

**Parking Management Strategies in Small, Low Growth
Cities – The Case of Portage la Prairie, MB**

By

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Abstract

A lack of empirical data regarding trends in municipal public parking located in small and low growth city downtowns contributes to municipalities enforcing parking regulations in the absence of local context. There is an opportunity for planners and policy makers to reform dated parking regulations and provide current data for decisions regarding future parking in small and low growth cities. Efforts to understand the issues of parking as they relate to their local context can result in better informed municipal public parking management strategies, contributing to downtown vibrancy.

This practicum examines municipal public parking in downtown Portage la Prairie, MB, providing insight into the unique parking context in a small and low growth city. It provides replicable tools for municipalities with similar circumstances to collect data about parking in their downtowns, and examples of relevant parking management strategies. The findings reveal that parking is a complex planning issue, with parking perceptions, preferences, and behaviours that may at times contradict themselves. Understanding this complex issue in the context of small and low growth cities can aid municipalities in their efforts to manage their supply of downtown public parking.

[Keywords: *Public parking; on-street parking; off-street parking; parking meters; parking management strategies; small cities; low growth; Portage la Prairie*]

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Executive Summary

Project Objectives

The objective of this project is to contribute local empirical data to the City of Portage la Prairie, while demonstrating the importance of collecting such data to inform municipal public parking management in the downtowns of small and low growth cities. Acknowledging the relationship between parking types, perceptions, preferences, and behaviours may result in better informed municipal public parking management strategies not only for Portage la Prairie, but for urban centres of similar context. Additionally, acknowledging that parking is an issue that should not be dealt with in isolation is important for small cities as there is a complex relationship between the function of parking and the vibrancy of downtowns.

Study Approach

The study area of this project is the downtown core of Portage la Prairie. The study includes the following approaches to data collection:

- **Unobtrusive study area observations** to determine trends in typical parking use behaviour;
- **Intercept surveys** with the general public to identify the relationship between downtown parking use behaviour and the big box commercial area;
- **Formal engagement** with the business community to discuss their opinions and perceptions concerning municipal public parking within the downtown;
- **A questionnaire** to gather first-hand opinions and perceptions from City staff working with municipal parking; and
- **A policy review** to learn from the experiences of other similar urban centres in terms of parking management strategies in their respective downtown cores.

Study Area Context

Portage la Prairie serves nearby municipalities as a centre for amenities and services, with the provision of administrative, institutional and health services, recreational facilities, retail, and restaurants. There is little signage indicating the terms of parking use (such as which parking zone a meter is located in or what hours

the meters charge for use) for on- or off-street spots. There are two parking zones located downtown that operate between the hours of 9:00 am and 6:00 pm during the week, and do not operate on weekends. **Zone A** accepts \$0.25 per 15 minutes of use and **Zone B** accepts \$0.05 per six minutes of use. The downtown area is characterized by a central grid system, with approximately:

- 286 functioning on-street metered spots;
- 98 non-functioning on-street metered spots;
- Approximately 450 on-street non-metered parking spots; and
- 273 off-street non-metered spots located in municipal parking lots.

The City of Portage la Prairie has not produced a formal management strategy for parking in the downtown. The **Portage la Prairie Development Plan (2006)** provides goals, objectives, and policies concerning private off-street parking. Downtown municipal public parking is currently regulated by the **Portage la Prairie Traffic By-law (2001)** and the **General and Parking By-law Enforcement By-law (2017)**. These by-laws regulate parking in terms of the enforcement of related by-laws, costs of metered on-street parking, and violations and ticketing. The **Portage la Prairie Zoning By-law (2010)** regulates private off-street minimum parking requirements in the downtown, and elsewhere in the city, however it does not outline provisions for the regulation of municipally owned public parking.

Lessons Learned

The data reveals that parking is a complex planning issue in Portage la Prairie, with parking perceptions, preferences, and behaviours that may at times contradict themselves. The most common trends in downtown parking use are outlined in Table A:

Table A: Downtown Municipal Public Parking Use

Type of Parking	Fee	Time Restriction	Occupancy	Turnover	Peak Use
On-street Metered	Yes	Yes	Short-term	High	Morning
On-street Non-metered	No	No	Long-term	Low	Morning
Off-street Non-metered	No	No	Long-term	Low	Afternoon

Table B provides a summary of the important lessons learned about municipal public parking in downtown Portage la Prairie.

Table B: Lessons Learned about Municipal Public Parking in Downtown Portage la Prairie

Emerging Trend	Lesson Learned
Parking Use Behaviours	On-street metered parking is typically occupied for shorter periods of time with high turnover during the day.
	Off-street non-metered parking is typically occupied for longer periods of time with low turnover during the day.
	On-street non-metered parking is typically occupied for longer periods of time with low turnover during the evening, especially adjacent to residential land uses.
	The demand for on-street metered spots located adjacent to off-street lots typically is not as high as those located on other blocks.
	Just over half (54%) of the occupied on-street metered spots were paid for during observation times.
	The practical parking spot occupancy of 85% was rarely reached for all types of downtown parking demonstrating that the supply of parking is greater than its demand during typical weekday use.
	On-street meters on more peripheral streets (i.e. Zone B) experience less frequent turnover and occupancy compared to more central streets (i.e. Zone A).
Parking User Preferences	Parking users prefer free parking with no time limits.
	Despite preferring free parking, users will pay for on-street meters based on a combination of factors including their destination and length of stay (i.e. shorter trips may result in paying for meters near the destination).
Parking Perceptions	Off-street parking lots perceived as crucial to local business owners, but also criticized by same group for long-term parkers using valuable patron and visitor parking.
	There is a general perceived parking problem in the downtown despite the supply of all parking types exceeding typical daily demand.
	Multiple ongoing downtown events can lead to a peak in demand for parking that exceeds supply, contributing to the perception of parking problem.
	The time provided at meters for payment of use is viewed as restrictive (i.e. users are of the opinion that they should receive more time at meters for what they pay).
Land Use Factors	A wider range of land uses draw patrons and visitors to the downtown compared to the big box commercial area of Portage la Prairie.
	The land uses present in the downtown draw patrons and visitors for more frequent trips compared to the big box commercial area.
Parking Enforcement	Inconsistent enforcement of on-street meters contributes to parking users not paying for use.
	Enforcement of parking meters is viewed as too strict with the preference for it to be more consistent, yet contradictorily more lenient.
	There is a lack of signage explaining parking by-laws in the downtown (i.e. hours of the day in which on-street meters require payment for use, or which zone metered streets are located in).
Ageing Parking Meters	Parking meters in both Zones A and B are ageing.
	Ageing meters contribute to user error, in part resulting in meters not being paid for (i.e. users not having the correct denomination of money accepted by meters).

Potential Management Strategies

Table C provides potential parking management strategies that could be implemented in Portage la Prairie relative to the lessons learned by this project.

Table C: Potential Municipal Public Parking Management Strategies for Downtown Portage la Prairie

Management Strategy	Description
Create a Parking Management Strategy	Establish a parking management committee responsible for creating, implementing, promoting, managing, monitoring, and evaluating parking strategies.
	Conduct ongoing downtown parking studies to identify trends in supply and demand.
	Implement pilot parking programs on a non-permanent basis to monitor and evaluate effectiveness.
Encourage More Efficient Use of On-street Parking	Continue to study the ongoing relationship between on- and off-street parking.
	Consolidate parking zones to one downtown parking model in which meters charge the same amount for use (i.e. \$0.25 for 15 minutes)
	Enforce time restrictions at meters to encourage turnover (i.e. 2 hour restrictions requiring parkers to move to a new meter on a different block).
Manage Long-term Parking Behaviour	Install signage to direct long-term parking users to off-street lots.
	Install meters along the periphery of off-street lots to disincentivize long-term parkers from utilizing valuable patron/visitor parking spots.
	Implement employee parking permits at an annual fee to provide off-street space (centrally or peripherally located) for downtown employees intending to occupy spots for longer periods of time.
	Implement residential parking permits at an annual fee to guarantee on-street space for downtown residents in competition with patrons and visitors.
	Utilize peripheral off-street lots and temporary signage for special event parking during multiple ongoing downtown events.
Upgrade Parking Infrastructure	Upgrade meters to include mechanisms that accept a range of payment methods with user-friendly interfaces.
	Install signage outlining clear parking instructions as per downtown parking by-laws.
Improve Parking Enforcement	Implement consistent enforcement as per parking by-laws (i.e. organizing officers by one hour or bi-hourly routes to monitor the same parking spaces consistently).
	Improve transparency by creating a public campaign to provide information on how parking enforcement is organized and what parking fees/ ticket revenues are put toward.
Land Use Strategies	Encourage reuse of vacant lots and storefronts to increase the potential number of patrons and visitors in the downtown.
	Explore shared municipal and private off-street parking options, and allow payment-in-lieu of parking provisions.

1.0 Introduction

While there is a wealth of research and studies on parking management strategies in larger urban and metropolitan centres, there is a lack of these same studies focused on smaller and low growth urban centres. The lessons learned from data in larger urban centres may not be completely applicable to smaller urban centres. The City of Portage la Prairie is interested in understanding and identifying potential opportunities for municipally owned and maintained downtown public parking. This practicum aims to identify empirical data regarding municipal public parking trends in small and low growth urban centres, particularly Portage la Prairie, and the implications this data suggests for the planning profession in terms of challenging conventional parking practices.

1.1 Research Problem

There is a wealth of academic literature surrounding historic and contemporary issues of parking in the downtowns of North American cities. Countless books and articles have been published, dedicated to arguing and discussing the problems that cities face as a result of parking, and the strategies to remedy these problems. Case studies of downtown parking in cities are often found in said publications. Large and rapidly growing urban centres are often examined in depth, such as Portland, OR, and Vancouver, BC by Richard R. Willson (2013), or New York, NY, and San Francisco, CA by Donald Shoup (2005). As secondary research was conducted for this practicum, little academic literature was found that discussed parking in downtowns of, or provided case studies for, small urban centres experiencing low growth. While the literature on parking in large urban centres is certainly informative, it may not be relevant to parking studies or strategies concerning other smaller urban centres.

The proposed research of this practicum is focused on the city of Portage la Prairie, a small urban centre located in the prairie province of Manitoba. The city is located along the Trans-Canada Highway (Provincial Trunk Highway 1), 126 kilometers east of Brandon, MB, and 85 kilometers

west of Winnipeg, MB. Presently, the City of Portage la Prairie does not have a formal parking management strategy and has recently acknowledged the need to identify options for parking in the city's downtown core. The City is interested in reviewing their municipal public parking located in the downtown core, particularly the function of on-street metered parking and its relationship to surrounding local businesses.

Consultation with different groups within the city – such as members of the public, local business owners, and community groups – regarding perceptions surrounding public parking in the downtown core has been identified as a priority by City officials. This practicum aims to contribute to the literature on parking, in terms of the issues faced by smaller urban centres, and the strategies that may be helpful to them in managing their municipal public parking. The research will also provide a snapshot of the existing municipal public parking conditions within the downtown core of Portage la Prairie, while exploring options for future parking management strategies.

1.2 Study Area and Context

1.2.1 Study Area

The study area for this practicum is the downtown core of Portage la Prairie. The identified study area, roughly 490 m² in size, is bounded by Lorne Avenue to the north, Dufferin Avenue to the south, 3rd Street NW and 3rd Street SW to the west, and 4th Street NE and 4th Street SE to the east (see Figure 1). Saskatchewan Avenue, a section of the Trans-Canada Highway (Provincial Trunk Highway 1A), bisects the study area. The Portage la Prairie Bypass routes highway traffic around the city on Provincial Trunk Highway 1. Provincial Trunk 1A splits from Provincial Trunk Highway 1 and directs traffic through the city centre. The bypass was constructed with the purpose of redirecting highway traffic away from Saskatchewan Avenue, however, the road remains a major thoroughfare within the city.

Figure 1: Downtown Study Area



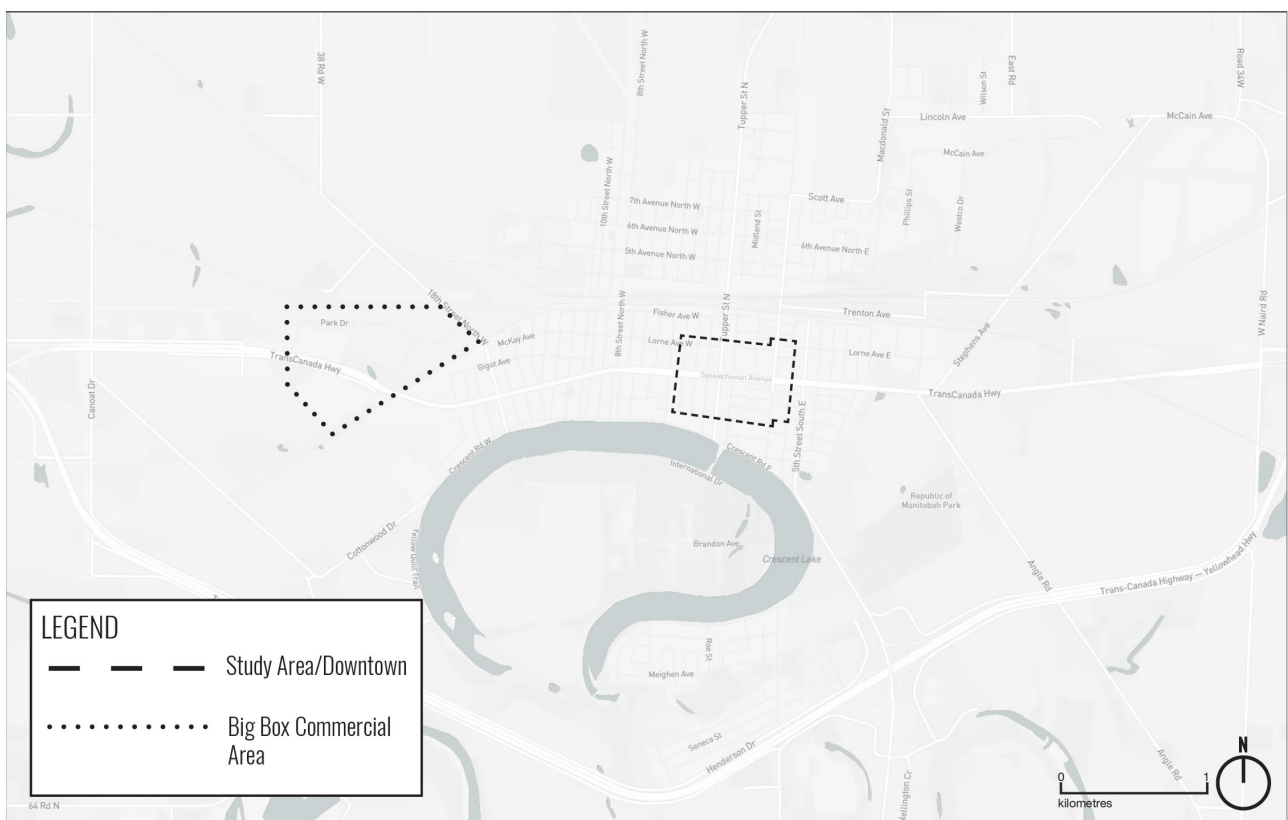
1.2.2 Context

As per the 2016 Canadian Census, the population of the city of Portage la Prairie is 12,949, making it the fourth largest settlement centre in Manitoba (Statistics Canada, 2017c). Portage la Prairie serves nearby municipalities as a centre for amenities and services, with the provision of administrative, institutional and health services, recreational facilities, retail, and restaurants. Many of these amenities and services are located within the downtown, with approximately 134 active and vacant storefronts located within the downtown study area boundaries.

A majority of the downtown is zoned for commercial use and is surrounded by residential

zones with predominantly single-detached residential dwellings (see Appendix 8.1 for the zones located in the downtown). Some higher-intensity residential dwellings, such as two-unit and multiple unit dwellings, are also located within the downtown. Located approximately 3.5 kilometers west of downtown on Saskatchewan Avenue is a node of big box commercial development that is in competition with the downtown for patrons (see Figure 2). This area provides large parking lots that are free to users, and includes big box retailers such as Walmart, Canadian Tire, and Sobeys.

Figure 2: Downtown Study Area in Relation to the Big Box Commercial Area



The downtown area is characterized by a central grid system, with approximately 286 functioning on-street metered public parking spots that are municipally owned and maintained. There are also approximately 98 parking meters within the downtown that are currently non-functional or have been removed resulting in free and unrestricted on-street parking spots. Traditionally, meters are installed one per parking spot and accept coins as a payment for use

(Willson, 2015, p. 125), as is the case in Portage la Prairie. The intention of meters is to create turnover at parking spaces within the downtown core. Metered parking is divided into two zones that charge for parking use between the hours of 9:00 am and 6:00 pm (see Figure 3). Zone A charges users \$0.25 per fifteen minutes of use, and would cost \$9.00 if used all day by the same occupant, as there are no by-laws requiring users to move their vehicle to a new spot after a certain amount of time. Zone B charges \$0.05 per six minutes of use, and would cost \$4.50 if used all day by the same occupant. In the event that a user does not pay for parking, or the meter expires, a ticket of \$40.00 can be issued by a parking enforcement officer. If the ticket holder pays within fourteen days, the ticket fee is reduced to \$10.00.

Figure 3: Municipal Public Parking



An unknown number of on-street non-metered public parking spots are also located within the downtown. These unpaid and unmarked parking spots are located curbside in residential areas.

The approximate number of on-street non-metered parking is estimated at 450 spots, however these are not officially marked. Municipal off-street parking consists of Heritage Square and the Glesby Centre parking lots, both of which are located roughly in the centre of the downtown (see Figure 3). Heritage Square offers 167 spots and the Glesby Centre parking lot offers 106 spots. These two lots are the only lots within the downtown that are municipally owned and maintained. Other privately owned off-street lots that are available to the public exist, but were not quantified as part of this research.

The City of Portage la Prairie has not produced a formal management strategy for parking in the downtown. The *Portage la Prairie Development Plan* (2006) provides goals, objectives, and policies concerning private off-street parking. The plan outlines a “Transportation Agenda” (City of Portage la Prairie, 2006, p. 39); one of the goals encourages better use of off-street parking, but does not address downtown municipally owned public parking. The plan mentions on-street parking on one occasion so as to discourage public parking on “local streets for non-residential purposes” (City of Portage la Prairie, 2006, p. 29). Some streets within the downtown have residential uses in addition to commercial. Only the commercial areas provide adjacent on-street metered parking, whereas the remaining residential non-metered areas are available to residents, patrons, and employees of the downtown alike. There is no signage restricting parking on local streets for non-residential purposes.

Municipal public parking in downtown Portage la Prairie is currently regulated by the City of Portage la Prairie via the *Portage la Prairie Traffic By-law* (2001) and *General and Parking By-law Enforcement By-law* (2017). These by-laws regulate parking in terms of the enforcement of related by-laws, costs of metered on-street parking, and violations and ticketing. The fees and ticketing costs associated with downtown municipal parking can also be found in the *Portage la Prairie Fees and Charges By-law* (2017). The *Portage la Prairie Zoning By-law* (2010) regulates private off-street parking requirements in the downtown, and elsewhere in the city, however it does not outline provisions for

the regulation of municipally owned public parking. The zoning by-law affixes minimum parking requirements by use rather than by zone (see Appendix 8.2 for residential, commercial, and open space/recreational uses in Portage la Prairie).

1.3 Research Questions

This proposed practicum aims to provide the City of Portage la Prairie with useful data concerning municipally owned public parking located within the city's downtown core. The City has expressed an interest in understanding their municipal public parking, as well as possible strategies for its reform. As the literature review suggests, the issues of parking are felt across almost all urban areas. This research contributes to the literature on parking in terms of the issues faced by small and low growth urban centres. While the research is specific to municipally owned public parking in Portage la Prairie, it is intended for it to be easily replicated in other municipalities also looking to address parking in their downtowns. There is an opportunity for planners and policy makers to reform dated parking regulations and provide current data for decisions regarding future parking in small and low growth urban centres. As such, this practicum aims to answer the following questions:

- 1) How are people using municipally owned public parking within the downtown study area, and what are their overall patterns of use?
- 2) What is the relationship between the downtown study area and other significant commercial areas in Portage la Prairie – specifically the big box commercial area – in terms of parking use?
- 3) What are the perceptions of the business community concerning municipally owned public parking within the downtown study area toward existing parking management?
- 4) What do other cities of comparable context do in terms of municipally owned parking management strategies within their respective downtown cores, and can these strategies be applied to Portage la Prairie?

1.4 Overview of Research Methods

I conducted five methods of research to gather data for this practicum: unobtrusive study area observations, intercept surveys, a focus group/semi-formal interviews, a questionnaire, and a short policy review. The study area observations and policy review did not require ethics approval. Intercept surveys were utilized to identify the relationship between municipal public parking within the downtown and the big box commercial area. Additionally, I organized a focus group and semi-structured interviews discuss the perceptions of business community members concerning municipal public parking within the downtown. A conversation with the business community allowed for detailed data to be gathered that may not have been revealed by field research. Lastly, I distributed a short questionnaire to City of Portage la Prairie staff that work directly with the municipal parking to gather their first-hand opinions and perceptions.

1.5 Significance of Research

The research of this practicum aims to contribute local empirical data to the City of Portage la Prairie, while demonstrating the importance of collecting such data to inform municipal public parking management in small city downtowns. Additionally, this practicum contributes to the literature surrounding how to plan for municipal public parking management in small urban centres. This practicum reveals that parking is a complex planning issue, with parking perceptions, preferences, and behaviours that may at times contradict themselves. Acknowledging the relationship between parking types, perceptions, preferences, and behaviours may result in better informed municipal public parking management strategies not only for Portage la Prairie, but for urban centres of similar context.

This practicum also acknowledges the relationship between parking and the overall vibrancy of downtowns. It is important for small cities to identify parking not as an independent problem, but as a part of a larger issue facing downtowns. The issue of parking is less about cars and where to

leave them, than it is about attracting people for continued downtown visits (City of Terrace, 2017. p.1). Historically, changes in land use and transportation patterns, and conventional parking planning practices, have contributed to the migration of once centrally located services and amenities to more peripheral locations. Issues of parking, as recognized by small cities like Portage la Prairie, can be directly related to these changes. As such, understanding the trends in downtown parking use is as important as recognizing the complex connection between parking and downtown vibrancy.

1.6 Document Structure

The first section of this practicum provides an overview of the project by introducing the study area and research questions, as well as the significance of the research as it contributes to the literature on parking in smaller urban centres. Section two provides an exploration of the literature on the topics of parking management research, policy, and strategies, as well as downtown revitalization as it relates to parking reform. The third section provides a description of the research methods used to collect data with the aim of answering the research questions outlined in the first section. The limitations and biases of the research are also discussed. Section four provides an analysis of emerging themes and trends in data collected through the five research methods identified in Section three. The fifth section builds on the analysis in Section four and identifies the seven key findings resulting from the research of this practicum. Lastly, section six discusses the implications of the key findings for the City of Portage la Prairie and the planning profession, as well as areas of potential study to further the contributions of this practicum.

2.0 Literature Review

2.1 Parking as a Public Good

Ben-Joseph (2012) refers to parking lots and parking spots as a “type of place, so ordinary and familiar that we ignore their existence until we need them,” (p. 9). Parking is considered a public or common good available for consumption or use by the public, the price of which is often subsidized for users. Similarly, Manville and Shoup (2006) describe the parking lot as the space in which “we stop thinking about the car, because parking means we have reached our destination,” (p. 233).

Both on and off-street parking can be regulated by meters or other methods of payment, as well as being time-restricted. Parking would seemingly be free without user pay fees; however, the costs are passed on and built into taxes or the price of housing (Willson, 2015, p. 8) or goods. Users compete for parking; even though it is a public and often affordable good. In some cases, user-pay parking only charges users for certain times of the day, usually between 8:00 am and 5:00 pm (Hymel, 2014). After these time intervals, the user-pay parking oftentimes becomes free to its users.

It is not uncommon for users of parking to have strong opinions regarding their right to use parking as a public good. A number of authors have pointed out that there is a sense of entitlement and territoriality felt by users concerning availability of parking (Barter, 2013, p. 12; Faulk, 2006, p. 628; Litman, 2006, p.41). Faulk (2006) suggests that users of parking are “unwilling to walk more than a few blocks” to their destination (p. 628). Litman (2006, p. 41) points out that if parking is not readily available at a user’s destination, there is an assumption that a parking problem exists. As a result, parking is often provided in abundance so as to better accommodate parking users.

Despite the notion that parking is either free or affordable, there are many costs associated with parking. Davidson & Dolnick (2002) suggest that seemingly free or subsidized parking “leads to a vicious over supply of parking virtually everywhere in the metropolitan landscape,” (p. 7). This concern is echoed by Smith, Dorsett, & Chapman, (2010c), who recognize that minimum parking

requirements have the capability to “destroy the fabric of the downtown,” (p. 25) resulting in excessive parking and inefficient use of land. If fewer spots are available due to cheap prices, and users are parking in them for long periods of time, there is little vehicle turnover. It is not uncommon for employees to park for longer periods of time in cheap, or free, on-street parking spots (Edwards, 2006, p. 31). Inefficient policies and pricing can negatively influence land use, businesses, the environment, and individuals (Hymel, 2014, p. 221).

Another cost of parking is *cruising* – when motorists search for affordable and conveniently located parking spaces. Ommeren, Wentink, & Rietveld (2010) theorize that cruising for parking is a direct result of underpriced metered curb parking (p. 123). If the price of parking is low, it will encourage motorists to drive and park at their destination, decreasing the number of available spots and increasing cruising time (Shoup, 2003, p. 758). Conversely, if the price of parking is higher, fewer motorists will choose to drive, thus increasing the number of available spots and decreasing cruising time (Shoup, 2003, p. 758). Motorists experience an increased time cost and spend more on fuel while congesting the street in search of the perfect spot, while non-motorists experience the ills of congestion, including reduced air quality and noise pollution.

2.2 Conventional Parking Planning

“Planners or decision makers often fail to recognize the interrelationships between goals expressed in community plans and parking requirements. In other words, goals such as improving sustainability and producing liveable communities are identified in plans, but parking requirements persist in the zoning [by-law], unchanged,” (Willson, 2013, p. 40).

Willson (2013) indicates that there is a lack of empirical evidence in many local municipal zoning by-laws in terms of their parking regulations (p. 30). This means that many parking requirements are created without local context taken into consideration. It is not uncommon for

municipalities to replicate the zoning regulations from other cities (Willson, 2013, p. 39). Shoup (2016a, p. 27) echoes this by stating that it can be difficult for planners to set parking requirements when they are unsure what the demands for parking will be for each land use. This results in the replication of potentially outdated parking controls that may not actually be useful or effective in a particular municipality.

Davidson & Dolnick (2002) also state that it is not uncommon for municipalities to “borrow” (p. 8) parking regulations from other municipalities. They recognize that “adoption without consideration of the local context can result in standards that do not fit,” (Davidson & Dolnick, 2002, p. 8). Manville and Shoup (2005, p. 233) suggest that there is no city that is able to, or that has made the effort to, keep track of parking in its entirety, but that many cities are beginning to realize the benefit of tracking parking in their central business districts. The local context of a municipality might include not only unique site conditions, but also the goals of primary and secondary planning documents. Goals of the municipality may be ignored if outdated and copied parking regulations do not fit within the purview of planning documents. Additionally, the concept of parking minimums can be disruptive to new development. “Parking remains heavily regulated, with its supply mandated by zoning enforced minimums,” (Manville & Shoup, 2006, p. 233) and it becomes clear that parking is not a good regulated by market demands.

Conventional parking planning, as described by Litman (2006, p. 41), Barter (2015, p. 137), and Barter (2003, p. 2) is slowly being challenged by municipalities, however, it remains the accepted norm. Litman (2006, p. 41) describes conventional parking planning as a model for providing parking minimums and increasing the supply of parking spots when the supply becomes insufficient. If users cannot readily find spots near their destination, a municipality may increase the minimum required supply of parking to accommodate demand at peak times. Under this conventional way of planning for parking, “a parking lot was not expected to fill up, and every destination was expected

to satisfy its own parking, (Litman, 2006, p. 44). Barter (2013) and Barter (2016) build on Litman's (2006) concept of conventional parking planning, suggesting that it is an accepted mindset that planners of parking should challenge.

Proponents of parking reform are critical of parking minimums. Parking minimums are often a convention of accepted parking planning trends that are outlined in municipal zoning by-laws. Zoning by-laws provide the minimum number of off-street parking spots required for a new or expanding development based on their land use and/or zone. This means that off-street parking requirements must be met for each individual privately owned lot. Barter (2013) suggests that parking minimums are the result of the notion that “*enough* parking is ... taken to mean the demand for free parking should be met within every site at peak times, always,” (p. 3). As these minimums are continually applied for each land use, they can have “disastrous results,” (Barter, 2013, p. 3). Shoup (1999) also discusses this concern, stating that “parking minimums promote free parking ... [and] they often hinder development on sites where it is difficult to both construct a building and provide the required parking,” (p. 9) contributing to lot vacancies.

The conventions of parking planning are gradually being challenged as parking trends are better understood. Similar to trends in market demands, trends in parking shift over time. According to Willson (2015), not only have there been changes in development, reflecting a demand for density, there have also been changes in “cultural trends and consumer preferences,” (p. 19). As millennials and seniors continue to age, the shift to “embrac[ing] a car free lifestyle” (Wilson 2015, p. 19) will likely continue. Over time, this may result in a surplus of parking spaces in municipalities. Once a municipality recognizes the need for updated parking regulations in relation to changes in parking trends, they must consider the “proper data collection and careful analysis of site specific circumstances,” (Dorsett & Smith, 2010, p. 3). Smith, Dorsett, & Chapman, (2010c) indicate that over time, trends in parking regulation and user needs will change; however, parking policy

documents are often not appropriately adjusted to reflect these trends (p. 23). Willson (2013) suggests that the future of parking regulations should be anticipated and “take a long-term perspective,” (p. 67).

2.3 Parking in Small Cities

It is evident that while the literature on parking management strategies in larger urban and metropolitan centres is abundant, there are few publications that discuss the circumstances in smaller cities. Many authors (Ramsey, 2001; Robertson, 1999; Faulk, 2006; and Burayidi, 2001) recognize that there is a lack of published studies on parking trends and management in smaller cities across North America. Ramsey (2001) points out that “small and large cities may face the same basic problems and challenges, [but] it is increasingly being recognized that the strategies and solutions for dealing with these problems are quite different,” (p. 3). A study of parking in the downtown of a larger center will yield context specific results and solutions that are not necessarily applicable to the context of parking in smaller city downtowns. It is specifically suggested by Burayidi (2001) that studies should aim to fill the gap in “knowledge and understanding” (p. 2) of the forces at play in small city downtowns, including the issue of parking.

Although research specifically tackling parking in small city downtowns is scarce, there exist publications concerning downtown revitalization that recognize the role parking plays in a healthful and vibrant downtown. These publications identify parking not as an independent problem, but as part of a larger issue facing downtowns in small cities. Robertson (1999) and Edwards (2006) discuss how the National Main Street Centre identified parking in the early 1990s after conducting surveys with participant cities regarding the issues present in their downtowns (p. 274). The surveys included parking questions regarding issues surrounding “meters, revenue, fines, shared parking, enforcement, time limits, and parking management,” (Edwards, 2006, p. 31). The results of the survey revealed that parking was a prominent issue, the fifth item out of a total of thirteen listed

issues (Robertson, 1999, p. 274). It is important to note that problematic parking in small city downtowns is often more of a perception than it is a reality (Robertson, 1999, p. 279). Litman (2006, p. 41) has described how difficulty finding parking spots during peak usage times can result in parking users determining that there is a problem with parking supply at all times.

Burayidi (2001) described the history of the decline of small city downtowns and its relation to the “decentralization of economic activity” (p. 1) spurred by post-war highway development. Robertson echoes Burayidi’s (2001, p. 274) discussion of historical forces, explaining that automobile use encouraged the relocation of what were typically centralized uses, such as retail, offices, or hotels, outward to highways that were conveniently accessed by automobiles and provided “abundant, free parking” (Ramsey, 2001, p. 11). In some cases, after the “exodus of downtown activities” some buildings were demolished with lots used as off-street parking (Robertson, 1999, pp. 281-282).

In general, smaller cities do not deal with the same problems of parking and traffic congestion that larger cities do (Ramsey, 2001, p. 4). The *Parking Handbook for Small Communities* was published in the early 1990s by the National Main Street Centre (NMSC). The handbook outlined six steps that small cities could take toward addressing parking in their downtowns. Some of these steps included “gathering data and analyzing demand, increasing the effectiveness of existing parking, planning new parking facilities, and managing the new parking system,” (Edwards 2006, p. 31). At this time, the handbook is no longer in print, however, at the time of its publication, the handbook aimed to help “small communities in finding economical solutions to existing parking problems,” (Edwards, 2006, p. 31). The NMSC indicated that a significant cause of “downtown deterioration was not the lack of parking, but the lack of good management” of the existing stock of parking in downtowns as well as a “strong perception” of problems linked to lack of parking (Edwards, 2006, p. 31). The handbook outlined solutions such as “more convenient parking, converting parallel parking to angle parking,

and improving parking enforcement and management,” (p. 30).

The current literature concerning downtown revitalization provides few examples of parking management strategies in small cities. Faulk (2006, p. 628) discusses that an adequate amount of parking is important to encourage people into downtowns, however they do not provide an approach of how to do so. There is a lack of publications that describe recent attempts at contextual parking management strategies in small city downtowns. Specifics such as time limits and fees are not discussed. That being said, parking pricing varies “according to local demand” (Barter, 2013, p. 9) and this must be determined by each municipality. Barter (2013) suggests that there is a lack of discussion surrounding the effectiveness or outcome of small city parking strategies.

2.4 Parking Management Strategies

According to Barter (2013), Barter (2015), and Litman (2006), to effectively manage parking is to embrace the evolution of management strategies. Litman (2006, p. 43) introduces the idea that there is an old and new parking management model. Litman’s (2006) old model assumes that “a parking lot [is not] expected to fill up and every destination [is] expected to satisfy its own parking,” (p. 44), whereas the new model suggests that there are multiple “strategies that can significantly reduce the number of parking spots required” while also “provid[ing] a variety of additional benefits by improving service,” (p. 44). The key idea of the new model is that it improves the existing parking service as opposed to assuming that every lot is required to provide more parking.

Barter (2015) discusses Litman’s (2006) new parking model further, suggesting that assumptions surrounding how parking is managed should be changed. Barter (2013, p. 2) introduces “adaptive parking” to challenge the “conventional,” and widely accepted, approach to managing parking. The adaptive parking approach does not “involve a strict parking supply” and is “responsive to local conditions,” (Barter, 2013, p.2). Under the adaptive approach, parking can be considered either a market good or as infrastructure that services a larger area, rather than each lot

on its own (Barter, 2015, pp. 138-139). Barter (2015, p. 139) is critical of identifying parking as a market good, stating that it is only practical in certain scenarios. Identifying parking as a market good seeks to “deregulate supply,” (Barter, 2015, p. 144).

Barter (2015) asserts that under the adaptive approach, parking “must be planned, if not necessarily provided, by governments,” (p. 139). Under this approach, parking would be managed by municipalities over larger areas, such as a downtown core. Characteristics of the adaptive approach also include reforming parking minimums, encouraging shared parking, and identifying opportunities to manage demand and reduce supply (Barter, 2015, p. 142). Most importantly this approach rejects the idea that parking problems are exclusively related to a shortage in supply, but rather it recognizes parking as a complicated issue with varying entwined problems (Litman, 2006, p. 42; Barter, 2015, p. 142).

2.4.1 Parking as a Market Good

Proponents of identifying parking as a market good include Donald Shoup and Richard Willson, who over many articles have discussed introducing parking pricing mechanisms in larger urban centres. Pricing mechanisms are effective management strategies that municipalities may consider employing to their current and future parking. Willson (2015) suggests that the behaviour of parking users is predictable and that “theoretically, drivers will respond to changes in price,” (p. 16). Perhaps then, raising the price of on- and off-street parking will result in a reduction of parking use. Determining the price of parking, according to Willson (2015), must be done on a case by case basis, and is based on three important items: “the breakeven cost for maintaining operations, future system needs, and increments as necessary” to discourage users of parking from violating parking policies (p. 192). Tickets for violation, starting at \$60 is common in larger cities in the United States (Willson, 2015, p. 192), however this does not include smaller cities, of which prices may vary.

Hymel (2014) tested this theory, and although the research area was small, the results indicated

that there was no evidence that raising the price of parking reduced its use (p. 221). The study tested the theory that businesses are negatively affected by users of cheap parking, in that there is little rotation, thus bringing fewer customers. However, many authors, including Shoup (2011), Willson (2013), and Litman (2015) argue that this is indeed an effective strategy to reduce parking at the benefit of local businesses.

Another pricing mechanism to manage parking is to let the market decide what the price should be. Willson (2015) suggests that public parking in larger urban centres is Fordist; prescribing to both mass production and consumption (p. 16). Essentially, public parking continues to be supplied, or oversupplied as some authors argue, at a subsidized price. Performance based pricing is a strategy that sets the price of parking based on the desired occupancy rate. Shoup (2011) indicates that the practical occupancy rate of parking for casual use parking spaces is 85% (p. 52). This is echoed Hymel (2014), Litman (2015) and Willson (2015).

Pricing of parking spots may be increased or decreased to reflect this occupancy rate. In the event that there are increases in parking revenue due to changes in pricing, municipalities can employ local revenue returns or parking increment finance programs. Local revenue returns include returning the revenue gained from an increase in parking prices to neighbourhoods for public services (Shoup, 2011, p. 53). Parking increment financing, comparable to tax increment financing, returns only the profits made by an increase in parking prices that are above the usual parking revenue to local neighbourhoods (Shoup, 2011, p. 53).

2.4.2 Adaptive Parking

There are a number of parking management strategies that a municipality could employ to solve issues of parking, perhaps better suited to smaller city downtowns. Edwards (2006) succinctly summarized the six steps of managing parking in the *Parking Handbook for Small Communities*. The first two steps include “getting organized” and “gathering data/analyzing demand,” (p. 31). For

example, a municipality might decide that the most efficient way to deal with issues concerning parking is to estimate future parking demands. Smith, Dorsett, & Chapman (2010a) suggest first adjusting parking ratios as per the local context, while forecasting future parking needs (p. 7). Conducting studies to gather this data include a number of steps. According to Willson (2015) these steps can include identifying and engaging with stakeholders, gathering and analysing data, creating an overall goal or vision, implementation, and measuring outcomes (p. 65). These exercises lead into the remaining four steps outlined in the handbook: “increasing the effectiveness of existing parking, planning new parking facilities, promoting the new parking system, and managing the new parking system,” (Edwards, 2006, p. 31).

Shared parking is encouraged by Barter (2013) and Barter’s (2015) adaptive parking management approach. Shared parking is an option for municipalities looking to “increase the capacity of existing facilities,” (Litman, 2015, p. 3). Shared parking, as defined by Smith, Dorsett, & Chapman (2010b), “occurs when multiple, and usually adjacent, land uses are able to meet their individual needs through common parking spaces,” (p. 16). Shared parking may be employed by adjacent land uses that require parking at different times of the day, (Shoup, 2005, p. 231). This is helpful for reducing the amount of parking in an area, and beneficial for local businesses (Smith, Dorsett, & Chapman, 2010b, p. 16). According to Smith, Dorsett, & Chapman (2010b), shared parking is a trend that can be seen in downtown cores.

A way to encourage shared parking is to provide the option for payment in-lieu of parking spots in municipal by-laws. Payment in-lieu of parking is not a new concept. They provide developers with the opportunity to pay a municipality a sum of money rather than supply a parking spot or multiple spots (Shoup, 1999, p. 9). This reduces the number of off-street parking spots on a lot, without reducing the actual parking requirements. Barter (2013) argues that reforming parking minimum requirements could more effectively manage the issues of parking, but that few cities have

“abolished” (p. 7) minimums altogether. Barter (2015) later states that although “payment in-lieu of parking may seem like a modest change since it retains parking minimums ... it decisively shifts the emphasis towards public parking,” (p. 147). As parking spots on individual lots decrease, a municipality can use the money earned from in-lieu payments for publicly owned shared parking lots (Shoup, 1999, p. 9).

Adaptive parking encourages cities to provide municipally owned parking, both on- and off-street. Providing municipally owned and managed on-street parking is seen as a way to “increase the effectiveness” of parking (Edwards, 2006, p. 32). Barter (2015) supports this statement, suggesting that on-street parking is a more intensive parking management strategy that plays an integral role in helping serve an area as a whole (p. 148). Shoup (2014) describes ways in which a municipality can effectively provide and manage on-street parking via meters. Shoup (2014) suggests that meters can be made popular by providing a variety of options to users, such as providing a portion of the meter use for free or installing updated technology offering a range of payment methods, like cash, credit, or pay by cell (p. 35). The management of metered parking can be improved by providing visible and understandable signage, “establishing trustworthy time-based fees,” and enforcing consistent time limits to dissuade long-term parkers from using meters (Barter, 2013, p. 6). A unique approach to on-street parking comes from Willson (2015), who suggests that users of on-street parking should not see it strictly as a “revenue stream” for a municipality (p. 106). While a municipality may collect revenue from on-street parking it could be used toward maintenance and improvements to parking facilities, such as updated meters or improved enforcement.

Shoup (2014) indicates that by “changing the politics of parking, cities can meter more of their valuable curb space,” (p. 37) therefore producing more revenue. As on-street parking spots begin to be more intensively managed, Shoup (2016b) suggests that it can be a good idea for municipalities to provide nearby residents and employees with parking permits at a fair market price (p. 35). This

ensures that nearby residents and employees are not negatively affected by changes in management, such as fees or time limits, while providing the municipality with revenue.

Of course, there are a number of challenges that municipalities may face while reforming their parking management strategies. Challenges might include lack of support from the public and or local businesses, delays on returns, or high implementation costs (Litman, 2015, p. 28). It is not uncommon for people to fear the loss of their existing parking privileges (Barter, 2013, p. 12). However, Shoup (2011) suggests that patiently testing these new strategies by way of a pilot program may be the most efficient way to determine whether or not certain strategies are indeed helpful (p. 55). “Fair, predictable enforcement is the key to making parking management programs work” (Willson, 2015, p. 149) as many users of parking consider fines a “money grab” and/or that parking rules are confusing to understand (p. 192). Willson (2015) also mentions that the enforcement of parking should not be “heavy handed or extremely lenient,” (p. 191) so as to be firm but trustworthy. Much like Barter (2015), Edwards (2006, p. 37) suggests that parking should be managed publicly and consistently enforced by a parking advisory committee, or a municipal parking department.

The adaptive parking approach is not meant to be frightening for cities looking to reform their current parking management strategies. This approach acknowledges that existing parking management strategies and supplies do not have to be done away with immediately (Barter, 2013, p. 12). Much like its name, this strategy can adapt to the local parking context as it evolves over time.

2.5 Chapter Summary

This academic literature review provides an overview of parking as a public good, current parking practices, the gap in literature concerning parking in small city downtowns, and examples of newer approaches to parking management. Overall, the literature purports that there are issues stemming from parking, and that these issues have negative impacts on both users and non-users of

parking. Arguably, these negativities are largely a result of outdated parking regulations lacking local empirical evidence and an understanding surrounding parking in the downtowns of smaller cities, as well as rigid assumptions of how parking should be planned for.

The literature discusses many examples of how to reform parking management based on studies of larger urban centres, however these are not entirely applicable to cities of a much smaller scale. While the adaptive approach does not specifically refer to parking management in smaller cities, the intention of the approach itself is to be adapted to suit the local parking context. Contributing to the gap in knowledge of parking in smaller cities is important since there is a lack of studies concerning the efficacy and shortcomings of updated parking management. Once again, there is a considerable amount of studies on how updated parking management has worked in larger urban centres.

Acknowledging that conventional parking management has contributed, in part, to the decentralization of downtowns is an important takeaway from the review of the literature. It leads to the understanding that effective parking management can also contribute to a healthful and vibrant downtown. Authors suggest that shifting perceptions of conventional parking management to more adaptive approaches can begin to reform the practice of planning for parking. Acknowledging parking as a common good that should be managed as public infrastructure across whole areas is crucial.

3.0 Research Methods

I conducted research for this practicum with the intent of answering the identified research questions, as well as to draw conclusions from the data to form potential implications regarding municipal parking management in Portage la Prairie's downtown. I conducted both qualitative and quantitative research. Qualitative research attempts to understand "human or social problems" by analyzing data collected "in the participant's setting" and drawing conclusions from it (Creswell, 2009, p. 4). Quantitative research refers to data collection concerning the measurement of relationships between variables (Creswell, 2009, p. 4). I conducted qualitative research with the purpose of understanding the experiences and opinions held by a variety of parking users within the study area. I also conducted quantitative research with the purpose of quantifying observed and recorded patterns of municipal parking behaviour within the downtown.

3.1 Study Area Observations

I conducted research in downtown Portage la Prairie in order to gain an understanding of downtown municipal parking user behaviour. I conducted non-participant, or unobtrusive, observations. This required little to no interaction with users of the study area, only observations of the surrounding environment and the behaviours of those within it. A benefit to ensuring that the presence of the researcher is not known is that it will not influence the behaviour of users of the study area (Berg, 2001, p. 147). Thus, data can be collected without any threat of "researcher bias" (Gaber & Gaber, 2007, p. 22).

I began by first conducting a site review of the downtown. Current built form, and parking characteristics and conditions were tallied, including the number of establishments located in the study area, the type and number parking spots, and the occurrence of signage, meters, and regulations (such as "time limits, parking fees, disabled parking, loading zones," etc.) (Willson, 2015, p. 71). This information is outlined in Section 1.2.

Secondly, I conducted observations of user behaviours within the downtown to answer the first and second research questions of this practicum. “Parking occupancy inventories assess how fully the existing inventory is being used at different days and times,” (Willson, 2015, p. 72). Since the downtown was too large to observe at one time, I made observations at specific locations and times to provide a snapshot of typical municipal parking use within the downtown. Willson (2015) suggests that weekday and weekend peak parking occupancies be observed for retail and workplaces (p. 75).

Although I observed each location on separate occasions, they were observed in intervals during the same times of day for consistency and comparison (see Figure 4 for observation locations). Each location was observed once during the week (at three peak times of day, divided into three intervals each). Each location was also observed once during the weekend (at two peak times of day, divided into three intervals each) (see Table 1).

Table 1: Observation Periods

Site Observations	Observation Periods
Weekday	10:00 am - 11:30 am
	1:30 pm - 3:00 pm
	5:00 pm - 6:30 pm
Weekend	10:00 am - 11:30 am
	1:30 pm - 3:00 pm

3.1.1 Analysis

Berg (2001, p. 161) suggests that for the sake of data quality and ease of analysis, field notes should be organized ahead of time and standardized for each observation. Thus, I analyzed the data with the use of spreadsheets, as well as mapping data provided by the City of Portage la Prairie. I recorded the initial site review using spreadsheets, photos, and maps with corresponding symbols to identify study area variables. I created spreadsheets for the study area observations to record date, location, time intervals, and corresponding occupancy rates of municipal parking spots (see

Figure 4: Downtown Study Area Observation Locations



Appendix 8.3 for an example of these spreadsheets). I also generated graphs to illustrate the trends that emerged in parking behaviour.

I conducted the site review and observations with the objective of revealing if municipal parking patterns existed in the downtown. I compared this data collected from other research methods used in this practicum to aid in the formation of implications for municipal parking management within Portage la Prairie's downtown.

3.2 Intercept Surveys

I conducted intercept surveys in downtown Portage la Prairie, as well as in the big box commercial area located west of the downtown, to gather data relating to patterns of parking use. The intercept surveys were also conducted to gather information on user knowledge of municipal parking within the downtown. Intercept surveys are different from general surveys in that they are

often much shorter, and conducted in person within the study area (Willson, 2015, p. 79). They are a convenient way to gather data that may not be easily observed by initial study area observations. The sampling frame was identified as ‘users of parking’ both in the study area and the big box commercial area.

Neuman indicates that surveys “sample many respondents who answer the same questions ... [and] measure many variables ... from questions about past behaviour, experiences, or characteristics” (2000, p. 250). The general purpose of surveys is often to gain an understanding of public opinion, and their results may sometimes lead to policy changes (Gray, 2009, p. 220).

The intercept survey questions stemmed from a “central research question” (Gray, 2009, p. 225) which has been outlined as this practicum’s first and second research questions. It was crucial to develop questions that were easily interpreted by respondents, as questions that are not well thought out by the researcher may lead to results that are not useful (Neuman, 2000, p. 247). The intercept survey was structured, meaning that each participant answered the same questions. The survey received ethics approval prior to being administered (see Appendix 8.5 for the Intercept Survey Schedule).

I conducted the intercept surveys on multiple days, during both the week and weekend, between the hours of 10:00 am – 12:00 pm, and 1:00 pm – 3:00 pm. They were generally conducted during good weather, as days with extreme heat/humidity or rain were avoided for data collection. Locating survey participants in the downtown required a considerable amount of walking around. Out of the 58 people I asked to participate, 36 people agreed, with 22 refusing (see Appendix 8.6 for a spreadsheet containing participant responses).

3.2.1 Analysis

I recorded participant responses using spreadsheets to organize the data for efficient analysis. Responses, such as how often participants visited the study area, how long they searched for a

parking spot, time spent in a parking spot, and number of destinations, were tabulated. I analyzed and grouped qualitative responses, such as trip purpose, location of parking spot, and the influence of parking price based on emerging trends and outlying responses.

3.3 Focus Group/Semi-structured Interviews

To answer the third research question of this practicum, I organized a focus group and two structured interviews in Portage la Prairie to discuss the perceptions of business community members concerning municipal public parking within the downtown. Initially, I had proposed a focus group of six to eight participants, however, due to conflicting schedules and time constraints, a focus group with three participants was held. As such, I conducted two semi-structured interviews at a different time with individuals who were interested in participating in the focus group but could not attend. I identified participants with the help of my contact at the City of Portage la Prairie. I provided them with a practicum project summary to provide to downtown business owners within the study area. They then provided me a list of potentially interested participants whom I then contacted by email to confirm participation. As this research method received ethics approval prior to being conducted, it was also required that each participant understood the risks and benefits of being involved in this research method and provide their signed consent prior to participating.

3.3.1 Focus Group

Krueger and Casey indicate that “focus groups can provide insight into complicated topics when opinions are conditional or when the area of concern relates to multifaceted behaviour or motivation,” (Krueger & Casey, 2000, p. 24). The purpose of a focus group is to “gather spoken data from members of a small group,” (Gaber & Gaber, 2007, p. 73). Rather than conducting individual interviews, a focus group allows for a group of people to share knowledge and discuss their opinions or experiences concerning a particular issue. Focus groups are conversational, and

may allow for the researcher to gather detailed data that may not be revealed by more structured interviews.

I held a focus group with three members of the business community of downtown Portage la Prairie. I asked twelve questions and each participant was encouraged to respond, building on previous responses, and contribute to the conversation. The questions were used to successfully guide the conversation, and were grouped into the following categories (see Appendix 8.7 for the Focus Group Question Schedule): public parking patterns near each participant's establishment; supply of, and demand for, public parking; public parking policy; and price of public parking.

There are some constraints with conducting focus groups. There is a risk that one individual may dominate the conversation, and if the group is too large, participants may have less time to contribute (Gaber & Gaber, 2007, p. 81). Since the size of the focus group I conducted was small, it allowed for each participant to contribute to the conversation equally.

3.3.2 Structured Interviews

Despite the success of the focus group, it was my intention to ask questions to a larger sample of participants. As a result, I held two semi-structured interviews at a different time and location than the focus group. Semi-structured interviews, as coined by Gray (2009, p. 215), allow a more natural progression of interview responses and follow up questions than interviews of a structured variety. I asked participants of these semi-structured interviews the same predetermined questions as the focus group. Although participants were not able to build on previous participant responses, they were asked follow up questions and encouraged to expand their thoughts where possible.

3.3.3 Analysis

I gathered data for the focus group by requesting participants to speak toward a specific

comment or question asked by myself the researcher, building on previous comments. While the structured interviews asked the very same questions as the focus group, they were conducted one-on-one and did not allow for building on previous participant's comments. Responses were recorded by a note taker and later transcribed. I then grouped the raw data by hand based on reoccurring themes in the discussion. Participants remained anonymous throughout this process and were assigned a number value (i.e. P1 – Participant One).

3.4 Questionnaire

I distributed a short questionnaire to gain information from City of Portage la Prairie staff, specifically By-law Enforcement Officers, parking ticket issuers, and administrative staff that receive parking ticket payments. City staff understand the local context and are able to provide vital information concerning municipal parking and ticketing trends in downtown Portage la Prairie. I developed this questionnaire while data collection was already taking place as I identified an unforeseen group that had not been anticipated while drafting my practicum proposal.

I identified questionnaire participants with the help of my contact at the City of Portage la Prairie. Much like the focus group/semi-structured interviews, I provided them with a practicum project summary to provide to City staff meeting the parameters identified above. They then provided me a list of potentially interested participants whom I then contacted by email to confirm participation. Two of the City of Portage la Prairie staff that I contacted agreed to participate. I distributed the questionnaire to participants via their City of Portage la Prairie email. Questions were simple, easy to understand, and specific to the existing context of the locale in which the survey was administered (Neuman, 2000, p. 252) (see Appendix 8.8 for the Questionnaire Schedule). This method of research received ethics approval and required signed participant consent prior to participation. Two completed questionnaires were returned, resulting in a small data sample.

3.4.1 Analysis

I recorded the questionnaire results using spreadsheets for content analysis. Questions regarding the location of observed parking use, turnover, ticketing, and complaints were grouped for similarities and differences, where possible. Maps were generated to better illustrate the trends that emerged. The data was compared to other data collected for this practicum to aid in understanding the municipal parking trends present in the downtown.

3.5 Policy Review

To answer the fourth research question of this practicum, I conducted a short review of relevant planning policy documents to learn from the experiences of other urban centres in terms of parking management strategies in their respective downtown cores. In order to conduct a thorough and organized analysis, I identified research variables before analyzing the contents of policy documents (Gaber & Gaber, 2007, p. 106). For the purpose of this practicum, I defined urban centres of comparable context to Portage la Prairie by the following parameters: located in North America; low-growth city¹; small population centre²; and comparable weather conditions.

I conducted secondary research specifically from documents concerning parking policies, by-laws, and strategies passed by urban centres meeting the above noted parameters. Gaber and Gaber (2007, p. 104) indicate that planners often review published reports, such as research reports and or planning documents, for research purposes.

3.5.1 Analysis

I conducted a retrospective policy analysis. This type of analysis is defined as a “description and interpretation of past policies,” (Patton, Sawicki, & Clark, 2013, p. 36). I examined existing

¹ Low growth is defined as being below the national average growth rate of 5.0% between census periods, (Statistics Canada, 2017).

² A small population centre, according to Statistics Canada, has a “population between 1,000 and 29,999” and “no fewer than 400 persons per square kilometer,” (Statistics Canada, 2015).

policy documents including published reports on parking management or strategies, and planning documents from urban centres meeting the defined parameters.

Planning documents included development plans, secondary plans, zoning by-laws, and traffic by-laws (or the equivalent thereof). Search terms, relating to the research question, were identified within the analyzed documents via key word searches (Gray, 2009, p. 102). Key word searches included ‘municipal public parking,’ ‘downtown parking,’ ‘on-street parking,’ ‘metered parking/meters,’ ‘parking fees,’ ‘parking signage,’ ‘ticketing,’ and ‘time limits,’ as informed by the literature review and preliminary data collection.

3.6 Practicum Limitations

I identified two central limitations as part of this practicum in relation to the collection and accuracy of the data that was gathered.

3.6.1 Data Collection

The collection of data for this practicum was limited to the summer months, in particular, for the parking behaviour observations and intercept surveys. Much of this research was conducted outdoors during warm weather conditions. Had this data been completed during the winter months the research may have yielded different results. Other data revealed that trends in parking use in Portage la Prairie do in fact differ during the winter months, based on the focus group and semi-structured interview participant experiences. Being that the intercept survey data collection was confined to the summer months, the data reflects parking use during milder weather conditions than those compared to the winter. As such, the results of this practicum are limited and the fact that Portage la Prairie is a winter city should be considered in the future when addressing the issues related to parking. Additionally, the data I collected in Portage la Prairie revealed that a peak in parking outside of typical demand can be the result of multiple special events taking place in the

downtown. I did not observe any peaks in parking activity related to multiple events. At least one peak related to events would have been beneficial to observe in order to compare and contrast with the typical parking behaviour data.

3.6.2 Data Accuracy

As Section 1.1 indicates, this practicum intends to provide a snapshot of the existing municipal public parking conditions within the downtown core of Portage la Prairie, while exploring options for future parking management strategies. This snapshot was developed through a variety of research methods. However, due to limitations of data collection in terms of resources and timing, I have identified areas of potential future study to continue contributing to this data (further detail on this is outlined in Section 6.3).

Each observation of parking behaviour in the downtown was conducted on two separate occasions, contributing important data to the practicum in terms of parking behaviours. However, these observations were conducted during a typical week day/weekend day, meaning that outlying trends in use, such as peaks in demand for parking during special events, were not observed. Additionally, a significant user group of parking – downtown employees – was not present at the time of conducting the surveys. Although data from other methods provided insight into their parking behaviour, this is an important user group impacting parking trends in the downtown. Lastly, the questionnaire method research yielded a small sample of data. While it was useful, and helped confirm the trends and emerging themes from other methods, a larger data sample is preferable.

4.0 Findings

The data I collected as part of this practicum is outlined in the following section. Initial findings, emerging themes, and trends in data from the downtown parking use observations, intercept surveys, focus group/semi-structured interviews, questionnaire, and policy review research methods are presented below. Further analysis and discussion of these initial findings, emerging themes, and trends data is outlined in Section 5.0 and Section 6.0.

4.1 Results of Parking Observations

I conducted unobtrusive observations of municipal parking use behaviour in six locations within the downtown. I reviewed the entire downtown for current built form, parking characteristics, and conditions (including the number of establishments, the type and number of parking stalls, and the occurrence of signage and other parking infrastructure) (see Section 1.2 for this information). Seventeen city blocks of municipal public on-street metered and non-metered parking, and two municipal public and free off-street parking lots were observed for trends in occupancy (see Figure 4).

I observed each location once during the week (for three observation periods, divided into three intervals each) (see Table 1). I also observed each location once during the weekend (at two peak times of day, divided into three intervals each (see Table 1).

A summary of occupancy rates displayed by day and time of observations, and type of municipal parking across all locations is illustrated in this section. The data in this section is organized by day of observation and type of parking. On-street parking is comprised of two parking types, both metered and non-metered spots, whereas off-street parking comprises of one parking type (not requiring payment for use). It should be noted that non-metered spots include all spots in each location not marked by meters (often located adjacent to residential land uses), as well as spots that had once been marked by meters, but are no longer due to disrepair.

I also quantified parking spot duration during the weekday and weekend for each observation period. These percentages were calculated by dividing the number of occupied spots in each location by the location's total number of spots during each 30 minute observation interval. The observation interval percentages were then averaged to determine the average 90 minute observation period occupancy rate. This data is broken down into the percentage of spots that remained occupied for one, two, or three intervals of observation to identify how long vehicles were parking in the downtown by location and time, further explained in Section 4.1.1.

4.1.1 Weekday Metered and Non-metered Parking Observations

Weekday occupancy rates of metered spots are summarized by Figure 5. The highest weekday occupancy rate of metered spots was 37% in Location 2 during the morning observation, while the lowest was 13% seen in Location 4 during the morning and afternoon observations, as well as Location 2 during the evening observation. Weekday occupancy rates of non-metered spots are summarized by Figure 6. The highest and lowest weekday occupancy rate of non-metered spots was seen in Location 3 during the evening observation at 100%, and the afternoon observation at 0%, respectively. It should be noted that this location has comparably fewer non-metered spots and storefronts than the other locations observed. The metered spots in Location 2 and 3 that were closer to the off-street parking lots (Locations 5 and 6) generally had lower percentages of occupancy compared to those two blocks away. This may be a result of people choosing to park off-street rather than at meters. Perhaps people chose to park at the meters in Location 1 due to its greater distance to Locations 5 and 6, however this depends on the destination of downtown patrons, as well how close they prefer to park to their destinations.

On average, on-street non-metered spots saw a higher occupancy rate than on-street metered spots within their respective locations during the week. Metered parking typically appeared to be busiest during the morning and afternoon observations, whereas the non-metered parking appeared

to be busiest during the morning and evening. This may be due to the type of parking user at each location. During both the week and weekend, users of metered spots generally peaked during the morning or afternoon and were likely patrons visiting the downtown for varying purposes. Some users of non-metered spots during the evening may have been residents returning home from work, thus increasing occupancy. Although the City of Portage la Prairie zoning by-law requires residential land uses to provide off-street parking, downtown residents appeared to also contribute to the longer-term on-street non-metered parking. The non-metered spots in Location 1 also had a higher occupancy percentage than in Location 2, pointing to the preference for patrons preferring free spots over paid.

Figure 5: Weekday On-street Metered Parking Occupancy Rates

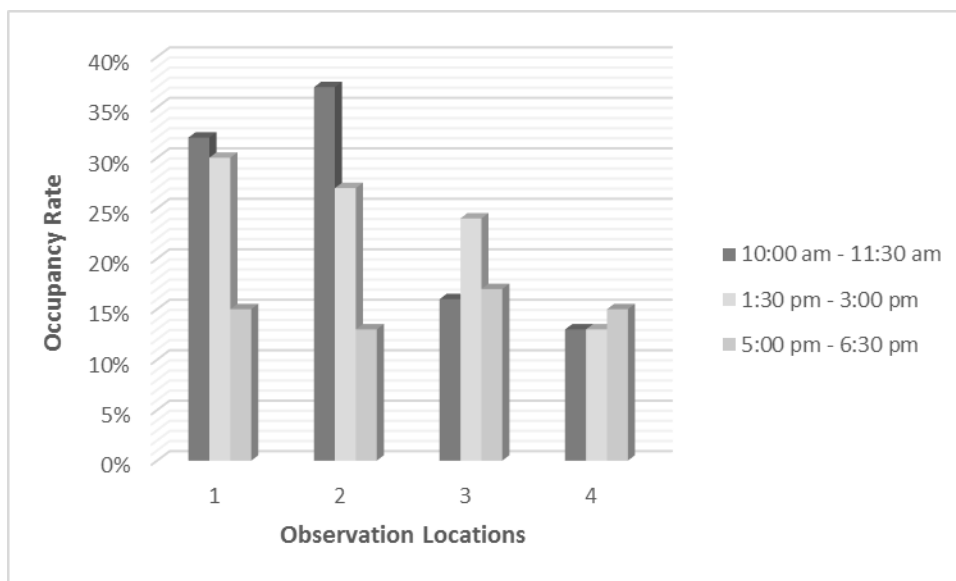
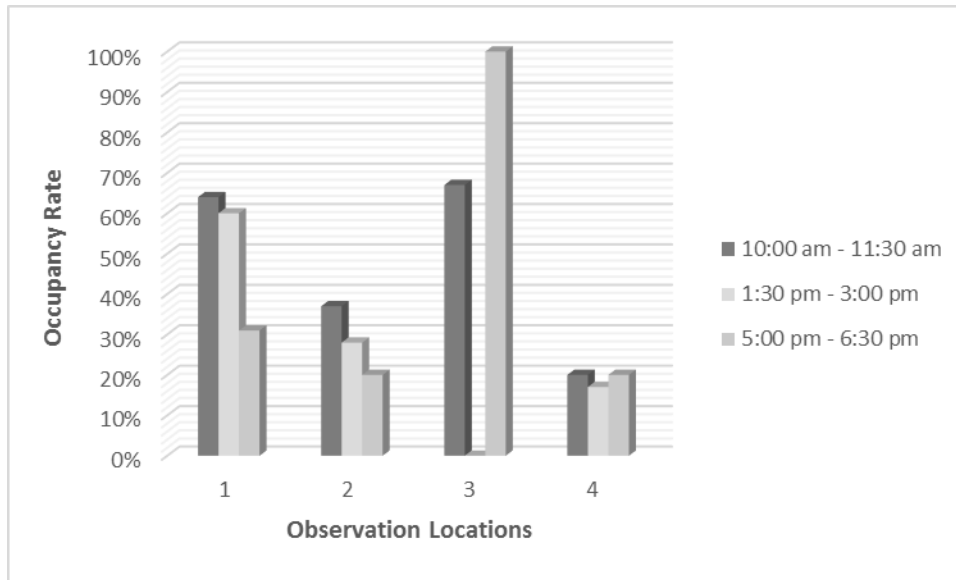


Figure 6: Weekday On-street Non-metered Parking Occupancy Rates



As previously noted, I observed each location once during the week (for three 90 minute periods, divided into three 30 minute intervals each). A majority of the metered spots were occupied for one interval or less across all locations during the week. This data was collected by recording the first three letters of license plates on parked cars in each location during each 30 minute observation interval. For example, in Figure 7, 75% of metered spots were occupied for one interval of observation, or 30 minutes, during the morning. Fewer cars remained parked in metered spots for a length of more than one 30 minute interval. This parking behavior persisted throughout the day, suggesting that users of metered parking made shorter trips to the downtown.

Non-metered spot occupancy length appeared to be the opposite, with a majority of the spots occupied for two or more 30 minute intervals across all locations. For example, in Figure 8, 19% of spots were occupied for at least two intervals of observation (60 minutes) and 76% for three intervals (90 minutes). This suggests that users of non-metered parking made longer trips to the downtown and were not required to pay for their length of stay. Non-metered parking located adjacent to residential land uses often remained occupied for all three intervals. This behaviour

indicates that users of non-metered parking make longer trips to, or were residents or employees of, the downtown. The lack of fee for use and longer periods of occupancy of these parking spots suggests that patrons will park for extended periods of time if they are not limited by a meter or other time limits.

Figure 7: Weekday On-street Metered Parking Occupancy Length

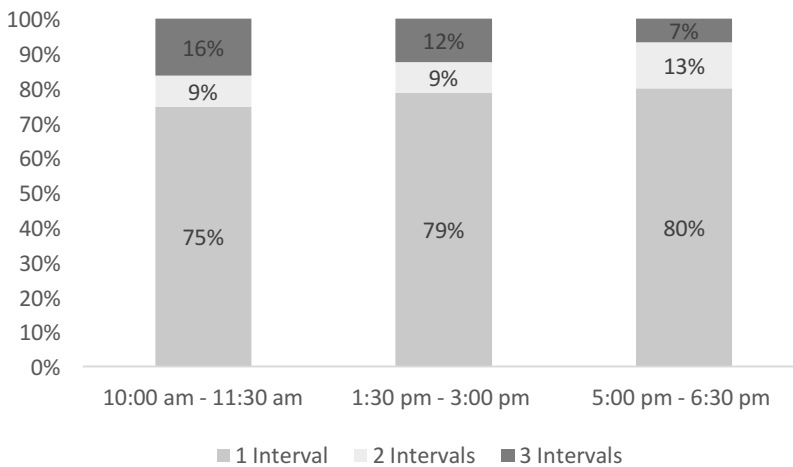
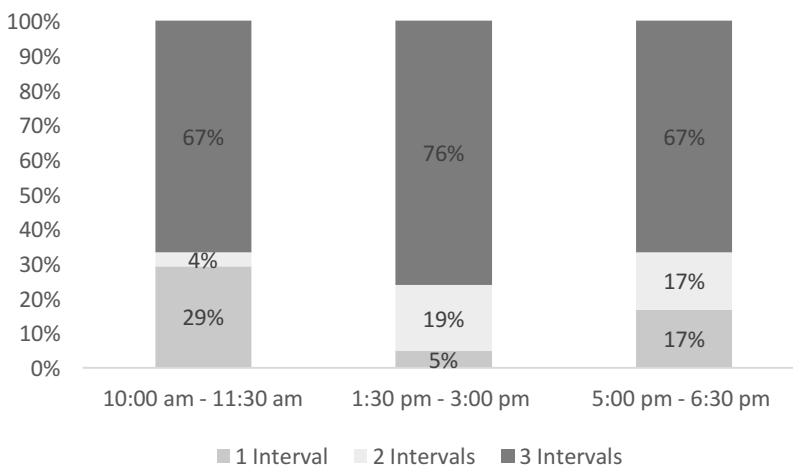


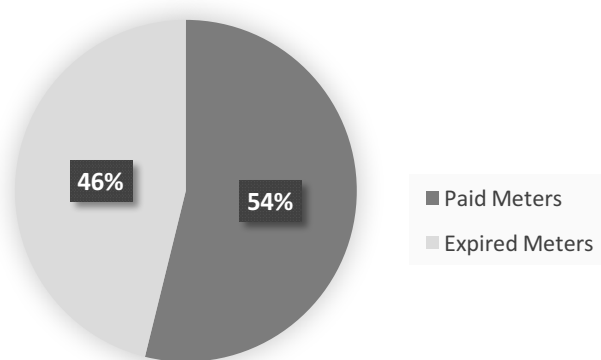
Figure 8: Weekday On-street Non-metered Parking Occupancy Length



On average, more than half of the metered spots in Locations 1, 2, 3, and 4 were paid during all weekday observation periods. Although more than half of users paid for their metered parking, as shown in Figure 9, 46% is a significant portion of the users of parking that did not pay for use, or

that let their meter expire. This may indicate that users perceive the repercussions of not paying for metered parking to be a low risk. Reasons that emerged through other research methods include not having the correct change or any change at all, only running into their destination for a short amount of time, or not knowing the meters were charging for use at that particular time. Meters in both Zones A and B do not require payment for occupancy during the weekend.

Figure 9: Weekday On-street Metered Parking Payment



4.1.2 Weekend Metered and Non-metered Parking Spot Observations

Weekend occupancy rates of metered spots are summarized by Figure 10. The highest weekend occupancy rate of metered spots was 28% during the afternoon observation in Location 3, while the lowest occupancy rate was 9%, also during the afternoon observation in Location 2.

Weekend occupancy rates of non-metered spots are summarized by Figure 11.

The highest occupancy rate of non-metered spots was 33% seen during the afternoon observation in Location 3, while the lowest occupancy rate was 0% during the morning observation of the same location, likely due to fewer business or offices being open or having reduced hours during the weekend.

Meters in both Zones A and B do not require payment on the weekend. Metered spots experienced a decrease in the average occupancy rate on the weekend, despite meters not requiring payment for occupancy. Non-metered spots also experienced a decrease in occupancy during the

weekend, however, there is no payment required for those spots regardless of the day of the week. The non-metered spots saw a slightly lower average occupancy rate than the metered spots during the weekend, likely due to the lack of open business or reduced business hours. This may be a result of the downtown being less busy compared to during the week in terms of patrons and employees, or perhaps that parking users occupied metered spots near their intended destination. The exception to this is Location 4 in which use of metered spots increased during the weekend, perhaps being a result of the meters being free and/or in disrepair, as well as being within close proximity to residential land uses.

Figure 10: Weekend On-street Metered Parking Occupancy Rates

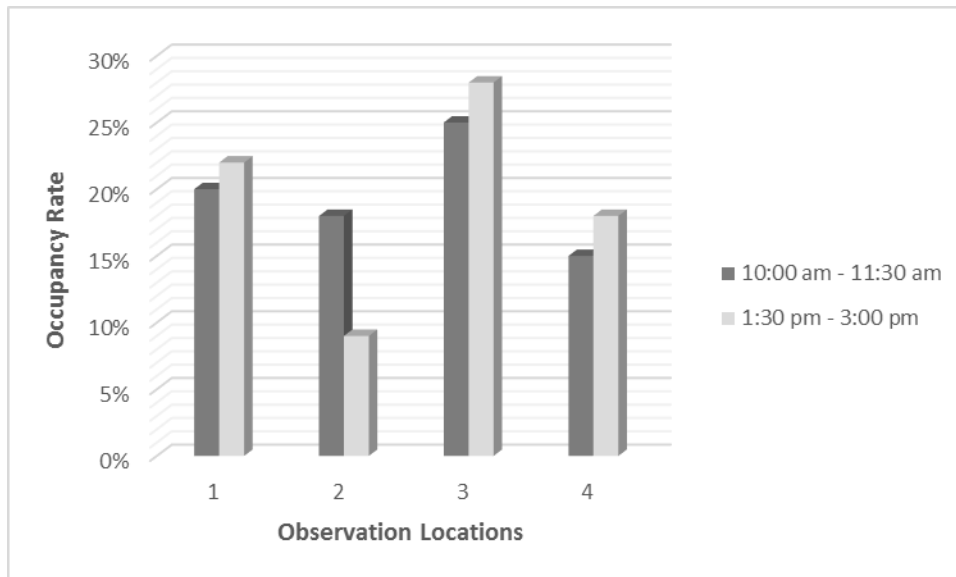
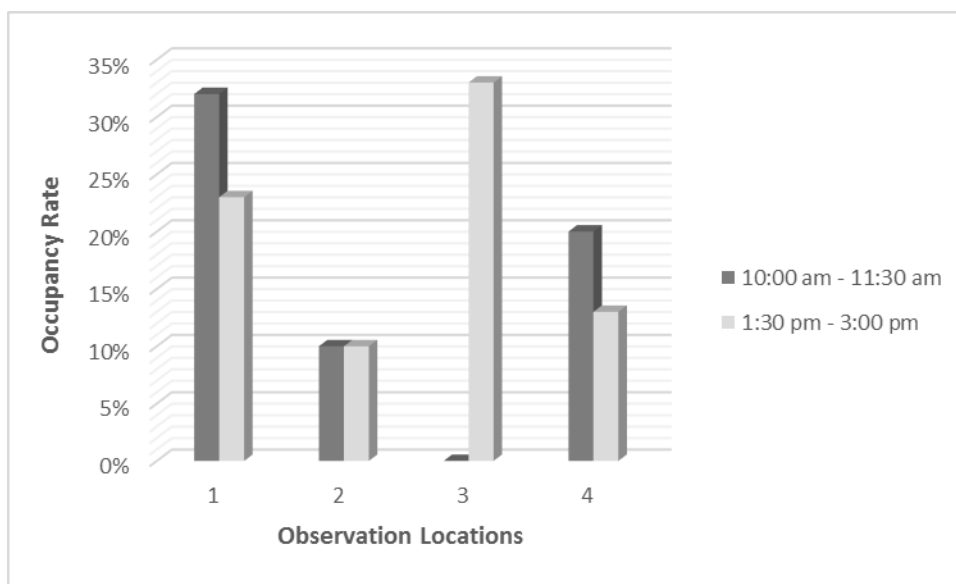


Figure 11: Weekend On-street Non-metered Parking Occupancy Rates



Much like the weekday observations, a majority of the metered spots remained occupied for one interval, or 30 minutes, across all locations during the weekend seen in Figure 12. Once again, this suggests that a majority of users of metered parking made shorter trips to the downtown. However, occupancy lengths of three intervals (90 minutes) increased slightly, likely due to the fact that meters do not require payment. It appears that despite meters being free, most patrons of the downtown still only used them for shorter times, perhaps out of habit or because of the purpose of their trip

Non-metered spot occupancy length appears to have slightly decreased (Figure 13). Despite this, a majority of the spots were occupied for two or more intervals, or 60 to 90 minutes, across all locations. This again suggests that users of non-metered parking made longer trips to, or were residents or employees of, the downtown. On-street non-metered parking adjacent to residential land uses often remained occupied for the longest periods of time.

Figure 12: Weekend On-street Metered Parking Occupancy Length

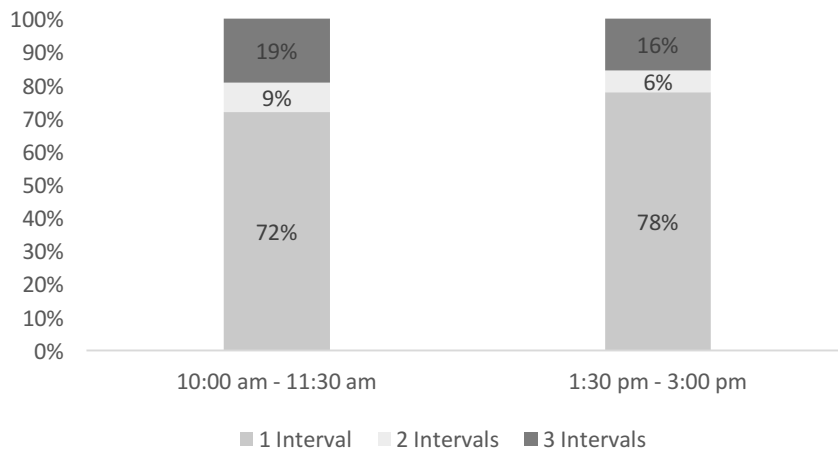
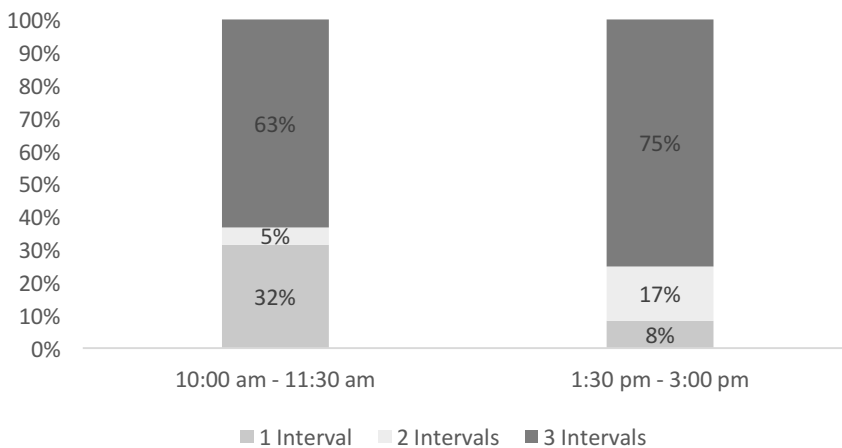


Figure 13: Weekend On-street Non-metered Parking Occupancy Length

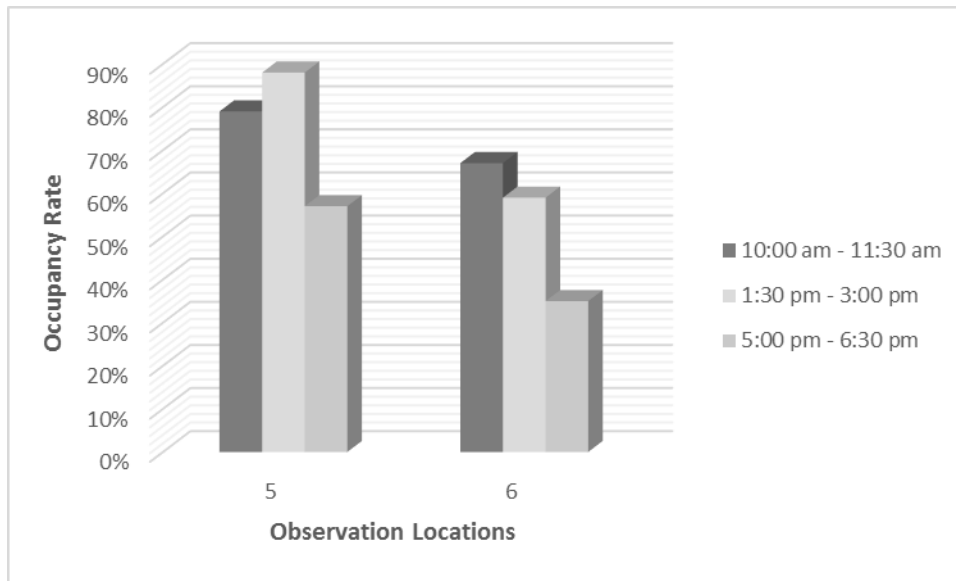


Weekday occupancy rates of free off-street parking spots are summarized on Figure 14. The highest occupancy rate of off-street parking during the week was 88% in the afternoon observation period in Location 5, whereas the lowest occupancy rate was 35% during the evening observation period in Location 6. Overall, Location 5 experienced higher occupancy rates than Location 6 during all three observation periods. Location 5 was busiest during the afternoon and Location 6 during the morning. Both locations experienced a significant drop in occupancy rates as the evening observation progressed. These percentages show that the municipally owned, free public parking

lots with unlimited parking time draw more users than on-street metered parking does in the downtown during the week. Additionally, the higher occupancy rates of Location 5 may be due to the fact that it is more centrally located and visible from high traffic streets.

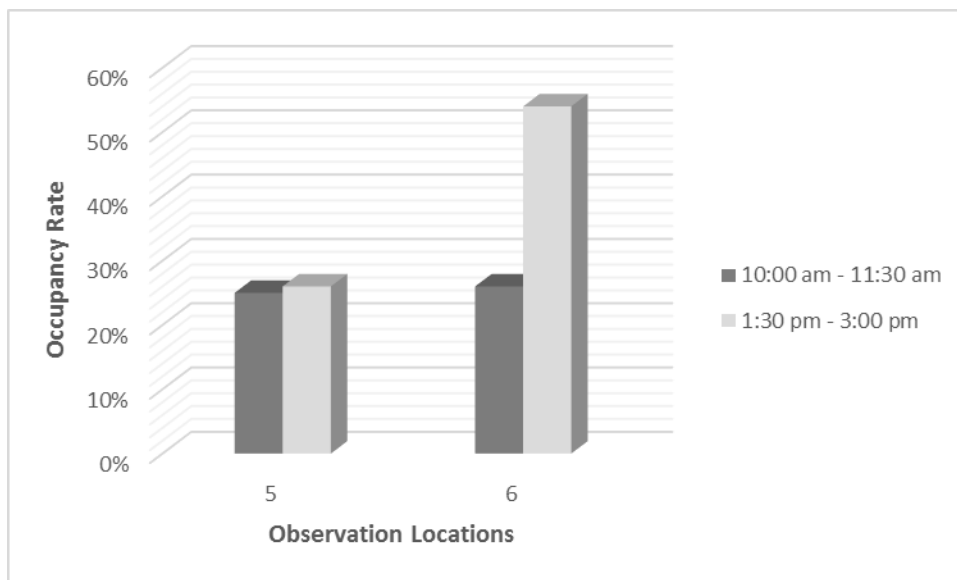
4.1.3 Weekday and Weekend Off-street Parking Spot Observations

Figure 14: Weekday Off-street Parking Occupancy Rates



Weekend occupancy rates of municipal free public off-street parking spots are summarized in Figure 15. The highest occupancy rate of off-street parking during the weekend was 54% during the afternoon observation period in Location 6, whereas the lowest occupancy rate was 25% during the morning observation period in Location 5. Overall, Location 5 experienced a stable occupancy rate during both observation periods, while the Location 6 occupancy rate more than doubled from the first to the second observation period. Overall, off-street parking experienced a lower occupancy rate during the weekend than during the week. This may be a result of the downtown being less busy compared to during the week in terms of patron and employee parking use, as both types of parking spots saw an overall decrease in occupancy. Reduced hours of business or business closure during the weekend in the downtown may contribute to this.

Figure 15: Weekend Off-street Parking Occupancy Rates



During the week, 58% of off-street parking spots were occupied for two or more intervals (60 to 90 minutes), but only during the morning and afternoon as seen in Figure 16. This indicates that longer-term parkers, like employees of the downtown, may use these lots during the week. On average, 42% of users occupied spots for 30 minutes or less. This also indicates that shorter and longer-term users of parking are close in number during the morning and afternoon time periods. During the evening observation, a majority of the occupancy lengths decreased to two or fewer intervals (30 to 60 minutes). This suggests that as the day progressed, shorter trips were being made by users of these off-street lots. This may be a result of employees, who use these parking lots during the day, leaving the downtown during the evening.

During the weekend, 61% of municipal free public off-street parking spots were occupied almost equally for two or more intervals (60 minutes or more) whereas 39% of spots were occupied for 30 minutes or less (see Figure 17). This indicates that during both the week and weekend, users of these parking lots park for longer periods of time than the users of metered parking. Additionally, as the day progressed, fewer short term trips were made to Locations 5 and 6, while longer trips

remained nearly equal.

Figure 16: Weekday Off-street Parking Occupancy Length

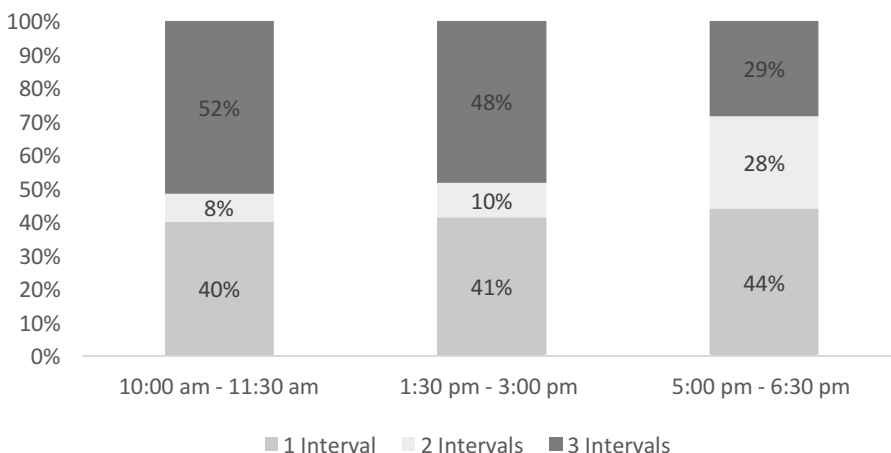
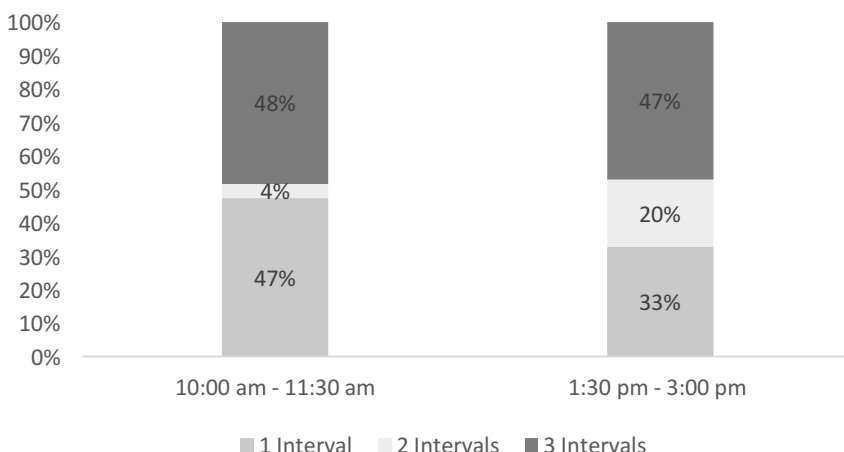


Figure 17: Weekend Off-street Parking Occupancy Length



4.1.4 Summary

Observations of on-street and off-street municipal public parking revealed some trends of use in the downtown. Users of on-street metered parking typically occupied spots for shorter periods of time, with higher rates of turnover, whereas users of on-street non-metered and off-street spots typically occupied spots for longer periods of time with lower rates of turnover. On-street non-metered spots were busier during the evening likely due to their general proximity to residential uses. If so, residential parkers did not appear to be in significant competition with patrons or

employees of the downtown for free on-street spots. This may be due to a substantial availability of free off-street parking located centrally in the downtown. Metered spots directly adjacent to off-street lots were not as busy as meters further away from these lots. All this suggests that depending on destination and willingness to walk, people prefer access to free parking with unrestricted time.

Based on parking occupancy, the downtown was busier during the morning and afternoon than during the evening, and busier during the week than the weekend, perhaps due to limited hours of business in the downtown during the weekend. Although just over 50% of the meters during observations were paid for, a significant portion went unpaid. This is a potential loss of revenue, unless these unpaid spots yielded some revenue from ticketing, however it is not certain how many of these were caught in violation.

The observed use of municipal public parking indicates that on only two occasions did any of the three types of parking exceed an occupancy of 85%. This number is specified by Shoup (2011) as the practical parking occupancy rate, however this is a result of studies conducted in larger metropolitan areas. While on-street non-metered spots and off-street parking lots were busier, they were still not at capacity. The majority of on-street metered spots were also well below capacity. Most of the occupancy rates fell well below the practical percentage, indicating that there may be an imbalance of parking supply relative to demand.

4.2 Results of Intercept Surveys

I conducted intercept surveys in two areas of Portage la Prairie, within the downtown, and the big box commercial area (see Figure 2). A total of 36 intercept surveys were completed by participants between mid-July and early August. I surveyed each area once during the week and weekend between the hours of 11:30 am – 1:00 pm, and 3:00 pm – 4:30 pm. For both a summary and a breakdown of survey responses by day and area, see Appendix 8.6

Generally, it was more difficult to locate willing survey participants in the downtown, as there

were fewer people present compared to the big box commercial area. Table 2 shows the distribution of willing and non-willing intercept survey participants by day and area. The downtown may draw patrons who arrive through other means of transportation such as walking or cycling. In the big box commercial area, there was a concentration of people in the parking lots and at store entrances. Eighteen participants were successfully surveyed in each area, and the amount of refusals received in each area differed marginally. The total response rate was 62%. The downtown had a slightly higher response rate (64%), compared to the big box commercial area (60%).

Table 2: Distribution of Intercept Survey

Responses	Downtown		Big Box Commercial Area		Total
	Weekday	Weekend	Weekday	Weekend	
Yes	7	11	10	8	36
No	4	6	5	7	22
Total	11	17	15	15	58

4.2.1 Trip Purpose

The first four questions of the intercept survey focused on trip purpose. I first asked participants what the purpose of their trip was. This was a close-ended question and participants were allowed to choose more than one option depending on the nature of their trip – data for weekday and weekend trip purposes was merged for this table.

The following paragraph discusses the data presented in Table 3. More than half of responses (55%) indicated that the trip purpose to the downtown was shopping, with the remaining 39% and 6% of responses indicating “personal business” and “employee” respectively. I recorded the “personal business” purposes which included going to the bank, a restaurant, the library, a medical appointment, the post office, and the senior centre. Only one participant stated they were an employee, and during the weekend there were no employee participants. Table 3 shows that 100% of participants within the big box commercial area responded that shopping was the purpose of their trip. No employees participated in this survey area.

Table 3: Trip Purpose

Response	Downtown		Big Box Commercial Area	
Shopping	10	55%	18	100%
Employee	1	6%	0	0%
Personal Business	7	39%	0	0%
Total	18	100%	18	100%

It is evident that there was a variation in trip purposes in both survey areas. The big box commercial area appears to primarily draw shoppers, as the area is comprised predominantly of retail uses, with some restaurants and a gas station. The downtown appears to draw shoppers, as well as people running errands or participating in social activities – with some variation between the weekday and weekend as compared to the big box commercial area. It can be presumed that there were likely more employees working in both survey areas, but few were present at the time of surveying or were not available to stop and participate in the survey.

I then asked participants “if shopping, why do you shop here?” This was an open-ended question and each response can be seen in Table 4 and Table 5, divided by survey area. Convenience was the most common response in both areas. What is convenient for one participant may not be convenient for another. Perhaps one participant lives closer to the downtown or another participant finds the amenities at the big box commercial area to meet more of their needs. Free parking was mentioned as a reason for choosing to shop at the big box commercial area, but no mention of parking was made in the downtown for this question. Specific shops appear to draw participants to the downtown, whereas reasons related to affordability or the variety of retail choices appear to draw participants to the big box commercial area.

Table 4: Reasons for Shopping in the Downtown

Response	Downtown	
	# of Responses	% of Responses
Retail	5	42%
Convenience	4	33%
Proximity	1	8%
Bank	1	8%
Post Office	1	8%
Total	12	100%

Table 5: Reasons for Shopping in the Big Box Commercial Area

Response	Big Box Commercial Area	
	# of Responses	% of Responses
Convenience	4	21%
Retail	4	21%
Affordability	3	16%
Preference	3	16%
Proximity	3	16%
Free Parking	2	11%
Total	19	100%

4.2.2 Trip Details

I asked the participants of each survey area how long they searched for a parking spot. This question was open-ended, but participants were only permitted to provide one response. There was little variation in the responses seen in

Table 6 and Table 7. In the downtown, 88% (during the week) and 90% (during the weekend) of participants did not have to search for a spot. The remaining 12% and 10% of participants (during the week and weekend respectively) responded searching for less than one minute for a parking spot. In the big box commercial area, 88% (during the week) and 100% (during the weekend) of participants did not have to search for a parking spot. The remaining 12% of participants during the week cited being unsure of how long they searched for a parking spot.

Table 6: How Long Participants Searched for a Parking Spot (Downtown)

Responses	Downtown			
	# of Weekday Responses	% of Weekday Responses	# of Weekend Responses	% of Weekend Responses
No Searching	7	88%	9	90%
1 Minute	1	12%	1	10%
Total	8	100%	10	100%

Table 7: How Long Participants Searched for a Parking Spot (Big Box Commercial Area)

Responses	Big Box Commercial Area			
	# of Weekday Responses	% of Weekday Responses	# of Weekend Responses	% of Weekend Responses
No Searching	7	88%	10	100%
Unsure	1	12%	0	0%
Total	8	100%	10	100%

I asked participants in each survey area how long they estimated they had been parked, or would remain parked, in their parking spot (see Table 8 and Table 9). This question was open-ended, but participants were only permitted to provide one response. During the week, a majority of participants in the downtown (63%) reported that they occupied parking spots for 5 to 30 minutes. Occupancy length differed on the weekend, with a majority of participants (40%) reporting occupying their parking spot for less than five minutes.

Thirty eight percent (38%) of participants reported they occupied spots for 30 minutes to one hour during the week in the big box commercial area. On the weekend, 88% of participants reported occupying spots for 5 to 30 minutes. While the responses for each survey area differ slightly, it appears that participants of the downtown reported occupying spots for shorter periods of time on both the weekday and weekend compared to participants in the big box commercial area.

The only employee survey participant responded that they estimated they would be parked for eight hours over the course of their shift in the downtown. Although only one employee

participated in the survey, it can be presumed that there were likely more employees present in both survey areas, contributing to the long-term occupancy of parking spots.

Table 8: Estimated Length of Parking Spot Occupancy (Downtown)

Responses	Downtown			
	# of Weekday Responses	% of Weekday Responses	# of Weekend Responses	% of Weekend Responses
less than 5 minutes	1	13%	4	40%
5 - 30 minutes	5	63%	2	20%
30 minutes - 1 hour	1	13%	1	10%
1 - 2 hours	1	13%	2	20%
8 hours	0	0%	1	10%
Total	8	100%	10	100%

Table 9: Estimated Length of Parking Spot Occupancy (Big Box Commercial Area)

Responses	Big Box Commercial Area			
	# of Weekday Responses	% of Weekday Responses	# of Weekend Responses	% of Weekend Responses
less than 5 minutes	1	13%	1	13%
5 - 30 minutes	2	25%	7	88%
30 minutes - 1 hour	3	38%	0	0%
1 - 2 hours	2	25%	0	0%
8 hours	0	0%	0	0%
Total	8	100%	8	100%

4.2.3 Trip Frequency

I asked participants how often they made trips to the survey areas during both the week and weekend. This was a close-ended question and participants were only able to give one response from the provided list (see Table 10 and Table 11). During the week, most downtown participants responded that they visited daily (39%) or 2-3 times per week (44%). Whereas, the responses for weekday trip frequency was more varied in the big box commercial area with participants visiting once a week (28%) and 2-3 times per week (22%).

During the weekend, 39% of participants cited that they visited the downtown once per weekend, with daily and 2-3 weekends per month responses with in second place each with 22%.

Thirty-nine percent (39%) of participants cited visiting the big box commercial area 2-3 weekends per month, followed by daily, one weekend per month, and never each with 17%. I asked the participant who responded as “never” making trips to the downtown to explain their answer. They responded that they were from out of town and would likely not return. Trip frequency varied between both survey sites, with the downtown receiving more frequent participant trips during the week and weekend than the big box commercial area.

Table 10: Frequency of Trips Made During the Week

Responses	Downtown		Big Box Commercial Area	
	# of Responses	% of Responses	# of Responses	% of Responses
Daily	7	39%	3	17%
2-3 times per week	8	43%	4	22%
Once per week	1	6%	5	28%
2-3 times per month	1	6%	2	11%
Once per month	0	0%	4	22%
Never	1	6%	0	0%
Total	18	100%	18	100%

Table 11: Frequency of Trips Made During the Weekend

Responses	Downtown		Big Box Commercial Area	
	# of Responses	% of Responses	# of Responses	% of Responses
Daily	4	22%	3	17%
Once per weekend	7	39%	2	11%
2-3 times per month	4	22%	7	39%
One weekend per month	2	11%	3	17%
Never	1	6%	3	17%
Total	18	100%	18	100%

4.2.4 Pricing Opinions

The last question I asked survey participants of the downtown was whether or not the price of parking influenced where they park. This was a close-ended question and participants were asked to provide only one response and explain their answer (see Table 12). Only downtown survey

participants were asked this question as users of big box commercial area parking do not have to pay, and therefore would not yield data useful for comparison. In the downtown, 50% of participants responded that the price of parking influenced where they park.

Table 12: Likelihood of Parking Pricing Influencing Where Participants Choose to Park

Responses	Downtown	
	# of Responses	% of Responses
Yes	9	50%
Sometimes	6	33%
No	3	17%
Total	18	100%

When asked to explain their answers, participants provided a wide range of reasons as to how pricing influenced their parking habits. This was an open-ended question and participants were able to provide more than one response. I grouped answers in one of two categories, “will not pay for parking” and “will pay for parking,” outlined in Table 13 below.

Table 13: Downtown Participant Willingness to Pay for Parking

Response	Downtown	
	# of Responses	% of Responses
Will not pay for parking	12	67%
Will pay for parking	6	33%
Total	18	100%

Of the reasons cited as influences on their parking behaviour, most responses (67%) revealed that participants preferred free parking and will not pay for it, given the option, and will use free parking spaces. One participant commented that they often parked in off-street lots to avoid paying for metered parking, while another said that they “search for free parking rather than paying for it.” Three responses revealed issues of inconvenience related to user experience of parking, with participants commenting that it is “inconvenient to plug a meter.” Another participant indicated that they did not consider the metered parking to be “user friendly” and would rather park for free in an

off-street lot. Three responses also showed that participants will avoid metered parking because they do not have the accurate change accepted by meters in the downtown. Two responses also revealed that metered parking ticketing influenced their parking choices for varied reasons. One participant commented that they avoided metered parking so as to avoid potentially receiving a more expensive parking ticket. Lastly, two responses indicated that meters are limiting in terms of the time received by payment (i.e. \$0.25 for 15 minutes), resulting in participants preferring not only free parking, but also parking without time restrictions.

While the assumption can be made that people prefer free parking over paid, 33% of responses indicated that participants did not mind paying for parking under certain circumstances, or that the price of parking was not a deterrent of use. Two responses indicated that participants would pay for metered parking if the trip was short, while another indicated that they would pay for parking if a meter in front of their destination was available. Three participant responses indicated that they perceived paid parking in the downtown to be affordable, but one also stated that “frequent trips” could become expensive and may dissuade them from using metered parking all of the time.

4.2.5 Summary

The downtown appears to draw people for a wider range of reasons, compared to the big box commercial area. Shopping appears to draw people to the big box commercial area, while both shopping and non-shopping related destinations draw people to the downtown. Participants of the downtown occupied parking spots for shorter periods of time on both the weekday and weekend compared to participants in the big box commercial area. Lastly, the downtown appears to receive more frequent participant trips during the week and weekend than the big box commercial area. As such, this data indicates that there were frequent and shorter occupancy periods by participants in the downtown for a variety of reasons, while fewer and longer occupancy periods by participants in

the big box commercial area specifically for shopping. The types of land uses appear to draw participants to drive and park at either location for different reasons.

For downtown participants, the price of parking influenced where they chose to park. In some cases, their parking choices were destination dependent, but many of them preferred free parking and would search for it. However, some participants also indicated that short-term parking at meters was affordable, and they were willing to pay for use, if they did not have to park at a meter too frequently, and if they did not receive a parking ticket. These results illustrate how the perceptions of parking in the downtown varied from participant to participant; what one participant considered affordable or convenient, another may not. These results also help point to reasons as to where people in Portage la Prairie are shopping or running errands, and how they are parking. The downtown and big box commercial area are in competition with each other in terms of attracting patrons. However, each area offers different destinations, amenities and parking options, thus resulting in different patronage and parking use behaviours.

Although only one employee participated in the survey, it can be presumed that there were more employees present in both survey areas at the time of surveying, contributing to longer-term occupancy of parking spots. The parking observations show that there is a considerable number of long-term parkers in the downtown and the focus group/semi-structured interview results in Section 4.3 indicate that these long-term parkers are often employees.

4.3 Results of Focus Group/Semi-structured Interviews

I conducted a focus group with three participants and two semi-structured interviews with members of the downtown Portage la Prairie business community. For details and context regarding participants (see Table 14 and Figure 18). All participants work for, or own, a business that fronts on to a metered street and experiences peaks in business at varying times of the day. Two establishments provide patrons with access to free, off-street private lots. Members of the

downtown business community were chosen for their proximity to, as well as their firsthand experience and knowledge of, municipal public parking in the downtown. Several of the participant's establishments have been in operation for multiple decades, as per Table 14. As such, the participants were able to provide detailed data and, in some cases, historical context in terms of parking in the downtown.

Figure 18: Focus Group/Semi-structured Interview Participant Locations



I developed twelve questions to guide the conversation through four general topics including municipal public parking patterns near each participant's establishment; supply and demand of municipal public parking; municipal public parking policy; and price of municipal public parking (see Appendix 8.7 for the focus group/semi-structured interviews schedule). The conversation deviated from the general topics, but provided valuable data that was included as part of these results. The discussions were transcribed and grouped by commonly occurring themes. These themes related to municipal public parking and include: supply and demand; peak demand and turnover; the influence

of free, public off-street parking; long-term parkers; payment of use; enforcement of by-laws; and seasonal factors. The transcriptions have been directly quoted and paraphrased to support these emerging themes.

Table 14: Participant Information

Participant	Business Type	Years in Operation ¹	Nearest Intersection	Busiest Time(s) of Day ²	Front onto Metered Street	Access to Free and Private Off-street Lot
1	Retail	34	Royal Road & Saskatchewan Avenue	10:00 AM - 1:00 PM	Yes	Yes
2	Retail	15	3 rd Street & Saskatchewan Avenue	8:00 AM - 11:00 AM	Yes	No
3	Bank	Approx. 40	Royal Road & Saskatchewan Avenue	12:00 PM - 1:00 PM	Yes	Yes
4	Social Service Organization	27	3 rd Street & Saskatchewan Avenue	8:30 AM	Yes	No
5	Retail	65	Royal Road & Saskatchewan Avenue	12:00 PM - 2:00 PM 4:30 PM - 5:30 PM	Yes	No

1. Total number of years the business has been in operation, not limited to the number of years each participant has been working at their respective business.
2. Busiest time(s) of day reported by participant.

4.3.1 Supply and Demand of Public Parking

Throughout the focus group and interview conversations, participants discussed issues relating to the supply and demand of public parking in downtown Portage la Prairie. While participants did not study parking patterns near their establishments, they had observed parking use over time. Participants 1, 2, 3, and 4 noted that there is generally more than enough public on- and off-street parking available downtown for their patrons, with spots left to spare. As per Table 14, P1 and P3 each have access to their own free, private off-street lot, as well as the meters that line the street in front of their establishments. Unlike P3, P1 is not adjacent to a public off-street lot, but is within a five minute, or 400 meter radius, walking distance (Sapawi, Said, & Mohamad, 2013, p. 514). Both P1 and P3 perceived the supply of parking as sufficient. P2 and P4 also perceived the supply of parking as sufficient, despite not having access to private lots. P2 is adjacent to metered parking and a public off-street lot, although access to the off-street lot is not direct as they do not have a rear entrance. P4 is adjacent to metered parking, and public off-street lots are within walking distance.

Only P5 stated that more parking is needed downtown. They do not have access to a private lot, but have direct access from a rear entrance to a public off-street lot, as well as metered spots in front. Their perception of a lack of parking was related to downtown employees who occupy spaces for longer periods of time. P1, P2, and P3 echoed the concern about long-term parkers; the theme of longer-term parkers is explored further in Section 4.3.4.

As indicated by the participants, metered parking use and occupancy varied by establishment. Participants 1, 2, and 3 cited regular short-term occupancy of metered spots by users outside of their establishments, particularly during the week. P1 also noted that metered parking spots are free of charge on weekends and that “most businesses are open and there seems to be quite a few parking spaces available.” P2 felt that the availability of parking spots influenced their business, and suggested that if patrons could not easily find parking outside of their establishment, they may keep going rather than searching for a spot. If patrons do in fact keep going rather than finding parking elsewhere, this may impact the total number of patrons that visit establishments in the downtown. However, four out of five participants agreed that parking options in the downtown were generally plentiful, with concerns noted by P1 and P3 in relation to peak demand during multiple ongoing events.

4.3.2 Peak Demand and Turnover

P3 stated that the supply of parking is not adequate for instances in which there is a peak in parking use downtown during multiple ongoing events. P1 echoed P3, commenting that “overall, there is lots of parking downtown, but it isn’t sufficient when there are lots of functions,” such as events at the seniors’ centre, shows at the Glesby Centre, church services, etc. The demand for public parking in the downtown increases when multiple events or activities overlap, and the supply cannot accommodate the influx of parkers. This includes public on- and off-street parking. For the

establishments that have access to an off-street private parking lot (see Table 14) the decrease in available public parking spots is mitigated for their patrons.

Each participant also noted their busy times, indicating peaks in parking meter use outside of their establishments (see Table 14). P5 noted that typical peaks in metered parking use occurred during lunch between 12:00 pm and 2:00 pm, as well as between 4:30 pm and 5:30 pm before closing. During these busy times the metered spots in front were occupied, despite having rear access to the public off-street lot. When their business was not experiencing a peak in patron activity, the metered spots were often left empty, or only occupied for short periods of time.

P4 noted that they are located near P1. When P1's business releases new inventory on certain days, it creates a peak in demand for parking at the meters along Saskatchewan Avenue, including in front of P4's location, despite P1 having access to a private off-street parking lot. However, P1 and P4 noted regular turnover of these metered spots, indicating that this peak parking demand is caused by short-term parkers. At times when the downtown is not experiencing a peak in parking demand as a result of multiple events, the general consensus was that people can often find metered or off-street spots with ease. P4 stated, based on what they can see from the window of their establishment, "there's a good amount of public parking in the downtown area with Heritage Square" and that people can always find a spot on Saskatchewan Avenue. Additionally, the peak time experienced at each establishment may not correspond directly to the number of occupied parking spots since not all patrons arrive by car, as cited by P1.

4.3.3 The Influence of Free, Public Off-street Parking

P1 estimated that only one third of their patrons use the front entrance of the establishment, with the majority using the entrance that backs onto the private parking lot. P5 also noted that "a greater portion" of patrons enter the business through the back door than the front, likely because the establishment has rear access to a free, public off-street lot. This suggests that a majority of P1

and P5's customers prefer to park for free in off-street lots rather than in paid metered spots. Conversely, P2 said that despite their best efforts, they cannot convince patrons to use the public off-street lot behind their establishment because parking in the front is more convenient. Their establishment backs onto the lot, but does not have rear access into the building. That being said, P1 indicated that not all of their patrons arrive by car, which may be true for other establishments in the area. As such, the door that patrons enter an establishment may not be an accurate indicator of where they parked.

The supply of parking provided by public off-street lots, like the Heritage Square or the Glesby Centre lots, is recognized as both significant and crucial to the downtown as a whole, and to each establishment in particular. P2 stated that the free parking is "good for business" in that it encourages people to shop downtown when parking spots are convenient to find. However, four out of five participants cited criticisms relating to public off-street lots in terms of use by long-term parkers. Long-term parkers occupy spots in these lots for long periods of time and participants were concerned that this displaced parking for shorter-term patron parkers of the downtown. Despite these concerns, P1 and P2 did not necessarily think that changing how parking was managed in these lots would result in positive outcomes. P2 worried that charging for parking in public off-street lots would "destroy their business" by negatively influencing the number of patrons that shopped downtown.

P5 discussed a private off-street lot available to the public that is located just outside the boundaries of this practicum's study area. According to P5, this lot had been free to users, and when it began charging \$2.00 per day it was no longer used. This behaviour indicates a preference for free parking in the downtown area. If there is ample free parking to begin with, charging for some lots may only displace users to other parking.

P2 noted that “we want to encourage people to park [at the meters],” making the downtown look busier as a result. While free and publicly available off-street parking lots are perceived as important to many of the participants, so is encouraging patrons to use the metered parking. The nature of metered parking encourages turnover or short-term parking with fees and time restriction. The absence of fees and time restrictions in downtown off-street lots do not encourage turnover and may also direct short-term users away from metered spots. The idea of removing meters from the downtown was discussed, as a way to encourage patrons to park on the street, but participants were unsure of what that might achieve. This could result in longer-term parkers using spots at the front of an establishment that should be reserved for patrons. P2 suggested that the City could remove the meters and impose time maximums, and enforce this by chalking tires. P3 agreed that this could be an option, but questioned the feasibility in terms of costs and lost revenue. They both stated that they would not like to see a potential solution turned down due to it being perceived by the City as too costly.

4.3.4 Long-term Parkers

Participants 1, 2, 3, and 5 had concerns about the effect that employees and residential tenants of the downtown and their parking habits have on the supply of parking during regular business hours. P5 agreed that Heritage Square is located in a “prime spot,” based on its central location in the downtown, but expressed concerns that it is shared by many users – meaning that a range of users, including patrons, employees, and residential tenants. P5 noted that the latter two users of parking remained parked in Heritage Square for long periods of time. These long-term parkers reduce the supply of available parking for other users for extended periods of time. P2 argued that long-term parkers occupy parking spots out of necessity. P5 did not disagree that employees and tenants need somewhere to park, and stated that spots used by long-term parkers was parking they would rather see being used by their patrons. While it is true that employees and

tenants do require parking spots, long-term use of spots by these groups can displace parking for patrons.

Aside from loading spaces, long-term parking is not restricted in the downtown. The City does not enforce time limits of their municipal off-street public parking lots. While metered parking spots enforce time restrictions for paid use (between 9:00 am and 6:00 pm), there are no restrictions regarding how many times a user may reload the meter and continue occupying the same spot. There are no by-laws requiring parkers to move to a new location after a certain time period. However, all participants generally noted that it is most often short-term parkers using metered spots. These responses indicate that price influences where users of parking choose to park. When metered parking becomes free, the same long-term parking behaviour exists.

Metered parking spots are free during the evening and on weekends, as well as during the peak of the Christmas shopping season (dates vary from year to year). P3 recalled seeing cars parked downtown for extended periods of time during free Christmas parking, even cars left parked overnight. P5 noted that long-term parkers may become snowed or ploughed in at metered spots as a result. They mentioned that this was a concern to the business community, as these spots are meant for patrons during regular business hours. P3 wondered who would be responsible for regulating this. Current traffic by-laws do not stringently regulate public parking time-restrictions. Without such regulation, it is unlikely that the concerns stemming from long-term parking behaviour will be mitigated.

Another user of parking that contributes to long-term use of spots are those with disability tags. P1 mentioned that it is not uncommon to see parkers with a disability tag to remain parked at a meter for longer periods of time as well. Cars marked with disability tags are not required to pay for parking in the downtown, and are not restricted to time limits. This user group, unlike employees and tenants, was not cited as a significant concern.

Four of five participants agreed that the issue of long-term parkers in free, public off-street lots taking up valuable patron parking should be solved, but were unsure of how it could be done. The idea of charging for parking at off-street public lots was not popular, with P2 citing that it would “destroy the downtown area” if these lots started charging, or that it might push long-term parkers on-street in residential areas. P3 suggested installing meters along the western portion of Heritage Square to “encourage employees of downtown not to park in the spots adjacent to [the street]” leaving them available for patrons, while still leaving parking options for those who needed it for longer periods of time.

4.3.5 Parking Payment

P3 estimated that half of the people who use parking in the downtown do not plug a meter for parking use, and that another quarter of people use the last person’s time already plugged in the meter. P5 cited that patrons who park at the meters in front of their establishment tend to pay the minimum amount of \$0.25, thus only receiving the minimum time of 15 minutes. This means that patrons “get in and get out” and that stopping to browse or chat with someone might result in the meter running out of time. This may impact businesses by reducing the amount of time that patrons shop or browse in their establishment. P1, P2, and P3 noted that users of metered parking are often of the opinion that it is too expensive and will not pay for more than the minimum time. P1 stated that it is “tough to do business in fifteen minutes,” to which P2 agreed. P5 suggested that patrons perceive the value of metered parking to be low, and that they feel “restricted” by the time allotments relative to what they are paying for. It was suggested by P2 and P5 that the amount of time that \$0.25 allots for parking at metered spots be increased. This could allow patrons to shop for longer periods of time without the risk of the meter expiring. P5 suggested this might result in “people thinking they’re getting good value out of their parking” and fewer people trying to “cheat a meter.”

Historically, some businesses in the downtown provided a dish at the register containing coins that their patrons could use to pay for metered parking. They explained that only one downtown business currently offers this option, and that it could become “tricky” to monitor if people abuse the courtesy. This concern is what stops P5 from offering a dish of coins to their patrons. There is risk involved in offering the courtesy of paying for patron parking. Although parking might be paid for, the courtesy could be taken advantage of by non-patrons or patrons with multiple destinations in the downtown. The resulting costs would be borne by the establishment.

The pricing and type of meter in both Zones A and B (see Figure 3) were brought up as being “archaic” in terms of how they accept payment. P3 stated that “people are used to ... machines [accepting] cards” in larger urban centres, and that “people are less inclined to have cash on them” in order to pay for the current meters in either Zone. In some cases, as noted by P2, patrons will try to get away with not paying while parked at a meter altogether. P3 recommended replacing them with machines that can accept forms of payment other than coins, such as credit cards. If the meters do not accept multiple forms of payment, this can exclude users or potential users, or encourage users to risk parking without payment if they do not have the correct method of payment. Additionally, some users of parking may choose to “cheat the meter” as P5 describes it, risking the ticket. The risk of not paying for parking may be perceived as low by users who choose not to pay. This may relate to inconsistent enforcement of expired meters and ticketing.

4.3.6 Enforcement of Public Parking By-laws

Participants discussed issues relating to the enforcement of public parking by-laws in downtown Portage la Prairie. Opinions regarding the consistency of enforcement varied, and interestingly, trends in enforcement appear to have evolved over the years. P4 and P5 both were of the opinion that the enforcement of metered parking was strict. P2 echoed this opinion, commenting that the parking enforcement officers are “not lenient;” once a ticket is started, it must

be completed. While enforcement may be strict, it may also be inconsistent at times. Without consistent enforcement, users of paid parking may be inclined to avoid payment, or use spots for prolonged amounts or time if they perceive the risk to be low. P3 was adamant that while enforcement of meters needs to be consistent, it also needs to be friendlier than it currently is. None of the participants commented on the behaviour of parking enforcement officers as being rude or aggressive.

P2 and P5 commented that historically, parking enforcement and ticketing used to be less strict. They explained that prior to issuing a ticket, parking enforcement officers would stop into local establishments and ask if any of the patrons owned a specific vehicle parked at an expired meter. P5 admitted that there should not necessarily be special treatment in terms of who is ticketed, but stated that taking the extra step to check before a ticket is issued is how “you differ a small town from a big city ... not just making people a number.” P3 and P5 were both curious to know the revenue that the City receives on issuing public parking tickets. Returning to the theme of small town friendliness, they would prefer to see more flexibility in issuing parking tickets, unless ticketing is a significant source of revenue for the City. A lack of transparency in terms of where parking related revenues are spent may contribute the negative perception of parking enforcement downtown.

4.3.7 Seasonal Factors

How seasonal factors influence public parking in downtown Portage la Prairie was a common theme that emerged from the discussions. Participants noticed a change in both the demand for public parking and in the behaviour of parkers based on the season, as Portage la Prairie is a winter city that experiences periods of inclement weather. P4 noted that weather influences where people park, stating that a majority of their patrons often park in Heritage Square and walk to

the establishment if it is not cold. P4 noted users of metered parking prefer the convenience of being close to their destination and are willing to pay for it during the winter.

Being that Portage la Prairie experiences significant snowfalls during the winter, the accessibility of parking, especially at metered spots, can become compromised. While P1 and P3 were critical of the accumulation of snow on sidewalks, they understood that snow clearing efforts, made by the Municipal and Provincial authorities, may experience some challenges. This is especially true if multiple weather events occur over a short amount of time. P5 commended the City for their consistent efforts in snow clearing. P4 noted that after snow clearing, piles of snow accumulate adjacent to the sidewalk, acting as a barrier to some. P1 cited large snow piles as a safety issue for people in the downtown to overcome. These snow piles can “ruin parking [at meters] during the winter.” Additionally, P1 noted that people experiencing mobility issues “have the added challenge in winter” being that they prefer “to use the [metered spots]” which are closer to front entrances.

Sidewalk clearing is related to parking being that motorists begin and end each trip as a pedestrian. Compacted snow and ice left to accumulate on sidewalks can be a hazard to all pedestrians, not just those experiencing mobility issues. During the winter, the City requires, by by-law, that sidewalk clearing be the responsibility of the building owner. Despite this, some sidewalks in the downtown remain un-cleared, as noted by P1. In some cases, the un-cleared sidewalks are in front of vacant lots. If the accessibility and safe use of parking is reduced, it may displace parkers to other, less convenient parking options, or prevent them from going to the downtown altogether. This may have an impact on downtown businesses and parking fee revenues. In terms of infrastructure that could potentially improve the safety and accessibility of parking during the winter, it was suggested by P5 that the City could invest in equipment to clear sidewalks, much like larger cities do. This could be an alternative to leaving the responsibility of sidewalk clearing to business owners.

4.3.8 Summary

Many themes emerged from the discussions at the focus group and semi-structured interviews. There were differing opinions and experiences unique to each participant, but many were able to agree on what some of the major issues are, in terms of municipal parking in downtown Portage la Prairie. Free, public off-street lots were often noted as crucial to downtown businesses due to its supply of parking, revealing the importance of these lots. Comments regarding the usually abundant supply of available metered parking spots in front of establishments were reflected in the data recorded during parking observations in Section 4.1. However, a peak in parking demand due to special events in the downtown, as mentioned by participants, was not observed during data collection. When not experiencing a peak in parking demand during regular business hours, metered spots may either be empty or occupied by short-term users, and public off-street lots are generally busier, being occupied by short-term and predominantly long-term parkers.

An important emerging theme, not initially included in the schedule of questions, was Portage la Prairie being a winter city and how weather influences parking use and pedestrianism. The accessibility of parking spots during the winter, especially on-street, can be hindered after a snowfall or snow clearing. Although the study area was not observed during the winter as part of this research, feedback received on the winter context is important information to be included in the analysis.

There were also some contradictions that emerged from the data. Encouraging more patrons to use metered parking to create a busier looking downtown was seen as a positive, but so was ensuring that each patron could easily find a parking spot. Participants were of the perception that there is only enough parking if a patron can find a parking spot directly outside of their destination. Increasing metered parking use also increases the chance of spots being occupied directly outside of their destination. Additionally, participants were concerned that the enforcement of metered parking

by-laws was inconsistent, but also preferred the enforcement to be lenient.

Some themes came up in discussion more than once, such as the perception of supply and demand of parking as it related to each participant's location; the effects of free, public off-street parking in terms of attracting long-term users; how to encourage more users to metered spots; meter time limits as being restrictive; and strict yet inconsistent parking by-law enforcement. There was little consensus on how these issues could be solved. When prompted, two of five participants admitted they had never considered what the alternatives to current parking enforcement might be. Four of five participants were unsure as to how the alternatives might be enforced, not knowing if alternative parking management strategies would yield successful results. Despite not knowing what the solutions may be, participants agreed that the business community would like to see action taken in terms of the issues revealed by the discussions, and that parking policies and infrastructure should be updated.

4.4 Results of Questionnaire

I developed a brief questionnaire that was targeted toward City of Portage la Prairie staff, specifically by-law enforcement officers, parking ticket issuers, and administrative staff that receive parking ticket payments. City staff understand the local context and are able to provide vital information concerning municipal parking and ticketing trends in the downtown. Only two individuals agreed to participate. Despite the small number of participants, some patterns were identified from their responses. Each question was open-ended and allowed participants to provide more than one response.

4.4.1 Metered Parking Occupancy

The questionnaire asked participants to identify the occupancy of metered parking spots on streets within the downtown between the hours of 9:00 am and 6:00 pm. Figure 19 illustrates

participant responses for streets that are most often occupied by users of metered parking during those times. Saskatchewan Avenue, Royal Road S, Tupper Street N, 1st Street NW, and 2nd Street NW were noted by participants. This figure also illustrates participant responses for metered spots with low occupancy by users of metered parking. Royal Road N, 3rd Street NE, 3rd Street SE, 1st Street NW, and 1st Street SW. It should be noted that there are fewer working meters on 3rd Street NE and SE than other streets in the study area.

Figure 19: On-street Metered Parking Occupancy



Participant responses indicated that there is a higher occupancy of metered spots in Zone A except along Royal Road N which is adjacent to a free, public off-street parking lot (see Figure 3 for parking zones in the downtown). This suggests that, given the choice, users of parking prefer to park off-street for free, rather than to park at a meter along the adjacent street. Zone A is more centrally located within the downtown perhaps contributing to the higher level of users. Generally, a lower occupancy of metered spots was cited in Zone B, which is not as central as, and costs less than,

Zone A. This suggests that although the meters in Zone B may cost less for use, users prefer to be more centrally located in the downtown, and are willing to pay for meters in Zone A. 1st Street NW was indicated as a street with both high and low occupancies of metered parking by participants. This could be the result of differing participant perceptions, or that at different times of the day or week 1st Street NW experiences different rates of meter occupancy.

4.4.2 Metered Parking Turnover

Participants were asked to name streets within the downtown in which metered parking experiences the highest and lowest rates of turnover. Figure 20 illustrates participant responses for metered spots with high turnover. Saskatchewan Avenue, Tupper Street S, Royal Road S, and 1st Street SW were cited. This figure also illustrates participant responses for metered spots with low turnover of metered parking use. Saskatchewan Avenue, Royal Road N, Tupper Street N, 2nd Street NW, 3rd Street NE, and 3rd Street SE were noted. Saskatchewan Avenue was cited as being a street with both the highest and lowest turnover, representing a difference in participant perceptions about this street. Additionally, this could mean that at varying times throughout the week this street experiences a range of turnover rates.

Participant responses indicated that there is a higher turnover of metered spots in the southern portion of the downtown. This may be a result of the price of parking as well as adjacent land uses drawing patrons for shorter trips. As well as experiencing high turnover, Royal Road S is also an area of higher meter occupancy, meaning that these streets see a more constant rate of short-term metered parking users. The northern portion of the downtown experiences lower turnover of metered parking spots. These streets see a mix of both low and high occupancy rates, suggesting that adjacent land uses draw a range of shorter and longer-term patrons at a lesser rate than the southern portion of downtown.

Figure 20: On-street Metered Parking Turnover



Saskatchewan Avenue was indicated as having both high and low turnover. It is a high occupancy street in which turnover may vary throughout the week depending on the purposes of metered parking user trips to downtown. 3rd street NE and SE are both low occupancy and low turnover for users of metered parking. These streets are not as centrally located in the downtown and have a limited number of working meters, meaning that while few people park there, those who do may stay for longer periods of time.

4.4.3 Metered Parking Ticketing

The questionnaire asked participants to name the streets within the downtown in which metered parking users are most often issued tickets for expired meters. Figure 21 illustrates participant responses. Saskatchewan Avenue, Royal Road S, 1st Street NW, and 2nd Street NW were cited. Two streets seeing the most ticketing in Zone A – Saskatchewan Avenue and Royal Road S – have high rates of occupancy and varying rates of turnover. As these streets are busier in terms of

metered parking volume, the likelihood of more tickets being issued increases. Two streets in Zone B also have high ticketing rates – 1st Street NW and 2nd Street NW – but there is no pattern in terms of occupancy and turnover as indicated by the participants. However, it is reasonable to assume that streets experiencing low turnover like 2nd Avenue NW would also experience higher ticketing rates if users exceed their meter time.

It should also be noted that not all users of metered parking pay for their use, as has been indicated by both the parking behaviour observations (Section 4.1) and the focus group results (Section 4.3). Focus group and semi-structured interview participants remarked that some of their patrons do not pay for meter use. Parking behaviour observations within the downtown confirm this, as during the time of observation 46% of the meters had not been paid for or had expired without repayment.

Figure 21: On-street Metered Parking Ticketing



4.4.4 Complaints Related to Metered Parking

Participants were asked to provide examples of the most common complaint they receive related to municipal parking in the downtown. This was an open-ended question and participants were allowed to provide more than one answer. Both participants cited that most often people complain that a meter accepted the payment without showing paid time. This could mean that some meters are malfunctioning, but it could also be an indication of user error. Meters in Zone A accept payment in the form of quarters, loonies, and toonies, whereas meters in Zone B accept payment in the form of nickels, dimes, and quarters. Coins of smaller denomination may be accepted in the coin slot of meters in Zone A, but will not show paid time.

Participants noted that most complaints were in relation to issues concerning payment of meters, such as users not having the correct change or needing to leave their meter unpaid while they went to get the proper change. This is something that was also mentioned by some intercept survey and focus group/semi-structured interview participants. Other complaints heard by participants include that the meters do not accurately count time or that users were unaware of the hours in which parking must be paid for. Additionally, participants indicated that some users admit to not paying for a meter, but that they had only gone into an establishment for a short moment. This suggests that some people justify paying or neglecting to pay for metered parking based on the length of their trip.

It appears that complaints are related to meter malfunction, human error, or refusal to pay for meter use. Based on study area observations, the downtown lacks clear signage indicating which Zone any street is located in. While each meter indicates which coins are accepted in writing on the user face, they do not indicate the times during the day in which payment is required, nor do the meters return incorrect change once inserted.

4.4.5 Participant Comments

Lastly, the questionnaire asked participants to provide additional comments regarding metered parking in the downtown. This was an open-ended question allowing participants to provide more than one answer. Both participants suggested that all the meters in the downtown should be converted to digital meters, as the meters in Zone B have a twist knob to accept coins. Both participants also suggested that the meters in Zone A should also accept nickels and dimes, as well as the higher denominations of coins. Many users of parking use nickels and dimes at meters in Zone A and then remark that the meter did not work properly. While this behaviour suggests human error, the errors are consistent enough, indicating that something should be changed in order to update meter technology and to make meters more user friendly.

4.4.6 Summary

There was some discrepancy between both participants about which streets had the highest or lowest occupancies and turnovers. Overall, the patterns suggest that more centrally located and expensive metered parking in Zone A draw the highest rates of occupancy and turnover. Whereas, the less centrally located and cheaper metered parking in Zone B experience lower rates of occupancy and turnover. That being said, Royal Road N, which is adjacent to free, off-street public parking, saw lower occupancy rates. This suggests that users of parking would rather park off-street for free than pay for parking immediately adjacent.

Streets experiencing high rates of ticketing were found in both Zones A and B. Zone A ticketing numbers may be related to the larger volume of metered parking users, whereas Zone B ticketing numbers may be related to lower turnover. Participant insight may also point to user error causing ticketing, with Zone A meters not accepting lower denominations of coins, and meters in Zone B being dated technology.

The more common complaints regarding metered parking in the study area relates to issues

surrounding how payment is currently accepted. While this may in fact be an issue of user error, there was consensus regarding potential ways to remedy some of the current problems experienced by users of metered parking across both parking zones. Both participants agreed that updating the meter technology may resolve some of the common user complaints that they receive.

Without knowing where the users of parking are going during their trip downtown, it is can be difficult to determine why each street may have higher or lower rates of occupancy, turnover, or ticketing. Generalizations and assumptions can be made based on patterns in the data such as location or the influence of nearby land uses. However, the questionnaire data reflects data collected during parking behaviour observations (Section 4.1) in terms of Zone A attracting more users of parking for shorter periods of time and Zone B attracting fewer uses with varying rates of turnover.

4.5 Results of Policy Review

I conducted a short review of planning policy and regulatory documents, reviewing their goals, objectives, policies, and by-laws regarding municipally owned downtown public parking, both on- and off-street, from nine relevant cities (the parameters of which are identified in Section 3.5). Policy documents that I reviewed included development plans, secondary plans, zoning by-laws, and traffic by-laws, or the equivalent thereof. A development plan outlines the general planning direction for a municipality and provides broad goals, objectives, and policies regarding how to achieve them. A secondary plan can bring greater detail to the goals or objectives of a development plan, such as downtown revitalization master plans, as examined in this policy review. Development and secondary plans also guide the by-laws outlined in lower level planning documents such as zoning by-laws or traffic by-laws. For example, if a development plan outlines that a municipality must make provisions for minimum off-street parking in all commercial land uses, the corresponding zoning by-law must provide specific regulations detailing the number, distribution, location, dimensions, etc. of off-street parking spots within commercial zones.

As the review progressed, it became increasingly evident that lower level documents, particularly zoning by-laws, typically do not outline by-laws concerning municipal public parking. The zoning by-laws that I reviewed regulated the provision of privately owned off-street parking. While some privately owned off-street parking may be available to the public, these types of parking were not within the parameters of this policy review. While traffic by-laws outline regulations for parking as a whole, they also identify regulations more specifically for municipally owned, public parking.

Planning documents from nine cities in Alberta, Saskatchewan, Manitoba, and Minnesota were chosen based on the parameters set forth in Section 3.5. Details from each city are illustrated in Table 15 and Table 16 below (see Appendix 8.9 for a list of each city and their respective documents). Big box commercial areas, not unlike that of Portage la Prairie, are present in all but one of the cities. Much like Robertson (1999, pp. 282-282) describes, this illustrates a contribution to the continued exodus of commercial and retail activity from the centre of small cities to more peripheral locations. Five of the nine cities provide internal public transit systems, and seven have access to regional public transit systems. Despite public transit being present in a majority of these cities, only one policy document as part of this review recognizes the relationship between parking and transit (see Section 4.5.8 for further details).

Table 15: Policy Review Data by Canadian City

Province	City	Population	Growth Rate Between 2011 and 2016	Internal Public Transit System	Regional Public Transit System	Big Box Commercial Area	Development Plan	Secondary Plan	Zoning By-law	Traffic By-law
British Columbia	Terrace	13,663	2.0%	•	•	•	•	•	•	•
Alberta	Wetaskiwin	12,665	1.0%	•		•	•		•	•
Saskatchewan	Estevan	11,483	3.9%		•	•	•		•	•
Saskatchewan	Humboldt	5,869	3.4%			•	•		•	•
Saskatchewan	Yorkton	16,343	4.3%		•	•	•		•	•
Manitoba	Selkirk	10,278	4.5%	•	•	•	•		•	•

Source: <http://www.statcan.gc.ca>

Table 16: Policy Review Data by US City

State	City	Population	Growth Rate Between 2010 and 2015	Internal Public Transit System	Regional Public Transit System	Big Box Commercial Area	Development Plan	Secondary Plan	Zoning By-law	Traffic By-law
Minnesota	Brainerd	8,699	1.1%	•	•	•	•	•	•	•
Minnesota	East Grand Forks	13,371	-1.6%	•	•	•	•	•	•	•
Minnesota	Winona	27,592	-1.8%	•	•	•	•	•	•	•

Source: <http://www.census.gov>

4.5.1 Terrace, BC

Development Plan (Official Community Plan)

The City of Terrace development plan seeks to balance vehicle parking and opportunities for active transportation within the city. While downtown parking is only mentioned briefly in the plan, the city's priority is to "maximize the existing parking and ease movement of vehicles and pedestrians in the downtown core," (City of Terrace, 2011, p. 16). Additionally, the plan suggests that the city should review its parking requirements in the future, with the goal of reducing reliance on vehicles. Since the publication of this plan, the City has completed a downtown parking study.

Secondary Plan (Draft Downtown Parking Study)

The City of Terrace recently commissioned a study of parking in their downtown. The study is currently in draft form, but is available for viewing. The study points out that "parking isn't about cars, it's about people. How to attract people, move them to their destination, and get them to visit again and again," (City of Terrace, 2017, p.1). High priority actions are suggested that the City could make efforts to implement in the short-term. These actions include increasing parking enforcement in order to encourage more frequent turnover of parking in the downtown. It is also suggested that parking time limits be altered. The city does not currently have metered parking; on-street parking is regulated by one hour, 30 minute, and fifteen minute zones. The plan proposes that in areas experiencing higher demand, the time limit be increased to at least two hours. The City is also encouraged to review on-street parking to determine short- and long-term parking user behaviours. This review could help identify areas in the downtown for long-term parkers like employees as well

as areas within the downtown that require more short-term parking space for patrons. Additionally, parking enforcement needs to be consistent in order to “improve collection rates, revenues, and customer service,” (City of Terrace, 2017 p. 52).

Zoning By-law

Off-street private parking requirements are outlined in the City of Terrace zoning by-law. No mention of municipal parking is made, and all of the off-street private parking requirements are regulated by minimums. The zoning by-law does allow, however, for payment-in-lieu options in lands located in the downtown. Up to 75% of the total number of spaces required for uses in the downtown may be paid for rather than be physically provided, but this fee is not established in the zoning by-law. These in-lieu options, if used in the downtown for example, have the potential to relocate users of parking from private off-street lots to municipal on- or off-street parking. If private land owners reduce the number of parking spots in their off-street lots for patrons, it may result in an increase in use of municipal public parking.

Traffic By-law

The City of Terrace traffic by-law regulates parking as a whole for the city, which includes parking in the downtown. This by-law gives power to the by-law enforcement officer to issue tickets to those in violation of parking by-laws, put up parking related signs, tow and/or impound cars, and issue residential parking permits. A list detailing violations and their related ticketing fees is not included in this by-law, and may be outlined in a document not within the parameters of this review. The by-law indicates that there are no meters or time limits in the downtown to encourage parking turnover. As indicated in the draft parking study, creating specific time limits for higher demand areas is a suggestion for the downtown. Residential parking permits are allowed in areas of higher parking demand, which may include the downtown, but little detail is provided in terms of where they can be applied for and how much they cost.

4.5.2 Wetaskiwin, AB

Development Plan

The City of Wetaskiwin development plan relates parking to the city's overall transportation system. The main objective for parking is to "provide sufficient parking spaces throughout the city" (City of Wetaskiwin, 2011, p. 29). This is a broad objective and did not differentiate between municipally owned and privately owned parking, and on- and off-street parking. The only policies referring to parking are ones in which off-street parking must be provided onsite by all new or expanding private development, as per the regulations set forth in the zoning by-law. These objectives and policies do not target the downtown of Wetaskiwin directly, but rather the city in general.

Zoning By-law

The Wetaskiwin zoning by-law does not outline any by-laws concerning municipally owned and public parking in the downtown. While the zoning by-law regulates parking by land use, including land uses found within the downtown commercial zones, the by-laws concern parking ratios and minimum requirements are for privately owned off-street parking. The development plan briefly points to the zoning by-law to regulate parking as such. It is important for a zoning by-law to regulate private, off-street parking requirements, but reviewing these policies is not within the parameters of this research method.

Traffic By-law

The City of Wetaskiwin traffic by-law provides regulations for traffic in general throughout the city, including the downtown. Parking as a whole is regulated by this by-law and pertains to both municipally and privately owned parking. For the purposes of this research method, only the policies pertaining to municipally owned public parking have been reviewed.

The Wetaskiwin traffic by-law requires that an inventory of all traffic control devices, such as parking signage, be kept by the by-law officers, and provides examples of signage in their appendices. Parking signage for municipal on- and off-street parking is used to regulate and organize parking use, including depicting the cost and time restrictions associated with parking in the downtown. Despite metered parking being referenced by this by-law, it does not outline the associated costs or time restrictions. As this policy review progressed, it became increasingly evident that not all cities charge, or enforce time restrictions, for municipal public parking, nor is it consistently outlined in traffic by-laws. Perhaps parking fees and time limits in Wetaskiwin are outlined in other municipal by-laws outside the scope of this policy review.

Generally, the Wetaskiwin traffic by-law outlines that violations of any of the respective parking related by-laws could result in a ticket being issued at a range of values. The by-law provides a list of the precise types of violations that could result in a ticket, such as parking where prohibited, failure to obtain parking permit, and double parking, as well as a comprehensive list of ticket fees. Again, the listing of violations and ticketing fees are not consistently outlined in the traffic by-laws reviewed. For those by-laws that include values, fees ranged from city to city, as well as payment dates and repercussions for late payment.

4.5.3 Estevan, SK

Development Plan

A general goal of the City of Estevan development plan is that the City must “provide safe, functional, and efficient on-street and off-street parking allowances in the interest and for the benefit of the City at large,” (City of Estevan, 2010, p. 34). The plan describes how the zoning by-law could regulate parking provisions in the city, but does not explicitly outline goals and objectives relating to municipally owned and public parking. However, the plan does provide policies in which

the City may use street rights-of-way for on-street parking, as well as to establish payment-in-lieu of parking spot by-laws.

Zoning By-law

Much like Wetaskiwin, the City of Estevan zoning by-law outlines that new or expanding developments provide minimum private off-street parking provisions. There are no references to municipal public parking. Despite this, the development plan allows the zoning by-law to establish payment-in-lieu of parking spot by-laws which have the potential to influence the use of municipal public parking. Payment-in-lieu of providing the required amount of off-street parking allows land owners to pay a sum of money to the City for the number of parking spots that they do not wish to include on their land. Estevan requires a sum of \$2,500 per spot, does not indicate if this option is limited by zone, and states that the revenue be put toward parking facilities.

Traffic By-law

The City of Estevan traffic by-law, despite indicating the presence of metered parking in the downtown, does not outline fees for parking use. Much like Wetaskiwin, perhaps fees are outlined in other municipal by-laws not within the parameters of this review. Estevan enforces time limits for parking use in their downtown, including two hours, 30 minute, and 12 minute zones for areas of higher traffic to encourage turnover. Estevan's by-law explicitly states that "no person shall park a vehicle in a zone where parking is limited by this By-law on the same side of the street of the same block where the vehicle was previously parked to the maximum time allowed by the limited parking zone," (City of Estevan, 2016, p. 18). This means that once the maximum parking time has been met by a user, the vehicle must be moved to a new location that is not on the same side of the same block, thus encouraging a more short-term use of on-street spots. The by-law provides a list of violations and enforcement of ticketing, pertaining to the violation of any of the parking related regulations, as well as a list of corresponding ticketing fees and payment schedules.

The Estevan traffic by-law allows for the issuance of permits for residents who live on a street with two hour parking limits within the downtown core, and business permits for employees who work on a street with two-hour limits within the downtown core.

4.5.4 Humboldt, SK

Development Plan

The City of Humboldt development plan requires the zoning by-law to provide for off-street parking throughout the city. Other than this, the plan makes no reference to any additional goals, objectives, or policies concerning municipal public parking.

Zoning By-law

As per the development plan, the City of Humboldt zoning by-law regulates parking by land use, including land uses found within the downtown commercial zones. These by-laws outline parking ratios and minimum requirements for privately owned off-street parking with no reference to municipal public parking. Humboldt also offers payment-in-lieu of providing the required off-street parking spaces, which, as noted above, does have the potential to influence the use of municipal on-street and off-street parking. The zoning by-law requires that \$2,500 per spot may be paid in-lieu and only applies to privately owned parking lots in the downtown core.

The Humboldt zoning by-law also provides provisions for shared parking, or as it was referred to in the by-law “joint use parking.” Joint use parking is defined as “where two or more uses on the same or separate sites are able to share the same parking spaces due to their parking demands occurring at different times,” (City of Humboldt, 2016c, p. 67). An agreement between all parties, including the City, must be entered into, and the parking application is approved at the discretion of the development officer. The by-law also gives examples of the types of uses that may share parking, such as offices (daytime peak) and restaurants (evening peak), or retail (daytime peak) and taverns (evening peak). While these by-laws pertain to private off-street lots, they have the

potential to influence parking use in downtowns if the supply of publicly available, private off-street lots is reduced due to sharing between uses. It could result in the relocation of downtown patrons to municipal on- or off-street parking lots, thus increasing their demand.

Traffic By-law

The City of Humboldt traffic by-law is not as thorough as the other traffic by-laws reviewed as part of this research method. The by-law makes no reference to metered parking regulations in the downtown, but does outline two hour time restrictions to encourage regular turnover. As such, the City does not appear to regulate parking with the use of paid meters, but rather through the use of un-paid time restricted zones, violation of which may be ticketed. The by-law also provides a list of violations as well as a list of corresponding ticketing fees and payment schedules.

4.5.5 Yorkton, SK

Development Plan

The City of Yorkton development plan recognizes the city's role in providing amenities and services to surrounding municipalities, but that the city is small enough to make finding parking near businesses in the downtown easy (City of Yorkton, 2014, p. 15). A goal outlined in the plan is one of creating a downtown parking strategy with the Yorkton Business Improvement District in order to "identify existing and future needs, capacity, problem areas, and options including the feasibility of an elevated off-street parking facility," (City of Yorkton, 2014, p. 15). Despite this goal being outlined, a secondary plan relating to parking has not yet been created.

Zoning By-law

The development plan does not explicitly state the role of the City of Yorkton zoning by-law in terms of regulating parking. Like the previous zoning by-laws reviewed, the Yorkton zoning by-law is no different in its provision of by-laws that regulate parking ratios and minimums by land use, including land uses found within the downtown. No specific by-laws regulate municipally owned,

public parking in the downtown. Like Estevan, and Humboldt, the Yorkton zoning by-law also includes provisions for payment in-lieu of parking by-laws which requires a sum of \$3,000 per spot and only applies to central commercial zones.

Traffic By-law

The City of Yorkton traffic by-law provides thorough detail concerning meters, including locations, time limits, pricing, and ticketing for violation of use – such as using a metered spot after the time has expired. Metered parking fees are organized by parking zone in the downtown. The by-law indicates a range of fees based on time restriction and location of parking. On-street meters in 15 minute limited zones accept \$0.05 for 7.5 minutes, while they accept both \$0.10 and \$0.25 for 15 minutes. There are locations in the downtown that are on-street and non-metered, but that are enforced by a time restriction of two hours. Lastly, metered off-street lots charge \$0.10 for 25 minutes, and \$0.25 for one hour, up to a maximum of five hours.

The Yorkton by-law also requires an inventory of all traffic control devices, such as parking signage, be kept by the by-law officers, and outlines examples of signage in their appendices. The provision of by-laws that regulate enforcement of violations, ticketing, and a range of corresponding ticketing fees is comprehensive, compared to the other traffic by-laws reviewed.

4.5.6 Selkirk, MB

Development Plan

The City of Selkirk development plan is shared with a number of other Manitoban municipalities in the Selkirk and District Planning Area. This means that one development plan applies to member municipalities of the planning district, however, each member municipality requires their own respective zoning by-laws. The district development plan does not outline any goals, objectives, or policies directly relating to municipal public parking in the downtown. The plan's only reference to parking in general is that existing vacant and off-street parking lots could be

redeveloped for the purpose of enhancement and development of mixed use areas throughout the city, some of which are located in the downtown (City of Selkirk, 2008, p. 20).

Zoning By-law

The City of Selkirk has its own zoning by-law, as per the planning district development plan. There is little direction from the development plan in terms of parking in general, and municipal public parking in particular. The regulation of private off-street parking ratios and minimum requirements by land use is similar to the other zoning by-laws reviewed as part of this research.

Traffic By-law

The City of Selkirk traffic by-law is also not as thorough as other traffic by-laws reviewed as part of this research. It does not provide any indication of metered parking or time limits for parking use within the downtown core. Additionally, this by-law does not outline enforcement of violations, ticketing, or ticketing fees. Perhaps these missing parking regulations are outlined in other municipal by-laws outside the scope of this policy review.

4.5.7 Brainerd, MN

Development Plan (Comprehensive Plan)

The City of Brainerd comprehensive plan makes reference to a general concern regarding a lack of parking in the downtown. A goal of the plan is to promote and improve parking within the downtown, however does not make the differentiation between municipally or privately owned parking. Greater detail in terms of how parking is addressed by higher level documents is found in the City's secondary plan.

Secondary Plan (Downtown Revitalization Master Plan)

The City of Brainerd master plan discusses parking as it relates to its importance of revitalizing the downtown, enhancing pedestrianism, and creating development opportunities. Recommendations for downtown improvement were grouped by priority. Moderate priorities

include “maximizing on-street parking” and “providing additional off-street parking,” (City of Brainerd, 2002, p. 24). The plan suggests that on-street parking could be maximized by utilizing rights-of-way more efficiently and increasing the number of parking spaces, noting that this is a “quick and cost effective way to increase parking where it is needed most,” (City of Brainerd, 2002, p. 17). Much like on-street parking, additional off-street parking can be provided by utilizing the space more efficiently, such as reducing the size of spaces, as well as creating new off-street lots or structures within the downtown (City of Brainerd, 2002, p. 18).

Parking structures can “provide more parking ... over less area,” (City of Brainerd, 2002, p. 19), but are expensive to construct and maintain. This is identified as a long-term strategy that Brainerd could potentially implement. Additionally, an opportunity for infill is highlighted as a long-term recommendation in the plan. This recommendation encourages reallocating existing spaces from municipally owned off-street surface parking to other on-street locations or to off-street structures. The City could sell their off-street parking lots with the purpose of intensifying the land use, and use the revenue to replace the lost spots via structured parking (City of Brainerd, 2002, p. 16).

City Code (Zoning Regulations)

The City of Brainerd zoning regulations are comparable to the zoning by-laws of the Canadian cities included in this review. Parking regulations outline the ratios and minimum parking requirements for private off-street parking. Similar to the payment in-lieu of parking option provided by the Estevan, Humboldt, and Yorkton zoning by-laws, Brainerd offers a parking deferment option. Land owners within commercial land uses, including those located within the downtown, can apply to the city to reduce the number of parking spaces on their land. Fees associated with this provision are not outlined.

The Brainerd zoning regulations are also comparable to Humboldt in that they allow for shared parking between two or more land uses. The regulations do not specifically indicate where shared parking lots may locate, as such the City may approve them in the downtown on a case by case basis. Shared parking lots are allowed “provided that the total number of parking spaces shall not be less than the sum of the separate requirements for each use during peak use,” (City of Brainerd, n.d.a, p. 22-11). The same number of parking spots are required for each use in shared parking lots as would be required on separate lots, meaning that this particular regulation may not impact municipal public parking as it does not reduce private off-street space requirements.

City Code (Traffic and Parking Regulations)

Compared to the Canadian traffic by-laws reviewed as part of this research, the City of Brainerd traffic and parking chapters of the city code are not as comprehensive in terms of references regarding municipal public parking. The regulations state that Council may prohibit or limit parking as a whole in areas throughout the City. Such prohibitions or limitations on parking are to be identified by signs and be subject to the same enforcement and violation regulations as per this chapter of the city code. Despite these regulations existing, there is no indication given that metered parking is present in the downtown, nor is there any evidence that fees are accepted in exchange for municipal public parking in the downtown. Additionally, there are no schedules or appendices attached to the city code outlining such regulations. Perhaps this information is outlined in other municipal by-laws outside the scope of this policy review. This chapter of the city code also indicates that enforcers of parking management may ticket users of parking that are in violation of use. However, there is also no indication of what such violations may be or the amount of which they may be ticketed.

4.5.8 East Grand Forks, MN

Development Plan (Land Use Plan)

The City of East Grand Forks land use plan does not speak to downtown municipal public parking explicitly, but to parking as a whole in the city. General land use goals and policies include ensuring that services and facilities, such as parking, are provided to support development. Another general goal outlined by the plan is to potentially reduce parking provision as a whole in the city. Shared use parking is briefly mentioned as a strategy to reduce the supply of parking in higher density areas. Off-street private parking is mentioned in terms of growth management, in that the zoning by-law should allow land owners or developers to reduce parking for new developments when other methods of transportation, such as public transit, are available. This strategy is unique to East Grand Forks, as none of the other policy documents in this review touch on the influence of public transit on parking. These goals could be applied to the downtown area and have the potential to influence municipally owned parking by redirecting vehicles to on-street parking.

Secondary Plan (Parking Study)

The City of Grand Forks commissioned a downtown parking study aimed at “increasing the efficiency of the parking system” through a holistic approach (City of East Grand Forks, 2011, p. 25). Pedestrian enhancements, in the form of alley, signage, and lighting improvements are suggested to enhance the pedestrian user experience in the downtown. On-street parking recommendations include implementing two hour time limits for downtown patrons in areas with high demand, and creating a residential street permit program for downtown residents at an annual cost of \$300. Off-street municipal public lot recommendations include directing long-term parkers from on-street to off-street parking, improving maintenance of these lots, and increasing off-street time limits from two to three hours.

A special events parking plan recommendation includes developing a plan for parking specific to an influx of vehicles in the downtown due to multiple ongoing events. Suggestions for

using more remote lots and temporary signs to direct vehicles is made. Improving parking enforcement is also cited. The study suggests that one parking enforcement officer should be able to monitor 600 to 800 spots in one circuit completed every two hours. Consistent monitoring between the hours of 9:00 am and 6:00 pm and accurate signage detailing these by-laws should be installed. Lastly, the study encourages the City to market and effectively promote any initiatives that are implemented using online and print sources. In addition to the varying recommendations made, the plan also provides the City with a matrix chart to monitor and maintain any of the recommendations that are implemented. This allows the City to evaluate any parking intervention in real time and better enables them to determine their outcomes and efficacy.

City Code (Zoning By-law)

The East Grand Forks city code chapter on zoning provides by-laws to regulate private off-street parking. As the land use plan gives little direction in terms of how parking is to be managed by zoning by-laws, this chapter of the city code makes no reference to municipally owned parking. However, shared parking facilities are permitted if constructed in commercial zones located in the downtown. Despite the land use plan aiming to reduce parking as a whole, this shared parking by-law does little to achieve that. Shared parking facilities “shall provide the total number parking spaces as the sum of the requirements for each building or use being served thereby,” (City of East Grand, 2009, p. 12). As such, the same number of parking spaces is required despite a shared facility being constructed. The zoning chapter also allows for land owners to apply for exemptions from parking regulations, but this by-law is opposite from those seen in other zoning by-laws in this review. If a landowner can demonstrate that their current off-street supply of parking is not enough, they can apply to pay for more parking – up to 20% more of their existing stock up to a maximum of 50 stalls. This can become problematic if there is a perceived lack of parking and may result in an even greater supply of parking being supplied relative to its demand.

City Code (Traffic By-law)

The East Grand Forks city code chapter on traffic regulations is general and speaks to municipal and private parking as a whole in the city; this includes the downtown. This by-law indicates that the city does not have parking meters, and relies on times zones to encourage turnover, such as five, 10, 15, and 30 minutes in high demand areas, and one to two hours in lower demand areas. The by-law provides additional rules for municipal parking lots and structures, in terms of hours of use, length of stay, vehicle type, etc. The traffic chapter defines the role of by-law enforcement officer, however it does not provide a list detailing violations and their related ticketing fees. These may be detailed in a by-law outside the parameters of this policy review.

4.5.9 Winona, MN

Development Plan (Comprehensive Plan)

The City of Winona Comprehensive Plan is the only high-level policy document reviewed as part of this research that explicitly refers to municipal public parking. The plan recognizes that the downtown is home to both public and privately owned parking infrastructure. The plan then summarizes the goals, objectives, and policies outlined in the City of Winona Downtown Revitalization Master Plan, the specifics relating to parking can be seen in the sub-section below. Overall, the comprehensive plan identifies ongoing goals to improve the management and enforcement of municipal public parking in the downtown. In addition to pointing to the master plan for further policies to regulate parking in the downtown, the comprehensive plan points to zoning regulations to reduce the requirements of private off-street parking. This has the potential to impact municipally owned on- and off-street parking if private parking is reduced for patrons of the downtown.

Secondary Plan (Downtown Revitalization Master Plan)

The City of Winona downtown revitalization master plan compares the city to other similar American cities and identifies the relationship between parking and land use: “much like other American cities, [Winona] saw much of its retail activity move outward from the downtown core to the highway corridor where large tracts of land offer malls and big box retail convenient auto access and ample off-street parking,” (City of Winona, 2007, p. 1). As per the plan, off-street municipally owned public parking is organized by short- and long-term use. Both on- and off-street parking is free, however, time limits are inconsistently enforced.

The overall goal of the plan is to “assure an adequate and visible supply of short- and long-term parking in the downtown serving visitors, employees, and downtown residents,” (City of Winona, 2007, p. 8) is available. This includes municipal parking as well as privately owned public parking. The plan also identifies current municipal public parking issues as inconsistent enforcement of time limits, a perceived lack of overall parking supply, and long-term parkers using prime spots. In order to achieve this broad goal and remedy the identified issues, a number of recommendations for updated parking management strategies are outlined. The plan suggests that shared parking between land uses with differing peak user times; converting municipal off-street parking to mixed use development, with the lost parking spots being replaced by structured parking; disincentivizing long-term, on-street parkers by enforcing time limit violations; encouraging employee parkers to long-term, off-street parking; dedicating off-street parking for downtown residents; implementing an updated meter system (machines that can service an entire block) to gain municipal revenue from off-street parking; and implementing free parking for customers of downtown businesses. Despite there being a number of recommendations, the master plan does little in the way of offering strategies for the City to apply them.

City Code (Zoning Regulations)

The City of Winona city code is comparable to the zoning regulations chapter in the Brainerd city code. Winona parking regulations provide provisions for ratios and minimum parking requirements for private off-street parking. Despite the comprehensive plan pointing to the zoning regulations to reduce off-street parking requirements, there is no evidence of parking maximum requirements. However, this does not mean that parking requirements have not been reduced from previous versions of the zoning chapter of the city code.

The zoning regulations also outline shared parking lots in a similar manner to Brainerd. While Winona does not make explicit reference to downtown municipal public parking, it is the only by-law to define what public parking is: “an open area, other than a street or other public way, used for the parking of automobiles and available to the public, whether for a fee, or as an accommodation for clients or customers,” (City of Winona, 2017a, p. 8). This definition is limiting in that it does not include on-street parking, which is operated at the municipal level.

City Code (Traffic and Parking Regulations)

The City of Winona traffic and parking chapter of the city code does not provide as much information as the Canadian traffic by-laws in terms of content, but is comparatively more thorough than its American counterparts. A schedule attached to this chapter outlines a list of limited on-street parking zones including 10, 15, 20, 30, and 45 minute parking, and one, two, three four, seven, and 12 hour parking. The schedule outlines each limited area by street name, some of which are located in the downtown, however it does not indicate if meters are located within any of these time limited parking areas, nor does it indicate associated fees.

Little is said in the way of the enforcement of parking regulations, as well as repercussions for the violation of regulations. This chapter gives permission to the City to install parking signage and other related infrastructure, as well as to parking by-law officers to chalk tires in order to

regulate the amount of time a car has been parked. There is no indication of what is considered a violation of parking regulation, nor is there a list of the associated ticketing fees.

The traffic and parking chapter of the Winona city code outlines provisions for parking permits. Applicants can apply for a residential parking permit if they live within an area of the city that enforces on-street parking time limits. However, the permit may only be approved “if the City engineer finds that on-street parking is substantially reduced ... by commuter vehicles for an extended period of time,” (City of Winona, 2017b, p. 22). This will not reduce the amount of on-street parking for residents, but it allows them to park “in excess” (City of Winona, 2017b, p. 22) of the indicated time restrictions.

4.5.10 Chapter Summary

This policy review illustrates that parking can be regulated across varying levels of planning policy and regulatory documents. It also reveals some patterns of public parking management that exist in the downtown core of cities sharing a similar context to Portage la Prairie. Table 17 provides a summary for each city examined as part of this policy review.

In general, the Canadian development plans provide little guidance for municipal public parking in their respective cities specifically to their downtowns, or even to their cities as whole. References to parking in most of the development plans are general and pointed to their respective zoning by-laws for further parking regulation. The American cities make explicit reference to their secondary plans for providing further direction in terms of parking in their respective downtown cores. East Grand Forks’ development plan is the only policy document as part of this review to explicitly provide goals for parking provision as it relates to the provision of public transit. Yorkton’s development plan outlines goals specifically targeting the downtown core, and even identifies the need for a downtown secondary plan in which parking would be included, however no such plan has been created. Without identifying parking management as a priority in higher level

documents, lower level documents may continue to include the same regulations moving forward and neglect parking management strategies and best practices.

Brainerd and Winona's downtown master plans draw the connection between a vibrant downtown core and parking, and Terrace's parking study acknowledges that parking is about people more than it is about their vehicles. The plan from Winona identifies the connections between other similar cities in terms of parking patterns, "as with many downtowns, Winona suffers from somewhat exaggerated perceptions of inadequate parking supply because of peak hour shortages," (City of Winona, 2007, p. 22). The Winona master plan points out that parking management can be influenced by a number of overlapping factors, like design, land use, and economics (City of Winona, 2007, p. 9). This statement is supported by the academic literature on parking. There is not a one size fits all parking management strategy. In order for parking management strategies to be successful they need to be context specific. As such, these master plans provide greater detail in terms of how updated parking management strategies can directly improve the parking issues in their downtowns, but also how they can indirectly improve other aspects in the downtown such as density of land uses.

This policy review reveals that a majority of the zoning by-law regulations are similar city to city. Each zoning by-law regulates private off-street parking and does not make reference to municipal public parking. Six out of nine cities outline provisions to allow for the payment in-lieu of parking to reduce the number of private, off-street parking spaces. However, East Grand Forks' approach to this includes allowing landowners to pay for more parking if they felt their supply was not enough. This becomes problematic in circumstances in which there is a perceived lack of parking supply rather than an actual lack of parking supply. Additionally, three of nine cities outline provisions for shared off-street parking between land uses. However, unless a shared parking lot reduces the number of parking spaces required, it may not impact municipal on- or off-street

parking. Lastly, even though zoning by-laws do not typically regulate municipal public parking, their regulation of private off-street parking can impact use of the former.

The traffic by-laws reviewed are generally inconsistent in terms of content, however, it is not to say that missing information is not published elsewhere, such as a different by-law or a municipal website – both sources of which are outside the scope of this review. All of the traffic by-laws provide regulations for parking as a whole, but also specifically to municipal public parking. These by-laws aid the city in defining their rights and responsibilities in terms of providing and restricting public parking, the enforcement of all parking regulations, and the ticketing of violations to said regulations. Only one out of nine cities outline the fees associated with on-street metered parking, and eight out of nine identified areas of time restricted parking – each with varying degrees of specificity. One out of nine traffic by-laws provide a payment in-lieu of parking provision, similar to those of the zoning by-laws, and six out of nine allow for parking permits in their downtown cores. Parking permits are for the advantage of residents and employees of downtowns in that they are exempt from on-street parking time limitations.

This policy review reveals that unless higher level documents identify parking as a priority, and include provisions for secondary plans or parking studies to bring greater detail to a city's parking management, it is unlikely that anything other than the continued conventional policies and by-laws will continue to be created. Even so, zoning by-laws in cities that had created secondary plans were comparatively standard to the other cities that had not created secondary plans. It is required that by-laws be updated for consistency when a development or secondary plan is adopted and zoning by-laws are obligated to implement the goals, objectives, and policies of the higher level planning documents. Across the nine cities that reviewed, a majority of them require standard, and sometimes inconsistent, management of parking. While some cities take a step toward reinventing

Table 17: Summary of Policy Review

Policy Review Indicators	Terrace, BC				Wetaskiwin, AB			Estevan, SK			Humboldt, SK			Yorkton, SK			Selkirk, MB			Brainerd, MN				East Grand Forks, MN				Winona, MN			
	DP	SP	ZB	TB	DP	ZB	TB	DP	ZB	TB	DP	ZB	TB	DP	ZB	TB	DP	ZB	TB	DP	SP	ZB	TB	DP	SP	ZB	TB	DP	SP	ZB	TB
Downtown Parking	•	•		•										•		•				•	•							•	•		
Municipal Public Parking, Off-street		•					•									•					•						•	•			
Municipal Public Parking, On-street		•		•			•	•					•			•					•				•		•	•			
Metered Parking		•					•			•						•															
User Fees																•															
Time Restrictions		•								•			•			•								•		•				•	
Signage				•			•									•								•		•				•	
Ticketing							•			•			•			•							•								
Specific Management Strategies:																															
Allowing Payment In-lieu of Parking		•	•					•	•			•			•							•				•				•	
Providing Downtown Parking Permits				•						•						•								•							
Permitting Shared Parking												•					•					•		•				•			
Re-using Vacant Off-Street Lots																					•							•			
Maximizing On-street Parking		•																			•				•			•			
Providing Additional Off-street Parking																					•				•						
Constructing Structured Parking																					•							•			
Implementing or Altering Time Restrictions		•																						•							
Consistently Enforcing Time Restrictions		•																						•				•			
Disincentivizing Long-term On-street Parking		•																										•			
Updating Meters		•																										•			
Marketing of New Parking Strategies																								•							
Monitoring Outcome of New Parking Strategies																								•							
Conduct Further Studies		•																													

DP: Development Plan

SP: Secondary Plan

ZB: Zoning By-law

TB: Traffic By-law

their management of parking through the use of secondary plans, it is uncertain whether these strategies have been implemented.

4.6 Summary of Findings

The data collected in Portage la Prairie has revealed patterns of both behaviours and perceptions surrounding municipal public parking in the downtown. The differing types of municipal public parking appeared to have a range of patterns of use during the week. On-street metered spots predominantly drew short-term users, and the supply of these spots appeared to be higher than their demand. On-street non-metered and off-street spots were in higher demand for long-term use. Despite these spots being in higher demand, their occupancy levels did not reach practical capacity levels. During the weekend, these behaviours remained similar, but with lower occupancy levels. It is important to note that the focus group discussions revealed that demand for parking in the downtown was higher than supply when multiple events are taking place at the same time.

In general, the results of the questionnaire supported data produced by the parking behaviour observations. Despite some contradictions, this data brought further specificity to the observations by participants who work with parking in the downtown day to day. The participants indicated a range of parking behaviours and patterns. There are relationships between each parking type and their proximity to other types of parking. For example, metered parking directly adjacent to the off-street lots were typically unoccupied, while one block south on the same street, the meters had a higher rate of occupancy. Much like the survey and focus group data, participants of the questionnaire noted similar complaints and concerns surrounding parking use like ageing infrastructure that was not necessarily user friendly.

Not only did the surveys illustrate where people were parking in the downtown and their preference for free parking, it revealed that patrons of the downtown and big box commercial area

went to each respective area for different reasons, resulting in differing parking behaviour in each area. The downtown was characterized by short-term parkers shopping or running errands, and making frequent trips, while the big box commercial area was characterized by long-term parkers that are shopping and making infrequent trips. While these two areas in Portage la Prairie are in competition with each other, they drew users for different reasons. The data also pointed to users of parking in the downtown preferring free parking that is not subject to time restrictions, however, depending on destination and intended length of trip, people may choose to pay for metered parking over the free spots.

Data from the focus group revealed that the perceptions of parking in terms of supply and demand contradicted the observations and questionnaire data. Although the latter two research methods revealed the supply of meters – and off-street parking spots to a lesser degree – was higher than their demand, some focus group participants indicated a need for more parking. Peaks in parking demand were indicated as a reason for this; demand at peak times, such as during multiple ongoing events, can be higher than the supply. Participants of this research also pointed to the importance of free off-street parking to the business community, and the fear or uncertainty of altering this parking from its current state. Despite this, they acknowledged that long-term parkers take advantage of these parking lots and can displace other users of parking. The enforcement and ticketing of parking was revealed as inconsistent, with a contradicting desire for the enforcement to be both more consistent and lenient. Adamant that although they are unsure of how the management of parking could be altered moving forward, the business community would like to see a parking management strategy developed.

Portage la Prairie is similar to the cities examined as part of the policy review in terms of their parking policies. Little was mentioned in terms of parking management strategies by the higher level

policy documents, other than pointing to lower level policy documents, like zoning by-laws to regulate private off-street parking, and traffic by-laws to regulate both private and municipal parking. The American cities provided an example of how cities of similar context can regulate their municipal parking, although indirectly through the use of downtown master plans – these cities identified the relationship between a vital downtown core and parking. Only one Canadian city of similar context had conducted a parking study as a result of the development plan outlining it as a priority. Without higher level documents identifying the importance of downtown parking management, regulations remain standard over time.

5.0 Analysis

This section discusses the results of this practicum, drawing connections between data sets and exploring emerging trends.

5.1 Parking Use Behaviours

The data collected from this practicum reveals municipal public parking characteristics in downtown Portage la Prairie. Each of the three types of municipal parking has different characteristics (see Table 18) and typical types of parking users – patrons, employees, and residents of the downtown.

Table 18: Downtown Municipal Public Parking Use

Type of Parking	Fee	Time Restriction	Occupancy	Turnover	Peak Use
On-street Metered	Yes	Yes	Short-term	High	Morning
On-street Non-metered	No	No	Long-term	Low	Morning
Off-street Non-metered	No	No	Long-term	Low	Afternoon

Table 18 outlines the most common parking characteristics by type during a typical day, supported by observation, intercept survey, and questionnaire data. Most users of on-street metered parking occupied spots for a short amount of time, typically in the morning, with higher levels of turnover. While free parking without time restrictions saw longer-term use (typically in the morning with the exception of off-street spots in which the demand peaked during the afternoon with slightly higher use than the morning) and lower turnover. The influence of parking price and time restrictions is explored further in Section 5.2. There are some exceptions in that some users of off-street non-metered spots do make short-term trips, or some areas of on-street metered spots, particularly in the periphery of the downtown, experience low turnover. Weekday and weekend trends of parking use are comparable, but characterized by different volumes of parking with weekdays being busier than weekends.

The data also indicates the locations within the downtown that municipal public parking is in highest demand. Municipal off-street lots are the highest demand areas, seeing higher occupancy rates than both on-street metered and non-metered spots. There did appear to be some demand for on-street non-metered spots in more peripheral locations, particularly streets with adjacent residential land uses likely as a result of resident use, but they were characteristic of little observed turnover. Combined observation and questionnaire data points to Saskatchewan Avenue, Royal Road South, and 1st Street NW as metered streets with higher occupancy rates compared to other metered streets. The data suggests that during normal business hours during the week the supply of these types of parking exceed their demand. On only one occasion did each on-street metered and off-street parking exceed the practical 85% occupancy rate. This suggests an oversupply of parking in the downtown which may be influenced by other privately supplied and publicly available, free off-street parking lots as a result of minimum parking requirements established in the zoning by-law. These spots may be competing with, and reducing occupancies of, municipal public parking.

These recorded trends of municipal parking use in the downtown provide useable data for the City of Portage la Prairie. These trends of use can also be compared with other data collected as part of this practicum so as to help understand these trends. Understanding how and why these usage characteristics occur may lead to informed parking policy interventions reflecting the local context of the downtown. Policy interventions developed from empirical evidence and an understanding of the local context can challenge the conventions of parking

5.2 Parking User Preferences

The data indicates a range of preferences in terms of municipal public parking use in downtown Portage la Prairie. Users of the varying types of parking in the downtown have preferences based on a number of factors, such as destination, length of stay, and price of parking, for example. Generally, the data suggests there is preference for free and unrestricted parking,

however this does not appear to be the rule. Intercept survey participant responses suggest that users of parking, particularly metered parking, may sometimes bargain with themselves in terms of where they park. There appears to be a willingness to pay for parking at meters under certain conditions, such as if the meter is close to their destination, they are only stopping at their destination for a short period of time, or if they perceive the price of metered parking to be affordable.

While employees of the downtown are largely absent from the intercept survey data, focus group participants indicated that the preference of these users, as well as residents of the downtown, is for unrestricted and free parking options. Parking at meters for those who intend on using a spot for an extended period of time can become expensive, especially if a ticket is issued, as noted by intercept survey participants. Additionally, observed winter parking data is absent from this practicum. However, focus group participants did indicate that there are different preferences during the winter, with users being even less likely to walk from a distance to their intended destination.

It is not uncommon for users of parking to prefer to park as close to their destination as possible, as specified by the literature review. Litman (2006) indicates that people perceive there to be an issue with the parking supply in an area if they cannot find a place to park immediately outside of their destination. This is when preference and perception of parking problems intersect. It is apparent that during a typical weekday and weekend, the supply of parking in the downtown exceeds the demand. However, focus group data strongly points to the demand exceeding the supply of parking during periods with multiple events in the downtown. The question remains, is this a result of actual undersupply relative to demand, or a result of a perceived lack of parking or user unwillingness to park at a distance from their destination by downtown parking users.

5.3 Parking Perceptions

The data reveals that perceptions related to municipal parking in downtown Portage la Prairie were in many cases different from actual parking use. This is particularly evident in terms of the themes that emerged from discussion with the business community. The general consensus was that although there appeared to be more than enough metered parking available within the downtown, there was still a desire for more. On-street metered parking typically experiences short-term duration with low occupancy and turnover. Multiple events in the downtown result in the demand of downtown parking exceeding the supply, however during observations on a typical day, supply exceeded demand, particularly of metered spots. The perception that there is an overall parking problem when multiple events take up the available supply of parking is not uncommon, and is widely supported by the academic literature.

Robertson (1999, p. 279) indicates that parking in small city downtowns is often more of a perception than reality. Litman (2006) builds on the subject of perceptions by discussing the role that occasional high parking demand plays. Litman (2006, p. 41) has described how difficulty finding parking spots during peak usage times can result in parking users determining that there is a problem with the parking supply at all times. The data revealed that the existing supply of municipal public parking more than accommodated typical day to day use, and the business community indicated that despite this, occasional high demand periods result in a lack of available parking, leading to the perception that there is a problem in terms of the downtown parking supply.

A difference of perceptions concerning off-street non-metered parking lots also emerged. While the business community agreed that these lots were crucial in terms of providing parking to patrons of the downtown, they were also critical of the impact of long-term users occupying these spaces. Long-term users are categorized as either being employees or residents of the downtown. The business community expressed concern over altering the management of these lots and agreed

that long-term parking users also needed places to park, but that it was important for patrons of their establishments to easily find available parking.

Lastly, perceptions concerning the price of on-street metered parking varied across users of downtown parking. Some users felt that it was reasonable, especially for short trips. Some felt that it could become unaffordable if frequent trips were made to the downtown or if a parking ticket was issued. Affordability is a moving target; what is perceived to be affordable to one person may not be affordable to another. However, a majority of downtown parking users prefer to use parking for free rather than pay for it, regardless of how they perceive affordability. The data suggests that if there is the option for free parking available, users would rather choose those spots over the paid variety (there are some exceptions to this, related to user preference discussed in Section 5.2). Free parking is in competition with paid parking, and the challenge, especially for Portage la Prairie, is encouraging patrons of the downtown to use metered parking when there is a significant amount of free parking available.

5.4 Land Use Factors

There appears to be a correlation between land use and parking behavior in downtown Portage la Prairie. Adjacent land uses may influence where and how people park. For example, the lower density residential land uses located typically at the periphery of the downtown appear to promote long-term occupancy with low turnover of on-street non-metered spots. Streets that also have a number of empty or vacant lots were not as busy in terms of parking use, unless some of the meters were not in working order, at which point those spots were often occupied for longer with lower turnover. Whereas, mixed and more dense land uses draw patrons making short trips to the downtown to park at on-street meters in both Zones A and B, or the off-street non-metered lots. However, these lots are typically characteristic of high occupancy and low turnover parking, likely a result of employees of the downtown. Although land uses appear to play a role in parking behaviour,

it is also likely that price and unrestricted parking times play a role in parking behaviour in the downtown, as per Section 5.2.

The big box commercial area was used as a comparison to the downtown as it is an area of the city that competes with the downtown for patrons. The data revealed that although these are both areas of the city that are characteristic of economic activity, each area draws patrons to them for different reasons, resulting in different parking behaviours between locations. For example, land uses in the big box commercial area are larger retail land uses, whereas the land uses found in the downtown have more variety in terms of providing local retail, institutional, and health related land uses. The big box commercial area draws patrons for longer, less frequent shopping trips, and is busier on weekends. Whereas the downtown draws patrons for shorter, more frequent trips of a more diverse nature, and is busier during the week.

5.5 Parking Enforcement

Questionnaire participants indicated the areas of the downtown that most often receive the most tickets for parking violations. Differing parking behaviours appear to result in parking tickets for a variety of reasons. Zones A and B both appear to result in parking tickets at meters. The streets in Zone A that receive more tickets may be a result of the higher volume of trips, whereas Zone B may be a result of low-turnover use in which users may exceed their time at meters.

Participants of the focus group/semi-structured interviews discussed enforcement of parking in the downtown of Portage la Prairie. Participants were concerned that the enforcement of parking in the downtown could be too strict at times, and at others could be inconsistent. The business community spoke with pride about the “small-town” feel that Portage la Prairie maintains, and reminisced of a time in which parking enforcement officers checked in nearby establishments for owners of vehicles at expired meters before issuing tickets. They indicated wanting both more

consistency in terms of the enforcement of parking violations, but also more leniency before a ticket is issued.

Although I did not observe parking enforcement operations, I observed a significant number of unpaid or expired meters. Just under half of the meters (46%) at the time of observation were unpaid or expired. This speaks to the behaviour of parking users, but also to the volume of parking violations that the enforcement officers have to contend with – or to a lack of consistent enforcement. The suggestion that enforcement be both more consistent and lenient is contradictory. However, if the enforcement of parking violations is indeed inconsistent, it may result in users of metered spots parking without payment if the risk of receiving a ticket is low. The literature indicates that although the capacity to consistently and strictly enforce parking in smaller urban centres may be low, some enforcement is better than none and should not be on either end of the spectrum of strictness.

5.6 Ageing Parking Meters

Data from the intercept surveys, the focus group/semi-structured interviews, and the questionnaire indicated that the existing parking meters in downtown Portage la Prairie are ageing. The dated infrastructure appeared to influence user-friendliness, and there may be a correlation between it and unpaid or expired meters. Survey participants noted that the parking meters are restrictive in terms of coinage accepted as payment, and the lack of cash options, which in some instances may result in them not having the correct change to pay for meter use. Data from the focus group/semi-structured interviews revealed that there is a desire for updated parking meters to support other forms of payment such as credit cards. Additionally, participants of the questionnaire indicated that many complaints concerning parking in the downtown relate to the meters themselves. While this may be a result of user error, it may also be a result of the meters not providing clear terms of use or accepting a range of payment methods. There also appeared to be

some confusion in terms of hours of the day in which the meters are active, which signage may help mitigate.

Additionally, there are a number of meters that no longer function, or that have been removed, in Zones A and B. These parking spaces often draw longer-term parkers with low rates of turnover indicating that users are taking advantage of the unrestricted and free parking at meters that were once active. Not only is this an example of lost revenue potential, but it is also an example of long-term parking behaviour creeping to on-street parking spaces in the downtown.

5.7 Parking Policy Precedents

Much like the academic literature on parking in small urban centres, there appears to be few policy precedents regarding parking management in small urban centres, particularly ones that are comparable to the Portage la Prairie context. This may be a product of urban centres lacking the capacity to create these policy documents, or perhaps an absence of knowledge surrounding parking in small urban centres as a result of a lack of examples from other centres of similar context. While there are studies and plans for parking in larger metropolitan areas, the lessons they provide are not necessarily relevant to urban centres with a significantly smaller population and growth rate. There is little evidence indicating the measures of effectiveness of possible management strategies. The literature indicates that small urban centres often do not have the capacity to collect their own empirical parking evidence of which to base parking management strategies.

While there are some examples of how urban centres of comparable context to Portage la Prairie manage parking in their downtowns, there are also many examples of urban centres that do not. Without a concerted effort to address parking in the policies of higher level documents, such as development plans and secondary plans, regulatory by-laws, like zoning or traffic by-laws, remain unchanged and conventional, as indicated by the literature. Although municipal public parking is often only regulated by development plans, secondary plans or studies, traffic by-laws and zoning

by-laws can also be an influence. Only in those urban centres that indicated a need for downtown revitalization, and that recognized parking as an important piece of the puzzle, did parking receive more attention. These planning documents are an important reference for other urban centres looking to adapt their parking management strategies. However, there is little evidence that these documents evaluate the effectiveness or success of the policies, goals, and objectives they suggest.

6.0 Discussion

Smaller urban centres, such as Portage la Prairie, provide amenities and services to residents, as well as surrounding rural areas, and as a result draw people from these surrounding areas by automotive travel. As such, a drastic reduction or change in parking regulations may not have the same positive or effective results that they do in larger urban centres that are densely populated and serviced by alternative transportation options. For example, without a public transit system, or the population density to support public transit altogether, there are no alternative modes of transportation for longer trips. Keeping this in mind, the following implications and potential parking management strategies are explored for the City of Portage la Prairie.

6.1 Implications for the City of Portage la Prairie

6.1.1 Creating a Parking Management Strategy

The City of Portage la Prairie does not currently have a parking management strategy for either the downtown. It is not uncommon for cities of comparable circumstance to lack a parking strategy. Some precedents show that similar cities may instead create parking management strategies as part of a larger downtown master plan, recognizing the importance of an efficient parking network as it relates to a healthful and vibrant downtown. A parking management strategy may be part of a pilot program in which the City identifies a goal, implements it on a non-permanent basis, and evaluates its success. This may contribute to an ongoing and adaptive dialogue related to parking in the downtown, and help to recognize changes in parking trends over time.

The City of Portage la Prairie may consider establishing a parking planning committee that is responsible for the creation of a parking management strategy that outlines short, medium, and long-term goals and objectives for parking in the downtown. This committee could manage any further parking study, such as quantifying parking behaviour during high parking demand periods in the downtown. This committee could also create promotional and informational material regarding

any changes to the current parking management in the downtown utilizing the municipal website and other media resources. There is an opportunity for the City to place a priority on the stock of municipally owned and maintained public parking as much of the supply, typically on-street metered parking, is occupied below the practical occupancy percentage of 85%. Parking requirements for private off-street lots, as outlined in the zoning by-law, may be addressed as an influencing factor on municipal public parking. Identifying circumstances in which to reduce the required amount of private off-street parking, such as payment-in-lieu of parking policies, could be part of a management strategy. This could be a strategy for the City to reduce the oversupply of parking in the downtown over time as it may result in an increased demand for municipal public parking if the private off-street supply is reduced.

6.1.2 Encouraging More Efficient Use of On-street Parking

Free off-street and non-metered spots will always be in competition with on-street metered spots in the downtown. The City of Portage la Prairie must consider how each parking type interacts with one another. If there is an abundant supply of free parking, and users prefer not to pay for it, meter occupancy may continue to be well below the practical 85% occupancy rate and turnover of parking spots may remain low. Off-street and non-metered occupancy is considerably higher, and much closer to practical occupancy percentage. Participants of the focus group indicated that they would like to encourage more people to park at the meters, and that a busier downtown in terms of parking was a positive thing.

When on-street metered parking in downtown Portage la Prairie is used, it functions as it should by generally encouraging short-term use with frequent turnover. However, the supply of metered parking appears to be higher than its demand on typical weekdays and weekends. The City of Portage la Prairie has already identified a need to address the stock of metered parking in the downtown. It is important to recognize the relationship between municipal on-street parking and

off-street parking. Simply addressing one type of parking may not result in a desired outcome.

The City of Portage la Prairie may consider on-street parking strategies that encourage patrons of the downtown to make more use of metered parking. As per the policy review, some small cities remove or do not install meters in their downtowns altogether, however, the literature review indicates that this is not the most effective way to encourage a higher volume of users of on-street parking for shorter trips. To encourage more efficient use of on-street parking, the City may consider consolidating the two zone parking system in downtown Portage la Prairie. Additionally, the City may implement two hour time limits for metered spots, requiring users to move their vehicle after the maximum time to a new meter on a different block. This aids in encouraging turnover by opening up spots for new patrons and deterring long-term users from occupying valuable on-street space for many consecutive hours.

Adopting a single parking zone for the entire downtown, including one rate of cost for use and relevant signage, may help to alleviate confusion and improve user-friendliness. This could also provide an opportunity to improve the consistency of enforcement. Rather than enforcing parking use in two zones with different pricing and time restrictions, parking enforcement officers would only be required to patrol an area with a uniform pricing and time restriction model. In the event that one price for parking is adopted for the entire downtown, such as the current Zone A pricing of \$0.25 for 15 minutes, the City may see an increase in parking related revenues. This practicum shows that users of parking in the downtown prefer free parking when given the option, but that they will pay for it under varying circumstances. It was suggested during the focus group that \$0.25 give 20 or 30 minutes at a meter rather than the current 15 minutes, effectively lowering the price of parking and perhaps resulting in less frequent turnover. The literature review shows that decreasing the value for use of parking meters may in turn decrease the rate of turnover. The purpose of meters is to provide parking for patrons; it should be priced to promote turnover and discourage higher volumes

of longer-term trips.

6.1.3 Managing Long-term Parking Behaviour

There is a need to accommodate long-term parking requirements in downtown Portage la Prairie. One type of parking user should not displace another. Long-term parking is typical in the off-street lots and on-street non-metered spots. The off-street lots are a good example of shared parking use, not only by varying types of users, but also by land uses within the vicinity. Long-term use of parking in these lots can become problematic when these users displace patrons making short-term trips to higher demand areas. This may contribute to be the perception of a parking problem in the downtown if higher demand off-street spots are occupied for extended lengths of time.

There is an opportunity for the City of Portage la Prairie to discourage long-term parking in these higher demand areas. Signs outlining time restrictions could be installed to direct users to different areas of these lots; directing short-term users closer to businesses, and limiting the number of long-term users that can occupy the lots at any one time. Suggestions coming from the focus group include installing meters along the periphery of these lots, adjacent to businesses, to accommodate short-term patrons – the off-street spots adjacent to Royal Road North, for example.

Additionally, the City could offer parking permits for long-term users, such as employees of the downtown. The City could establish a boundary around the downtown, in which employees working within are eligible to apply for a parking permit for a fee. Permit holders could be directed to certain areas of municipal off-street lots, allowing short-term parkers to park in higher demand spots. Alternatively, downtown employee parking permit holders could be directed to existing peripheral lots. These options are ways to regulate where long-term parkers are able to occupy space, providing them guaranteed parking while preventing them from occupying high demand spots, such as meters, for extended periods of time. The fees accepted for permits could also contribute to the

City's parking related revenues.

The City may consider upgrading the stock of meters, especially replacing malfunctioning meters oftentimes used by long-term users, and regularly enforcing their time limits to discourage long-term parking. Currently, long-term parking from off-street lots does not appear to be creeping into residential areas of the downtown, but the City must consider the impacts that any changes in parking management may have on surrounding areas. Offering parking permits for residents of the downtown at an annual fee may also be an option to guarantee their access to on-street parking in the event that long-term users shift to more peripheral areas of the downtown. A similar strategy could be implemented to accommodate peak parking demand during multiple ongoing downtown events. Special event parking could utilize more peripheral lots to house the influx of vehicles visiting the downtown, with temporary signage used for direction. Rather than search for available on-street parking, visitors could be directed to lots used specifically for special events so that they are more likely to find a spot to park their car.

6.1.4 Upgrading Parking Meters

The results of this practicum strongly indicate that the existing parking meters are ageing and require upgrading. The type of upgrades that need to be made is dependent on the parking strategies the City intends on implementing. If the City intends on continuing to charge for parking then upgrading the meters to support an efficient and effective parking network may be appropriate. There are options for an upgraded meter system which include installing meters that provide step by step instructions and provide options for multiple forms of payment including cash, credit card, or pay by cell. In a two zone system, signage indicating which zone a meter or parking spot is located in may also help users identify where they are parking and what the expected fees for use are. If the City chooses to enforce two hour time limits at meters to encourage turnover, clear and informative signage would be required for efficient and effective use.

6.1.5 Enforcement

While Portage la Prairie is categorized as a city, the results of this practicum indicate that small town values are important to residents. In terms of how this relates to the enforcement of parking, anecdotal evidence suggests that a small town courtesy check before issuing a ticket used to be a normal occurrence in the city. This courtesy does not currently appear to occur with the same frequency anymore, if at all. As such, enforcement is perceived as strict and at times inconsistent. While it is not a plausible option to implement this courtesy check, there are opportunities for enforcement in terms of consistency and transparency. However, the City of Portage la Prairie must consider their capacity to effectively and efficiently enforce parking. By-law enforcement officers could be organized to monitor specific routes on an hourly or bi-hourly basis during the hours in which meters require payment for use, ensuring the same on-street metered parking spots are monitored consistently throughout the day.

In terms of transparency as it relates to parking enforcement, the City can provide information to the public explaining how enforcement is applied. Information can also be provided to show how revenues are used. This provides the public, including users of parking, an understanding of how parking-related revenues are used and can help to reduce negative associations with fees and ticketing. Additionally, the City should place a priority on consistent enforcement, so that users know what to expect when parking at meters or time restricted areas. If a parking policy or by-law is violated by a user it should be the expectation that a warning or ticket is issued so as to dissuade from further violations. This also contributes to trustworthy and more transparent enforcement.

6.1.6 Land Use Implications

Land use in downtown and in other areas of Portage la Prairie has the potential to influence parking use. The data shows that the supply of parking exceeds its demand, suggesting an oversupply for typical use. However, this may also be relative to the number of patrons making trips

to the downtown. That being said, the downtown offers a range of unique land uses that draw patrons for a variety of reasons, often during the week for frequent trips, as compared to other areas of concentrated economic competition. Despite this, there are land uses in the downtown that are underutilized, either as vacant lots or empty storefronts. Vacant lands and storefronts provide an opportunity for the City to encourage growth and activity in the downtown. Not only can vacant lands be used to accommodate peak parking demand during multiple events, they can also be earmarked for future infill to encourage more patrons into the downtown.

In Portage la Prairie, many of the vacant lots or empty storefronts could attract potential tenants, but where minimum parking requirements exist, fitting both a new development and its required parking may dissuade potential tenants. Parking minimums may result in an inefficient use of small parcels of land. Shoup (1999, p. 9) indicates that such minimums may result in potential tenants looking elsewhere for larger lots that can accommodate both a new development and the minimum number of parking spots required by the zoning by-law. Allowing for shared use parking for defined development areas, while also considering payment-in-lieu of parking policies, provide opportunities for a more efficient use of land in downtown Portage la Prairie.

6.2 Implications for Parking Planning Practice

6.2.1 Challenging the Conventions of Parking Planning

The way in which many planning documents approach parking in small urban areas appears to be conventional in terms of management and regulations. Conventional parking management often maintains the same minimum parking requirements without empirical evidence to suggest current suitability. Additionally, some planning documents may borrow parking regulations from other jurisdictions. Lower level documents are obligated to achieve the goals, objectives, and policies outlined in higher level documents. As such, unless higher level policy documents identify the need to challenge the conventions of parking in lower level documents, it is not likely that the standard

practices will change.

It is also important for planning professionals to recognize that there are different types of parking to be planned for, rather than the private off-street parking requirements that planning documents typically regulate. Varying types of parking draw varying types of users with different parking behaviours. Municipally owned and maintained public parking is often not included as part of overall parking management strategies. Planners should push for more priority placed on this type of parking. Adaptive parking aims to gradually change the conventions of planning over time, and include multiple types of parking to meet the needs of a range of users. Adapting the conventions and perceptions of parking planning does not have to be dramatic or restrictive. Planners can help to create user-friendly parking strategies based on empirical evidence.

6.2.2 Contributing to Precedents for Small and Low Growth Urban Centres

While there is a wealth of planning research and policy precedents for downtown parking management strategies in large and metropolitan urban centres, there is a considerable lack for small and low growth urban centres. The difference in parking needs across urban centres of varying sizes should be recognized. Although the information coming from publications and plans stemming from larger urban areas is certainly helpful, it should not be considered the gospel of parking management. A study of parking in the downtown of a larger center will yield context specific results and solutions that are not necessarily applicable to the context of parking in smaller urban areas. Planners should aim to collect empirical parking data on each locale to inform its respective management strategies and contribute to the precedents for small and low growth areas. Unfortunately, some areas may not have the capacity to perform these studies, further contributing to the lack of precedent and policy.

6.2.3 Parking Management as Part of a Vibrant Downtown

As precedents suggest, some smaller urban centres have addressed their parking management strategies as part of a downtown masterplan. The literature that exists on the subject of parking management in small city downtowns indicates that it can be part of a larger strategy to revitalize downtowns as a whole. Planning professionals should not neglect parking and its relationship with the health and vibrancy of downtowns. While it is important to identify long-term parking management policy documents, it is also equally as important to acknowledge other factors that can impact parking, or vice versa. Including parking management studies and policy documents as part of a larger downtown secondary plan does not detract from the importance of parking management, but rather it contributes to the dialogue on how parking is just one factor influencing downtowns in small urban areas. Additionally, as part of a vibrant downtown, the pedestrian experience is often directly improved when streetscape features are improved. As each vehicle trip begins and ends as a pedestrian, streetscape improvements such as including better lighting, as well as informative wayfinding signage may help to encourage users of on-street parking walk to their destination from further distances.

6.3 Future Research Potential

There are opportunities for the City of Portage la Prairie to conduct further research in terms of downtown parking management. Peak event-related downtown parking use was not observed, only typical weekly parking behaviours. A snapshot of peak parking demand during multiple ongoing events, using similar observation techniques could be conducted to gain an understanding of this behaviour and how to accommodate an influx of vehicles with the existing supply of parking. Additionally, continued observation of parking in the downtown could be conducted to identify gradual changes in trends. This is something that could be conducted on an annual basis. It could provide a more complete picture of typical parking use, with a priority placed on surveying employee

parkers within the downtown.

Observing trends in parking use, as well as surveying parking users, during the winter has the potential to fill a gap in the research of not only this practicum, but in the literature on parking in general. Understanding the impact of winter conditions on parking behaviours is important when considering parking strategies for a city that spends a significant amount of time under snow. Lastly, the City could pursue information from the urban centres included in this study's policy review to find out whether or not suggested interventions from their respective policy documents were implemented. Understanding how and if parking interventions were executed, and if they were monitored for effectiveness and efficiency, could provide helpful data in terms of how interventions function when cities implement them.

6.4 Chapter Summary

The data of this practicum revealed a number of emerging trends and lessons related to municipal public parking in downtown Portage la Prairie, summarized Overall, the supply of municipal public parking, relative to typical weekday and weekend use, is greater than its demand. As such, parking, especially metered parking, is not efficiently used. Despite this, there persists the perception that there is not enough parking, or that there is an issue with the existing stock. This perception largely appears to be a result of peaks in parking demand during special events, which went unobserved during data collection.

Often, on-street metered parking was occupied for shorter lengths of time, while on-street non-metered and off-street non-metered parking were occupied for longer lengths of time. The meters in Zone A, being more centrally located, were more often occupied in greater numbers than the more peripheral Zone B, despite being cheaper. The data revealed an importance placed on free off-street parking to the business community, and a fear of altering how it is currently regulated by the City of Portage la Prairie. However, the fact that long-term parkers can displace short-term parkers from

centrally located parking did not go unacknowledged. While the data showed the types of parking users present in the downtown, it also showed the difference in parking behaviour between the downtown and the big box commercial area. These two areas may be in competition with each other, however, they draw users for different reasons for varying lengths of time. The diverse land uses in the downtown draw users for a variety of reasons, often parking for shorter intervals of time (unless a resident or employee of the area), and the big box commercial area often draws users for longer periods of time.

The data also illustrates that users of parking prefer a lack of time restrictions, as well as using it for free. However, people will pay for parking under certain circumstances such as destination location relative to available meters or trip length. Only a slight majority of on-street parking meters were observed to be paid during typical use. Preference for free parking, ageing parking meters, and meter user error revealed themselves as reasons as to why such a large percentage of meters go unpaid. Related to unpaid and ageing meters, there emerged the theme of concern over inconsistent parking enforcement. The data contradicted itself in that a preference for more consistent yet lenient enforcement and ticketing was desired.

Portage la Prairie is comparable to the small urban centres examined as part of the policy review in terms of their parking policies. Parking management strategies were largely absent in the higher level policy documents, other than pointing to lower level policy documents, like zoning by-laws to regulate private off-street parking, and traffic by-laws to regulate both private and municipal parking. Without higher level documents identifying the importance of downtown parking management, regulations may continue to remain standard over time. However, the American cities provided examples of how smaller urban centres can indirectly regulate their municipal parking through downtown revitalization. This practicum illustrates the importance of identifying parking as an issue that should not be dealt with in isolation. The complex nature of parking is related to transportation

and land use patterns. This practicum reveals that encouraging a busier downtown in terms of parking and patrons is desired. Revitalizing the small city downtown and improving the user experience of parking can contribute to an increase in visiting patrons, resulting in parking revenues that can be further invested in vibrancy efforts.

Table 19: Lessons Learned about Municipal Public Parking in Downtown Portage la Prairie

Emerging Trend	Lesson Learned
Parking Use Behaviours	On-street metered parking is typically occupied for shorter periods of time with high turnover during the day.
	Off-street non-metered parking is typically occupied for longer periods of time with low turnover during the day.
	On-street non-metered parking is typically occupied for longer periods of time with low turnover during the evening, especially adjacent to residential land uses.
	The demand for on-street metered spots located adjacent to off-street lots typically is not as high as those located on other blocks.
	Just over half (54%) of the occupied on-street metered spots were paid for during observation times.
	The practical parking spot occupancy of 85% was rarely reached for all types of downtown parking demonstrating that the supply of parking is greater than its demand during typical weekday use.
	On-street meters on more peripheral streets (i.e. Zone B) experience less frequent turnover and occupancy compared to more central streets (i.e. Zone A).
Parking User Preferences	Parking users prefer free parking with no time limits.
	Despite preferring free parking, users will pay for on-street meters based on a combination of factors including their destination and length of stay (i.e. shorter trips may result in paying for meters near the destination).
Parking Perceptions	Off-street parking lots perceived as crucial to local business owners, but also criticized by same group for long-term parkers using valuable patron and visitor parking.
	There is a general perceived parking problem in the downtown despite the supply of all parking types exceeding typical daily demand.
	Multiple ongoing downtown events can lead to a peak in demand for parking that exceeds supply, contributing to the perception of parking problem.
	The time provided at meters for payment of use is viewed as restrictive (i.e. users are of the opinion that they should receive more time at meters for what they pay).
Land Use Factors	A wider range of land uses draw patrons and visitors to the downtown compared to the big box commercial area of Portage la Prairie.
	The land uses present in the downtown draw patrons and visitors for more frequent trips compared to the big box commercial area.
Parking Enforcement	Inconsistent enforcement of on-street meters contributes to parking users not paying for use.
	Enforcement of parking meters is viewed as too strict with the preference for it to be more consistent, yet contradictorily more lenient.
	There is a lack of signage explaining parking by-laws in the downtown (i.e. hours of the day in which on-street meters require payment for use, or which zone metered streets are located in).
Ageing Parking Meters	Parking meters in both Zones A and B are ageing.
	Ageing meters contribute to user error, in part resulting in meters not being paid for (i.e. users not having the correct denomination of money accepted by meters).

Parking management strategies in small and low growth urban centres should differ from the strategies used by larger metropolitan areas. This practicum aims to contribute to the gap in knowledge regarding municipal public parking in the downtowns of smaller urban areas by taking a snapshot of the circumstances in Portage la Prairie. The findings of this research confirm that parking is a complex planning issue. Municipalities must acknowledge the importance of collecting local empirical evidence in order to better inform parking management strategies in their downtowns. Perception, preferences, and actual parking related behaviour appear to contradict themselves at times, pointing to the importance of local data.

This practicum offers not only the City of Portage la Prairie with useful data, it provides replicable tools for municipalities with similar circumstances to collect data about parking in their downtowns (see Table 20 for a summary of potential parking management strategies revealed by the research). Portage la Prairie, and other urban areas of similar context, should take into consideration opportunities for challenging the conventions of parking planning and identifying parking management as an integral part of a vibrant downtown. Municipal parking strategies could include creating new parking strategies, encouraging efficient use of on-street parking, managing long-term parking use, upgrading parking infrastructure, and acknowledging the implications of parking on land use. Acknowledging the relationship between municipal public parking types, perceptions, preferences, and behaviours can help to develop municipal public parking management strategies not only for Portage la Prairie, but for other small and low growth urban centres.

Table 20: Potential Municipal Public Parking Management Strategies for Downtown Portage la Prairie

Management Strategy	Description
Create a Parking Management Strategy	Establish a parking management committee responsible for creating, implementing, promoting, managing, monitoring, and evaluating parking strategies.
	Conduct ongoing downtown parking studies to identify trends in supply and demand.
	Implement pilot parking programs on a non-permanent basis to monitor and evaluate effectiveness.
Encourage More Efficient Use of On-street Parking	Continue to study the ongoing relationship between on- and off-street parking.
	Consolidate parking zones to one downtown parking model in which meters charge the same amount for use (i.e. \$0.25 for 15 minutes)
	Enforce time restrictions at meters to encourage turnover (i.e. 2 hour restrictions requiring parkers to move to a new meter on a different block).
Manage Long-term Parking Behaviour	Install signage to direct long-term parking users to off-street lots.
	Install meters along the periphery of off-street lots to disincentivize long-term parkers from utilizing valuable patron/visitor parking spots.
	Implement employee parking permits at an annual fee to provide off-street space (centrally or peripherally located) for downtown employees intending to occupy spots for longer periods of time.
	Implement residential parking permits at an annual fee to guarantee on-street space for downtown residents in competition with patrons and visitors.
	Utilize peripheral off-street lots and temporary signage for special event parking during multiple ongoing downtown events.
Upgrade Parking Infrastructure	Upgrade meters to include mechanisms that accept a range of payment methods with user-friendly interfaces.
	Install signage outlining clear parking instructions as per downtown parking by-laws.
Improve Parking Enforcement	Implement consistent enforcement as per parking by-laws (i.e. organizing officers by one hour or bi-hourly routes to monitor the same parking spaces consistently).
	Improve transparency by creating a public campaign to provide information on how parking enforcement is organized and what parking fees/ ticket revenues are put toward.
Land Use Strategies	Encourage reuse of vacant lots and storefronts to increase the potential number of patrons and visitors in the downtown.
	Explore shared municipal and private off-street parking options, and allow payment-in-lieu of parking provisions.

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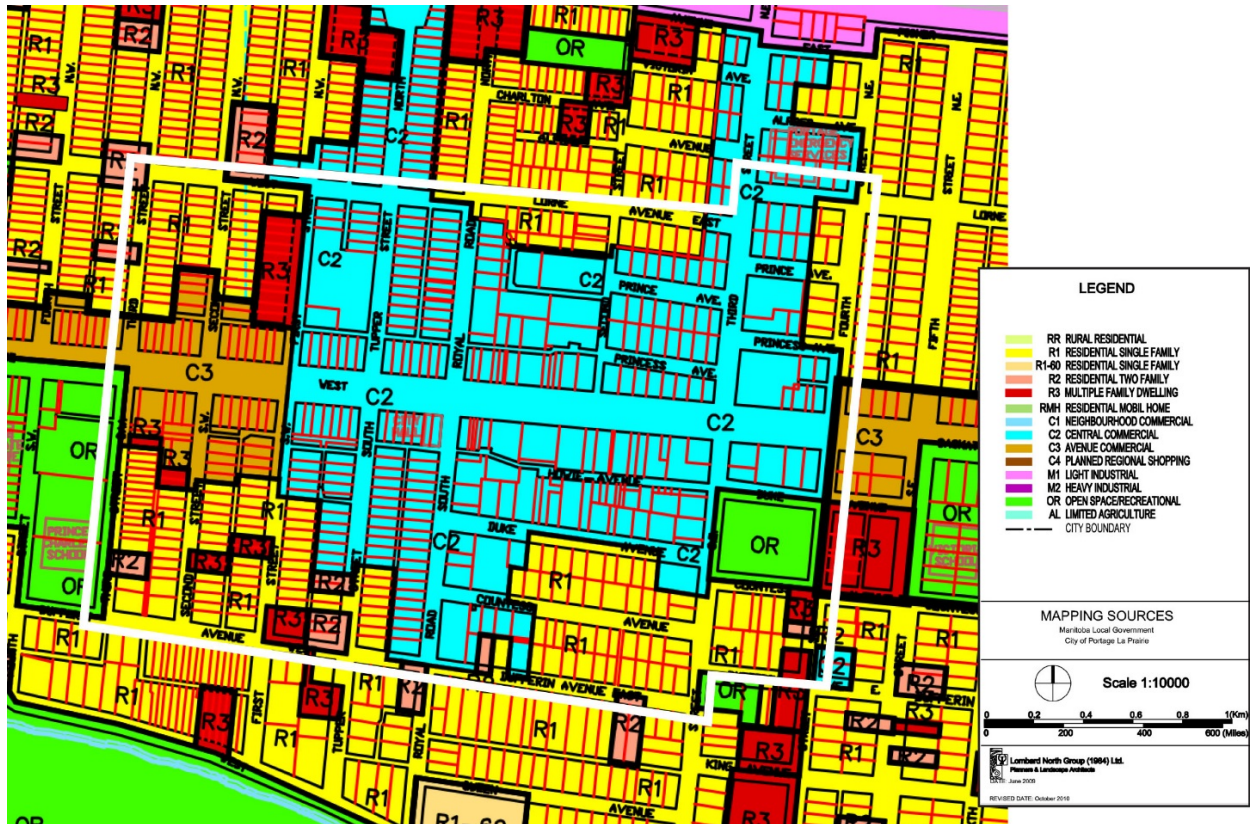
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8.0 Appendices

8.1 Zones Located in the Downtown Study Area

Figure 22: Zones Located in the Downtown Study Area



Source: Portage la Prairie Planning District Zoning By-law

8.2 Minimum Parking Requirements by Zones Located in Downtown Study Area

Figure 23: Minimum Parking Requirements by Residential Zones Located in Downtown Study Area

Table 4.2 Residential Land Use Regulations and Parking								
LAND USE Permitted = P Conditional = C	ZONES							PARKING (a)
	RR	R1	R1-60	R2	R3	RLL *	RMH	
Accessory Uses	See 2.12 and 4.6 [AM.B/L#11-8522] [AM.B/L#11-8524]							
Bed & Breakfast	C	C	C	C		C		1 space per unit
Boarding & Lodging Houses	C	C	C	C	C	C		One space per dwelling unit
Child Care - Group	P		C	C	C			1 per every 3 employees
Co-op Housing	C	C	C	C	C		C	One space per dwelling unit
Community Centres	C	C	C	C	C	C	C	1 per 46.5 square metres of floor area
Day Care Home, in Single-Family Dwelling	P	C	C	C	P [AM.B/L #11-8524]	P	P	1 per 46.5 square metres of floor area
Day Care Home, in Two-Family or Multi-Family Dwelling				C	C			1 per every 3 employees
Dwelling, Single-Family	P	P	P	P	C	P		One space per dwelling unit
Dwelling, Two-Family				P	C			One space per dwelling unit
Dwelling, Multi-Family				C	P			1.5 per dwelling unit (10% of which are unassigned visitor parking spaces)
Emergency Services	P	P	P	P	P	C	P	One (1) per every 93 square metres of floor area but not less than two (2)
Funeral Parlours					C			1 per 46.5 square metres of floor area
Government Services	C	C	C	C	C	C	C	1 per 23.2 square metres of floor area
Group Residence					P			1 per resident [AM.B/L#11-8524]
Home Occupation	(See "Home Occupation" in section 4.6)							
Libraries & Museums	C	C	C	C	C	C	C	One (1) per every 93 square metres of floor area but not less than two (2)
Live/work Studio	C	C	C	C	C	C	C	One space per dwelling unit
Mobile Home, in Mobile Home Park							P	One space per dwelling unit
Mobile Home, in Mobile Home Subdivision							P	One space per dwelling unit
Public Utilities	C	C	C	C	C	C	C	
Religious Institutions	C	C	C	C	C	C		1 per 5 seats in the principal seating area but no less than 10 spaces
School, Elementary/Junior High	C	C	C	C	C	C		1 per classroom plus 10 additional spaces
School, Senior High	C	C	C	C	C	C		5 per classroom
Special Needs Housing	P	P	P	P	P	P	P	[AM.B/L#12-8566]
Women's Transitional Home / Shelter House [AM.B/L#12-8566]	C	C	C	C	C			1.5 per every 2 dwelling units

*[AM.B/L#11-8522]

Source: Portage la Prairie Planning District Zoning By-law

Figure 24: Minimum Parking Requirements by Commercial Zones Located in Downtown Study Area

Table 5.2 Commercial Zone Land Use Regulations and Parking					
LAND USE Permitted = P Conditional = C	ZONES				PARKING (a)
	C1	C2	C3	C4	
Accessory Uses See 2.12 and 5.5 [AM.B/L#11-8524]	C	C	P	C	
Animal Grooming	C	P	P	P	1 per 93.0 square metres of floor area
Animal Hospitals, Veterinary Clinics and Taxidermy	C*	C	P	C	1 per 93.0 square metres of floor area
Antique stores, thrift stores, second hand stores	P	P	P	P	1 per 46.5 square metres of floor area
Arcade	C*	C	C	C	1 per 93 square metres of floor area
Auction Marts			C	C	1 per 46.5 square metres of floor area
Autobody Repair & Service Shops	C	P	P	P	1 per 46.5 square metres of floor area
Automated Teller	P	P	P	P	
Automobile Gas Bar	C	C	P	P	One (1) per every 278.7 square metres of floor area but not less than two (2)
Automobile Repair/ Service Station	C	C	P	P	One (1) per every 93.0 square metres of floor area but not less than two (2)
Automobile Sales Area	C	P	P	P	One (1) per every 93.0 square metres of floor area but not less than two (2)
Banks and Financial Services	P	P	P	P	1 per 46.5 square metres of floor area
Banquet Halls & Auditoriums	C	C	P	P	1 per 46.5 square metres of floor area
Bars & Taverns	C	P	P	P	1 per 23.2 square metres of floor area
Beer, Liquor & Wine Stores	C*	P	P	P	1 per 46.5 square metres of floor area
Bicycle Sales, Rental, Repair	P	P	P	P	1 per 46.5 square metres of floor area
Billiard & Pool Halls		C	C	C	1 per 46.5 square metres of floor area
Bingo Parlour		C	C	C	1 per 46.5 square metres of floor area
Bowling Alleys	C	P	P	P	One (1) per every 93.0 square metres of floor area but not less than two (2)
Building Supplies and Lumber Yards			C	C	1 per 46.5 square metres of floor area
Bus Station		C	P	P	1 per 46.5 square metres of floor area
Butcher	C*	C	P	P	1 per 46.5 square metres of floor area

Table 5.2 Commercial Zone Land Use Regulations and Parking					
LAND USE Permitted = P Conditional = C	ZONES				PARKING (a)
	C1	C2	C3	C4	
Car Wash	C	C	P	P	2 spaces plus 1 space per bay plus 2 queuing spaces measured from entrance
Catering Establishments	P*	P	P	P	1 per 46.5 square metres
Community Centers	P	P	P	P	1 per 93.0 square metres of floor area
Community Hall		P	P	P	1 per 23.2 square metres of floor area
Contractors' Yards	C(c)*		C(c)		1 per 93.0 square metres of floor area
Convenience Stores	C	P	P	P	1 per 46.5 square metres of floor area
Day Cares	C	C	C	P	1 per 46.5 square metres of floor area, but not less than 2 spaces
Department Stores (including retail sales of building supplies, lumber, greenhouse and nursery stock)		C	P	P	1 per 46.5 square metres of floor area
Dry Cleaners	C	P	P	P	1 per 46.5 square metres of floor area
Dwelling, Multi-family	C (b)	C (b)	C**		1.5 per dwelling unit (10% of which are unassigned visitor parking spaces)
Dwelling, Suite	P(b)	P(b)			One space per dwelling unit
Emergency Services	P	P	P	P	One (1) per every 93.0 square metres of floor area but not less than two (2)
Entertainment Facility		C	C	C	1 per 46.5 square metres of floor area
Farm Implements (Sales & Service)			P	P	1 per every 93.0 square metres of floor area, at the discretion of the Development Officer
Farmers Market	C	C			
Fitness Centre	P	P	P	P	1 per 46.5 square metres of floor area
Funeral Parlours	C*	C	P	P	1 per 46.5 square metres of floor area
Government Services	P	P	P	P	1 per 46.5 square metres of floor area
Greenhouses & Nurseries which include growing stock on site			C	C	1 per every 93.0 square metres of floor area, at the discretion of the Development Officer
Hardware Store	P	P	P	P	1 per 46.5 square metres of floor area
Hospitals & Personal Care Homes	C	P	P	P	.75 parking spaces per bed
Hotels & Motels	P	P	P	P	1 per unit
Jeweller	P	P	P	P	One (1) per every 46.5 square metres of floor area
Laundromats	P	P	P	P	1 per 46.5 square metres of floor area

Table 5.2 Commercial Zone Land Use Regulations and Parking					
LAND USE Permitted = P Conditional = C	ZONES				PARKING (a)
	C1	C2	C3	C4	
Libraries		P	P	P	1 per 46.5 square metres of floor area
Live/work Studio	P(b)	P(b)			One space per dwelling unit
Lodges & Private Clubs	C*	P	P	P	1 per 46.5 square metres of floor area
Offices	P	P	P	P	1 per 46.5 square metres of floor area
Parking, Public	C	P	P	P	
Parks & Open Spaces	P	P	P	P	
Personal Services	P	P	P	P	1 per 46.5 square metres of floor area
Playground, tot lots and similar uses including buffer strips, public reserves and public walkways		C			
Professional Services	P	P	P	P	1 per 46.5 square metres of floor area
Radio and Television	C*	C	P		1 per 46.5 square metres of floor area
Recreation Facility	C	C	C	C	1 per 5 seats
Recycling Collection Area	P	P	P	P	
Religious Institutions	P	P	P	P	1 per 5 seats in the principal seating area but no less than 10 spaces
Restaurants, Including Drive Through Facilities	C*	P	P	P	1 space for every 4 seats or 1 per 23.2 square metres of floor area, whichever is greater
Restaurants, Not Including Drive Through Facilities	C	P	P	P	1 space for every 4 seats or 1 per 23.2 square metres of floor area, whichever is greater
Retail Stores	P	P	P	P	1 per 46.5 square metres of floor area
Sexually Oriented Business		C	C	C	1 per 46.5 square metres of floor area
Shopping Centers			C	P	1 per 46.5 square metres of floor area
Supermarkets		P	P	P	1 per 46.5 square metres of floor area
Swimming Pool, Public	C	C	C	C	1 for each 23.2 square metres of gross floor area at the discretion of the Development Officer
Tanning Salon	C	P	P	P	1 per 46.5 square metres of floor area
Taxis & Couriers	C*	P	P	P	1/93.0 square metres not less than 2
Theatres & Cinemas, excluding Drive-In		P	P	P	1 per 5 seats
Upholstery Shop	P*	P	P	P	1 per 46.5 square metres of floor area

Table 5.2 Commercial Zone Land Use Regulations and Parking					
LAND USE Permitted = P Conditional = C	ZONES				PARKING (a)
	C1	C2	C3	C4	
Video Rental Establishments	C	P	P	P	1 per 46.5 square metres of floor area
Warehouses			P		1 per 46.5 square metres of floor area
Workshops	C*		P		1 per 46.5 square metres of floor area

*[AM.B/L#11-8533] **[AM.B/L#15-8629]

Source: Portage la Prairie Planning District Zoning By-law

Figure 25: Minimum Parking Requirements by Open Space and Recreation Zones Located in Downtown Study Area

Table 7.2 Open Space/Recreation and Limited Agriculture Land Use Regulations and Parking			
LAND USE Permitted = P Conditional = C	ZONES		PARKING (a)
	OR	AL	
Accessory Uses	See 2.12 and 7.4 [AM.B/L#11-8524]		
Agriculture, excluding livestock		P	At the discretion of the Development Officer
Camping/ Tenting Grounds	C	C	At the discretion of the Development Officer
Cemeteries	P	C	At the discretion of the Development Officer
Conservation Areas	P	P (b)	
Dwelling, Single Family on existing parcels of land	C	C (c)	1 per dwelling unit
Emergency Services	P	C	One (1) per every 93.0 square metres of floor area but not less than two (2)
Exhibition Grounds	P	C	At the discretion of the Development Officer
Golf Course or Driving Range	P	C	At the discretion of the Development Officer
Government Services	P	C	1 for each 46.5 square metres of gross floor area
Greenhouses & Nurseries	P	P	At the discretion of the Development Officer
Home Occupation	(See "Home Occupation" in Section 4.6)		
Horse Track	C		At the discretion of the Development Officer
Hospitals & Personal Care Homes	C		2 guest parking for every bed
Libraries & Museums	P		One (1) per every 93.0 square metres of floor area but not less than two (2)
Market Gardening	P	P	
Mobile Training Labs, for schools	C		[AM.B/L#12-8570]
Park Buildings	P		
Public Utilities	P	P	One (1) per every 93.0 square metres or at the discretion of the Development Officer
Radio and Television Stations	P	C (d)	1 for each 46.5 square metres of gross floor area, but not less than 2 spaces
Recreational Facility	C		1 per 5 seats
Recycling Collection Area	C	C	At the discretion of the Development Officer
Religious Institutions	C		1 per 5 seats in the principal seating area but no less than 10 spaces
Schools	P	P (b)	5 per classroom [AM.B/L#11-8524]
Stables	C	C	At the discretion of the Development Officer
Swimming Pool, Public	P	C (d)	1 for each 23.2 square metres of gross floor area
Vegetable Production	P	P	

Source: Portage la Prairie Planning District Zoning By-law

8.3 Sample Parking Observation Analysis Spreadsheets

Location 3: Saskatchewan Avenue, Zone A, June 2016, Public On-street and Metered Parking

Table 21: Location 3 (Weekday Parking Observations Data)

Time	Zone	Street	Block	Type of Parking	Meters Avail.	Meters in Use	Non-metered Spots Avail.	Non-metered spots in use
10:00 am - 11:30 am	A	SK Ave.	0	Public; On-street meters	7	1	-	-
	A	SK Ave.	1	Public; On-street meters	7	2	-	-
	A	SK Ave.	2	Public; On-street meters	8	1	-	-
	A	SK Ave.	3	Public; On-street meters	16	1	-	-
	A	SK Ave.	4	Public; On-street meters	14	0	-	-
	A	SK Ave.	5	Public; On-street meters	7	0	1	1
				Total	60	5	1	1
1:30 pm - 3:00 pm	A	SK Ave.	0	Public; On-street meters	7	1	-	-
	A	SK Ave.	1	Public; On-street meters	7	2	-	-
	A	SK Ave.	2	Public; On-street meters	8	1	-	-
	A	SK Ave.	3	Public; On-street meters	16	3	-	-
	A	SK Ave.	4	Public; On-street meters	14	1	-	-
	A	SK Ave.	5	Public; On-street meters	7	0	1	1
				Total	60	8	1	1
5:00 pm - 6:30 pm	A	SK Ave.	0	Public; On-street meters	7	2	-	-
	A	SK Ave.	1	Public; On-street meters	7	2	-	-
	A	SK Ave.	2	Public; On-street meters	8	2	-	-
	A	SK Ave.	3	Public; On-street meters	16	4	-	-
	A	SK Ave.	4	Public; On-street meters	14	3	-	-
	A	SK Ave.	5	Public; On-street meters	7	2	1	0
				Total	60	15	1	0

Table 22: Location 3 (Weekday Parking Observations Analysis)

Time	Metered		Non-metered		Total	
	Available	In Use	Available	In Use	Available	In Use
10:00 am - 10:30 am	60	5	1	1	61	6
10:30 am - 11:00 am	60	8	1	1	61	9
11:00 am - 11:30 am	60	15	1	0	61	15
Average	60	9	1	1	61	10
Percent	-	16%	-	67%	-	16%
Time	Metered		Non-metered		Total	
	Available	In Use	Available	In Use	Available	In Use
1:30 pm - 2:00 pm	60	17	1	0	61	17
2:00 pm - 2:30 pm	60	9	1	0	61	9
2:30 pm - 3:00 pm	60	17	1	0	61	17
Average	60	14	1	0	61	14
Percent	-	24%	-	0%	-	23%
Time	Metered		Non-metered		Total	
	Available	In Use	Available	In Use	Available	In Use
5:00 pm - 5:30 pm	60	13	1	1	61	14
5:30 pm - 6:00 pm	60	9	1	1	61	10
6:00 pm - 6:30 pm	60	9	1	1	61	10
Average	60	10	1	1	61	11
Percent	-	17%	-	100%	-	19%

Table 23: Location 3 (Weekday Occupancy of Metered Spots)

Time	Occupancy of Metered Spots			Occupant of Non-metered Spots		
	1 Interval	2 Intervals	3 Intervals	1 Interval	2 Intervals	3 Intervals
10:00 am - 11:30 am	24	2	0	0	1	0
Percent	92%	8%	0%	0%	100%	0%
1:30 pm - 3:00 pm	39	2	0	0	0	0
Percent	95%	5%	0%	0%	0%	0%
5:00 pm - 6:30 pm	23	5	0	0	0	1
Percent	82%	18%	0%	0%	0%	100%

Table 24: Location 3 (Weekday Occupancy Length of Metered Spots)

Time	Spots Occupied More Than One Observation Period			
	Metered		Non-metered	
	#	%	#	%
10:00 am - 3:00 pm	0	0%	0	0%
10:00 am - 6:30 pm	0	0%	0	0%

8.4 Parking Observations Locations

Figure 26: Downtown Study Area Observation Locations



Location 1: 1st Street NW/SW (Zone B)

The metered parking in Location 1 is in close proximity to a bank and the post office, which appeared to be the biggest driver of shorter trips, and non-metered parking was located adjacent to single-detached and multiple-unit dwellings. Both metered and non-metered parking was busiest in the morning during the week. Comparatively, both metered and non-metered parking was significantly less busy during the weekend. Fifteen percent (15%) of non-metered spots were occupied during all three observation periods during the week, and 31% of non-metered spots were occupied during all three observation periods during the weekend.

Location 2: Royal Road N/S (Zone A)

Location 2 is centrally located and within close proximity to multiple banks, a medical clinic, a church, and City Hall – all apparent drivers of shorter trips. A portion of this location is also

adjacent to Location 5 which provides free, off-street public parking. During the week, metered and non-metered spots were busiest in the morning during the week, and during the weekend occupancy rates of metered and non-metered spots were lower. During the week, 15% of non-metered spots were occupied during all three observation periods, and during the weekend 10% of non-metered spots were occupied during all three observation periods.

Location 3: Saskatchewan Avenue (Zone A)

Location 3 is centrally located and bisects the study area, and is within close proximity to banks, post offices, retail, City Hall, restaurants, and vacant lots. The parking spots in this location were busiest in the afternoon during the week. Shorter trips were more frequent during the week, while longer trips were more frequent during the weekend. A driver of these shorter trips appeared to be banks, post offices, and some retail, whereas longer trips appear to be restaurants and some retail.

Location 4: 3rd Street NE/SE (Zone B)

Location 4 is within close proximity to retail, a vacant lot, a movie theatre, and a Red River College. A farmer's market located in a vacant lot during the weekend drew shorter trips to the location. Fewer metered spots were present, and most non-metered spots were located where meters once stood. In general, fewer parking spots were occupied in this location compared to others, and non-metered parking drew longer trips than metered parking during the week. During the week, 3% of non-metered spots were occupied during all three observation periods, and 3% of non-metered spots were occupied during all three observation periods.

Location 5: Heritage Square (Off-street)

Location 5 is centrally located and within proximity to a seniors' centre, a library, a performing arts theatre, banks, a medical clinic, post offices, retail, City Hall, and restaurants. Apparent

generators of shorter trips included the medical clinic, Shoppers Drugmart, the senior centre, and the library. Longer trips were common in this location, however, the number of shorter trips grew as the day progressed. These longer trips were potentially generated by employees of the study area and restaurants. During the week, 14% of off-streets spots were occupied during all three observation periods, and during the weekend, 17% of off-street spots were occupied during all three observation periods.

Location 6: Glesby Centre Parking Lot (Off-street)

Location 6 is centrally located and within proximity to a performing arts theatre, a bank, retail, restaurants, and a movie theatre. Longer trips were common, and this location was busiest in the morning during the week. These longer trips were potentially generated by employees of the study area and restaurants. During the week, 11% of off-streets spots were occupied during all three observation periods, and during the weekend, 17% of off-street spots were occupied during all three observation periods during.

8.5 Intercept Survey Schedule

Users of Parking: Portage la Prairie Downtown Core

- 1) What is the purpose of your trip downtown?
 - a) ☐ Shopping
 - b) ☐ Employee
 - c) ☐ Other (describe)
- 2) If shopping, why do you shop downtown?
- 3) If an employee, where do you usually park?
 - a) Is this for the duration of your shift?
 - b) How long do you park for?
- 4) In the last month, how often did you come downtown?
 - a) On weekdays: ☐ Daily ☐ 2-3 times per week ☐ Once a week ☐ 2-3 times a month
☐ Once a month ☐ Never
 - b) On the weekend: ☐ Daily ☐ Once per weekend ☐ 2-3 weekends per month
☐ One weekend per month ☐ Never
- 5) How long did you search for a parking spot during this trip downtown?
- 6) How long do you estimate that you will remain parked in your parking spot?
- 7) Approximately, near which intersection did you park during this trip?
- 8) Do you have more than one destination during this trip?
- 9) Does the price of parking influence where you chose to park downtown?
 - a) ☐ Yes ☐ Sometimes ☐ No
 - b) Please explain your answer.

Users of Parking: Portage la Prairie Big Box Area

- 1) What is the purpose of your trip to the big box commercial area?
 - a) ☐ Shopping
 - b) ☐ Employee
 - c) ☐ Other (describe)
- 2) If shopping, why do you shop at the big box commercial area?
- 3) If an employee, where do you usually park?
 - a) Is this for the duration of your shift?
 - b) How long do you park for?

- 4) In the last month, how often did you come to the big box commercial area?
- a) On weekdays: ☐ Daily ☐ 2-3 times per week ☐ Once a week
☐ 2-3 times a month ☐ Once a month ☐ Never
- b) On the weekend: ☐ Daily ☐ Once per weekend ☐ 2-3 weekends per month
☐ One weekend per month ☐ Never
- 5) How long did you search for a parking spot during this trip to the big box commercial area?
- 6) How long do you estimate that you will remain parked in your parking spot?
- 7) Approximately, where did you park during this trip?
- 8) Do you have more than one destination during this trip?

8.6 Intercept Survey: Participant Responses

Table 25: Downtown Intercept Survey Participant Responses

Weekend	Q1	Q2	Q3	Q3(a)	Q3(b)	Q4(a)	Q4(b)	Q5	Q6	Q7	Q8	Q9(a)
1	Shopping	For the sales Shoppers Drugmart	/	/	/	Daily	Daily	No searching	10 minutes	Heritage Square	No	Sometimes
2	Shopping	Shoppers Drugmart It's where all the stores I want to shop at are located	/	/	/	Daily	Once per weekend	No searching	15 minutes	Heritage Square	No	Yes
3	Other (Library)	/	/	/	/	Daily	Daily	1 minute	1 hour	Heritage Square	Yes	No
4	Other (Bank)	/	/	/	/	Daily	Once per weekend	No searching	5 minutes	Saskatchewan Avenue & Royal Road	No	Yes
5	Shopping	To avoid the Big Box stores	/	/	/	Daily	Daily	No searching	15 minutes	Heritage Square	Yes	Yes
6	Shopping	Thrift shop	/	/	/	Once a week	One weekend per month	No searching	30 minutes	Saskatchewan Avenue & Royal Road	No	Sometimes
7	Shopping	For the convenience	/	/	/	2-3 times per week	Once per weekend	No searching	10 minutes	Saskatchewan Avenue & Royal Road	No	No
8	Shopping	Shoppers Drugmart	/	/	/	Never	2-3 times per month	No searching	10 minutes	Heritage Square	No	No
Weekday	Q1	Q2	Q3	Q3(a)	Q3(b)	Q4(a)	Q4(b)	Q5	Q6	Q7	Q8	Q9(a)
9	Other (Bank)	Bank	/	/	/	2-3 times per week	Once per weekend	No searching	5 minutes	Saskatchewan Avenue & Royal Road	No	Sometimes
10	Other (Bank)	/	/	/	/	2-3 times per week	Once per weekend	No searching	15 minutes	Glesby	Yes	Yes
11	Shopping Other (Post Office)	To pick up parcels at the Post Office	/	/	/	2-3 times per week	Once per weekend	No searching	30 minutes	Heritage Square	Yes	Yes
12	Shopping	Close to work	/	/	/	2-3 times per week	2-3 times per month	No searching	5 minutes	Heritage Square	No	Sometimes
13	Other (Senior Centre)	/	/	/	/	Daily	Daily	No searching	2 hours	Heritage Square	Yes	Yes
14	Other (appointment) Other (Post Office)	/	/	/	/	2-3 times per month	2-3 times per month	No searching	5 minutes	Saskatchewan Avenue & Royal Road	Yes	Yes
15	Shopping	Convenient	/	/	/	2-3 times per week	Once per weekend	1 minute	10 minutes	Heritage Square	No	Yes
16	Other (Bank)	/	/	/	/	2-3 times per week	Never	No searching	5 minutes	Saskatchewan Avenue & Tupper Street	Yes	Sometimes
17	Shopping Other (Dining)	Pharmacy	/	/	/	Daily	2-3 times per month	No searching	1 hour	Glesby	Yes	Sometimes
18	Employee	/	Heritage Square	Yes	8 hours	2-3 times per week	Once per weekend	No searching	8 hours	Heritage Square	Yes	Yes

Table 26: Big Box Commercial Area Intercept Survey Responses

Weekend	Q1	Q2	Q3	Q3(a)	Q3(b)	Q4(a)	Q4(b)	Q5	Q6	Q7	Q8	Q9(a)
1	Shopping	Cheaper	/	/	/	2-3 times per week	2-3 times per month	No searching	1 hour	Walmart	No	Yes
2	Shopping	Variety	/	/	/	Once a week	2-3 times per month	No searching	30 minutes	Walmart	No	No
3	Shopping	Prefers to shop at Walmart	/	/	/	2-3 times per month	2-3 times per month	Unsure	Was dropped off	/	Yes	Sometimes
4	Shopping	Lack of meters	/	/	/	2-3 times per week	Never	No searching	10 minutes	Walmart	No	Sometimes
5	Shopping	Variety	/	/	/	Once a month	Once per weekend	No searching	1 hour	Walmart	No	No
6	Shopping	Proximity to home	/	/	/	2-3 times per week	2-3 times per month	No searching	30 minutes	Walmart	Yes	Yes
7	Shopping	Live in a nearby small town with limited amenities and services	/	/	/	2-3 times per month	One weekend per month	No searching	30 minutes	Walmart	Yes	No
8	Shopping	Convenience	/	/	/	Once a week	Once per weekend	No searching	20 minutes	Walmart	Yes	Yes
Weekday	Q1	Q2	Q3	Q3(a)	Q3(b)	Q4(a)	Q4(b)	Q5	Q6	Q7	Q8	Q9(a)
9	Shopping	Habit	/	/	/	2-3 times per week	2-3 times per month	No searching	15 minutes	Canadian Tire	Yes	No
10	Shopping	Convenience	/	/	/	Once a week	One weekend per month	No searching	10 minutes	Canadian Tire	No	No
11	Shopping	Convenience	/	/	/	Once a month	Never	No searching	20 minutes	Canadian Tire	Yes	Yes
12	Shopping	Convenience	/	/	/	Once a month	Never	No searching	5 minutes	Canadian Tire	Yes	No
13	Shopping	Few alternatives	/	/	/	Daily	Daily	No searching	15 minutes	Co-op	No	Yes
14	Shopping	Variety	/	/	/	Once a week	One weekend per month	No searching	20 minutes	Co-op	Yes	Yes
15	Shopping	Groceries	/	/	/	Once a month	2-3 times per month	No searching	30 minutes	Co-op	No	No
16	Shopping	Close to work	/	/	/	Once a week	2-3 times per month	No searching	10 minutes	Walmart	Yes	Yes
17	Shopping	Cheaper	/	/	/	Daily	Daily	No searching	30 minutes	Walmart	No	Yes
18	Shopping	Cheaper	/	/	/	Daily	Daily	No searching	1 minute	Walmart	Yes	No

8.7 Focus Group/ Semi-structured Interview Schedule

- 1) What type of business do you own in the downtown core of Portage la Prairie?
 - a) Approximately, near which intersection in the downtown core is your place of business located?
 - b) How long has your place of business been operating?
- 2) What do you think about the current supply of public parking in the downtown core relative to its demand? Please elaborate on your answers.
- 3) Metered parking is organized by Parking Zones in the downtown core, are you familiar with their associated costs and time limits?
 - a) What is your opinion of the current time limits and pricing mechanisms? Please elaborate on your answers.
- 4) Heritage Square provides free public parking with no time limits. What is your opinion regarding the lack of time limits and pricing? Please elaborate on your answers.
- 5) Based on previous experience, are your patrons satisfied with the availability and price of public parking near your establishment?
 - a) Do you think that the availability or pricing of public parking influences your establishment in terms of patronage?
- 6) Have you observed the turnover of public parking spots outside of your establishment?
 - a) Are they regularly occupied for extended periods of time by the same vehicle?
 - b) Is there regular turnover of vehicles in those spots?
 - c) Are the spots often left empty?
- 7) What time of day is the busiest for your establishment?
- 8) Do you think that the availability or pricing of parking influences your business?
- 9) Do you perceive there to be any issues of public parking safety in the downtown core?
- 10) Do you feel that the enforcement of parking meter time limits is consistent and firmly enforced?
- 11) Do you perceive a need for alternative ways of managing parking in the downtown core? Please elaborate on your answers.
- 12) Are there other issues I may have missed, or any further comments?

8.8 Questionnaire Schedule

- 1) What are the streets in downtown in which parking meters are most often occupied?
- 2) What are the streets in downtown in which parking meters are most often empty?
- 3) Which streets in downtown have the highest metered parking turnover?
- 4) Which streets in downtown have the lowest metered parking turnover?
- 5) What are the streets in downtown in which the most parking tickets are issued for expired meters?
- 6) What is the most common complaint that you hear related to parking in the downtown?
- 7) Do you have any additional comments?

8.9 Policy Review – List of Policy Documents by City

Terrace, BC

- City of Terrace Downtown Parking Study Draft
- City of Terrace Official Community Plan
- City of Terrace Street and Traffic By-law #1776-2002
- City of Terrace Zoning By-law #2069-2014

Wetaskiwin, AB

- City of Wetaskiwin Land Use By-law
- City of Wetaskiwin Municipal Development Plan By-law 1782 -11
- City of Wetaskiwin Traffic By-law #1870-16

Estevan, SK

- City of Estevan Official Community Plan By-law 2010-1833
- City of Estevan Traffic By-law 2016-1963
- City of Estevan Zoning By-law #2010-1834

Humboldt, SK

- City of Humboldt: 2035 Official Community Plan
- City of Humboldt Traffic By-law #05/2016
- City of Humboldt Zoning By-law

Yorkton, SK

- City of Yorkton: Our City Our Future Official Community Plan
- City of Yorkton Traffic By-law #10/2000
- City of Yorkton Zoning By-law #14/2003

Selkirk, MB

- City of Selkirk Traffic By-law #5123
- City of Selkirk Zoning By-law #4986
- Selkirk and District Development Plan By-law 190/08

Brainerd, MN

- City of Brainerd City Code: Chapter 43 Zoning Code
- City of Brainerd City Code: Section 1305 Traffic and Parking
- City of Brainerd City Code: Section 1310 Parking Regulations
- City of Brainerd Comprehensive Plan
- Revitalizing Downtown Brainerd: A Master Plan

East Grand Forks, MN

- City of East Grand Forks 2045 Land Use Plan
- City of East Grand Forks City Code: Chapter 10 Land Use Regulation (Zoning)
- City of East Grand Forks City Code: Chapter 72 Parking Regulations
- Downtown Grand Forks Parking Study

Winona, MN

- City of Winona Comprehensive Plan
- City of Winona City Code: Chapter 43 Unified Development Code
- City of Winona City Code: Chapter 61 Traffic
- City of Winona City Code: Section 61.26 Limited Parking Zones
- City of Winona City Code: Section 61.26 Parking Regulations
- City of Winona Downtown Revitalization Plan