

STONY PLAIN PARKING STUDY

Final Report



PERMIT TO PRACTICE HUBERMAN TRANSPORTATION CONSULTANTS INC.
RM SIGNATURALE TURNETURE
RM APEGA ID #:
DATE: NAV. 21. 2025
PERMIT NUMBER: P015103
The Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Prepared For: Town of Stony Plain Date: November 21, 2024 Our File No: 4234.T01

WATT EDMONTON Suite 1270, 10055 106 St NW Edmonton, AB T5J 2Y2 780-800-2957



ACKNOWLEDGEMENTS

WATT Consulting Group would like to acknowledge that the Town of Stony Plain is in Treaty 6 territory, home of the Plains Cree, Woodland Cree, Beaver Cree, Saulteaux, Niisitapi (Blackfoot), Métis, and Nakota Sioux Peoples.

PROJECT TEAM

WATT Consulting Group

William Minchin, MSc, P.Eng. Tim Shah, RPP, MCIP

Project Manager Senior Technical Lead

Mark Huberman, P.Eng. Gaelan Patterson, EIT

Huberman Transportation Consultants Analyst & Author

Senior Technical Advisor

Matthew Lilly, MA Robin Bird

Analyst Data Collection Lead

Kari Anderson, EIT Diego Hatch

Analyst Data Collection



EXECUTIVE SUMMARY

WATT Consulting Group was retained by the Town of Stony Plain to conduct a comprehensive parking study, as part of the CMHC's Housing Accelerator Fund Action Plan. The study's purpose is to identify ways that the Town can build housing that is affordable to both current and future residents through changes to the Town's Land Use Bylaw (LUB).

Methodology

The study included a robust data collection process where parking supply and parking demand data were collected from 11 multi-unit residential, 4 single-unit residential, and 4 commercial and community service sites. Sites were selected to represent a variety of building types, ages, and locations throughout the town. For the multi-unit residential, single-unit row house, and one commercial site, the parking demand and parking supply were calculated based on results of the collected data. Three sites were situated in the town's downtown, where shared parking is provided instead of site-specific off-street parking; for these locations, interviews / travel surveys with employees and patrons were conducted to determine parking demand.

Results

The study has several important findings, summarized as follows:

- Multi-unit residential parking is over-supplied compared to both parking demand, and the current LUB minimum parking requirements (see Figure I and Figure II).
- Single-unit residential parking utilization ranges from 33-100% (see Figure III).
- Commercial parking outside of the C3 zoned multi-use district is oversupplied compared to demand, but demand matches the current LUB minimum parking requirements (see Figure IV)



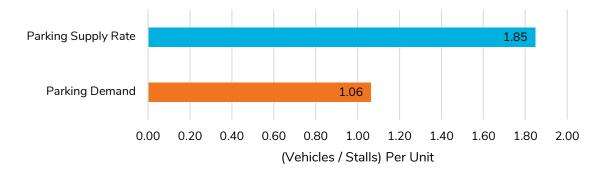


Figure I: Parking Demand vs. Parking Supply for Multi-Unit Residential

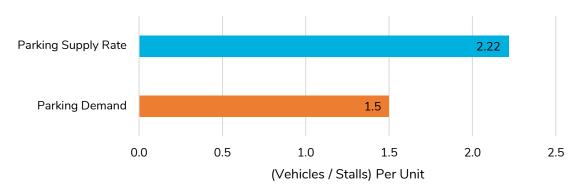


Figure II: Parking Demand vs. Parking Supply for Row Housing

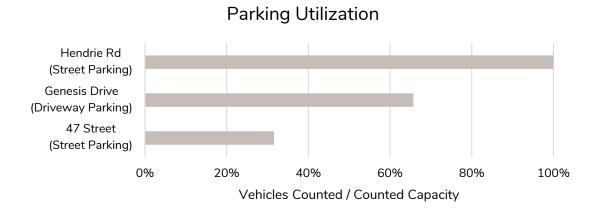


Figure III: Parking Utilization for Single-Unit Sites



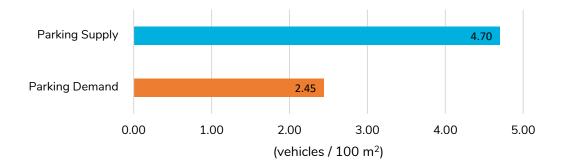


Figure IV: Parking Demand vs. Parking Supply for Commercial

Jurisdictional Scan and Best Practices

A review of similar municipalities to Stony Plain was conducted to provide information on how the Town's parking regulations compare. The selected municipalities were all of a similar size and located a similar distance to a major municipality. The results indicate that the Town's minimum parking regulations are comparable to municipalities that have not recently revised their LUB. For municipalities who have undertaken that work, parking regulations were found to be lower or removed entirely.

Municipalities throughout Alberta and more broadly in North America are focused on creating more walkable, transit-oriented areas, designed to provide choice in lifestyle and travel mode. The requirement to supply parking detracts from this goal, as it increases building costs and makes it harder to promote livable communities by making it easier for people to continue to drive. The most successful of these communities have adopted one, several, or all the following best practices in their off-street parking requirements:

- Removal of parking minimums
- Parking maximums
- Lowered parking requirements for affordable housing units
- Setting parking requirements by geographic area
- Shared parking provisions
- Transportation Demand Management (TDM)

Scenarios

Three scenarios were developed based on the results of the parking study and the qualitative assessment from the jurisdictional scan and parking best practices. These scenarios provide varying levels of change compared to current parking requirements.



Scenario 1: Removal of Minimum Parking Requirements (Impactful Change)

This approach has been implemented in nearby Edmonton and in High River, which is more comparable to Stony Plain and was included in the jurisdictional scan. By removing minimum parking requirements, businesses and developers are instead given the responsibility to provide the amount of parking that the market requires, instead of by municipal bylaw. While this approach may appear drastic, it provides flexibility to developers, businesses, and the Town to cater parking supply to market demands, with the additional benefit of reducing total construction costs incurred from building parking that is (or could be) unused.

Scenario 2: Match to Analysis Results (Gentle Change)

This approach utilizes the results from the parking study to align LUB minimum parking requirements with measured parking demand, based on land use. The result is a 20% reduction to multi-unit and row-house residential requirements, while commercial and community service uses do not change.

Scenario 3: Simplified Residential Minimums (Measured Change)

The final approach builds on the Town's current C3 land use district residential parking regulations and applies them town-wide. As the data shows, the parking demand for both measured residential uses was lower than both the parking supply and the current LUB rate. Scenario 3 would reduce the minimum required parking amount for residential uses to 1.0 stalls per housing unit and maintain the current commercial and community service regulations.

Ultimately, the Town will need to determine which scenario is most appropriate—and effective—for encouraging greater housing supply in the community, which is one main objectives of this study.

General Parking Regulations

There are also general parking regulations that can be adopted by the Town. These are not specific to one scenario, but rather can be used to tailor the impacts of the selected scenario. These general regulations include:

- Maximum Parking Standards
- Lot Coverage Regulations
- Barrier-Free Parking
- Geographic Regulations
- Transportation Demand Management (TDM)
- Affordable (non-market) Housing Variances



TABLE OF CONTENTS

1.0	INTR	INTRODUCTION				
	1.1	Backg	round and Policy Context	1		
		1.1.1	Town Policy & Strategy	1		
		1.1.2	Housing Accelerator Fund	2		
		1.1.3	History of Parking Regulations	2		
		1.1.4 Goals?	How Does Parking Management Relate to the Town's Planning	_		
		1.1.5	How Does the Town Currently Manage Parking?	3		
	1.2	Repor	t Organization	3		
2.0	UNDE	ERSTAN	NDING THE NATURE OF PARKING	4		
	2.1	The S	upply and Demand Relationship	4		
		2.1.1	Why do we Supply Parking?	4		
		2.1.2	How Much Parking Do We Supply?	5		
	2.2	Parkir	ng and Human Behaviour	6		
		2.2.1	Time	6		
		2.2.2	Cost	6		
		2.2.3	Convenience	7		
	2.3	Linkin	g Parking Demand to Automobile Ownership	7		
	2.4	The T	rue Costs of Parking	8		
		2.4.1	General	8		
		2.4.2	What Are the (True) Costs to the Municipality?	. 10		
3.0	METH	HODOL	OGY	. 11		
	3.1	Study	Area & Site Selection	11		
	3.2	Data (Collection	14		
		3.2.1	Residential Sites	15		
		3.2.2	Commercial Sites	15		



		3.2.3	Other Data	15
	3.3	Data A	Analysis	15
		3.3.1	Residential	15
		3.3.2	Commercial and Community Service Analysis	17
4.0	RESUL	_TS		18
	4.1	Reside	ential Multi-unit	18
		4.1.1	Relationship Between Parking Demand and Parking Supply	18
	4.2	Reside	ential, Detached and Row Housing	19
		4.2.1	Row Housing	19
		4.2.2	Detached Housing	20
		4.2.3	Parking Utilization	21
	4.3	Comm	nercial	23
		4.3.1	Parking Survey Methodology	23
		4.3.2	Travel Survey Methodology	25
			,	
	4.4	Comm	nunity Service	26
5.0	JURISI	DICTIO	NAL SCAN AND BEST PRACTICES IN OFF-STF	REET
	JURISI	DICTIO EQUIRE	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS	REET 27
	JURISI	DICTIO	NAL SCAN AND BEST PRACTICES IN OFF-STF	REET 27
	JURISI	DICTIO EQUIRI 5.1.1	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS	REET 27 27
	JURISI (ING RE	DICTIO EQUIRI 5.1.1	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways	REET 27 27 27
	JURISI (ING RE	DICTIO EQUIRE 5.1.1 Summ	NAL SCAN AND BEST PRACTICES IN OFF-STF EMENTS Key Takeaways ary of Best Practices	REET 27 27 27 28
	JURISI (ING RE	DICTIO EQUIRE 5.1.1 Summ 5.2.1	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Bary of Best Practices Removal of Parking Minimums	REET 27 27 27 28 29
	JURISI (ING RE	5.1.1 Summ 5.2.1 5.2.2 5.2.3	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Bary of Best Practices Removal of Parking Minimums Parking Maximums	REET 27 27 28 29 29
	JURISI (ING RE	5.1.1 Summ 5.2.1 5.2.2 5.2.3	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Bary of Best Practices Removal of Parking Minimums Parking Maximums Lower Parking Requirements for Affordable Housing Units	REET 27 27 28 29 29 29
	JURISI (ING RE	5.1.1 Summ 5.2.1 5.2.2 5.2.3 5.2.4	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Removal of Parking Minimums Parking Maximums Lower Parking Requirements for Affordable Housing Units	REET 27 27 28 29 29 29 30
	JURISI KING RE	5.1.1 Summ 5.2.1 5.2.2 5.2.3 5.2.4 5.2.5 5.2.6	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Removal of Parking Minimums Parking Maximums Lower Parking Requirements for Affordable Housing Units Setting Parking Provisions	REET 27 27 28 29 29 29 30 30
PARK	JURISI KING RE	5.1.1 Summ 5.2.1 5.2.2 5.2.3 5.2.4 5.2.5 5.2.6 ARIO D	NAL SCAN AND BEST PRACTICES IN OFF-STREMENTS Key Takeaways Removal of Parking Minimums Parking Maximums Lower Parking Requirements for Affordable Housing Units Setting Parking Requirements by Geographic Area Shared Parking Provisions Transportation Demand Management	REET 27 27 28 29 29 30 30 32



	0.5	Scena	no 5: Simplined Residential Minimums (Measured Change)	50
	6.4	Gener	al Policy Options	38
		6.4.1	Maximum Parking Standards	38
		6.4.2	Lot Coverage	38
		6.4.3	Barrier-Free Parking	38
		6.4.4	Geographic	38
		6.4.5	Transportation Demand Management (TDM)	39
		6.4.6	Affordable (Non-Market) Housing	39
7.0	CONC	LUSIO	N	40
	FIGU	JRES		
Figure	e 1: Add	itional S	Servicing Distance Required Due to Parking	9
Figure	e 2: Exar	mple of	Less Taxable Value vs. More Taxable Value	9
Figure	e 3: Data	a Collec	tion Locations	14
Figure	e 4: Park	king Der	mand vs. Parking Supply for Multi-unit Residential	19
Figure	e 5: Park	king Der	mand vs Parking Supply for Row Housing	20
Figure	e 6: Park	king Util	ization for Single-Unit Sites	22
Figure	e 7: Park	king Der	mand vs. Parking Supply for Commercial	24
	TAB	LES		
Table	1: Auto	mobile	Ownership Rates in Stony Plain and Similar Municipalities	8
Table	2: Data	Collect	ion Sites	11
Table	3: Sumi	mary of	Residential Multi-unit Parking Demand	18
Table	4: Com	parison	of Multi-unit Parking Demand vs. Parking Supply	18
Table	5: Sumi	mary of	Whispering Creek Parking Demand	19
Table	6: Com	parison	of Whispering Creek Parking Demand vs. Parking Supply	20



Table 7: Summary of Single-unit Parking Demand by Site	21
Table 8: Summary of Parking Utilization for Single-unit Sites	21
Table 9: Summary of Commercial Parking Demand from Parking Surveys	23
Table 10: Summary of Commercial Parking Demand from Parking Surveys	23
Table 11: Summary of Commercial Parking Demand from Parking Surveys	24
Table 12: Summary of Commercial Parking Demand from Travel Surveys	25
Table 13: Parking Demand per Bylaw Unit Area and Parking Demand Compared to	
Table 14: Summary of Community Service Parking Demand	26
Table 15: Parking Demand per Bylaw Unit Area and Parking Demand Compared to	
Table 16: Scenario 1 Pros and Cons	32
Table 17: Scenario 1 Parking Regulations	33
Table 18: Scenario 2 Pros and Cons	34
Table 19: Scenario 2 Parking Regulations	35
Table 20: Scenario 3 Pros and Cons	36
Table 21: Scenario 3 Parking Regulations	37
APPENDICES	
Appendix A – Data Collection	42
Appendix B – Jurisdictional Scan	67



1.0 INTRODUCTION

WATT Consulting Group (WATT) was retained by the Town of Stony Plain ("the Town") to conduct a comprehensive parking study¹. The objectives of the Stony Plain Parking Study were to:

- 1. Conduct a comprehensive parking review to determine the supply and utilization of current on-street and off-street parking supplies.
- 2. Produce a list of alternative policy scenarios for the Town to reference in updating the parking requirements in the Land Use Bylaw (LUB), with the goal of helping to encourage the development of housing.

The second objective is informed by the Town's overall intent to increase the supply of housing in the community, recognizing that parking requirements can serve as a barrier to achieving that. As outlined below, the Town is prioritizing the acceleration of housing policy based on the overarching policy directions outlined in its Housing Strategy and Municipal Development Plan.

1.1 Background and Policy Context

1.1.1 Town Policy & Strategy

Housing development emerged as a larger priority for the Town in 2020, when Stony Plain released its updated Municipal Development Plan (MDP) "Uniquely Stony Plain"². Direction 2.1 of the MDP is titled "encourage a diversity of non-market affordable housing options" that contains five specific policies. One such policy (2.1d), states:

"The Town will explore opportunities for innovative housing types that increase affordability and meet the needs of diverse populations, including prefabricated homes, tiny homes, secondary suites, laneway homes, zero lot line development, cohousing and homes that facilitate multigenerational living."

Following the MDP, the Town released its Housing Strategy, which outlines Stony Plain's overall approach to meet its housing goals. The Housing Strategy contains several goals and policies, one of which is directly relevant to this study. Policy 5, under the goal "Improve Access to and Choice of Market Housing", directs the Town to:

¹ Note, the official name of the project is the "Housing Initiative Parking Study". For the purposes of this report, the project is referred to "the Stony Plain Parking Study" and/or "the parking review".

² Available at https://www.stonyplain.com/en/town-hall/resources/SP_MDP_Nov22_2019_Website.pdf



"Complete a targeted review of the Land Use Bylaw to reduce or remove parking minimums for residential development."

1.1.2 Housing Accelerator Fund

Building on both the MDP and Housing Strategy, the Town then developed its Housing Accelerator Fund (HAF) Action Plan. The implementation of seven key initiatives funded by the HAF will enable the Town to build more diverse and affordable housing options for current and future residents. The development of the plan was also a requirement to be eligible for funding under the Canada Mortgage and Housing Corporation's (CMHC) Housing Accelerator Fund (HAF).

The Town's Corporate Plan (2024-2026) also references the HAF and the importance of changing parking regulations and requirements to allow for more housing options to be built, which can be flexible to resident's needs.

In mid 2024, the Town was successful in obtaining \$5 million from the Housing Accelerator Fund. The HAF's goal is to:

"[Remove] barriers to encourage local initiative to build more homes, faster. The fund is helping to boost housing supply, while supporting affordable, diverse and climate-resilient communities."

1.1.3 History of Parking Regulations

Parking requirements are development regulations that require developers and businesses to provide a certain number of off-street parking stalls. The current LUB contains requirements regarding the number of vehicle parking stalls that must be built, depending on development type. These are often referred to as "Parking Minimums", and are common across North America, following their adoption after World War II.

These requirements were originally intended to ensure that the rise in personal automobile ownership did not result in vehicles being parked on municipal streets. The unintended consequences of the regulations have resulted in more expensive development, sprawling urban form, and increased vehicle dependency.

1.1.4 How Does Parking Management Relate to the Town's Planning Goals?

Parking management and parking regulations are key components of land use planning, as parking directly impacts the physical form of the built environment. In addition, managing parking demand is key to creating "Smart Growth" communities as it is one of the most effective strategies for shifting travel demand away from single-occupancy vehicle use toward walking, cycling, and transit. More specifically, the price and



availability of parking are two very important factors in any individual's choice of travel mode.

1.1.5 How Does the Town Currently Manage Parking?

The Town currently has means to manage parking supply both on- and off-street. Offstreet parking regulation is found in the LUB and allows the Town to require developments provide parking in accordance with parking regulations. On-street parking management is accomplished by time restrictions, primarily in the downtown core, and through the availability or limitation of parking along public roads. The Town's road design standards also play a crucial role in managing parking.

1.2 Report Organization

This report is organized into 7 sections, as follows:

- Section 1: Introduction Provides an overview of the study and its purpose, objectives, and outcomes.
- Section 2: Nature of Parking Describes the fundamentals of parking including the supply and demand nature of parking, human behaviour, and the true costs born by municipalities when providing parking.
- **Section 3: Methodology** Presents the framework for the data collection including site selection, and methodology for analysis.
- Section 4: Results Analyzes the results of the data collection for the studied land uses and compares measured demand and supply to current Town LUB rates where applicable.
- Section 5: Jurisdictional Scan and Best Practices Summarizes the key takeaways from the jurisdictional scan and provides brief summaries for modern best-practices related to off-street parking management.
- Section 6: Scenario Development Presents three potential scenarios for changes to the Town's LUB ranging from gentle to impactful change.
 Additionally discusses some relevant general parking policies that can be applied to any chosen scenario.
- Scenario 7: Conclusion Summarizes the process and findings from the report.



2.0 UNDERSTANDING THE NATURE OF PARKING

Parking is a critical component of urban transportation systems: all vehicle trips both begin and end at a parking spot. The act of parking and the supply of parking stalls is a complex interplay that is influenced by economics, human behaviour, policy, management, and urban planning.

2.1 What follows is a discussion of the functions parking serves within a municipality: Why do we provide parking? What are the true costs of providing parking? And how does the supply (and demand) of parking impacts travel choice and urban form? The Supply and Demand Relationship

2.1.1 Why do we Supply Parking?

A parking space, like any other economic good, is affected by the law of supply and demand. When parking is free or when prices are low, consumers tend to demand a greater amount of it. However, this can result in demand exceeding the available parking supply leading to an overall shortage of parking spaces. Moreover, when parking is free or priced at a low rate, people have a strong incentive to continue driving and not explore other modes of transportation. This is an example of the Tragedy of the Commons, a well-studied phenomenon where access to a free or infinite resource results in its overuse and eventual destruction.

The price and availability of parking strongly influences travel behaviour. In many North American cities and towns like Stony Plain, driving has continued to be the dominant form of transportation. Municipalities (public) and the private sector have responded by supplying parking facilities to cater to growing demand.



As Stony Plain has expanded in size, with neighbourhoods extending outward and containing primarily residential or primarily employment land uses (rather than significant mixed-use), intuitively, travel distances to destinations have increased. This factor has led to an increased propensity to drive along with greater need for parking at destinations as a robust transit system is not currently available.



Reversing this trend will require a significant shift toward other modes of transportation, which is a direction the municipality has begun, with an emphasis on active transportation and the addition of an on-demand transit service.

2.1.2 How Much Parking Do We Supply?

At a high-level, parking is provided by public bodies such as municipalities, mostly in the form of on-street parking, and by private bodies in the form of off-street parking attached to developments.

Parking is provided through many different forms. A municipality will provide public parking – both on and off-street – to address demand from business patrons, office workers, and residents. The supply of parking accompanying private (off-street) development is regulated by off-street parking requirements.

Off-street parking requirements are established by a land use or zoning bylaw which mandates a minimum number of parking spaces for various land uses, commonly organized into four categories: 1) commercial, 2) residential, 3) community service and 4) industrial. The Town of Stony Plain's Land Use Bylaw off-street parking requirements provide rates for 26 distinct uses across these four broad categories. The uses are wideranging and include, for example, apartment housing, schools, community recreation services and hospitals.

Proponents of new developments will typically supply parking consistent with development regulations and may seek variances when they desire to provide an amount lower than what is required. Municipalities have historically set their minimum parking supply rates based on what other nearby municipalities do or have relied on the Institute of Transportation Engineers (ITE) Parking Generation data³. The ITE reference contains parking generation rates for over 100 land uses, each with rates that represent the peak parking demand period based on observations completed at representative sites throughout North America.

These data have limitations, however, primarily being based on sites in more outlying, suburban communities with free (or cheap) parking, and in some cases are outdated. Other land uses have parking rates determined based on the study of only one site, which is not a statistically valid method of analysis. Further, these rates may not reflect

Stony Plain Parking Study Final Report

³ Institute of Transportation Engineers (2023). Parking Generation, 6th Edition. Institute of Transportation Engineers, Washington DC.



changes in how parking demand is generated, which is contingent on numerous factors. Even offering an easily referenced estimate of parking demand, these rates are currently thought to overstate actual parking demand.

There is also a question of the design period: is parking provided for the busiest time of the year, such as the weekend before Christmas shopping, or for a lower, but more common, demand. A parking lot designed for the Christmas rush is generally grossly oversized for the rest of the year.

2.2 Parking and Human Behaviour

How people choose where to park and the influence of parking supply on how people choose to travel is largely driven by three factors: time, cost, and convenience. Each factor is explored below.

2.2.1 Time

The role of time is largely a function of trip purpose. Suppose a driver is commuting downtown for work purposes. In that case, they will either use their employer's parking facilities or an off-street public parking facility that can accommodate their vehicle for an extended period. Conversely, drivers will choose to use on-street parking if their trip purpose – and destination – is anticipated to be short term such as shopping, visiting a friend, or a similar purpose that is more temporary in nature.

While the type of parking facility can dictate where drivers decide to park, a time component is also associated with searching for parking. Research has suggested that on average, a driver can spend between ten to twenty minutes searching city blocks for an available spot in a larger municipality's downtown cores, adding to roadway congestion and further reducing a municipality's efficiency⁴.

In many municipalities, commuting by car and searching for parking is faster than taking public transit in larger urban centres. This can strongly influence travel mode choice for residents in Stony Plain, with the faster travel option often dictating mode choice.

2.2.2 Cost

The cost of parking also influences travel mode choice. When it is free (or inexpensive) and easy to find a parking space near a destination, using a car is the most attractive

⁴ Canadian parking Association, Stall-Based Monitoring, the Key to Progressive Urban Parking Solutions, Ryan Hickey. 2024



option. When parking is expensive and scarce, alternative modes of transportation begin to look more appealing from a time and cost point of view.

Some drivers will spend significant time searching for "free parking", even if it results in wasted time or searching for parking. Price is often the strongest factor in a drivers' decision on where to park, if the nearest parking to the destination is "expensive" or fully occupied.

Drivers are drawn to areas where there is free parking, or where the price for parking is low and acceptable to them. If the price is higher, drivers may have a stronger incentive not to drive and explore other modes of transportation.

Drivers have been observed to search for free and unrestricted parking in residential areas, then walk from their parked vehicle to their destination. In general, parking prices tend to be highest in downtown cores where parking demand is greatest whereas prices at park-and-ride transit facilities are lower to encourage drivers to use transit.

All public parking provided in Stony Plain today is free, which is a factor in making driving the most frequent travel mode in the town.

2.2.3 Convenience

The overall convenience of parking is an important factor in choosing where to park. Convenience is a product of the individual's perception and is generally influenced by the ease (or predictability) of identifying available parking, proximity to the end destination(s), and the "experience" of parking. Parkers prefer driving directly to their destination and finding an unoccupied parking space. This psychological preference helps explain why most on-street parking spaces are occupied in front of businesses or storefronts in a downtown area.

2.3 Linking Parking Demand to Automobile Ownership

Automobile ownership rates are not fixed and can be affected by complexities beyond the scope of the study including demographics, urban design, access to alternative modes, and economics. From 2018 to 2023, the population of the town grew 4.68%, but auto ownership grew only 0.11%. In other words, automobile ownership rates in Stony Plain dropped from 0.98 per person in 2018, to 0.94 per person in 2023, a 4.37% decline in per-capita ownership rates.

For comparison, three municipalities from the jurisdictional scan also have published automobile ownership data: Spruce Grove, Beaumont, and Camrose. Spruce Grove and Camrose both saw declines in auto ownership from 2018 to 2023, at -4.37% and -0.45% respectively. Beaumont saw an increase in auto ownership of +1.43% over the



same period. A summary of data is provided in **Table 1** below. As Stony Plain's population continues to grow, the parking demand in the town is likely to change, even from the data that was collected as part of this study.

Table 1: Automobile Ownership Rates in Stony Plain and Similar Municipalities

Parameter	Stony Plain	Spruce Grove	Beaumont	Camrose
% Change in Vehicle	+0.11%	+5.62%	+12.52%	-0.29%
Registration (2018-2023)				
Population Growth (2018-	4.68%	9.00%	10.94%	0.16%
2023)	4.00 /0	3.00 /0	10.54 /0	0.1070
2023 Automobile	0.94	1.23	0.78	1.02
Ownership Rate	0.94	1.23	0.78	1.03
2018 Automobile	0.98	1.26	0.77	1.03
Ownership Rate	0.98	1.20	0.77	1.03
% Change in Per Capita	-4.37%	-3.10%	+1.43%	-0.45%
Vehicle Ownership	-4.3/%	-3.10%	+1.45%	-0.45%

2.4 The True Costs of Parking

2.4.1 General

Most parking in the town and across North America is "free", meaning the user does not pay to park at the point of service. This does not mean that parking is free to provide or maintain. Instead, the true cost of parking is built-in to the overhead of businesses, additional infrastructure costs from sprawling development, the opportunity cost of a reduced tax base from unproductive land, and the additional cost of new residential units.

The cost of constructing parking spaces will vary depending on the type of parking space to be constructed. In the Edmonton context, surface parking spaces typically cost in the order of \$20,000 (paved, lit, landscaped) while above-grade parking spaces usually cost in the order of between \$23,000 and \$31,000 per space. The cost of constructing below-grade parking spaces is in the order \$35,000 to \$40,000 plus \$12,000 to \$15,000 per level below the first level (i.e. \$35,000 for one level underground, \$47,000 for the second level underground, \$59,000 for the third, etc.).

While businesses may be required to build and maintain parking, municipalities are also impacted financially from this requirement imposed on development from increased infrastructure servicing costs. Simply put, when a piece of land has a section dedicated



to parking, it places the next property further away. Thus, more infrastructure is required to service the next site. This additional infrastructure includes roads, sidewalks, water servicing, storm sewer, sanitary sewer, and telecommunications. **Figure 1** demonstrates the additional distance that is produced when required to serve a lot with a large parking area.

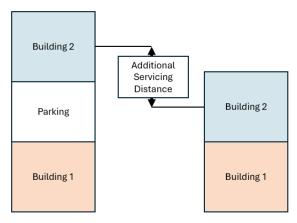


Figure 1: Additional Servicing Distance Required Due to Parking

With every lot and block, the additional distance compounds, leaving municipalities with a larger land area they are required to service, and subsequently higher costs and a larger infrastructure liability on the same tax base. Municipalities also incur an opportunity cost from having land that is dedicated to parking instead of other uses with higher values. Additional property tax revenue is lost when land is not developed to its highest potential use, as shown in **Figure 2**.

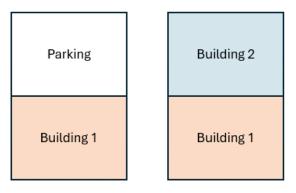


Figure 2: Example of Less Taxable Value vs. More Taxable Value



The two ways that municipalities subsidize "free" parking are in fact different ways of looking at the same situation. It can be viewed as either the municipality has built extra infrastructure because of the sprawling urban form that parking creates. Or the municipality has built that infrastructure regardless but incurs opportunity cost from not having the most productive land possible being serviced by that investment. In either case, the "free" parking that results, is paid for by taxpayers, whether they utilize that service or not.

2.4.2 What Are the (True) Costs to the Municipality?

Public parking is either managed and enforced by the local jurisdiction or contracted to a private operating and/or enforcement company. Conducting parking operations and enforcement "in-house" requires significant allocation of staff resources, whereas contracting to third parties is costly; both costs are significant. Enforcement costs include salaries, benefits, administration and technology fees, although a portion of these costs will be recovered with parking tickets and fines.

Annual operating and maintenance fees include lighting, parking access and revenue control equipment, security and staffing costs, cleaning and repair costs.

Beyond the obvious on-going operating and enforcement costs, there are a series of intangible costs that impact a local government tasked with providing public parking including the lost opportunity costs (i.e. to provide for land uses or activities that offer better value to an urban area).

More intangibly, parking lots (particularly surface parking lots) break up the urban design of downtown cores in terms of streetscape and walkability. They create large spaces that can be void of activity and feel unsafe to residents and visitors.



3.0 METHODOLOGY

This chapter provides an overview of how the data collection was completed for the study along with an overview of the analysis approach for the residential, commercial, and community service land uses. Industrial land uses were out of scope for this study.

3.1 Study Area & Site Selection

The study included data collection from across Stony Plain and therefore the Town's municipal boundaries constituted the study area. A variety of sites were selected to reflect different land uses, walkability, and building age.

WATT worked closely with Town staff to determine the study sites, with **Table 2** and **Figure 3** providing a summary of the sample site locations. During the first round of data collection, WATT was not able to access the underground parkades of two multi-unit developments. These two sites represented half of the multi-unit sites where data was being collected, and it was determined that surveying only two sites was insufficient to accurately quantify actual parking demand. Therefore, these two sites were removed from the sample, and an additional 10 sites were added to the data collection program.

A total of 19 sites were included in the sample. **Figure 3** shows a map of site locations.

Table 2: Data Collection Sites

#	Site	LUB Zoning	Land Use	Year of Construction
1	47 Street, between 54 and 55 Avenues	R1 – Residential Large Lot Detached Dwelling District	Single-unit Detached Residential	1931-1991
2	Meridian Pines	R8 – Residential High-Density District	Multi-unit Residential	1978
3	5208 47 Street	R8 – Residential High-Density District	Multi-unit Residential	1972



#	Site	LUB Zoning	Land Use	Year of Construction
4A	Butter Chicken Hut	C3 – Central Mixed Use District	Commercial Retail	1965
4B	Library	C3 – Central Mixed Use District	Community Service	2021
4C	Mint Health & Drugs	C3 – Central Mixed Use District	Commercial Retail	1964
5	Genesis Villas	R5 – Residential Small Lot Mixed Form District	Single-unit Semi-detached Residential	2014
6	Sonora 2	R8 – Residential High-Density District	Multi-unit Residential	2003
7	Hendrie Drive	R4 – Residential Mixed Form District	Single-unit Semi-detached Residential	2002
8	St. Andrew's Plaza	C1 – Local Commercial District	Commercial Retail	1991
9	Whispering Creek	R6 – Comprehensively Planned Residential District	Single-unit Attached Row House Residential	1994
10	51 & 57 Brown Street	R8 – Residential High-Density District	Multi-unit Residential	1980



#	Site	LUB Zoning	Land Use	Year of Construction	
11	Tanglewood	R8 – Residential High-Density District	Multi-unit Residential	2023	
12	Westview Manor	R8 – Residential High-Density District	Multi-unit Residential	1983	
13	Stone Haven	R6 – Residential Comprehensively Planned District	Multi-unit Residential	1994	
14	Southpark Cove	R8 – Residential High-Density District	Multi-unit Residential	2015	
15	Sonora 1	R8 – Residential High-Density District	Multi-unit Residential	2000	
16	Meridian Heights Apartments	R8 – Residential High-Density District	Multi-unit Residential	1974	
17	Ironstone Terrace	R8 – Residential High-Density District	Multi-unit Residential	2009	



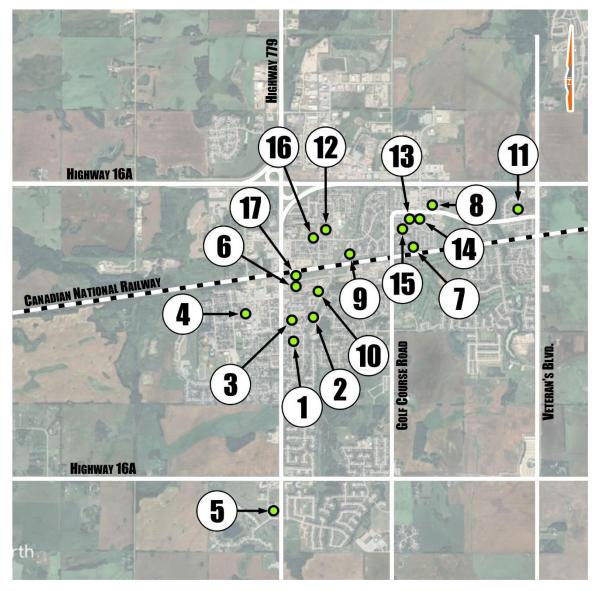


Figure 3: Data Collection Locations

3.2 Data Collection

Parking demand data was collected by WATT staff on Wednesday, September 25, Thursday, September 26, Tuesday, October 15, and Wednesday, October 16, 2024. The dates were selected to represent the typical weekday parking demand. Depending on location, either a parking survey or travel survey was conducted. Parking surveys were conducted at sites where parking was countable (i.e., not underground or behind a gate), and a single lot or parking area served all units. Travel surveys were conducted in



the town's downtown, where shared street parking is used by multiple businesses. The surveys determined how customers arrived, where they parked, and the occupancy of their vehicle.

Complete records of data collection are provided in **Appendix A – Data Collection**.

3.2.1 Residential Sites

Fifteen residential sites were surveyed between the hours of 9:00 p.m. and midnight (12:00 a.m.), to capture parking demand when most residents would be expected to be at home. Adjustment factors of 3-10% were applied to counted vehicles to account for residents who may be returning home late in the evening or are otherwise away from their homes. The number of units and parking stalls for each development were provided by Town staff. Parking stall counts were also recorded as part of the parking survey, to verify Town information and confirm capacity.

3.2.2 Commercial Sites

Commercial parking data was acquired through both parking surveys and travel surveys conducted by WATT staff during peak hours of operation, as estimated from Google Maps' Popular Times information. While some commercial sites may experience peak times on Fridays or weekends, the weekday peak is expected to sufficiently represent a time of high parking demand.

3.2.3 Other Data

Supplemental data was also collected from public sources to help guide scenario development and recommendations. This included:

- Motorized vehicle registrations: select municipalities as of March 31⁵
- Alberta Municipal Affairs Population List⁶

3.3 Data Analysis

3.3.1 Residential

The parking demand analysis differed between multi-unit and single-unit sites. At multiunit building locations, it was possible to determine parking supply, and the number of vehicles parked during data collection. In contrast, single-unit sites with detached and

⁵ Motorized vehicle registrations: select municipalities as of March 31 - Open Government (alberta.ca)

⁶ Alberta Municipal Affairs Population List - Open Government



semi-detached housing had parking that was not visible to WATT staff (i.e., vehicles were parked in a garage).

3.3.1.1 Multi-unit Analysis

For multi-unit sites, parking demand and parking supply is calculated on a per-unit basis, using unit counts from development data provided by the Town.

Demand is determined by dividing the number of vehicles parked by the number of units. As each site was surveyed on two separate days, the day with the higher demand was selected, which represents peak parking demand. Parking supply was determined by dividing the counted parking capacity at each site and dividing by the number of units. This was cross-referenced with Town development data to ensure that the counted capacity was consistent with parking supply submitted as part of development permitting. If there was a variance of more than 10%, the higher supply value was used.

To best represent parking supply and demand across the town, the arithmetic mean of both values were calculated, instead of calculating supply and demand at each site and averaging the results. The arithmetic mean for supply is calculated by adding the total number of vehicles observed and dividing by total number of units. Similarly for supply, the total number of stalls provided is divided by the total number of units.

Comparing the parking demand to the parking supply, the parking over- or undersupply is determined on a percentage basis, which will be used for scenario development and recommendations.

3.3.1.2 Single-unit Analysis

Each single-unit site was unique in terms of what data was able to be collected. Total parking demand was not possible to calculate, as cars inside garages were not visible to WATT staff. Each site was analyzed as follows:

- 47 Street Single-unit detached homes near the downtown core. Only street-parked vehicles were counted, and the supply of on-street parking determined.
 This was then used to calculate the utilization of on-street parking as a percentage.
- **Genesis Drive** Single-unit semi-detached-style homes in a greenfield subdivision. Although each unit has the same number of garage spaces, it was not possible to determine whether they were used or not. The number of vehicles parked in driveways, and the number of driveway spots were calculated. This was then used to calculate the utilization of driveway parking.



 Hendrie Road – Single-unit semi-detached-style homes. Only street-parked vehicles were counted, and the supply of on-street parking was determined.
 Each unit has four off-street stalls, two garage stalls and two driveway stalls.
 The utilization of on-street parking was calculated.

3.3.2 Commercial and Community Service Analysis

Commercial and community service floor areas for each site was obtained through data supplied by Town staff, estimations from satellite imagery, or publicly available information. Where a parking survey was conducted, the same methodology used in residential sites was applied. The parking demand and parking supply were calculated, and the parking over- or under-supply determined.

For commercial sites in downtown Stony Plain, travel surveys were conducted as patrons park in different locations to access a destination. Most commercial uses in the downtown do not have their own designated parking lots, which makes it harder to determine parking demand from a site's patrons and/or employees.

Each site was surveyed over a 2-hour period during peak weekday hours, which included both customers and employees. An average length of stay was estimated for each site based on professional judgment. Then, the average vehicles requiring parking per hour was multiplied by the average stay duration to calculate the number of parking spaces required at peak times.



4.0 RESULTS

4.1 Residential Multi-unit

A total of 11 multi-unit sites were surveyed to determine parking demand and parking supply. A summary of parking demand is provided in **Table 3** below.

Table 3: Summary of Residential Multi-unit Parking Demand

Land Use	Sites	Adjusted Parked Vehicles Counted	Units	Arithmetic Mean (Adjusted Parked Vehicles Counted / Units)
Multi-unit Residential	11	687	646	1.06

As shown in **Table 3**, the average parked vehicles per unit (arithmetic mean) for multiunit housing is 1.06 vehicles / unit. Demand from study sites ranged from 0.69 to 1.90 vehicles per unit. Plus-or-minus one standard deviation from the mean, which encompasses 68% of all sites, results in a parking demand range of 0.76 to 1.45 vehicles per unit.

4.1.1 Relationship Between Parking Demand and Parking Supply

A comparison between multi-unit parking demand, and the building's approved parking supply was explored to determine whether buildings are over- or under-supplying parking.

Using data from the Town, the parking supply for each residential use was calculated and summarized in **Table 4**. Note that if parking supply data was not available for a site, then it was removed for this portion of the analysis.

Table 4: Comparison of Multi-unit Parking Demand vs. Parking Supply

Land Use	Parking Demand (Vehicles / Unit)	Parking Supply Rate (Stalls / Unit)	Absolute Difference (Supply – Demand)	% Difference
Multi-unit Residential	1.06	1.85	0.79	74%



As shown in **Table 4**, the average parking supply per unit (arithmetic mean) is 1.85 stalls per unit. Supply from study sites ranged from 1.00 to 3.36 stalls per unit. One standard deviation from the mean, which encompasses 68% of all sites, results in a parking demand range of 1.20 to 2.49 vehicles per unit.

The data indicates that parking is significantly oversupplied for multi-unit residential housing. The parking supply rate also shows that multi-unit residential parking is being built at rates higher than required in the current LUB. Even if all multi-unit residential was built with only 2 bedroom or larger units, requiring the highest parking supply of 1.50 stalls per unit, the built supply would still be 25% higher than required.

Figure 4 shows a comparison between parking demand and parking supply.

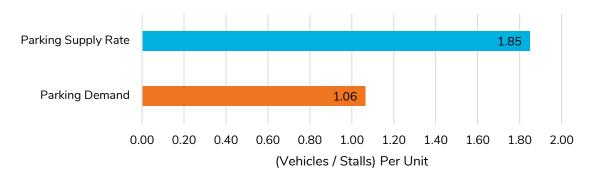


Figure 4: Parking Demand vs. Parking Supply for Multi-unit Residential

4.2 Residential, Detached and Row Housing

4.2.1 Row Housing

Four residential single-unit sites were surveyed, but only Whispering Creek had sufficient data to conduct similar analysis to the multi-unit sites. While this is a sample size of 1, the data is presented below for information in **Table 4**.

Table 5: Summary of Whispering Creek Parking Demand

Land Use	Adjusted Vehicles Counted	Units	Mean (Adjusted Vehicles Counted / Units)
Row House	90	60	1.50



4.2.1.1 Relationship Between Parking Demand and Parking Supply

The relationship between supply and demand was also calculated, with results presented in **Table 6**.

Table 6: Comparison of Whispering Creek Parking Demand vs. Parking Supply

Land Use	Parking Demand	Parking Supply Rate	Absolute Difference	% Oversupply
Row House	1.5	2.22	0.72	48%

As shown in **Table 6**, parking is over-supplied compared to demand by nearly 50%. Of particular note, the parking supply rate is similar to the rate required in the current LUB, which is 2 spaces per unit, plus 0.1 spaces per unit of vehicle parking.

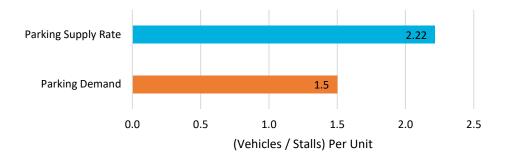


Figure 5: Parking Demand vs. Parking Supply for Row Housing

4.2.2 Detached Housing

A summary of the three single-unit sites surveyed, and the corresponding parking demand is summarized in **Table 7**. As noted in **Section 3.3.1.2 Single-unit Analysis**, the type of parking for each site varies due to the nature of data that was feasible to collect. Caution should be used when drawing conclusions from these results due to the small sample size.



Table 7: Summary of Single-unit Parking Demand by Site

Land Use	Vehicles Counted	Units	Demand (vehicles / unit)	Туре
47 Street	6	12	0.50	Street Parking
Genesis Drive	23	19	1.21	Driveway Parking
Hendrie Rd	7	15	0.47	Street Parking

As shown in **Table 7**, on-street parking has a demand rate of roughly half a vehicle per house. On Genesis Drive, driveway parking was found to be 1.21 vehicles per unit. It is noted that these parking demand rates are not directly comparable to other housing types, as vehicles in private garages cannot be counted. They are instead the parking demand for the type of parking listed (street or driveway).

4.2.3 Parking Utilization

The available parking supply for the single-unit study sites was determined to calculate the utilization of the available parking spaces.

Using Google Maps, the parking supply for each residential site was calculated and summarized in **Table 8**.

Note that parking utilization is a different metric than the parking demand and parking supply values reported in other sections due to the limitations of data collection, specifically being unable to count vehicles inside private garages. Parking utilization is instead a measure of vehicles counted divided by the counted spaces, for that specific parking type.

Table 8: Summary of Parking Utilization for Single-unit Sites

Land Use	Vehicles Counted	Counted Spaces	Parking Utilization
47 Street	6	19	32%
Genesis Drive	23	35	66%
Hendrie Rd	7	7	100%



As shown in **Table 8**, parking utilization varies significantly by site. Utilization on Hendrie Road is highest at 100%, with the few spaces available for on-street parking all being utilized. This is contrasted with on-street parking at 47 Street, where only 32% of on-street capacity is being utilized.

Genesis Drive's counted spaces are a measure of driveway parking capacity. Parking utilization for this site shows that 66% of driveway spaces are being utilized. There is no data available to determine whether interior garage spaces are being fully utilized, or whether they are empty or used for other purposes. Therefore, the findings indicate that parking demand is generally accommodated on-site for two of the three sites.

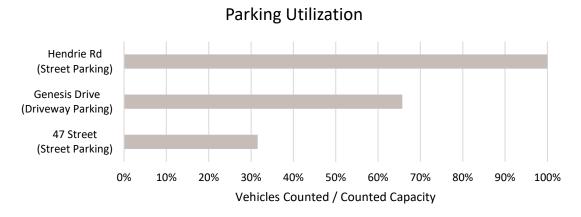


Figure 6: Parking Utilization for Single-Unit Sites



4.3 Commercial

Commercial parking demand was calculated using both parking survey and travel survey methodologies depending on the site context. At downtown sites with shared parking, travel surveys were used as parking is shared for all businesses.

4.3.1 Parking Survey Methodology

Only St. Andrews Plaza was surveyed using the parking survey methodology, with a summary of parking demand and supply provided in **Section 4.3.1.1 Relationship Between Parking Demand and Supply.**

Table 9: Summary of Commercial Parking Demand from Parking Surveys

Land Use	Vehicles	GFA	Demand
	Counted	(m²)	(veh / 100 m²)
St. Andrews Plaza	39	1,595	2.45

As shown in **Table 9**, the average parking demand for a commercial site is 1 vehicle per 40.9 m^2 . The current bylaw rate is expressed is either 1 space per 30 m^2 or 1 space per 50m^2 , depending on the exact commercial use. Therefore, the results indicate that demand is in the range of what is required in the LUB.

4.3.1.1 Relationship Between Parking Demand and Supply

A comparison between parking demand and parking supply was explored to determine whether commercial developments are over- or under-supplying parking.

Using Town provided data, the parking supply for St. Andrews Plaza was calculated with results shown in **Table 4**. Results were normalized to be presented in terms of vehicles or spaces per 100 m² to best illustrate the results. It is noted that there is a vacant unit within St. Andrews Plaza, representing less than 8% of total leasable floor area. The vacant unit was not removed from the data as vacancies arising from commercial lease turnover is common.

Table 10: Summary of Commercial Parking Demand from Parking Surveys

Land Use	Parking Demand (veh / 100 m²)	Parking Supply (spaces / 100 m²)	Absolute Difference (supply - demand)	% Difference
St. Andrews Plaza	2.45	4.70	2.26	92.3%



The data shown in **Table 4** indicates that parking is significantly over-supplied at St. Andrews Plaza, with 92% more parking available than required at peak times.

Figure 7 shows a comparison between parking demand and parking supply.

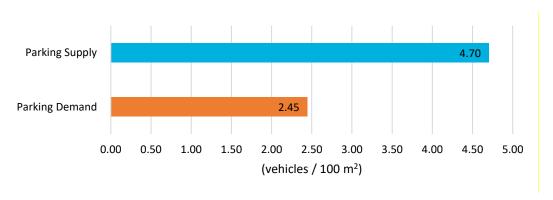


Figure 7: Parking Demand vs. Parking Supply for Commercial

Comparing parking demand with parking supply is helpful to understand how much parking has been built in the town, but a comparison to the current LUB is required to determine whether current parking regulations are aligned with measured demand. The required parking supply of St. Andrews Plaza was determined based on the commercial use of each tenant, and the corresponding gross floor area.

Table 11 summarizes the current parking demand compared to the current LUB parking requirement in number of vehicles.

Land Use	Parking Demand (number of vehicles)	Current LUB Requirement (number of stalls)	Absolute Difference (supply - demand)	% Difference
St. Andrews Plaza	39.0	36.0	-3.0	-7.7%

Table 11: Summary of Commercial Parking Demand from Parking Surveys

As noted in **Table 11**, the current LUB parking requirements are slightly lower than measured peak demand at St. Andrews Plaza. While this is only one surveyed site, it shows that the LUB reflects actual demand, however more parking is being supplied than is required.



4.3.2 Travel Survey Methodology

The average stay duration for each downtown location was determined based on professional judgment. These assumptions are as follows:

Butter Chicken Hut: 30 minutesMint Health + Drugs: 10 minutes

A summary of the parking demand for employees and customers at each surveyed location is summarized in **Table 12**. These values are not normalized to units of floor area, as is typical for non-residential parking rates.

Table 12: Summary of Commercial Parking Demand from Travel Surveys

Location	Employee Stall Demand	Customer Vehicles / hr	Customer Stall Demand (cust. veh. per hr. X stay duration in hrs)	Total Stall Demand (cust. stall demand + employee stall demand)
Butter Chicken	2	3.00	1.50	3.50
Mint Health	4	6.50	1.08	5.08

The parking demand for each site was normalized according to the bylaw unit rate for each use, if the LUB was applicable to the C3 zoned downtown core. Then the over- or under-supply was calculated to determine whether the current bylaw rate is appropriate for commercial uses. These results are shown in **Table 13**.

Table 13: Parking Demand per Bylaw Unit Area and Parking Demand Compared to LUB

Location	Size (m²)	Total Stall Demand	Unit Bylaw Area per Stall (size / total stall demand)
Butter Chicken	189	3.50	54 m ²
Mint Health	306	5.08	60 m ²

As shown in **Table 13**, if Stony Plain maintained current LUB minimum parking requirements for C3 zoned areas, it's found based on parking demand that parking would be oversupplied for both commercial sites studied.



4.4 Community Service

Community Service parking demand was calculated using the travel survey methodology.

The average stay duration for the Stony Plain Public Library was assumed to be 60 minutes based on professional judgment.

A summary of the parking demand for employees and customers at each surveyed location is summarized in **Table 14**. These values are not normalized to units of floor area, as is typical for non-residential parking rates.

Table 14: Summary of Community Service Parking Demand

Location	Employee Stall Demand	Customer Vehicles / hr	Customer Stall Demand (cust. veh. per hr. X stay duration in hrs)	Total Stall Demand (cust. stall demand + employee stall demand)
Library	18	12.0	12.0	30.0

The parking demand was normalized according to the bylaw unit rate of 1 stall per 50 m^2 , if the LUB was applicable to the C3 zoned downtown core. Then the over- or under-supply of parking was calculated to determine whether the current bylaw rate is appropriate for the community service use. These results are shown in **Table 15**.

Table 15: Parking Demand per Bylaw Unit Area and Parking Demand Compared to LUB

Locatio	on Size (m²)	Total Stall Demand	Unit Bylaw Area per Stall (size / total stall demand)
Librar	/ 1,375	30.0	46 m²

As shown in **Table 15**, it's found that parking would be undersupplied for the Library if the current LUB minimum parking requirements were applied. The parking demand for the library is primarily influenced by employee parking demand, as most patrons arriving by vehicle parked on-street. The travel surveys also revealed the employees typically park in the residential neighbourhoods nearby with unrestricted on-street parking (downtown parking is limited to 2-3 hours in duration). Parking demand will remain high if employees are reliant on vehicles to travel to work.



5.0 JURISDICTIONAL SCAN AND BEST PRACTICES IN OFF-STREET PARKING REQUIREMENTS

To support the original data collection and analysis, a review was undertaken to explore parking requirements in other communities across Alberta. A total of six communities were included in the review. The complete jurisdictional scan is included in **Appendix B** – **Jurisdictional Scan**.

5.1.1 Key Takeaways

Stony Plain's residential parking requirements can be described as typical compared to similar municipalities identified in the jurisdictional scan who have not recently revised their LUB parking requirements. Residential requirements in Stony Plain are nearly identical to requirements found in Spruce Grove, Morinville, and Fort Saskatchewan, and higher than requirements in Camrose, Beaumont, and High River, the last of which has no minimum parking requirements.

For commercial uses, Stony Plain's parking requirements are lower than most similar municipalities. Spruce Grove, Morinville, Fort Saskatchewan, and Camrose all have minimum commercial parking rates higher than the Town. Beaumont and High River have lower or no parking requirements.

5.2 Summary of Best Practices

To supplement the jurisdictional scan, a high-level review was also completed to understand the types of best practices and innovation in off-street parking requirements occurring across North America. These best practices can be considered by the Town to develop parking policies to support smart growth and transit / transit-oriented-development (TOD) policies. These best practices assisted in informing the scenario development discussion in **Section 6.0**.

Municipalities throughout Alberta are working to create walkable, transit-oriented districts, designed as lively and attractive places that provide residents and visitors a choice in lifestyle and travel mode. An obstacle in the successful establishment of walkable mixed-use districts is modifying conventional parking policies that currently encourage an oversupply of parking, free parking and personal vehicle use, all of which discourage walkable transit-supportive communities.

Many communities have developed and implemented approaches to parking policies that support infill, transit-oriented development, and downtown development and have found that parking management strategies can improve the quality of life for residents



and enhance economic opportunities for businesses, mitigate project impacts, and improve traffic circulation. These communities have found that parking management strategies work best when they are combined with pedestrian- and transit-supportive policies as a component of downtown improvement plans.

Modified parking policies in the town should reflect the local community's goals and vision for the future and reflect the mix of uses, the market for various types of development, the type and level of transit service available, and the access that service provides to jobs and commercial uses.

A summary of best practices is provided below.

5.2.1 Removal of Parking Minimums

In recent years, many cities and municipalities have re-thought parking minimums entirely. Off-street minimum parking requirements, originally implemented to ensure that personal vehicles were not over-running public streets, have created unintended consequences such as:

- Sprawling urban form, which separates businesses from each other and residential customers.
- Higher development costs from increased land required for parking and greater infrastructure requirements, leading to lower returns on investment and less economic activity.

As such, the reduction, or elimination, of parking requirements has been a growing trend across North America. At its core, the trend is a re-focusing of values and priorities within municipalities to allow the economics of parking demand to determine supply. Both businesses and developers are incentivized by market forces to build what customers demand or require, but not more. For example, a housing developer may conclude that the cost to build a second parking stall per unit would not result in a higher sale price, so they will not provide it.

The elimination of parking minimums is a recognition that building parking incurs a monetary cost, and that cost is passed down to consumers whether they require it or not. With no parking minimums, each business or developer will make an economic calculation to determine how much parking customers will require, just as they make an economic calculation of how much square footage to construct, or the price they must charge for the completed units. By not regulating the amount of parking that new developments must provide, the cost to provide new housing can potentially be reduced, providing more options for current and future residents of the town.



Eliminating parking minimums does not mean that no parking will be built. Instead, it is a values shift within the town, to recognize that parking is not free, and to instead allow the market to determine how much parking should be built.

5.2.2 Parking Maximums

Some municipalities have introduced parking maximums in their bylaws, which defines an upper limit for parking supply. It is more common to see parking maximums for a select number of uses (e.g., residential) rather than applied for all uses. Maximums may accompany minimum supply rates to provide a limited range of possible parking supply, or may be pursued instead of a minimum, which would protect against over-supply.

The District of Saanich (BC) is an example of a community that is introducing parking maximums for its residential uses only.

5.2.3 Lower Parking Requirements for Affordable Housing Units

Parking demand in affordable (non-market) housing units has been shown to be lower when compared to market housing. Recognizing this, some communities like the City of Kamloops (BC) and City of Victoria (BC) have specific parking requirements for affordable housing developments. In Kamloops, parking requirements can be reduced by 7% if a minimum of 50% of units provided are affordable. In Victoria, there are specific parking rates for affordable housing that are significantly lower than market housing.

5.2.4 Setting Parking Requirements by Geographic Area

Some communities set their parking requirements by geographic area to reflect that some areas of a community might require less parking due to higher levels of walkability, transit availability, etc. For example, the City of Hamilton (ON) has a "parking rate area" based on three areas where PRA 1 is the most urban / compact and PRA 3 is more suburban. For multiple dwelling units with more than 5 units, no parking is required if the site is in PRA 1 compared to 0.85 spaces per unit if in PRA 3.

The City of Nanaimo (BC) follows a similar approach in its parking bylaw whereby developments in the most urban / walkable area require much less parking compared to the more suburban locations.

To a limited extent, the Town has already implemented this through their C3 Central Mixed Use District zoning, which applies to the town's downtown core.



5.2.5 Shared Parking Provisions

In scenarios where two or more land uses have differing peak parking demand times or complementary parking demand, they may reduce their provided parking supply by sharing parking while still meeting the parking demands of visitors to these units. These "shared parking" concepts are exemplified in adjacent office and residential land uses. Office parking demand is typically highest during weekday working hours (9:00am-5:00pm), while residential visitor parking demand is highest during weekday evenings and weekends, reducing the likelihood of competition for parking spaces based on the time of day.

Some communities have introduced shared parking provisions into their parking requirements. For example, the District of Central Saanich (BC) has a regulation that states:

"Where it is determined that peak parking demand for two or more non-residential buildings, structures or uses on the same site or abutting sites occurs at different periods of time, the parking requirements for those buildings or uses may be reduced by a maximum of 25% of the total parking requirement."

The City of Whitehorse (YK) also allows for shared parking in its bylaws.

5.2.6 Transportation Demand Management

The effective application of Transportation Demand Management (TDM) measures is considered a cost-effective means to reduce the need for additional roadway and parking infrastructure. TDM strategies and objectives can complement and reinforce other policies, such as the use of alternative modes of transportation and non-auto modal split targets. The implementation of TDM measures can enhance the livability of the development area by controlling the number of vehicles through a reduction in the number of parking spaces.

There are several communities in North America that have introduced specific TDM measures into their parking bylaws that allow developers to reduce the amount of parking they are required to provide if they commit to a TDM measure. Other communities have taken a more flexible approach by introducing TDM guidelines for developments, which outline different programs they can consider in their developments.

TDM measures typically include a selection of the following:



- Carsharing where the development proposal includes a shared vehicle either on-site or nearby to allow for easy access for residents to use. This could also include carshare memberships provided to each residential dwelling unit.
- Non-standard bicycle parking where the development proposal includes a
 percentage of bicycle parking spaces that are intended for non-standard bicycle
 parking, which includes electric cargo bikes, bikes with trailers, and tricycles.
- Bicycle end-of-trip facilities where the development proposal, especially for non-residential developments, includes lockers, showers, and bike wash / repair stations to help support cycling trips.
- Transit passes where the development proposal includes financial support to lower the cost of transit fares for residents.
- Marketing packages where the development proposal includes information to residents and/or employees about the various TDM measures that are available to them.

The implementation of TDM measures can enhance the livability of the development area by controlling the number of vehicles through a reduction in parking spaces. Local characteristics play an important role in determining the status, image, and acceptability of different types of travel behaviour. The private automobile has social and cultural attributes that go well beyond its role as a transportation mode; for TDM strategies to be effective, the strategies must recognize and acknowledge local Stony Plain cultural factors.



6.0 SCENARIO DEVELOPMENT

Using the data collected, analysis results, the jurisdictional scan / review of best practices, and WATT's professional parking knowledge, a series of scenarios were developed to assist the Town in determining how it could update the parking requirements in its LUB. These scenarios represent different approaches towards parking minimums in the LUB. An implied "Scenario Zero", not further outlined here, is to maintain the status quo, where current parking minimums and other parking regulations remain unchanged.

6.1 Scenario 1: Remove Parking Minimums (Impactful Change)

The first scenario is to remove all minimum parking requirements in the LUB, for all land uses. This approach places the responsibility for providing an appropriate amount of parking on local businesses and developers. This approach challenges the conventional wisdom around parking requirements and calls into question whether a municipality should be regulating parking at all. This is also an approach several jurisdictions have taken across North America, including nearby Edmonton as well as a comparable municipality in High River. While it may feel drastic, it also allows the most flexibility moving forward for developers, businesses, and the Town to cater parking supply to what the market demands.

Table 16 summarizes the pros and cons for Scenario 1.

Table 16: Scenario 1 Pros and Cons

Pros	Cons
 Reduces development costs. 	The public may perceive this is a
 Reduces the regulatory cost for 	ban on parking, instead of
businesses and developers to	eliminating the minimum required
adhere to LUB requirements.	amount.
 Forces developers to consider an 	 Requires strategies to ensure that
individual project's parking needs.	adjacent streets are not used as
 Existing parking lots become 	supply for under-built parking.
potential redevelopment sites.	

Resulting minimum parking recommendations for the studied land uses are presented in **Table 17** for Scenario 1.



Table 17: Scenario 1 Parking Regulations

Land Use	Spaces / Unit or GFA / Space	
Land Ose	Current	Recommendation
Studio / 1-Bedroom	1.0	0.0
2+ Bedrooms	1.5	0.0
Detached Dwelling, Semi-Detached Dwelling, Duplex Dwelling, Manufactured Dwelling, Row House Dwelling	2.0	0.0
Visitor Parking in: Multi-Unit Dwelling, Comprehensively planned residential sites	0.1	0.0
Restaurant, Bar, Private Club, Religious Assembly, Recreation Facility	30	0.0
Community Facility, Hospital, or any commercial or industrial use not otherwise specified	50	0.0



6.2 Scenario 2: Match to Analysis Results (Gentle Change)

The second scenario was developed by utilizing the analysis results to determine the parking demand in Stony Plain.

For commercial sites, the analysis found that current parking rates are already consistent with parking demand, therefore no changes are recommended. For multi-unit residential sites, a 20% reduction was found to best suit the parking demand data. The same differential between unit types will be used (i.e. 2-bedroom rate is 1.5 times the 1-bedroom rate), as the unit type was not known for study sites.

Table 18 summarizes the pros and cons for this scenario.

Table 18: Scenario 2 Pros and Cons

Pros	Cons
 Utilizes the parking demand data to reflect supply with demand. Reduces the amount of parking required compared to current regulations. 	 Parking demand may change over time. Setting a minimum amount may lead to businesses and developers not considering their parking needs, but instead simply building the minimum.



Resulting minimum parking recommendations for the studied land uses are presented in **Table 19** for Scenario 2.

Table 19: Scenario 2 Parking Regulations

Land Use	Spaces / Unit or GFA / Space	
Land Ose	Current	Recommendation
Studio / 1-Bedroom	1.0	0.8
2+ Bedrooms	1.5	1.2
Detached Dwelling, Semi-Detached Dwelling, Duplex Dwelling, Manufactured Dwelling, Row House Dwelling	2.0	2.0
Row House Dwelling (Separated from Above Category)	2.0	1.6
Visitor Parking in: Multi-Unit Dwelling, Comprehensively planned residential sites	0.1	0.1
Restaurant, Bar, Private Club, Religious Assembly, Recreation Facility	30	30
Community Facility, Hospital, or any commercial or industrial use not otherwise specified	50	50



6.3 Scenario 3: Simplified Residential Minimums (Measured Change)

This scenario builds on the Town's current C3 land use district residential parking regulations and applies them town-wide. As shown in the multi-unit residential data analysis, parking demand for multi-unit units is only, on average, 1.06 vehicles per unit. Scenario 3 would reduce the minimum required amount for residential uses to 1.0 stalls per unit. Commercial rates for non-C3 land use districts would remain at current levels, as the analysis shows no significant evidence for lowering from current rates.

Table 20 summarizes the pros and cons for Scenario 3.

Table 20: Scenario 3 Pros and Cons

Pros	Cons
 Builds on existing parking policy used in C3 land use districts. Reduces the amount of parking required compared to current regulations. 	 Requires that parking is built for new developments, even if residents do not require it.



Resulting minimum parking recommendations for the studied land uses are presented in **Table 21** for Scenario 3.

Table 21: Scenario 3 Parking Regulations

Land Use	Spaces / Unit or GFA / Space	
Land Ose	Current	Recommendation
Studio / 1-Bedroom	1.0	1.0
2+ Bedrooms	1.5	1.0
Detached Dwelling, Semi-Detached Dwelling, Duplex Dwelling, Manufactured Dwelling, Row House Dwelling	2.0	1.0
Visitor Parking in: Multi-Unit Dwelling, Comprehensively planned residential sites	0.1	0.1
Restaurant, Bar, Private Club, Religious Assembly, Recreation Facility	30	30
Community Facility, Hospital, or any commercial or industrial use not otherwise specified	50	50



6.4 General Policy Options

In addition to the specific scenarios developed above, there are also additional parking regulations that can be adopted. These are not specific to one scenario and can be used to tailor the impact of the selected scenario, including maintaining the status quo ("Scenario Zero").

6.4.1 Maximum Parking Standards

As discussed in **Section 5.2.2** maximum parking standards can be implemented to help reduce the amount of land dedicated to parking. If maximum parking standards are implemented, it is suggested that the Town's current parking minimums become the new parking maximum values.

6.4.2 Lot Coverage

The Town may also choose to implement regulations as it relates to the amount of lot coverage that can be used for parking. This would help to reduce urban sprawl and ensure that the urban form of Stony Plain remains compact by keeping buildings closer to each other. As discussed in **Appendix B – Jurisdictional Scan**, the Town of High River implemented a similar policy, limiting parking to no more than 50% of lot coverage.

6.4.3 Barrier-Free Parking

The current LUB regulates barrier free parking by referring to the Alberta Building Code and the Barrier-Free Design Guide. The Barrier-Free Design Guide lists the required number of barrier-free stalls based on the amount of **required** parking stalls. It is recommended that language in the LUB be amended to clarify that designated barrier-free parking stalls should be built at rates commiserate with the number of **built** parking stalls.

If the Town significantly reduces or eliminates parking minimums, developers are likely to build more parking than the minimum required amount. As such, requiring barrier-free parking based on built stalls ensures that an appropriate supply is provided.

6.4.4 Geographic

The Town currently has parking regulations based on Land Use Bylaw district. For Central Mixed Use (C3) zoning, parking regulations have already been reduced to the Scenario 3 requirements of 1 stall per residential unit, and no commercial requirements.

The Town's Municipal Development Plan (MDP) has clear goals and targets to encourage higher density and development intensity within the Town's transition area



surrounding the downtown core. The Town could set a parking reduction percentage for all developments in the "Core" or "Transition Area" to incentivize more housing. construction.

6.4.5 Transportation Demand Management (TDM)

As discussed in **Section 5.2.6**, TDM can be an effective way to reduce parking demand and thereby allow developers to provide less parking in new developments. The City of Richmond (BC) for example, allows developers to reduce their parking requirements by as much as 20% if they commit to TDM measures, which can include but not be limited to providing new or enhanced cycling and walking facilities in the vicinity of the development; the provision of carsharing; transit passes; and end-of-trip facilities, for example.

6.4.6 Affordable (Non-Market) Housing

Some communities like Victoria (BC) and Kamloops (BC) have lower parking requirements for affordable housing developments. The Town of Stony Plain has policy direction in its MDP to encourage a diversity of non-market affordable housing options. Therefore, it could consider providing a parking reduction for all market buildings that include a percentage of affordable (non-market) housing units. Or the Town could develop specific parking rates for non-market housing, which would be lower than market housing.



7.0 CONCLUSION

WATT Consulting Group was retained by the Town of Stony Plain to conduct a comprehensive parking study, as part of the CMHC's Housing Accelerator Fund Action Plan. The study's purpose is to identify ways that the Town can build housing that is affordable for both current and future residents.

The implementation of minimum parking requirements over 70 years ago has led to large portions of urban land dedicated to the storage of personal vehicles. Often the minimum parking rates required for development are not substantiated on parking demand, but rather on limited studies, often performed in suburban car-dependent areas. The increased servicing costs from a less dense municipality, and the opportunity cost of land not built to full zoning potential are incurred by municipalities when parking is constructed. There is also a measured cost to build a parking stall, which can cost up to \$20,000 for a surface stall, and up to \$60,000 for a stall deep underground. This cost is accounted for in business overhead and passed on to customers.

Data Collection and Results

This study collected data from 12 multi-unit residential, 3 single-unit residential, and 4 commercial and community service sites to determine parking demand, parking supply, and how it relates to current LUB minimum parking rates.

It was found that Stony Plain's multi-unit parking demand was 1.10 vehicles per unit, with a standard deviation of 0.35, and multi-unit parking supply was 1.88 vehicles per unit, with a standard deviation of 0.63. For comparison, the current LUB requires 1.0 stalls for a 1-bedroom or smaller unit, and 1.5 stalls for a 2-bedroom or larger unit.

Single-unit parking demand was not analyzed, as data collection within private garages was not possible. The on-street parking utilization along 47 Street and Hendrie Drive was found to be 32% and 7%, respectively, representing a demand 0.50 and 0.47 vehicles per unit. Driveway parking on Genesis Drive was found to be 1.21 vehicles per unit, and utilization was 66%.

Commercial parking outside the downtown was measured at St. Andrews Plaza and found a demand rate of 2.45 vehicles per 100 m², and a supply rate of 4.70 vehicles per 100 m². In comparison, the current LUB requirement if the development was constructed today would require 1 vehicle per 44 m² (2.23 vehicles per 100 m²). Thus indicating that demand is roughly matched by current minimum parking rate in the LUB.

Travel surveys were conducted at two businesses and the Stony Plain Public Library along 50 Street in the downtown core. There are currently no parking requirements for



commercial or community service uses in this area of the town, zoned as C3 – Central Mixed-Use District. Parking is provided for customers through on-street parking with time limits along 50 Street, and in the nearby neighbourhood streets. Parking demand for these uses was 1 vehicle per 46 to $60 \, \text{m}^2$.

Recommended Scenarios

Three potential changes to the Town's LUB parking regulations were developed using a combination of the data analyzed, existing regulations, jurisdictional scan of similar municipalities, and WATT's parking experience. The recommended scenarios are as follows:

- Scenario 1: Removal of Parking Minimums (Impactful Change)
- Scenario 2: Match Minimum Parking Requirements to Observed Parking Demand (Gentle Change)
- Scenario 3: Simplify Residential Minimum Parking Requirements (Measured Change)

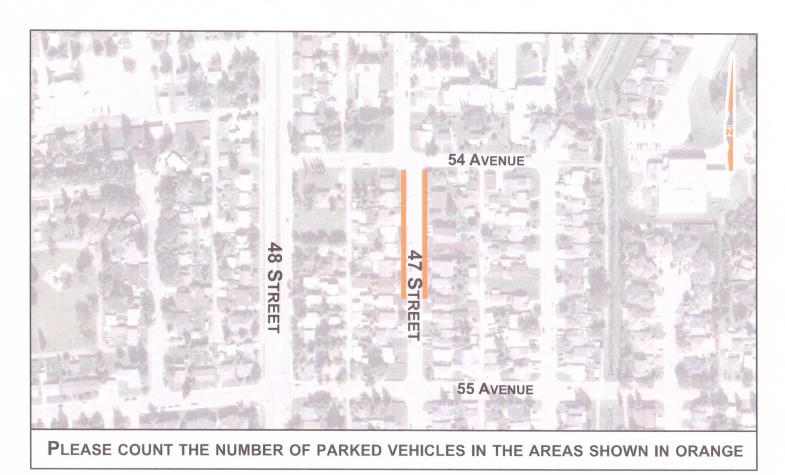
A series of general parking policies are also provided, which could be overlaid to tailor any of suggested scenarios, including the status quo. These include:

- Maximum Parking Standards
- Lot Coverage Regulations
- Barrier-Free Parking Standards
- Geographic Considerations
- Transportation Demand Management (TDM) Strategies
- Differential Rates for Affordable (Non-Market Housing)



APPENDIX A – DATA COLLECTION





NUMBER OF PARKED VEHICLES
WEDNESDAY SEPTEMBER 25, 2024
EAST SIDE
WEST SIDE

TIME OF DAY

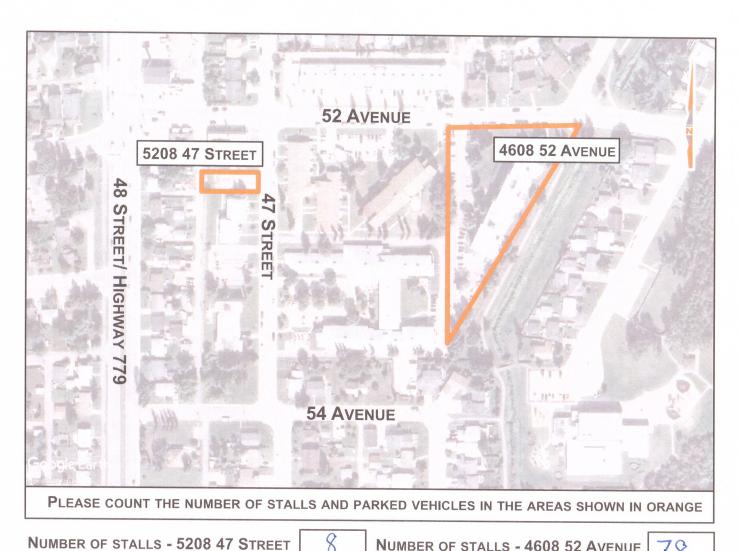
NUMBER OF PARKED VEHICLES
THURSDAY SEPTEMBER 26, 2024
EAST SIDE
WEST SIDE
TIME OF DAY

NUMBER OF PARKED VEHICLES
THURSDAY SEPTEMBER 26, 2024

EAST SIDE
TIME OF DAY

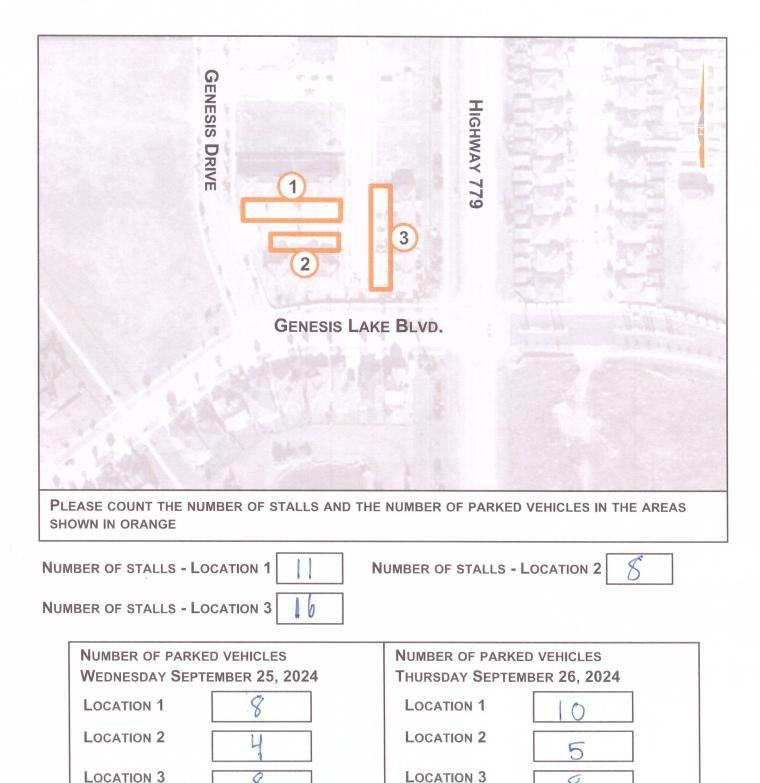
TIME OF DAY





	1888 3271121182
NUMBER OF PARKED VEHICLES WEDNESDAY SEPTEMBER 25, 2024	NUMBER OF PARKED VEHICLES THURSDAY SEPTEMBER 26, 2024
5208 47 STREET 5	5208 47 STREET 5
4608 52 AVENUE 5	4608 52 AVENUE 49
TIME OF DAY 9:50	TIME OF DAY



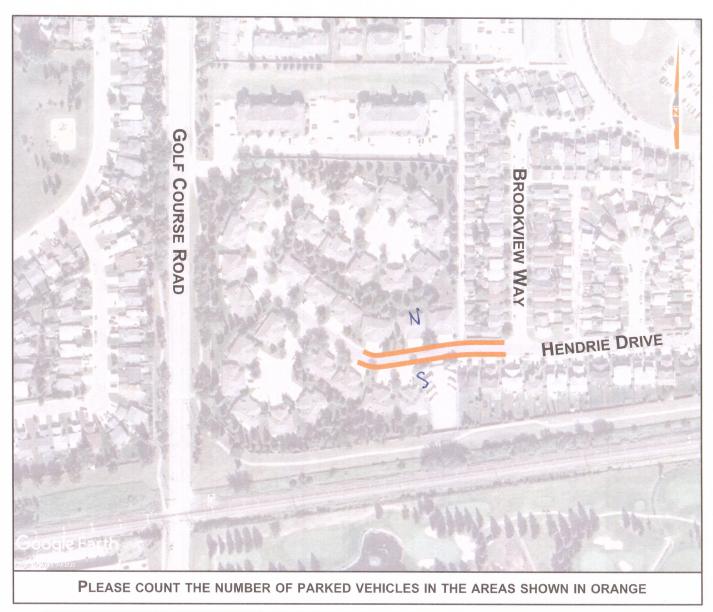


TIME OF DAY

0:06

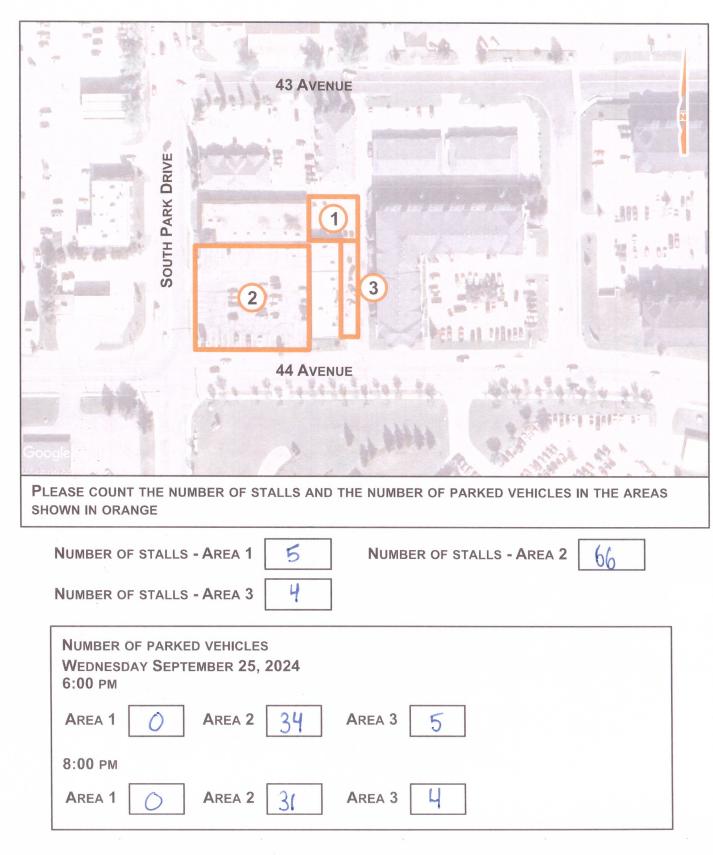
TIME OF DAY





NUMBER OF PARKED VEHICLES WEDNESDAY SEPTEMBER 25, 2024	Number of parked vehicles Thursday September 26, 2024
NORTH SIDE 3	NORTH SIDE
SOUTH SIDE	SOUTH SIDE 3
TIME OF DAY 9:05 pm	TIME OF DAY





Yellow Head Clinic



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location: Butter Chicken Hut – 5108 50 Street

Date: Wednesday September 25, 2024

Time: 3:30pm to 5:30pm

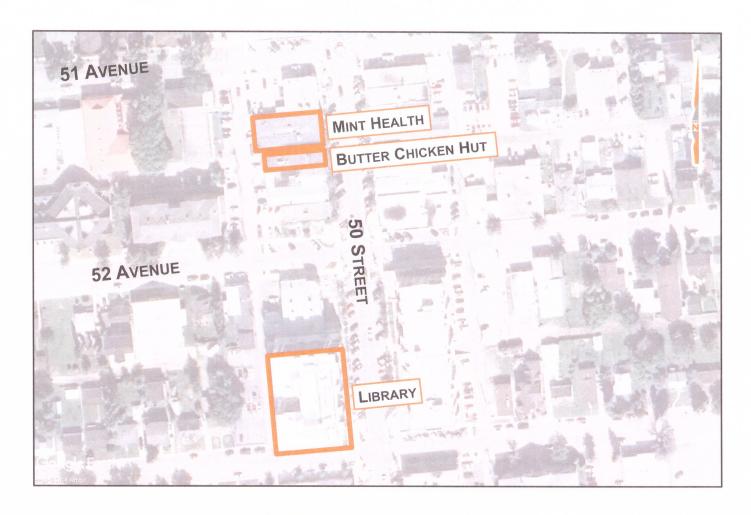
Question 1: Did you drive to the Butter Chicken Hut today? (if "yes", go to question 2, if "no", no interview required)

Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
Behind Butter Chicken Hut	l
Benind Butter chicken Hut	a
Infront Butter concuen Aut	a
Infront Butter Chicken Hot	2
Infront-Botter avenuen Hut	1
Infront Butter curcicen Hut	<i>∂</i> .
Infront Butter chicken Hut	1
Infront Butter Chicken Huf	2



STONY PLAIN PARKING SURVEY TRAVEL SURVEY LOCATIONS



12:30 - 2:30



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location: M

Mint Health & Drugs - 5106 50 Street

Date:

Wednesday September 25, 2024

Time:

12:30pm to 2:30pm

Question 1: Did you drive to the drug store today? (if "yes", go to question 2, if "no", no interview required)

Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
Behind Mint Health	1
Behind Mint Health	1
Infront Wint Health	1
Infront Mint Health	l
Infront Butter Chicken	1
Walked to Store (From Home)	t .
Walked to Store (from Home)	(
Infront Butter chicken	1
Infront Mint Health	1
Achors's street Infront Law Office	1
Infront Mint Health	1
Infront Mint Health	1
Infront Mint Health	1

Not I



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location:

Mint Health & Drugs - 5106 50 Street

Date:

Wednesday September 25, 2024

Time:

12:30pm to 2:30pm

Question 1: Did you drive to the drug store today? (if "yes", go to question 2, if "no", no interview required)

Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
ABORREN AN Infront Mint Health	a
Infront Mint Health	1
Infront Mint Health	4
Infront Butter chicken Hut	1
Infront Mint Health	2
Infront Mint Health	(
Infront Mint Health	2
Across Street Infront (BUSY B Workshop)	2
Infront Mint Health	1
Infront Mint Health	2
Infront Butter Chicken Hut	
Infront Mint Health	l
Infront Mint Health	1



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location:

Mint Health & Drugs – 5106 50 Street

Date:

Wednesday September 25, 2024

Time:

12:30pm to 2:30pm

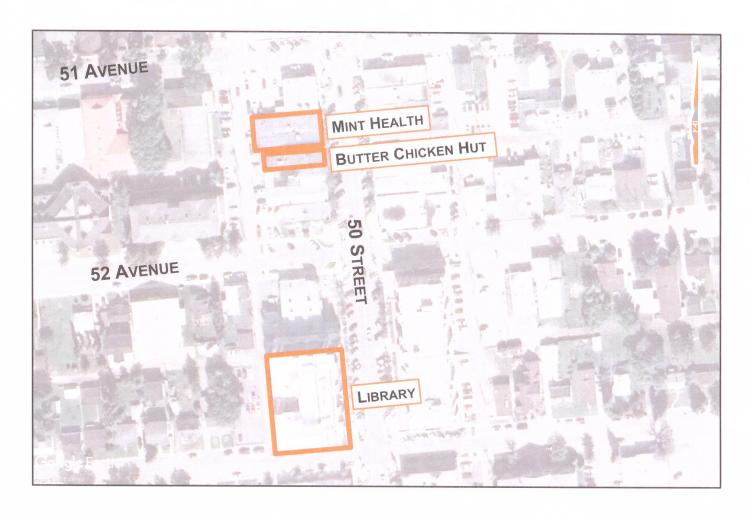
Question 1: Did you drive to the drug store today? (if "yes", go to question 2, if "no", no interview required)

Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
Infront Mint Health	1
Infront Mint Health Infront Butter Chicken Hut	1



STONY PLAIN PARKING SURVEY TRAVEL SURVEY LOCATIONS



12:30 - 2:30



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location: Stony Pl

Stony Plain Public Library - 5216 50 Street

Date:

Thursday September 26, 2024

Time:

3:30pm to 5:30pm

Question 1: Did you drive to the library today? (if "yes", go to question 2, if "no", no interview required)

Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
Library South Lot	
Library South Lot	· ·
Library East Lot	2
Library East Lot	1
Library South Lot	1
Library Underground Parking	1
Library North Lot	1
Library North Lot	1
Post Office on main st. 53 Ave	2
Library North Lot	3
Library North Lot	1
Library Underground Parking	1
Library North Lot	



Note: we are only interested in the number of vehicles, the number of people is for information purposes only. For example, if there are 3 people in the car, only count that as one occurrence.

Location: Stony Plain Public Library - 5216 50 Street

Date: Thursday September 26, 2024

Time: 3:30pm to 5:30pm

Question 1: Did you drive to the library today? (if "yes", go to question 2, if "no", no interview required)

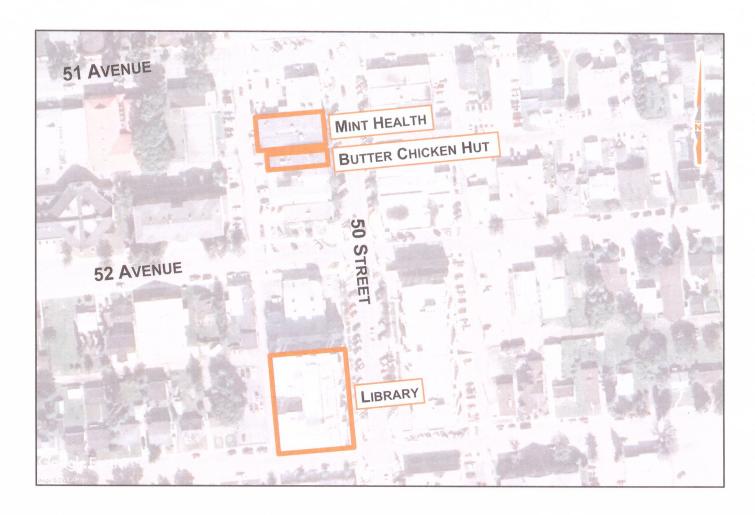
Question 2: Where did you park? (ask for a specific street, parking lot, parkade etc.)

Parking Location	# of people in vehicle
Library North Lot	A.
Library North Lot	a
Library North Lot	2
Library East Lot	3
Library Underground Parking	
Libiary North Lot	l
opposite Side of North Loton: corner of Main St 53 Ave	reet 2
Library North Lot	2
Library East Lot	1
Library North Lot	
Library East Lot	1

16 Employes Park in the residential Area and two on the South side

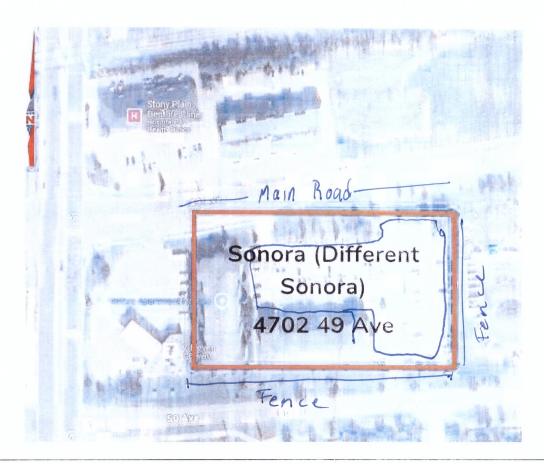


STONY PLAIN PARKING SURVEY TRAVEL SURVEY LOCATIONS



12:30 - 2:30





Please count the number of stalls in the surface lot.

Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

172

Number	OF	PARKED	VE	HICLES
THESDAY	O	TORER 1	15	2024

SURFACE LOT

97

TIME OF DAY

9:30

Number of Parked Vehicles Wednesday October 16, 2024

SURFACE LOT

103

TIME OF DAY





Please count the number of stalls in the surface lot.

Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

65

Number o	OF PARKED	VEHICLES
TUESDAY	OCTOBER	15, 2024,

SURFACE LOT

26

TIME OF DAY

9:50

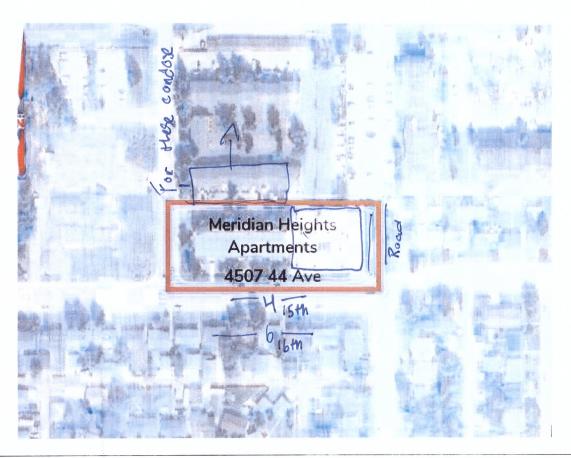
Number of Parked Vehicles Wednesday October 16, 2024

SURFACE LOT

21

TIME OF DAY





Please count the number of stalls in the surface lot.
Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

50

Number of parked vehicles Tuesday October 15, 2024,		Number of par Wednesday Oc	RKED VEHICLES TOBER 16, 2024	
SURFACE LOT	4 on street	Surface Lot	32	6 on street
TIME OF DAY 10:05		TIME OF DAY	9:30	





Please count the number of stalls in both the surface lot. Please count the number of parked vehicles in the surface lot. If there is a parkade, skip the site.

Number of Stalls - Surface Lot 134

Number of Parked Vehicles
Tuesday October 15, 2024,

Surface Lot 51

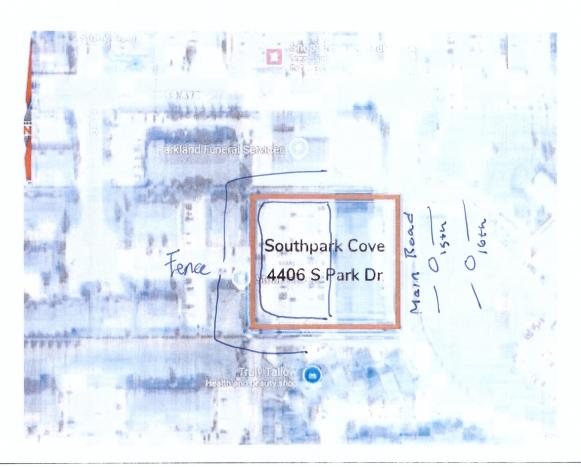
Time of Day 10:30

Number of Parked Vehicles
Wednesday October 16, 2024

Surface Lot 48

Time of Day 9:50





Please count the number of stalls in the surface lot.
Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

119

Number	OF	PARKED	VE	HICLES
THESDAY	00	CTOBER	15	2024

SURFACE LOT

49

TIME OF DAY

10:40

Number of Parked Vehicles Wednesday October 16, 2024

SURFACE LOT

52

TIME OF DAY





Please count the number of stalls in the surface lot.

Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

74

NUMBER OF PARKED VEHICLES TUESDAY OCTOBER 15, 2024,

SURFACE LOT

36

TIME OF DAY

10:55

NUMBER OF PARKED VEHICLES WEDNESDAY OCTOBER 16, 2024

SURFACE LOT

38

TIME OF DAY





Please count the number of stalls in the surface lot.
Please count the number of parked vehicles in the surface lot.
Please count stalls in both the Central Lot & West Lot.

NUMBER OF STALLS - SURFACE LOT

258

Number	OF	PARKED	VE	HICLES
THESDAY	00	CTOBER	15.	2024.

SURFACE LOT

123

TIME OF DAY

11:10

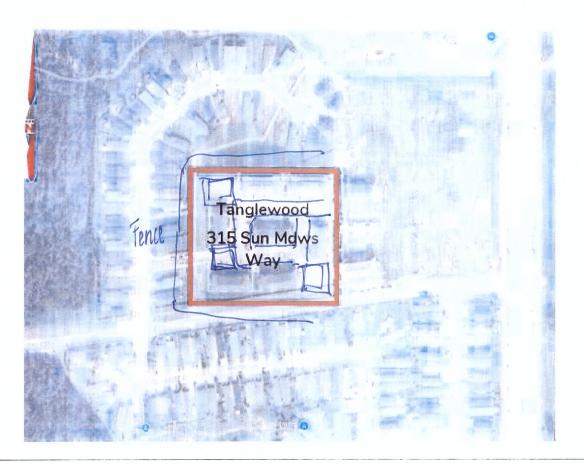
NUMBER OF PARKED VEHICLES WEDNESDAY OCTOBER 16, 2024

SURFACE LOT

112

TIME OF DAY





Please count the number of stalls in the surface lot. Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

NUMBER OF PARKED VEHIC	CLES
TUESDAY OCTOBER 15, 20	24,

Surface Lot 200

103

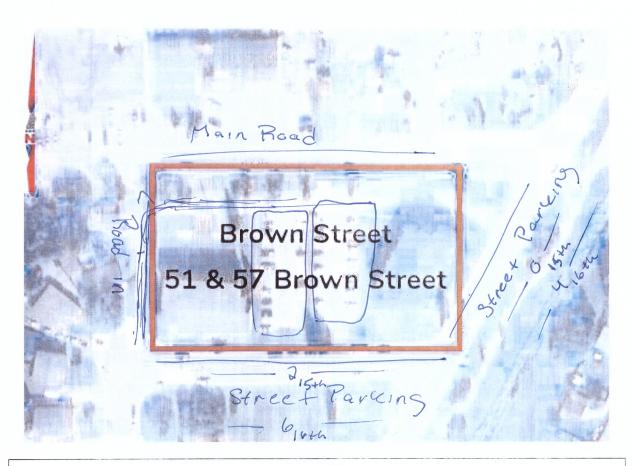
TIME OF DAY

NUMBER OF PARKED VEHICLES WEDNESDAY OCTOBER 16, 2024

SURFACE LOT

TIME OF DAY





Please count the number of stalls in the surface lot.

Please count the number of parked vehicles in the surface lot.

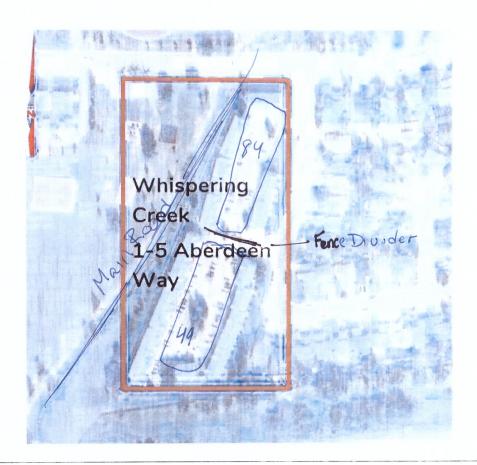
Please count cars parked on 51A Ave south of buildings.

NUMBER OF STALLS - SURFACE LOT

60

Number of Parked Vehicles Tuesday October 15, 2024,	Number of parked vehicles Wednesday October 16, 2024		
SURFACE LOT 42	Surface Lot 59		
TIME OF DAY	TIME OF DAY		
50A AVE 6	50A AVE		





Please count the number of stalls in the surface lot.
Please count the number of parked vehicles in the surface lot.

NUMBER OF STALLS - SURFACE LOT

133

Number	OF	PARKED	VE	HICLES
THESDAY	0	TORER 1	5	2024

SURFACE LOT

78

TIME OF DAY

12:05

Number of Parked Vehicles Wednesday October 16, 2024

SURFACE LOT

90

TIME OF DAY



APPENDIX B – JURISDICTIONAL SCAN



STONY PLAIN AND SIMILAR REPRESENTATIVE MUNICIPALITIES

To support the original data collection and analysis, a review was undertaken to explore parking requirements in other communities across Alberta. A total of six communities were included in the review.

Unless otherwise stated, geographic bylaw considerations – such as distance to transit or core areas - were not included in this analysis.

Benchmarking

Table B1 identifies the six municipalities included in the benchmarking survey. The municipalities included in the benchmarking exercise included both cities and towns.

Proximity to a Municipality **Population Municipal Status** Major Urban Area Stony Plain 17,993 Town 30 km Spruce Grove 38,985 22 km City Morinville 10,385 Town 24 km Ft. Saskatchewan 28,624 18 km City 10 km Beaumont 20,888 City Camrose 18,772 City 80 km

Table B1: Benchmarked Municipalities

Residential Parking Requirements

As presented in **Table B2**, Stony Plain, Spruce Grove, Morinville, Fort Saskatchewan, and Camrose each use the number of bedrooms as the variable upon which to identify the minimum number of parking stalls to be provided for a multi-family residential development.

The City of Beaumont requires the universal provision of one vehicle parking space per unit above 75 m². The City of Beaumont recently amended its Land Use Bylaw to reduce multi-family residential parking requirements to better balance the supply and demand of parking to accommodate alternative modes of transportation such as walking and cycling.

Fort Saskatchewan is the only municipality of the six municipalities analyzed that differentiates parking based on geographic location within the municipality.



Table B2: Comparison of Local Residential Parking Bylaws

		Per Unit Basis / Unit of Specified Floor Area								
Building		Stony Plain	Spruce Grove	Morinville	Fort Saskatchewan	Beaumont	Camrose	High River		
	Bachelor/Studio	1	1	1	1 / 0.75*		1			
<u>></u>	1-Bedroom	1	1	1.25	1/1*	1 / unit	1			
Multi-Family	2-Bedroom	1.5 / 1*	1.5	1.5	1.5 / 1.5*		1.25			
Multi	3-Bedroom +	1.5 / 1*	2	2	2 / 1.75*	over 75m ²	1.25			
Town	houses	2	2	2	Same as MF buildings		2**	0***		
Visito	r Parking	0.1	0.14	0.14	0.17 / 0.14*	-	N/A			
Senio	r Assisted Living	0.25	0.00	0.20	0.6	-	0.25			
Senior Living	r Independent	0.60	0.50	0.20	-	-	0.5			

^{*} Minimum downtown parking requirements

^{**} Not specifically Townhouses, Duplexes, and Mobile Homes used instead

^{***} High River has removed residential parking minimums in favour of development appropriate parking provisions as discussed below



Of the municipalities that require parking to be provided depending on the number of bedrooms per unit (excluding the downtown area of Fort Saskatchewan), each municipality requires the provision of a minimum of one vehicle parking space for bachelor/studio sized units.

This is also true of 1-bedroom units except for in Morinville and Camrose which requires 1.25 spaces per 1-bedroom unit. Each of these analyzed municipalities requires 1.5 vehicles per 2-bedroom unit and two vehicle parking spaces provided per 3-bedroom or larger unit.

Of municipalities analyzed that require parking to be provided using unit size as the variable, Camrose requires the fewest vehicle parking spaces with a maximum of 1.25 spaces per unit of two bedrooms or greater in size. None of these municipalities differentiate their parking requirements based on the building tenure and require the same parking provisions for condominiums (strata) and apartments (market rental).

Townhouse developments require the provision of 2.0 vehicle parking spaces within Stony Plain, Spruce Grove, Morinville, and Camrose. Fort Saskatchewan and Beaumont both require the same provision of parking for these developments as other multi-family developments. It is notable that Camrose does not specify townhouses within its bylaw; however, the bylaw does specify Duplexes and Mobile Homes, which have been used as a proxy for Townhouse developments.

Visitor parking is very similar across each of the municipalities with Stony Plain having the most lenient requirement of 0.1 visitor parking space per dwelling unit being required in Stony Plain. Spruce Grove, Morinville, and downtown Fort Saskatchewan each require 0.14 visitor parking spaces per dwelling unit, whereas Fort Saskatchewan outside of its downtown area requires the provision of 0.17 visitor parking spaces per dwelling unit. Neither Beaumont nor Camrose specifies visitor parking requirements at residential developments.

Finally, for each municipality, vehicle parking for senior independent and assisted living facilities both require fewer residential vehicle parking spaces than units. For assisted living facilities Stony Plain, Morinville, Fort Saskatchewan, and Camrose, require 0.25, 0.20, 0.60, and 0.25 residential vehicle parking spaces per unit, respectively. Spruce Grove does not require the provision of any residential parking for these facilities. Independent living facilities within Stony Plain, Spruce Grove, Morinville, and Camrose require the provision of 0.60, 0.50, 0.20, and 0.50 residential vehicle parking spaces, per unit, respectively. The other municipalities assessed either did not differentiate independent living facilities or do not currently have parking requirements for each of these care facilities.



In contrast to the required residential parking minimum requirements set out by each of these municipalities, the Town of High River has forgone required parking minimums in favour of an approach that requires developers to consider an appropriate number of parking required to support the proposed development. This approach aims to reduce the oversupply of parking, building costs, and wasted space resulting from antiquated parking requirements. To this end, the parking structures/area will not exceed 50% of a given site and must be associated with a development. Accessible vehicle parking will still be required for parking structures/areas with 11 or more units.

Secondary Suites

Parking requirements for secondary suites from all comparable municipalities were also studied. The name of these unit types vary, with common names being secondary suite, garden suite, accessory dwelling unit, or garage suite. Apart from High River, which has no minimum parking requirements, all other municipalities had identical minimums of 1.0 spaces per unit. This also matched Stony Plain's current requirement.

Commercial Parking Requirements

Illustrated in **Table B3**, a comparison of non-residential bylaws for Stony Plain, Spruce Grove, Morinville, Fort Saskatchewan, and Beaumont was completed based on a 100m² equivalency when possible.

Stony Plain requires the second fewest parking spaces to be provided for retail developments, with 2 vehicle parking spaces per 100m^2 of gross floor area (GFA), only Beaumont had a lesser requirement requiring only 1 vehicle parking space per 100m^2 . Of note, Beaumont does not measure in GFA and instead measures parking based on the square metres the development occupies within the lot.

Camrose requires parking based on the public floor area as opposed to GFA. As a result, Camrose has the greatest required parking provision with 2.5 vehicle parking spaces per 100 m^2 of public floor area.

Most of the compared municipalities require that restaurants provide parking based on the seating area but also provide staff with parking based on the GFA. As such, it is not possible to compare the required restaurant parking requirements in Stony Plain with the municipalities that use this method. However, Beaumont only requires 2.00 vehicle parking spaces per $100m^2$ of GFA compared to Stony Plain's required 3.33 vehicle parking spaces per $100m^2$. Both Beaumont and Stony Plain require fewer parking spaces than Camrose which requires 10 spaces per $100m^2$.



Table B3: Comparison of Local Commercial Parking Bylaws

Building	Stony Plain	Spruce Grove	Morinville	Fort Saskatchewan	Beaumont	Camrose	High River
Retail and Equivalents	2.00 / 100 m ² GFA *	2.5 / 100 m ² GFA	2.22/ 100 m ² GFA	 < 2000 m² 2.2 / 100 m² GFA 2000 m² – 20000 m² 3.2 / 100 m² GFA > 20000 m² 4.3 / 100 m² GFA 	1 / 100 m² lot area	2.5 / 100 m² public floor area	
Dining and Equivalents	3.33 / 100 m ² GFA *	20 / 100 m² of seating area + 0.5 per employee	1/4 seats or 5 / 100 m ² GFA	1/4 seats or 1 / 100 m² GFA (minimum 5)	2 / 100 m² lot area	10 / 100 m ² of public floor area; or 1 / 8 seats	0**
Office Building	2.00 / 100 m ² GFA *	2.22/ 100 m ² GFA	2.22/ 100 m ² GFA	1 / 100 m² customer plus 1/ 100 m² GFA staff	1 / 100 m ² lot area	2.5 / 100 m ² GFA	
Liquor Stores and Dispensaries	2.00 / 100 m ² GFA *	2.5 / 100 m ² GFA	3.33 / 100 m ² GFA	 < 2000 m² 2.2 / 100 m² GFA 2000 m² – 20000 m² 3.2 / 100 m² GFA > 20000 m² 4.3 / 100 m² GFA 	1 / 100 m² lot area	2.5 / 100 m² Public Floor Area	

^{*} No parking Minimums in Downtown Core

^{**} High River has removed commercial parking minimums in favour of development appropriate parking provisions



Regarding parking requirements for office buildings, Stony Plain has comparable parking requirements to similar municipalities with 2.0 vehicle parking spaces required per 100 m^2 of GFA Spruce Grove and Morinville both require the provision of 2.22 vehicle parking spaces per 100 m^2 , whereas Fort Saskatchewan and Beaumont both require the provision of 1.00 vehicle parking spaces per 100m^2 of GFA. The largest number of parking spaces required is from Camrose which requires 2.5 vehicle parking spaces per 100 m^2 of gross floor area.

Retail shops of controlled substances such as Alcohol and Cannabis require the provision of 2 spaces per 100 m² of GFA within Stony Plain. This is less than Spruce Grove, Morinville, Fort Saskatchewan, and Camrose which each require 2.50, 3.33, 2.20, and 2.5 vehicle parking spaces per 100 m² of GFA, respectively. Beaumont requires only one vehicle parking space per 100 m² of lot area for these businesses. Fort Saskatchewan does have a tiered floor area system when determining parking which increases to 3.2 vehicle parking spaces per 100 m² of GFA in buildings sized between 2,000 m² of GFA and 20,000 m² of GFA and then increases to 4.3 vehicle parking spaces per 100 m² of GFA for buildings larger than 20,000 m² of GFA.