
- ◯ Neutral
- ◯ Not Important
- ◯ Not Applicable

8. **How long would you be willing to walk (one way) to purchase your groceries?**
*Mark only one oval.*

- ◯ I would not be willing to walk to purchase my groceries
- ◯ 0-5 minutes
- ◯ 5-10 minutes
- ◯ 10-20 minutes
- ◯ Over 20 minutes

9. **Besides a grocery store, do you access food at any other locations? Check all that apply**

- ☐ Farmers Market
- ☐ Home Garden
- ☐ Community Garden
- ☐ Food Bank / Pantry
- ☐ Church / Community Organization
- ☐ Home - Delivery
- ☐ Other: .....

10. **Do you agree with the following statement: "There are many options for purchasing groceries in downtown Winnipeg."**
*Mark only one oval.*

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly Disagree
- ◯ Dont Know

11. **Do you personally find it difficult to purchase groceries in your neighbourhood?**
*Mark only one oval.*

- ◯ Yes
- ◯ No
- ◯ Don't know

12. **If yes, what are the main issues in accessing the food you need in your neighbourhood? Choose 3**

- ☐ Cost of food
- ☐ Time required to shop
- ☐ Distance to a grocery store
- ☐ Quality of Food
- ☐ Safety
- ☐ Other: .....

13. **Are there certain foods that you find are difficult to access in your neighbourhood?**
*Mark only one oval.*

- ◯ Yes
- ◯ No

14. **If yes, which foods?**

.....

.....

.....

.....

.....

15. **Which of the following would you like to see more of in your neighbourhood? Choose 3.**

- [ ] Full service grocery store
- [ ] Farmers markets
- [ ] Community gardens
- [ ] Health food stores
- [ ] More fresh food available at existing grocery stores
- [ ] Cooking classes / Food education workshops
- [ ] More emergency food distribution locations
- [ ] Other: .....

16. **What is the closest intersection to where you currently live?**

.....

17. **Including yourself, how many people live in your household?**

.....

18. **How many are under the age of 18?**
*Mark only one oval.*

- ◯ Option 1

19. **What is your age?**
*Mark only one oval.*

- ◯ 18-30
- ◯ 31-40
- ◯ 41-50
- ◯ 51-65
- ◯ 66+

20. **What is your average annual household income?**
*Mark only one oval.*

- ◯ 0 - $15,000
- ◯ $15,001 - $25,000
- ◯ $25,001 - $35,000
- ◯ $35,001 - $50,000
- ◯ $50,000 - $75,000
- ◯ $75,000 +
- ◯ Prefer not to say

21. **Do you have any additional comments?**

.....

.....

.....

.....

.....

22. **If you would like to be entered for a chance to win a $50 gift card to a downtown restaurant, please leave an e-mail address or phone number below:**

.....

23. **If you would like a copy of the survey results, please leave an e-mail address below:**

.....

## D. SURVEY RESPONDENTS GROCERY SHOPPING LOCATIONS

| # | STORE | PRI. | SEC. | TOTAL |
|---|---|---|---|---|
| 1 | Safeway (River & Osborne) | 29 | 24 | 53 |
| 2 | Family Foods (Donald & Broadway) | 7 | 26 | 33 |
| 3 | Giant Tiger (Ellice & Donald) | 13 | 16 | 29 |
| 4 | Superstore (St James & Sargent) | 10 | 11 | 21 |
| 5 | Safeway (Marion Ave) | 7 | 6 | 13 |
| 6 | No Frills (Notre Dame) | 4 | 9 | 13 |
| 7 | Youngs (William) | 4 | 6 | 10 |
| 8 | Neechi Commons (Main & Euclid) | 2 | 5 | 7 |
| 9 | Superstore (St Annes & Fermor) | 4 | 2 | 6 |
| 10 | Superstore (Grant & Kenaston) | 4 | 2 | 6 |
| 11 | Safeway (Sargent & Maryland) | 2 | 4 | 6 |
| 12 | Edmonton Convenience (Edmonton) | 0 | 6 | 6 |
| 13 | Superstore (Regent) | 2 | 3 | 5 |
| 14 | Food Fare (Portage and Burnell) | 1 | 4 | 5 |
| 15 | De Lucas | 0 | 5 | 5 |
| 16 | Costco (St James) | 0 | 5 | 5 |
| 17 | Sun Wah Supermarket (King St) | 0 | 4 | 4 |
| 18 | Save-on-Food (Northgate) | 2 | 2 | 4 |
| 19 | Dino's Grocery (Notre Dame) | 0 | 4 | 4 |
| 20 | The Forks | 0 | 3 | 3 |
| 21 | Sobeys (Taylor) | 2 | 1 | 3 |
| 22 | Save-on-Foods (Delivery) | 2 | 1 | 3 |
| 23 | Rexall drugs (Hargrave & St Mary) | 1 | 2 | 3 |
| 24 | Price Choppers (Pembina) | 0 | 3 | 3 |
| 25 | Pal's Grocery (Broadway) | 0 | 3 | 3 |
| 26 | No Frills (Goulet at Kenny) | 2 | 1 | 3 |
| 27 | La Grotta (Taylor Ave) | 1 | 2 | 3 |
| 28 | Food Fare (Maryland/Westminster) | 0 | 3 | 3 |
| 29 | Walmart (St Vital) | 2 | 0 | 2 |
| 30 | Walmart (Empress) | 1 | 1 | 2 |
| 31 | VitaHealth (Osborne) | 1 | 1 | 2 |
| 32 | Shoppers (WPG Square) | 0 | 2 | 2 |
| 33 | Shoppers (Osborne) | 0 | 2 | 2 |
| 34 | Sam's Food Fare (Fort Gary) | 0 | 2 | 2 |
| 35 | Safeway (Ness) | 2 | 0 | 2 |
| 36 | No Frills (Main Street) | 2 | 0 | 2 |
| 37 | Hirise convenience (Colony Square) | 1 | 1 | 2 |
| 38 | Gimli Fish (Pembina) | 0 | 2 | 2 |
| 39 | Full House (Main & Alexander) | 0 | 2 | 2 |
| 40 | COOP - (Grant Park) | 0 | 2 | 2 |

| # | STORE | PRI. | SEC. | TOTAL |
|---|---|---|---|---|
| 41 | Walmart (Taylor) | 1 | 0 | 1 |
| 42 | Vics Fresh Fruit and Vegetables | 1 | 0 | 1 |
| 43 | Valu Lots (Ellice & Wall) | 0 | 1 | 1 |
| 44 | Tenderloin Meats (Main St & Lansdowne) | 0 | 1 | 1 |
| 45 | Superstore (Portage Ave) | 1 | 0 | 1 |
| 46 | Superstore (Gateway) | 0 | 1 | 1 |
| 47 | Superstore (Bison Dr) | 1 | 0 | 1 |
| 48 | Sobeys (Regent) | 0 | 1 | 1 |
| 49 | Sobeys (Henderson) | 0 | 1 | 1 |
| 50 | Shoppers (Sherbooke) | 0 | 1 | 1 |
| 51 | Save on Foods (St. James Street) | 1 | 0 | 1 |
| 52 | Safeway (St Anne's & Fermor) | 1 | 0 | 1 |
| 53 | Safeway (McPhillips & Jefferson) | 1 | 0 | 1 |
| 54 | Safeway (McGillvary) | 1 | 0 | 1 |
| 55 | Safeway (Henderson Hwy) | 1 | 0 | 1 |
| 56 | Marcellos Meats (Meadowood Drive) | 0 | 1 | 1 |
| 57 | Inner Convenience (Main St) | 1 | 0 | 1 |
| 58 | Harrys Foods (Portage & Arlington) | 0 | 1 | 1 |
| 59 | Halal Meats (Maryland) | 0 | 1 | 1 |
| 60 | Giant Tiger (Logan/Maryland) | 0 | 1 | 1 |
| 61 | Fresh Option (Delivery) | 0 | 1 | 1 |
| 62 | Fresh Carrot (Pembina/Donald) | 0 | 1 | 1 |
| 63 | Food Fare (Lilac at Corydon) | 0 | 1 | 1 |
| 64 | Downtown Holiday Foods (York Ave) | 0 | 1 | 1 |
| 65 | Costco (Kenaston & McGillvary) | 0 | 1 | 1 |
| 66 | Chefs Plate (Delivery) | 0 | 1 | 1 |
| 67 | Cantors Meats (Logan Ave + Quelch St) | 0 | 1 | 1 |
| 68 | 711 (Hargrave) | 1 | 0 | 1 |