



# **CAMROSE DOWNTOWN TRANSPORTATION AND PARKING PLAN**

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## REPORT SUMMARY

The purpose of the Camrose Downtown Transportation and Parking Plan is to understand existing transportation and parking conditions in the downtown, and make recommendations for improvements in the short term and the long term.

Existing parking within the downtown was surveyed to understand the existing conditions. The largest parking numbers and occupancy were located on or near 50 Street between 49 Avenue and 51 Avenue. This parking reflects the high concentration of retail in this area. Off-street public lots within the downtown have additional capacity. The parking occupancy was observed to be within an ideal target range and the supply is adequate to handle the current demand. Marking stalls with paint lines, particularly on 50 Street between 49 Avenue and 51 Avenue, is a way to increase the effective parking supply and could be used to ensure efficient use of the existing parking is demand increases within the downtown.

A duration survey of this area found that 12% of all vehicles parked in this area stayed for longer than the 2-hour limit. Introduction of enforcement for this limit should significantly reduce the long-term parking, but may have negative implications on the downtown. Education and encouragement techniques, largely targeted at businesses, would be an alternative that could reduce the number of long term parkers, without negatively impacting the downtown.

A Draft Transportation Master Plan for Camrose proposes road classification changes for the City and the downtown. These changes would not significantly change the roadways, but instead focuses on ensuring non-vehicular modes are prioritized along with vehicles. The downtown does offer non-vehicular travel options through:

- Sidewalks throughout downtown, with only a few gaps,
- Curb ramps, curb bulb-outs, and midblock crossings to provide safety and accessibility,
- Seasonal Bicycle parking,
- Fixed Route transit service through the downtown four days a week, and
- Specialized transit and a taxi token program.

The next steps in improving the downtown street network is:

- Continue to fill in pedestrian gaps and improve the network,
- Assess the relocation of roadway width to pedestrian or bicycle uses.
- Provide additional, permanent bicycle parking,
- Assess a special downtown bicycle parking rate, and
- Assess the transit system and look for ways to improve and expand.

Vehicle volumes within the downtown are not projected to increase to a level that would require significant improvements to the downtown road network. Moving towards complete streets, streets that accommodate all modes and users, can be facilitated through prioritization of different modes on parallel roadways. Reallocation of the parking, pedestrian, and vehicle portions of the roadway to develop additional pedestrian and bicycle facilities should be assessed as this moves the downtown street network toward a Complete Streets network.

Intersection control is primarily 4-way stops within the downtown. Conversion of several 2-way stops on 48 Street into 4-way stops should be assessed to improve safety and provide consistent intersection control for drivers.

Existing truck routes within the downtown should be reviewed to ensure that each route is appropriate. Loading was observed to block the traffic downtown but based on observed driver response, this is not considered a significant issue. Loading should be monitored and addressed if it becomes significant.

The future parking demand was assessed based on information from the Downtown and City of Camrose Retail and Commercial Market Study. Nine areas within the downtown were identified as targeted growth areas and are adequate to accommodate the forecast growth. Areas within and near the downtown Core Parking Area were estimated to have a parking demand rate roughly half of the Land Use Bylaw (LUB) parking rate. Developing a special LUB parking rate of 1 stall per 80m<sup>2</sup> of public floor area (half the current LUB rate) for this portion of downtown will adequately accommodate the majority of parking demand on-site and rely little on the on-street and public off-street parking. Developments outside of the core of the downtown should be assessed to determine if the LUB rate or special downtown rate best applies.

Shared parking is currently allowed within the Land Use Bylaw and offers a way to reduce the parking requirement within a development. This allowance should be continued and improved going forward.

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## ACKNOWLEDGMENTS

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- Camrose External Stakeholder Committee

## 1.0 INTRODUCTION

WATT Consulting Group was retained by the City of Camrose to develop the Camrose Downtown Transportation and Parking Plan. This plan is in support of a new Downtown Area Redevelopment Plan (DARP), currently in preparation, that will replace the 2007 Downtown Action Plan. The purpose of this study is to understand existing transportation and parking conditions in the downtown, and make recommendations for improvements in the short term and the long term.

Downtown Camrose, located in northeast central Camrose, consists of approximately 36 city blocks in a traditional grid pattern. The downtown is roughly bounded by:

- Highway 13 (48 Avenue) to the south,
- Highway 833 (53 Street) to the west,
- The CN Rail line to the north, and
- 46 Street to the east.

Downtown Camrose continues to be a vibrant, diverse hub with unique services. Main Street (50 Street) has been the commercial heart of the city with additional commercial and institutional uses present throughout downtown.

The study area matches the DARP area and encompasses the whole of downtown. **Figure 1.1** shows the study area of this project.

**Figure 1.1 - Study Area**



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## 2.0 BACKGROUND & CONTEXT

The context of the plan area within the downtown and within Camrose was reviewed to provide a foundation for the transportation and parking plan.

### 2.1 CITY CHARACTERISTICS

The City of Camrose is a medium sized city with a population of 18,520. Located in east-central Alberta, Camrose has a diverse economic base with a trading area that stretches to the Saskatchewan border 200 km to the east and includes 340,000 people within a two-hour drive (excluding Edmonton population). Several large retailers have helped establish Camrose as a leading regional shopping destination. 28% of the population of Camrose are between 25 and 49 years old with 23% of the population made up of senior (65 and older) population.

A key aspect of the City of Camrose since 1910 is the University of Alberta's Augustana Campus. The university employs approximately 55 academic staff and has 1,000 students enrolled. An amendment to the University's Long Range Development Plan is being prepared to include additional University land to the east.

Camrose is regionally connected to the east via Highway 26, to the west and southeast via Highway 13. North and south connection is provided by Highway 833 and Highways 21 (8 km west) and 56 (8 km east). The Camrose Municipal Airport provides connections for private aircraft. Camrose is serviced by Canadian National Railway, Canadian Pacific Railway, and Battle River Railway.

### 2.2 TRANSPORTATION MASTER PLAN

The most-recent Transportation Master Plan for the City of Camrose was reviewed in final-draft form, and is expected to be finalized in Spring, 2018. Its objective is to define a long-range transportation network and provide recommendations relating to specific transportation and traffic issues. While the document addresses the city as a whole, several aspects of the plan are directly or indirectly related to the downtown.

#### **Existing and Future Traffic Volumes**

The vehicle volumes downtown are well within the roadway capacity and forecasted to remain that way into the future. The areas identified having a higher volume-to-capacity ratio, and potentially requiring improvements, are 53 Street (north of 49 Avenue) and 51 Street (between 48 Avenue and 48A Avenue).

#### **Recommended Network Improvements**

A 2021 recommended improvement is the extension of 53 Street across Mirror Lake to connect directly to 48 Avenue. The 2026 and 2036 improvements also include 53 Street and recommend banning of parking to accommodate four lanes of vehicle travel along the edge of downtown.



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## Road Classification and Complete Streets

To facilitate the full spectrum of transportation modes, the Transportation Master Plan identifies three classifications of roadway.

- **Arterial Streets** – Primary emphasis on movement of vehicles, but also emphasis on other modes within certain areas.
- **Livable Streets** – Facilitate a wide range of users and provide connectivity within the city with an emphasis on attracting people and ensuring a high level of safety for all users.
- **Local Streets** – Provide direct access to adjacent land uses.

## Walking and Cycling

The downtown is identified as an area within the city with good sidewalks coverage, though some gaps exist. The existing active transportation network primarily follows Mirror Lake and Camrose Creek valley. The proposed “minimum network” identifies new active transportation corridors within the downtown along 50 Street and 49 Avenue, with connection to the existing facilities along Mirror Lake and to the south via 48 Street.

## 2.3 STAKEHOLDER OBSERVATIONS

A meeting of the Camrose External Stakeholder Committee was held on November 16, 2017. At the meeting, a survey was circulated that requested input on positive and negative aspects of the parking and transportation systems in Downtown Camrose, and asked for any suggested changes. Nine responses were received from committee members.

Two thirds of the responses identified the level of availability, and free cost, of parking as positives. Some other commonly identified items were:

- **Transit System** – Its existence was considered a positive, but the coverage it provides was identified as a negative. An evaluation of the service was also suggested.
- **Bike Parking** – Several respondents identified the lack of year-round bike parking as a negative and suggested more be installed.
- **Angled Parking** – Two respondents cited this as a positive, another respondent identified a concern regarding seniors having difficulty backing out of the angled stalls.
- **Walkability / Trails** – The walkability of Downtown (and the adjacent trail system) was identified by two respondents as a positive. Some concerns were raised over pedestrian access to the lanes and side streets, as well as lighting and snow removal. The flashing-amber-light mid-block pedestrian crossings were identified as a positive.
- **Lack of Enforcement** – Two respondents identified the lack of enforcement of parking restrictions in Downtown as a negative. Concerns over business staff and owners parking in front of retail shops were also raised.

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Other issues/concerns received a single mention:

- Disabled parking supply
- Disabled parking location/design
- Parking near stop signs
- Poor signage
- Public parking lots
- No ride-share companies (e.g., Uber)

Based on the feedback received, there are a number of aspects of parking and the transportation network that are positively impacting the residence and businesses. No single issue / concern was identified by the majority of the group, indicating there is not a single large issue. However, there appears to be number of items that, if addressed, would further improve the public's opinion.

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## 3.0 EXISTING PARKING CONDITIONS

Data collection was conducted to better understand the existing parking conditions in Downtown Camrose. This section summarizes the key findings.

### 3.1 PARKING INVENTORY AND DATA COLLECTION

A baseline Downtown Parking Study was conducted in 2011 by the City of Camrose. While this report was not formally adopted by Council, one aspect it assessed was the current inventory of parking stalls. This information was used as a base for the data collection in this study. Exhibits showing parking restrictions and supply are provided in **Appendix A**.

WATT conducted a parking survey in early November 2017 to collect information on the parking conditions within Downtown Camrose. Surveys were conducted on Saturday, November 4, and Thursday, November 9, to ensure a typical weekday and weekend day were captured. Two types of data were collected.

- Occupancy of all on-street and public off-street parking spaces in the study area (i.e., counting the number of vehicles parked in each area).
- Length of stay (duration) for all of 50 Street and the portions of 49 Avenue and 50 Avenue between 51 Street and 49 Street on one-hour intervals.

This was conducted to determine where and when the peak demand for parking is occurring, and if the current parking supply is meeting the parking demand from residents, employees and visitors to the downtown. Additional information on the data collection and results is available in **Appendix B**.

### 3.2 PARKING OCCUPANCY

A summary of parking occupancy for the study area including on-street and municipal off-street parking is identified below. Occupancy rate refers to the percentage of available parking spaces occupied in a given area. 70% to 85% occupancy is generally used as the target occupancy rate where parking supply meets demand but is not over-supplied.

#### 3.2.1 ON-STREET

Parking occupancy maps for each survey day are contained in **Appendix C**; as an example of the survey maps, peak observed parking on the Thursday survey day was at 2:00 pm, as shown in **Figure 3.1**.

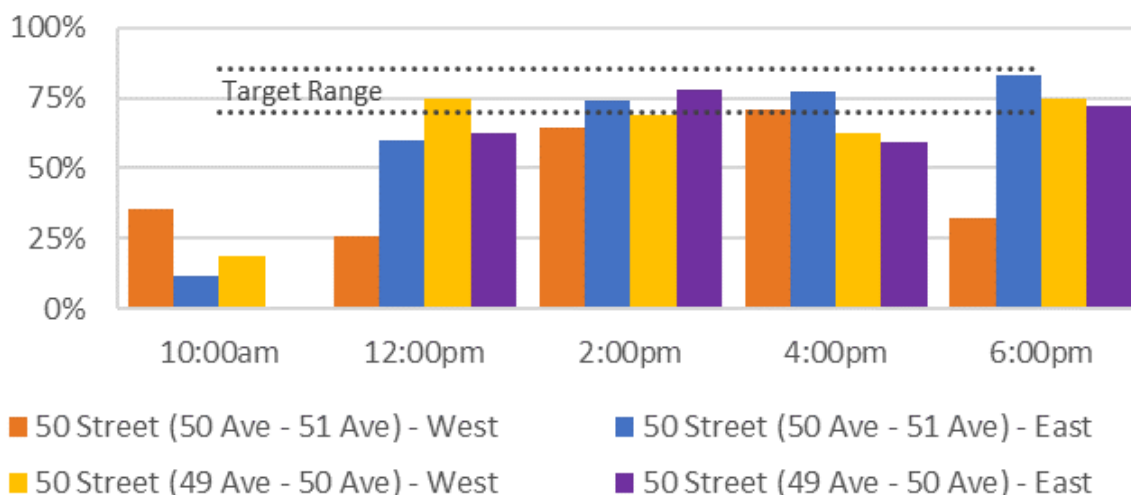
**Figure 3.1 - Thursday Peak Parking Occupancy – 2:00 pm**



The survey data indicate that the majority of roadways within the downtown have less than 50% occupancy throughout the day for both the surveyed weekday and weekend day. 50 Street experienced the highest and most consistent parking counts (and occupancy percentage) with the majority of intervals having 20 to 25 vehicles per block face, or 60-75% occupancy. The land uses along 50 Street (ground floor retail, restaurants) are likely the key contributor to the consistent occupancy rates. Thursday hourly occupancy is shown in **Figure 3.2**. Additional occupancy information is provided in **Appendix B**.

Overall, the parking supply is adequate to accommodate the parking demand. With the exception of one interval on Saturday, the highest parking occupancy observed along an entire road segment in the Parking Duration Survey Area was approximately 75%, which is within the typical target occupancy range.

**Figure 3.2 - 50 Street Parking Occupancy 51 Avenue to 49 Avenue – Thursday**



In the rest of the downtown, parking occupancy rates are typically below 50%. The block faces outside of the Parking Duration Survey Area (portions of 50 Street, 50 Avenue, and 49 Avenue) with an occupancy rate of 70% or higher:

- 50 Avenue (46 Street – 47 Street) – South Side – Thursday
- 50 Avenue (47 Street – 48 Street) – North Side – Thursday and Saturday
- 50 Avenue (47 Street – 48 Street) – South Side – Saturday
- 50 Avenue (51 Street – 52 Street) – South Side – Thursday
- 48A Avenue (48 Street – 49 Street) – South Side - Saturday
- 52 Street (south of 48A Avenue) – West Side – Thursday and Saturday
- 48 Street (48 Avenue – 48A Avenue) – East Side -Thursday
- 46 Street (48 Avenue – 49 Avenue) – West Side – Saturday
- 46 Street (48 Avenue – 49 Avenue) – East Side - Saturday

Further information on these locations is available in Appendix B.

Specific events were identified that explain the higher parking occupancy in some of the above areas.

- A volleyball tournament occurred at École Charlie Killam School, located on the east side of 46 Street, between 48 Avenue and 49 Avenue, on Saturday, November 4. Parking occupancy above 50% was observed throughout the day in the area near the school. This localized increase was adequately accommodated with the available supply.



- Near the intersection of 48A Avenue and 51 Street, high occupancy was observed in the 5pm interval on Saturday, which coincides with the Mass time of St. Francis Xavier Catholic Church.
- Several events occurred at the Chuck MacLean Arts Centre, located on 52 Street south of 48A Avenue, on Saturday, November 4, between 12:00 pm and 4:00 pm. Additionally dance classes occurred on Thursday, November 9, starting 3:30 pm. These programs coincide with increased parking data observed on 52 Street and within the Mirror Lake parking lot.

Outside of the locations listed above, a couple of areas stood out in the parking occupancy plots.

- 50 Street – Parking between 49 Avenue and 51 Avenue along 50 Street was both the highest number of parked cars and the highest occupancy. The west block face south of 50 Street was one of the highest occupancy areas.
- 50 Avenue and 48 Street – This area adjacent to the Library had occupancy over 70% on both Thursday and Saturday.

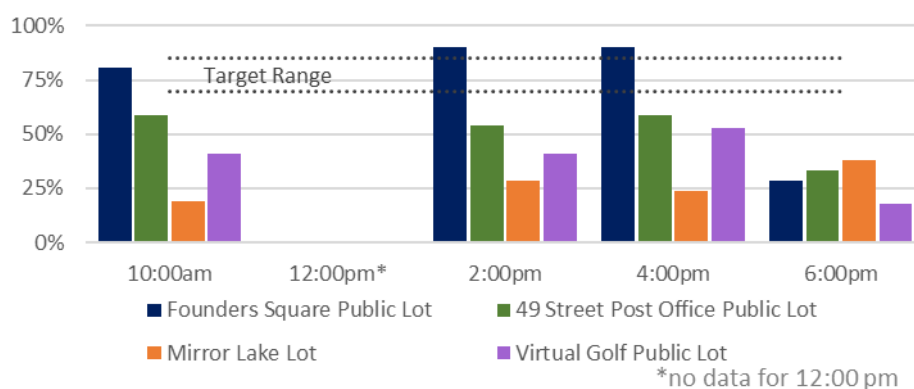
Based on the collected data, no areas of downtown experience a significant issue of lack of parking supply. Parking along and near 50 Street is well used, but the available supply would accommodate additional demand.

### 3.2.2 OFF-STREET

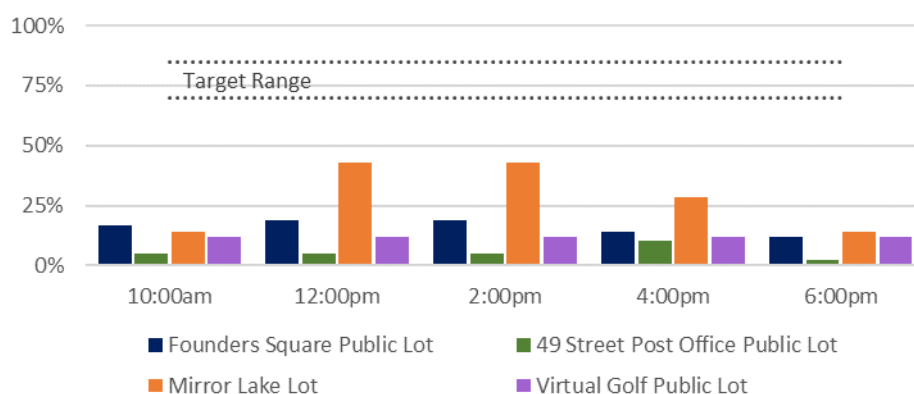
Off-street parking is located throughout Downtown Camrose as either public off-street lots that are owned and managed by the City, or private off-street spaces that belong to individual businesses, or serve many businesses in one parking lot.

There are four public parking lots that were observed during the parking surveys. Peak occupancy was observed on Thursday, November 9, when total occupancy for the four lots was 63% with the Founder's Square lot at 90%. The parking occupancy of the public off-street lots is provided in **Figure 3.3** and **Figure 3.4** and also in map form in **Appendix C**.

**Figure 3.3 - Off-street Parking Lot Occupancy – Thursday**



**Figure 3.4 - Off-street Parking Lot Occupancy – Saturday**



### 3.3 PARKING DURATION

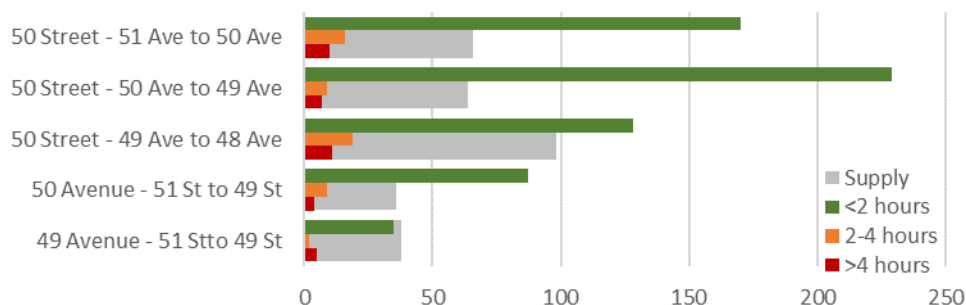
The parking duration survey was conducted over two days and included a total of 1,226 unique vehicles with the following distribution:

- 656 unique vehicles on Thursday only,
- 534 unique vehicles on Saturday only, and
- 36 vehicles on both Thursday and Saturday.

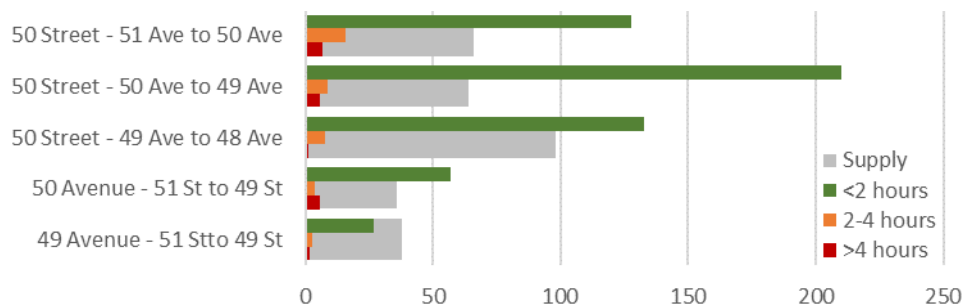
The majority of vehicles were observed on a single road segment, however, approximately 3-4% of total vehicles were observed on more than one road segment (suggesting the motorist would park their vehicle once, and then move to another parking space for further activities). On Thursday, 17 vehicles were observed on two different road segments, while 1 vehicle was observed on three different road segments. On Saturday, 21 and 2, respectively, were observed.

Within the duration survey area, a two-hour maximum parking limit is typical. Data obtained from the survey was used to estimate the parking duration of all the vehicles surveyed. The duration of all vehicles observed is provided for 50 Street, 50 Avenue, and 49 Avenue in **Figure 3.5** and **Figure 3.6**.

**Figure 3.5 - Vehicles Parked by Duration – Thursday**



**Figure 3.6 - Vehicles Parked by Duration – Saturday**



In terms of parked vehicles, the vast majority were within the two-hour posted limit. Approximately 7% of parked vehicles remained for two to four hours with approximately 5% of the total vehicles remaining for four or more hours.

Vehicles parked for longer than four hours occupy stalls for a large portion of the day and make them unavailable for other vehicles. This can be an issue if a high proportion of the vehicles are within one block. **Figure 3.7** identifies the percentage of stalls for each block face occupied by vehicles parking longer than four hours.



**Figure 3.7 - Percentage of Stalls Occupied by Vehicles Parked for Longer than Four Hours**



The figure identifies some block faces that have up to 30% of the stalls occupied by vehicles parking for more than four hours, however, these vehicles are spread throughout the downtown and not focused in a single area or block. Additionally, the areas with a higher proportion of long term parking are not the highest parking occupancy areas.

Combining all the blocks together, approximately 7% of the total parking stalls within this area are occupied by vehicles parked for longer than four hours. The occupancy survey data shows that the peak occupancy on these block faces' is approximately 75%, including the vehicles parked for longer than four hours. The available supply exceeds the demand and the downtown is not currently significantly impacted by the parking exceeding four hours.

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## 4.0 TRANSPORTATION NETWORK

The street network, with some multi-use trails along Mirror Lake, form the transportation network within the downtown. Access to the downtown by users of all modes is accommodated to some extent. Existing features can be expanded upon and new features provided to further enhance the transportation network.

### 4.1 STREET NETWORK OVERVIEW

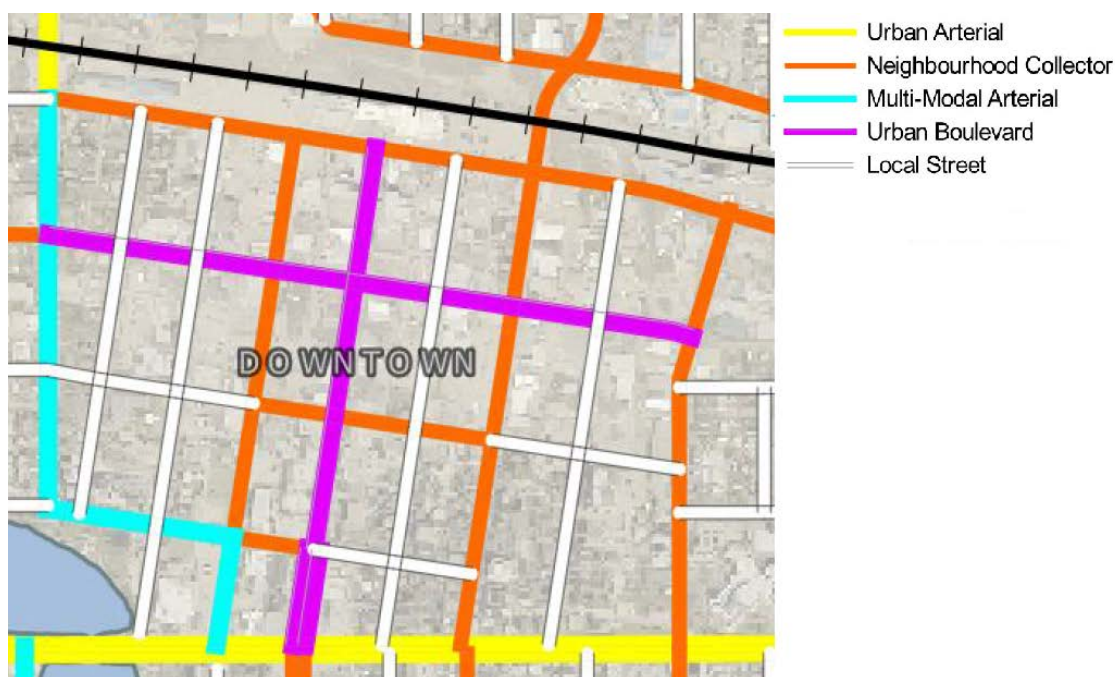
Several key features of the network are:

- A grid slightly skewed from Highway 833 (53 Street) and Highway 13 (48 Avenue) for the west and south boundaries of the downtown, respectively;
- Access to the north across the railroad line via 53 Street and 48 Street;
- access to the south side of Camrose via 50 Street;
- Sidewalks on both sides of roads throughout most of the downtown;
- Pedestrian midblock crossings on each block of 50 Street between 51 Avenue and 48A Avenue;
- Curb bulb outs along 50 Street and parts of 49 Street, 48 Street, and 49 Avenue; and
- Connection to the Mirror Lake multi-use trails to the west on 48A Avenue.

53 Street (and portions of 51 Street and 48A Avenue), 48 Street, and 50 Avenue will remain key links for the road network. Accommodating vehicles will be one of the priorities of these roadways. Most of the remaining roadways will primarily serve the downtown through accommodating travel via all modes. While vehicles will continue to be served, an increase in the priority of accommodating modes other than vehicles is needed. This can already be seen with the midblock crossings on 50 Street and the curb bulb outs throughout the downtown. The 2017 Transportation Master Plan recommended a road classification system that provides additional information on each roadway class, in order to better classify roadways. This road classification is shown in **Figure 4.1**.

The classifications within the downtown highlight the planned multi-modal nature of the downtown. The Urban Boulevards and Neighbourhood Collector will aim to serve all modes while still providing access to the adjacent land uses. As the application of an urban boulevard is undertaken on 50 Street, consideration of the allocation of space to all street users is important. Current traffic flow and maneuverability is good and there may be an opportunity to decrease the functional carriageway for vehicles and increase the width of the pedestrian realm.

**Figure 4.1 – TMP Proposed Road Classification**



Source: City of Camrose DRAFT Transportation Master Plan, July 2017 (Figure 7-1)

A key consideration of the street network downtown is determining the priority modes of each roadway. This complete street approach will see roadways designed to integrate all road users safely, including pedestrians, cyclists, motorists, truck drivers, and public transportation users of all ages and abilities. A system of complete streets should prioritize all road user types; however, each roadway does not need to prioritize each user type. For example, the current design and usage of 50 Street is not conducive to implementing bicycle infrastructure; however, providing bicycle priority on 51 Street and 49 Street would improve the network as a whole.

Additional assessments for the other roadways in downtown, such as 51 Street, 49 Street, and 49 Avenue, may offer opportunities for reconfiguration and/or banning of parking to facilitate an improved pedestrian realm or new protected bicycle facility.

As roadway projects are undertaken in the downtown, it is important to evaluate each project as a unique opportunity within this multi-modal network.

#### 4.1.1 PEDESTRIANS

The pedestrian network within the downtown is extensive. For a number of reasons, including on-street parking, vehicles within the downtown are generally travelling at a lower speed. This conducive to a successful pedestrian realm. Sidewalks on both sides of the road throughout the downtown with curb ramps accommodates pedestrians well. Additionally, a number of marked

crosswalks at intersections and midblock as well as curb bulb-outs further improve the pedestrian network.

During field observations, mobility impaired pedestrians including visually impaired and electric scooter users were observed. Providing a pedestrian network with accessibility for all users, especially mobility impaired users, is vital. Ensuring the transportation is safe and efficient for these users should continue to be a priority going forward.

The midblock crossings on 50 Street utilize flashing amber lights to draw attention to the crosswalk. It was observed that these lights flash continuously and not just when pedestrians are present. While this approach does draw driver's attention to the crosswalk, it does not alert drivers that pedestrians are present and may tend to be disregarded by motorists over time. The City should consider switching to a button activated flashing beacon style crossing to better alert drivers of the presence of pedestrians.

Portions of 47 Street, 46 Street, and 50 Avenue in the northeast corner of downtown only have sidewalks on one side of the road. This is largely due to the land use in that area and as the downtown develops, these missing links should be filled in.

Part of developing a pedestrian network is understanding the key origins and destinations that may result in walking. Several key downtown pedestrian generators are:

- 50 Street Retail area
- Camrose Public Library
- Ecole Charlie Killam School
- Mirror Lake
- Apartments in southwest corner of downtown.

These areas should be considered when developing the pedestrian network.

#### 4.1.2 BICYCLES

A city the size of Camrose has a unique opportunity in that its size is conducive to bicycle trips with the furthest edge of Camrose roughly 3.5 km (approximately 12 minutes) from the downtown. In order to encourage cycling trips, bicycles need to be accommodated within the transportation network and appropriate bicycle parking must be provided. These stalls should be located in visible locations close to destinations and offer year-round bicycle parking.

During field observations, several bike parking racks were observed in use. These bike racks are provided seasonally. An example of a typical rack is shown in **Figure 4.2**. Also observed was existing signage within the downtown that identifies "No skateboarding, No bicycle riding, No rollerblading, No scooter riding". These signs should be modified to indicate "on sidewalk"



and the “no bicycle riding” could be replaced with “walk your bicycle”. These signs could be positioned with bicycle parking, as observed in some locations, and maps or directions to the location of additional nearby bicycle parking could also be provided.

**Figure 4.2 – Typical Downtown Bicycle Rack**



Potential options for improving bicycle parking include:

- Bicycle parking racks at the ends of the block,
- Bicycle parking racks at the ends and midpoint of the block, and
- Smaller bicycle parking racks on the sidewalks along the length of the block.

By providing smaller racks in more locations, cyclists are better able to park close to their destination. This approach would be suited for 50 Street, but bicycle parking should be provided to some extent along the other roadways in the downtown, such as 51 Street and 49 Street.

The City of Camrose has a current Land Use Bylaw requirement of providing bicycle stalls equal to 10% of the vehicle parking stalls (with a minimum of five) for commercial developments requiring 20 or more vehicle stalls. A lessening of the threshold of 20 vehicles stalls to 10 (and removal of the minimum of five stalls) within the downtown would result in more developments providing bicycle parking stalls downtown. The City should consider a special bicycle parking rate, such as the one outlined above, to increase the occurrence of bicycle parking downtown.

Allowances for construction of bicycle parking within the road right-of-way adjacent to new developments may be a way to improve the public realm around new developments.

#### 4.1.3 TRANSIT

##### Handibus

The City of Camrose provides financial support to the Rose City Handivan Society, a non-profit which offers specialized “handibus” transportation for seniors and citizens with disabilities.

##### Community Bus

The existing “Community Bus” transit service operates on a fixed route, four days a week. Service is provided hourly on Tuesday, Thursday, Friday, and Saturday beginning at 9:00 am and ending at 5:00 pm. (There are also on-demand / group bookings serviced on Mondays and Wednesdays.)

Within the downtown, transit has the following stops:

- Wildrose Villa (53 Street, south of 50 Avenue) - regular transit stop
- Downtown / Tish’s Fashions (49 Avenue, east of 50 Street) - on-demand stop
- Jamieson Manor (49 Avenue, east of 47 Street) - regular transit stop

The transit route also includes stops at:

- Camrose Community Centre
- Camrose Recreation Centre
- St. Mary’s Hospital and other medical services
- Augustana University
- Large retail stores & malls on the west end of town
- Various seniors’ housing complexes

The transit system is run with funding / resources from the City Manager’s office; the vehicle was donated and the driver is contracted through the Rose City Handivan Society.

##### Taxi Tokens

The City of Camrose operates a Taxi Token program to supplement the transit service available through the community bus and handivan. This program provides tokens, worth \$4 off a taxi ride, to primarily community and medical organizations within the city. These tokens are given to people these organizations serve and can be used for any trip within Camrose. Currently, two of the three taxi companies accept these tokens and the City is working to improve the system.

With nearly a quarter of the population of Camrose above the age of 65, transit is an excellent option to provide service to seniors and mobility-impaired people when accessing medical or dental appointments and shopping or social trips. Assessing the current transit system and looking for ways to improve or expand the existing services will increase the benefit to citizens.

#### 4.1.4 PUBLIC PARKING WAYFINDING

The City of Camrose Wayfinding Master Plan identifies style, location, and content of wayfinding signs in the downtown and throughout Camrose. The current parking signage downtown is on the roadway directly adjacent to the parking lots. This location of signage is mirrored in the Wayfinding Master Plan. Additional signage on 50 Street and 49 Avenue would inform drivers of the availability of additional parking. The availability of parking throughout the downtown does not make wayfinding to parking a priority, however, the parking duration restrictions increase the need to highlight available unrestricted parking. If parking wayfinding signage is installed, the guidelines outlined in the Wayfinding Master Plan should be followed.

#### 4.2 TRAFFIC SPEEDS AND INTERSECTION CONTROL TYPE

The Camrose Traffic Bylaw (#2691/12) specifies the default speed limit for all roads in Camrose, including the downtown, as 50 km/h. Exceptions to this default speed limit within the downtown include:

- Main Street (50 Street), from 48 Avenue to 51 Avenue, has a speed limit of 30 km/h
- Alleys have a speed limit of 20 km/h
- 46 Street has a School Zone (48 Avenue to 49 Avenue, adjacent to École Charlie Killam School) restricting speeds to 30 km/h from 8:00 AM - 9:30 AM, 11:30 AM - 1:30 PM, and 3:00 PM - 4:30 PM.

Based on casual observations of traffic flow (during 20+ hours of parking data collection during downtown business hours in November, 2017), it appears that motor vehicle traffic in the downtown is generally operating in accordance with the speed limits noted above.

In particular, it was observed that motor vehicle traffic on 50 Street generally operates at a suitably slow speed during business hours, appropriate based on the level of activity on and adjacent to the street (including angle parking and unparking maneuvers).

It was observed that vehicle flow on 48 Street was perceived to be at a higher rate of speed. With east/west 2-way stops, 48 Street has uninterrupted right-of-way through the entirety of the study area. 48 Street also provides connection to the north as one of only two streets in downtown to cross the railway tracks. These factors can all contribute to a higher speed 48 Street.

In order to better balance the vehicle-carrying aspects of 48 Street with the urban function of a vibrant, human-scale downtown, a reduction in vehicle speeds on 48 Street would be appropriate and would contribute to safer traffic operations. This would be accompanied by an increased emphasis on walkability along and across 48 Street, integrating destinations and reducing the barrier-effect of 48 Street, and ultimately supporting the goals of a new DARP.

Several current and new approaches can help reduce the speed on 48 Street.

- Continuation of on street parking to reduce the effective road width.
- Addition of curb bulb-outs to reduce the effective road width and improve pedestrian safety.
- Conversion of 2-way stops to 4-way stops at 51 Avenue, 50 Avenue, and 49 Avenue.

These approaches would have the following benefits.

- Break up the long stretch of uninterrupted flow,
- Improve pedestrian and cross street vehicle safety, and
- Provide more consistency of intersection control in the central portion of downtown.

Through ongoing monitoring of traffic operations by the City, the intersection of 51 Avenue - 48 Street was within the top five locations by collision rate. The primary collision cause was “fail to proceed safely”. While this collision cause may be influenced by a number of factors, conversion of the intersection to a 4-way stop would likely reduce the occurrences of collisions. The other intersections along 48 Street did not show up in the top five intersections, but a similar conversion to a 4-way stop would reduce risk and provide more consistency within the downtown.

Throughout the rest of downtown, the primary intersection control type is a 4-way stop. Based on the existing and forecast volumes, this control type remains appropriate.

### 4.3 TRUCK ROUTES AND LOADING

Large trucks are used to service many land uses within the downtown. Additionally, 53 Street and 48 Street provide key connections to the north for movement of goods. The current truck route map is provided in **Figure 4.3**.



**Figure 4.3 – Existing Truck Route Map**



Source: City of Camrose DRAFT Transportation Master Plan, July 2017 (Figure 5-5)

As the downtown develops and continues to improve walking and cycling facilities, the accommodation of trucks will become more and more difficult. A review of the truck routes downtown should be completed and look at the removal of 51 Street (north of 48A Avenue), 49 Street, and 49 Avenue from the network. Trucks accessing the adjacent land-uses will still be accommodated on the roadway, but removal of the designation allows for more design options on the roadways.

During field observations, it was observed that courier vehicles were not using loading areas, and instead, inhibiting traffic flow, see **Figure 4.4**. While this use is not ideal for the network, the actual impact on traffic was minimal as vehicles were able to navigate around the obstruction. This speaks to the character of the downtown and how it is a multi-modal and flexible system. A review of the allocation, design, and use of the loading spaces downtown may be appropriate if the impact of loadings is deemed a significant issue.

**Figure 4.4 – Courier Loading Example**



## 5.0 FUTURE PARKING CONSIDERATIONS

As the downtown grows and changes, parking will remain as a key issue. This section addresses some key components of the future parking in the downtown.

### 5.1 FUTURE GROWTH AREAS

Within the downtown, there are a number of lots that are vacant or appropriate for development. The City has identified nine of these as targeted development sites. These parcels have a combined area of approximately 15,800 m<sup>2</sup> and are shown in **Figure 5.1**.

**Figure 5.1 – Targeted Development Sites**



Concurrent to the Downtown Transportation and Parking Study, a Downtown and City of Camrose Retail and Commercial Market Study is being undertaken for the City of Camrose by 360 Collective. This assessment will help establish future development targets. Based on available data from 360 Collective, the City of Camrose is expecting to see an average annual growth of 400-500 m<sup>2</sup> of new retail development in downtown over the next 25 years supplemented by a lesser amount of office space growth. This corresponds to approximately



10,000 to 12,500 m<sup>2</sup> of new development in the downtown. Assuming a floor area ratio (FAR) of 1.0, the targeted development sites would be sufficient to absorb the expected growth.

## 5.2 FUTURE PARKING DEMAND

Analysis of the downtown parking demand was completed to understand existing demand, and use that information to guide parking requirements for future developments. The data collection process identified on-street and off-street public parking, but did not measure off-street private parking for staff or visitors. The off-street private parking was estimated using field observations and aerial images for a six square block area between 51 Avenue and 49 Avenue, and 1½ blocks either side of 50 Street, see **Figure 5.2**.

**Figure 5.2 – Core Parking Area**



Once the private parking was combined with the observed public parking, a downtown parking demand rate between 1 stall per 100 m<sup>2</sup> and 1 stall per 75 m<sup>2</sup> of commercial/retail floor area was estimated. This rate includes approximately 40-50% of parking on-street and 40-50% in off-street private parking. The remaining parking is within off-street public lots.

Currently, a significant portion of the parking demand is accommodated on-street, largely due to no off-street parking requirements along 50 Street. While the remaining portion of downtown is not planned to duplicate this type of land use, a reduction in off-street private parking encourages denser development and can create more vibrant streets.

Providing off-street parking at a rate of 1 stall per 80m<sup>2</sup> of public floor area (half of the current Land Use Bylaw rate) within the area bounded by 51 Avenue, 49 Avenue, 52 Street, and 48 Street would support this reduction in off-street parking. Additionally, based on the estimated current demand, the provided off-street parking would be sufficient to accommodate the majority of the parking demand, relying very little on the public on-street and off-street stalls.

The development site east of 48 Street (site 7) is on the edge of the Core Parking Area, but could be appropriate for a reduced downtown parking rate depending on the development and the adjacent properties.

The development sites north of 51 Avenue (sites 1 and 2) lack connection to the Core Parking Area and are more-isolated. Initial indications from the DARP process are that these sites may be targeted for medium-sized retailers or junior department stores. For these reasons, it is expected that uses with higher vehicle parking demand are likely. The Land Use Bylaw rate of parking is likely appropriate to accommodate the anticipated demand of these areas.

### 5.3 PARKING MANAGEMENT APPROACH

Several aspects of downtown parking have potential to be managed to a higher degree. This section outlines the areas that could benefit from additional management.

#### 5.3.1 MANAGING PARKING LIMITS

The central portion of downtown has a two-hour parking restriction, see **Appendix A**. This is to encourage parking turnover and ensure that parking is available for customers coming downtown. The City does not currently have a regular enforcement program for these parking areas. As discussed in Section 3.3, there are vehicles parked for longer than 2 hours throughout this area.

One effective way to address this behavior is to conduct regular enforcement of the downtown. Knowledge of the enforcement would likely change behaviors and result is significantly less long-term parking. The risk with this approach is that such enforcement, especially if heavy-handed or inflexible, could serve as a deterrent for those coming to the downtown.

An alternative to enforcement is to start with encouragement and education. Employees and business owners are the most likely to park for extended durations. By targeting the businesses with education regarding the issues with long term parking (reduced customer parking), it may be an effective alternative to enforcement.

Another alternative would be to appoint downtown ambassadors. Their role would be a positive role for the downtown and be a friendly “on-street personality” when compared to a parking commissioner. Their role could include education and encouragement to abide by parking

restrictions, e.g., including warnings and longer parking thresholds. Information brochures regarding long term parking could be issued by ambassadors instead of parking tickets.

### 5.3.2 SHARED PARKING

As new development occurs within the downtown, parking supply will be a consideration. While areas of downtown may have on-site parking requirements less than the typical Land Use Bylaw rate, further reductions may be possible through shared parking. Shared parking is most effective between land uses that have varied peak parking demand. Some examples include churches or theatres having a different peak than office and most retail uses. The Bylaw currently allows for sharing of parking through the use of a restrictive covenant on nearby lots or completion of a parking demand study. These exemptions allow for developments with reduced parking supply, while still accommodating the anticipated demand. Continuation of this program will offer site developers a full range of options to rationalize and provide appropriate parking supply.

### 5.3.3 ON-STREET PARKING SUPPLY

The existing on-street angle parking on 50 Street has vertical white paint markings on the curb, intended to delineate stalls and encourage efficiency through proper vehicle positioning. Additional stall markings with white paint on the pavement itself would reinforce this delineation and increase effective parking supply, by further reducing the number of vehicles parking at odd angles. This potential increase will be largely seasonal as snow cover in the winter may hide the lines. As with all pavement markings, such additional markings would require regular maintenance and re-painting to ensure ongoing effectiveness.

The on-street parking supply can also be managed in conjunction with re-allocation of road right-of-way to other modes, such as bicycles or pedestrians. Conversion of parallel parking on both sides of the road into angle parking on one side could facilitate a protected bicycle facility on one side of the road. Adjustments of the existing on-street parking can provide a similar supply while also enhancing the transportation network through new features.

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## 6.0 CONCLUSIONS & RECOMMENDATIONS

The following conclusions have been made based on the analysis:

1. Public opinion sees the availability and cost (free) of parking as a positive.
2. Stakeholder feedback does not indicate any single dominant issue with the transportation system in the downtown.
3. The parking supply downtown is adequately meeting the demand.
4. On and near 50 Street, parking occupancy is within the typical target occupancy range.
5. Parking demand in the rest of downtown is significantly lower than the supply.
6. Long term parking (greater than 4 hours) is occurring in approximately 7% of all stalls within the Parking Duration Survey Area with areas with a higher proportion of long term parking in lower occupancy areas.
7. Public off-street parking lots have available supply.
8. The proposed road classifications will encourage the multi-modal nature of downtown.
9. Opportunities may exist to reallocate roadway width for pedestrian or bicycle modes.
10. The pedestrian network is extensive and accessible though gaps in the network should be addressed.
11. Operation of the midblock pedestrian crossing flashers could be assessed.
12. Additional, permanent bicycle parking should be provided.
13. A special downtown Land Use Bylaw bicycle parking rate could be developed.
14. Existing “no bicycle riding” signs should clarify the restriction only applies to sidewalks.
15. Ongoing assessment of the transit system should be conducted looking for opportunities for expansion.
16. Based on casual observations, vehicle speeds appear to be appropriate in the downtown, with higher speeds perceived on 48 Street.
17. Conversion of 2-way stops to 4-way stops on 48 Street at 51 Avenue, 50 Avenue, and 49 Avenue will improve safety and provide more consistency within the downtown.
18. Trucks routes in the downtown should be assessed to ensure they are appropriate.
19. The expected new commercial/retail development over the next 25 years will fit within the targeted development areas.
20. Existing parking demand in the downtown Core Parking Area is approximately between 1 stall per 100m<sup>2</sup> and 1 stall per 75m<sup>2</sup> of commercial/retail floor area.
21. Land Use Bylaw parking rates could be reduced to 1 stall per 80m<sup>2</sup> of floor area for areas within the DARP Character Areas ‘Central Business District/Civic Centre’ and ‘Commercial Transition District’.
22. Enforcement of parking limits would discourage long term on-street parking, but may also negatively impact customers.
23. Education and encouragement targeted at the downtown businesses may be a way to reduce long term parking.

- 
24. Support of shared parking within the downtown will allow for denser development.
  25. Marking on-street parking stalls may increase effective parking supply.

The following recommendations have been made based on the analysis:

1. Adopt the proposed road classifications.
2. Assess the relocation of roadway width to pedestrian or bicycle uses.
3. Assess the operation of the midblock flashing beacons.
4. Provide additional, permanent bicycle parking.
5. Assess a special downtown bicycle parking rate.
6. Modify signage regarding bicycle riding to clarify the restriction only applies to sidewalks.
7. Assess the transit system and look for ways to improve and expand.
8. Assess the conversion of 2-way stops to 4-way stops on 48 Street.
9. Assess the truck routes in the downtown.
10. Adjust the Land Use Bylaw parking requirements to 1 stall per 80m<sup>2</sup> of floor area for areas within the downtown.
11. Explore education and encouragement options to target long term on-street parking.
12. Continue to support shared parking within the downtown.
13. Consider marking on-street parking stalls to increase effective supply.



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## **APPENDIX A: PARKING RESTRICTIONS AND SUPPLY**





# Parking Restrictions

- 15 min
- 5 min, 8-9, 3-4, School Days
- 2 Hr, 9-6, M-Sa
- Mail Drop Parking Only
- Loading Zone
- Handicap
- Unrestricted
- 2 Hours
- ## Parking Supply



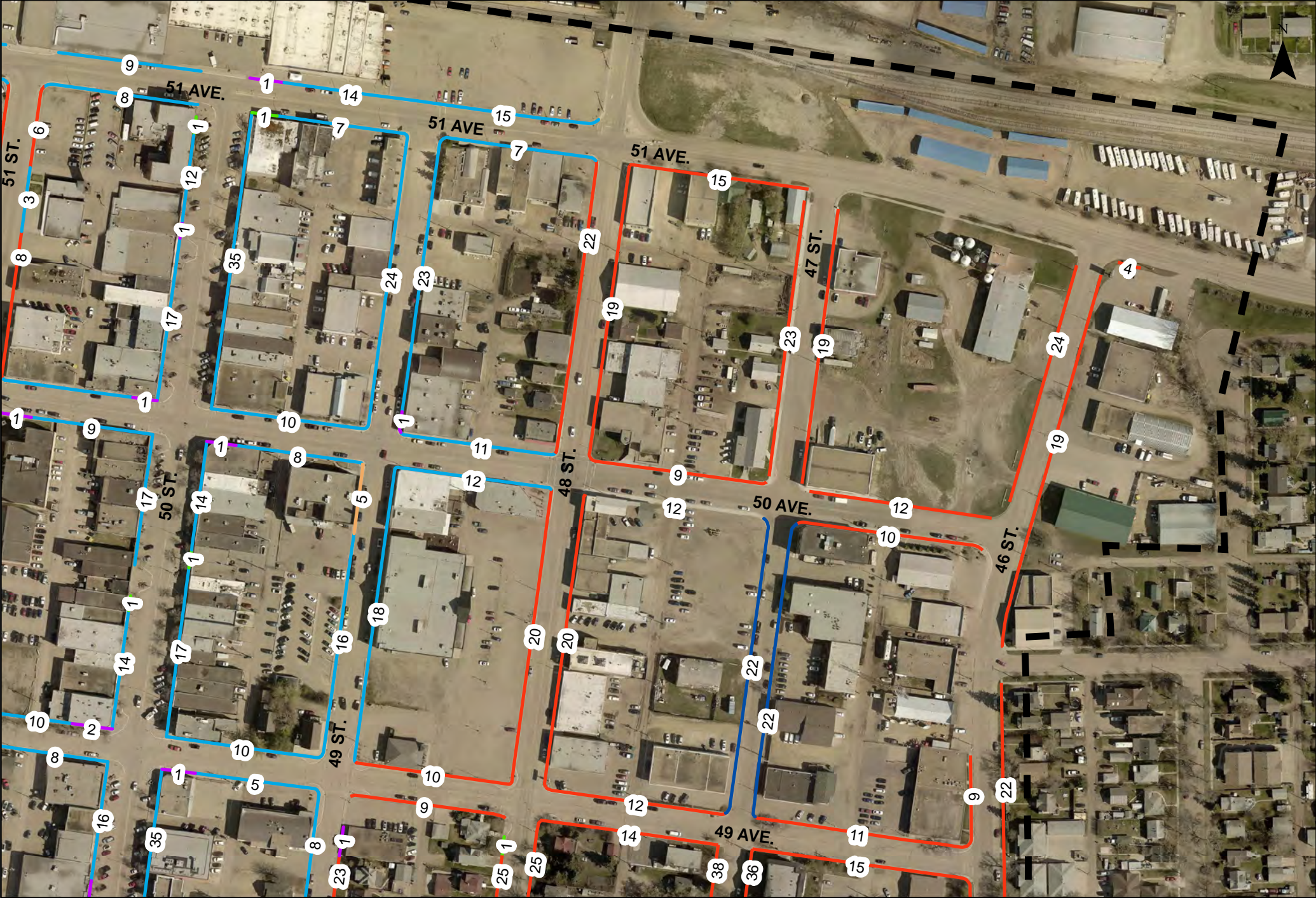




**Parking Restrictions**

<span style="color: pink;">—</span> 15 min	<span style="color: orange;">—</span> Mail Drop Parking Only	<span style="color: red;">—</span> Unrestricted
<span style="color: green;">—</span> 5 min, 8-9, 3-4, School Days	<span style="color: green;">—</span> Loading Zone	<span style="color: blue;">—</span> 2 Hours
<span style="color: blue;">—</span> 2 Hr, 9-6, M-Sa	<span style="color: purple;">—</span> Handicap	<span style="color: black;">##</span> Parking Supply





**Parking Restrictions**

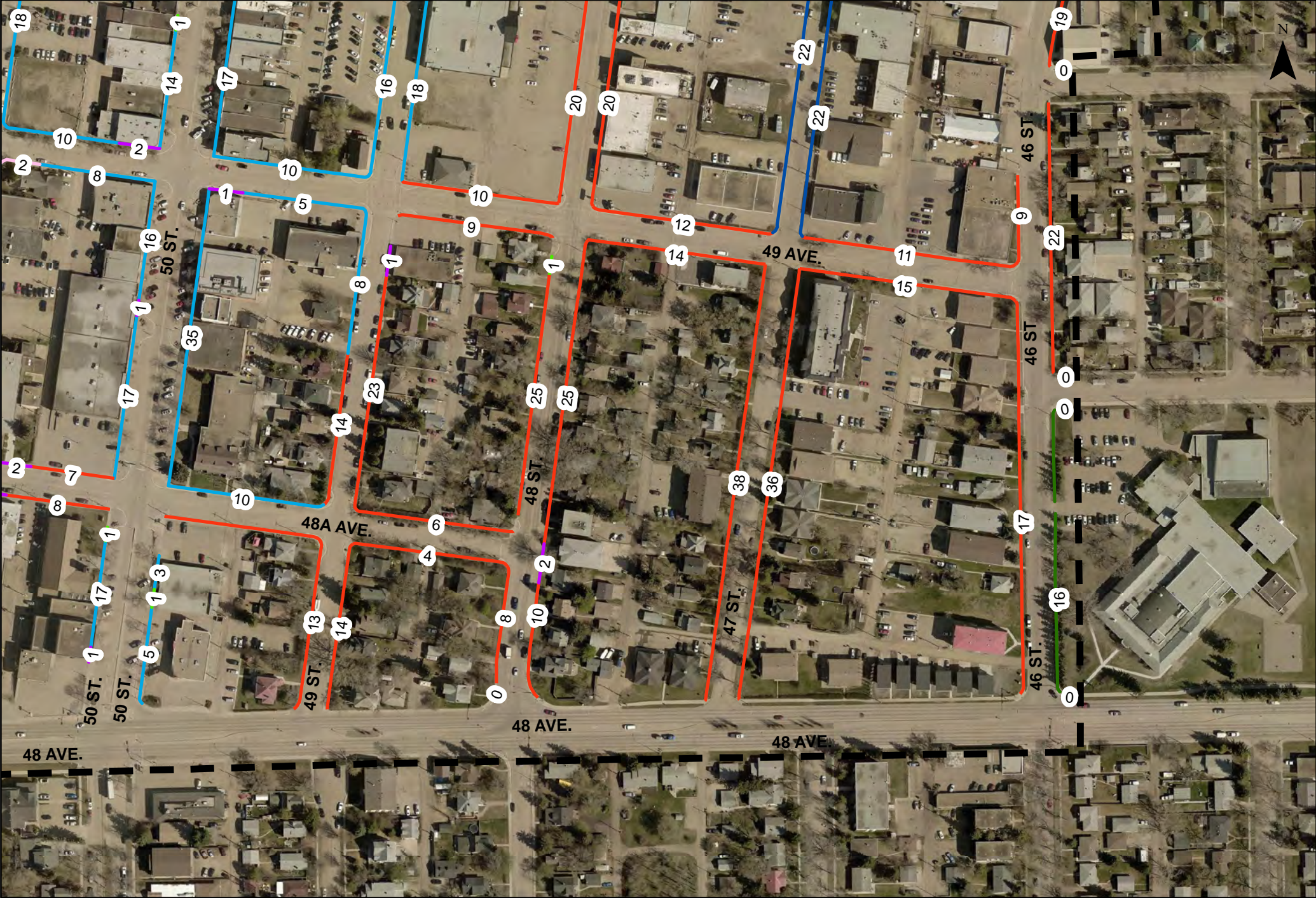
<span style="color: pink;">—</span> 15 min	<span style="color: orange;">—</span> Mail Drop Parking Only	<span style="color: red;">—</span> Unrestricted
<span style="color: green;">—</span> 5 min, 8-9, 3-4, School Days	<span style="color: green;">—</span> Loading Zone	<span style="color: blue;">—</span> 2 Hours
<span style="color: blue;">—</span> 2 Hr, 9-6, M-Sa	<span style="color: purple;">—</span> Handicap	<b>##</b> Parking Supply





January, 2018





Parking Restrictions		
<span style="color: pink;">—</span> 15 min	<span style="color: orange;">—</span> Mail Drop Parking Only	<span style="color: red;">—</span> Unrestricted
<span style="color: green;">—</span> 5 min, 8-9, 3-4, School Days	<span style="color: lightgreen;">—</span> Loading Zone	<span style="color: blue;">—</span> 2 Hours
<span style="color: blue;">—</span> 2 Hr, 9-6, M-Sa	<span style="color: purple;">—</span> Handicap	<span style="color: black;">##</span> Parking Supply



## **APPENDIX B: COLLECTED PARKING DATA**

## DATA COLLECTION METHODOLOGY

The parking survey was conducted for the following intervals:

- Thursday November 4
  - Occupancy – Every two hours between 9:00 am and 6:00 pm
  - Duration – Hourly between 9:00 am and 6:00 pm
- Saturday November 9
  - Occupancy – Every two hours between 9:00 am and 5:00 pm
  - Duration – Hourly between 9:00 am and 5:00 pm

The actual timing of the survey varied for each road segment, given the parking supply that was observed in the survey. The observations for 11:00 am, for example, would be measured at some point between 11:00 am and 12:00pm for hourly intervals and 11:00 am and 1:00 pm for two hour intervals. Data has been presented based on the midpoint of each interval. This means a 10:00 am parking occupancy was surveyed between 9:00 am and 11:00 am. Due to the volume of data collection, the 11:00 am to 1:00 pm interval on Thursday was missed. Where available, the data from the duration survey was used to populate the missing interval.

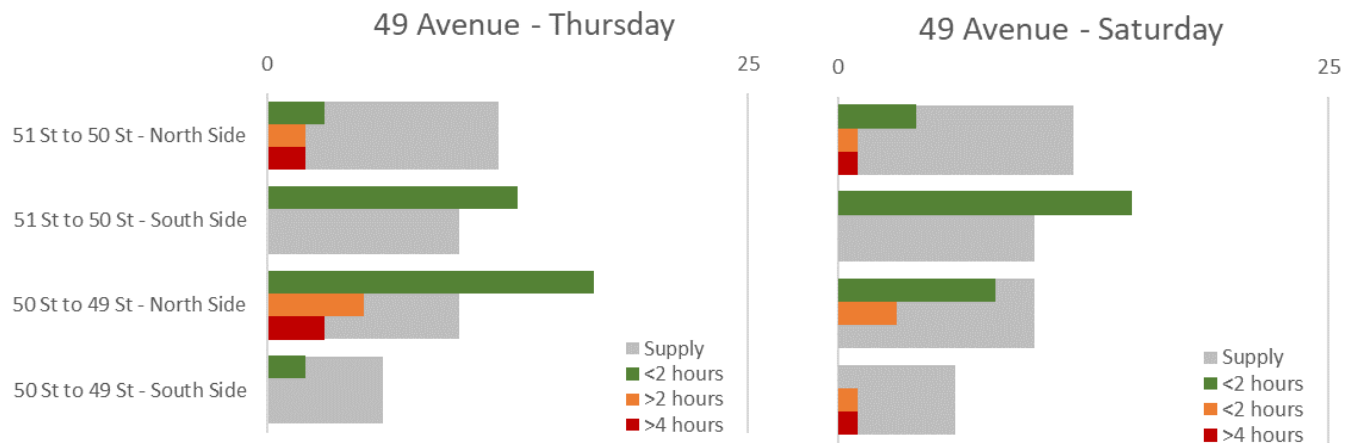
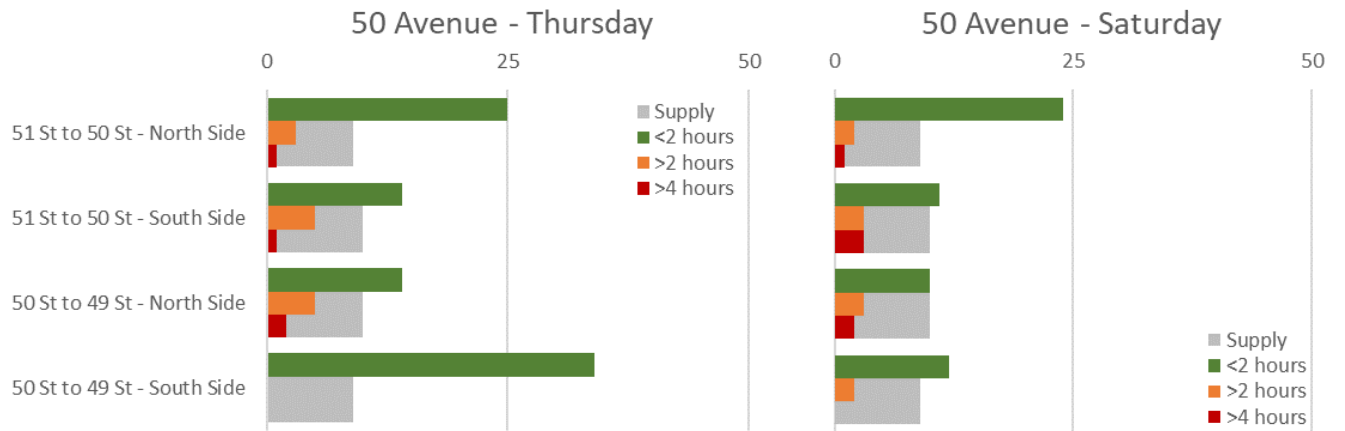
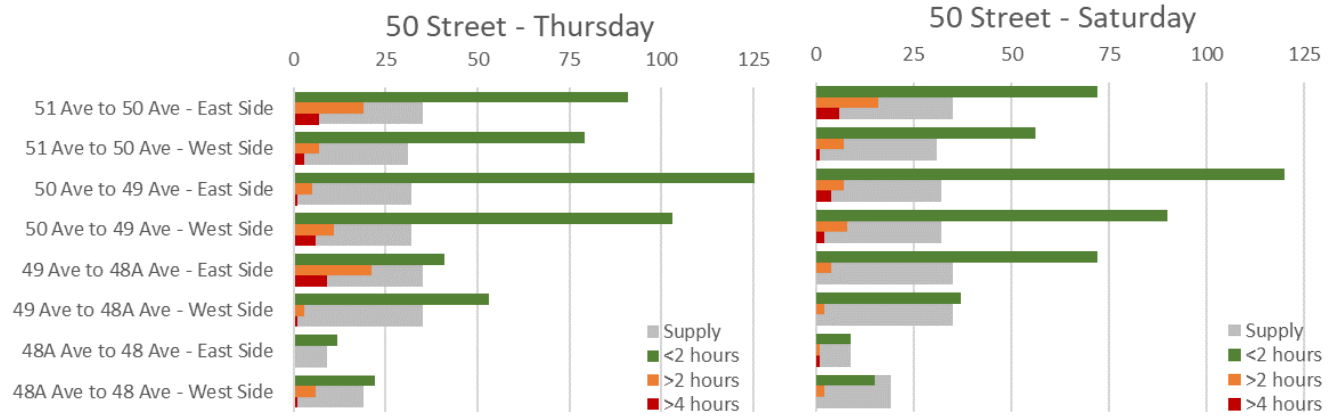
The parking duration survey was completed for the entire length of 50 Street and the portions of 49 Avenue and 50 Avenue between 49 Street and 51 Street. Due to the volume of collected data, the 2:00 to 3:00 pm interval was missed on Saturday. Vehicles observed before and after the 2:00 to 3:00pm interval were assumed to have remained the entire time.

## PARKING DURATION

The following charts identify the observed parking duration data. The data was grouped into three categories:

- Less than 2 hour duration
- Greater than 2 hour duration
- Greater than 4 hour duration (also included in greater than 2 hour duration data)

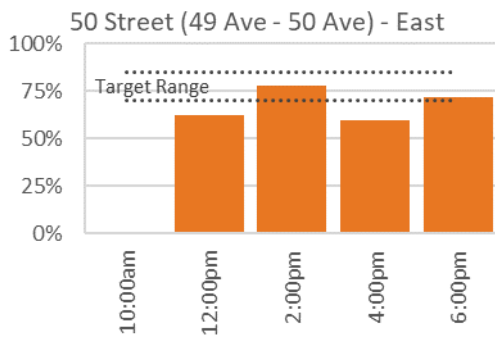
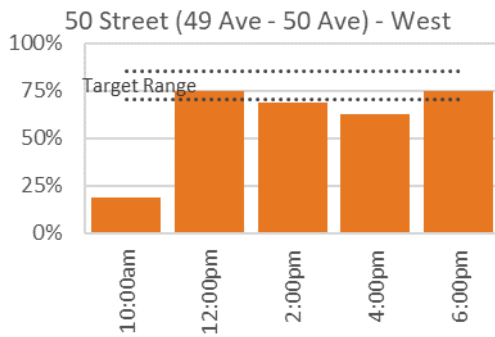
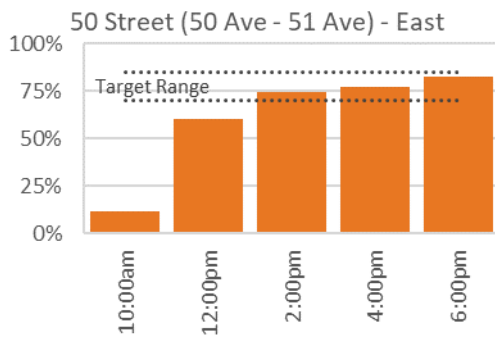
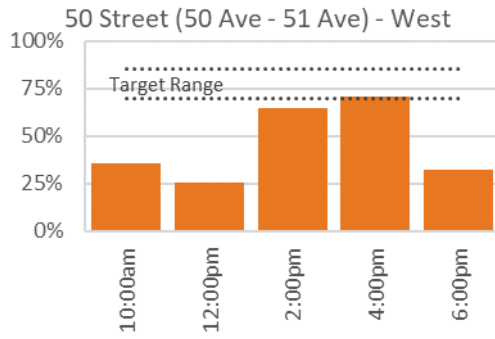




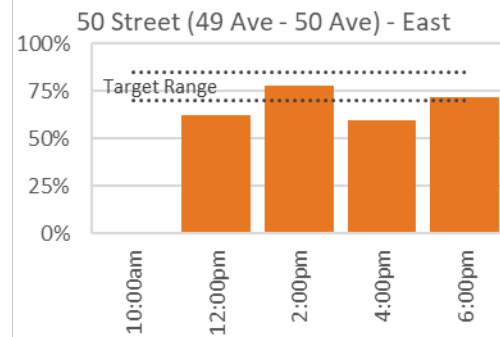
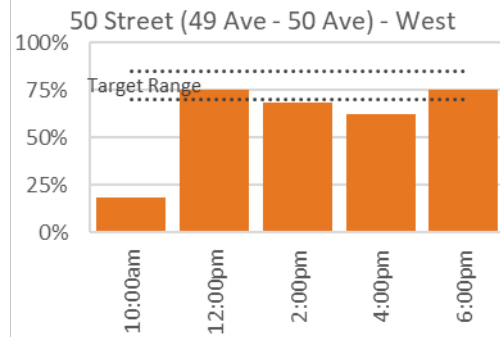
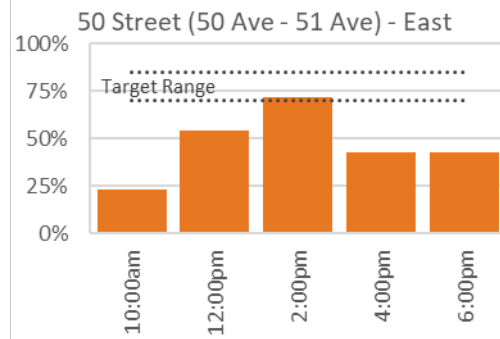
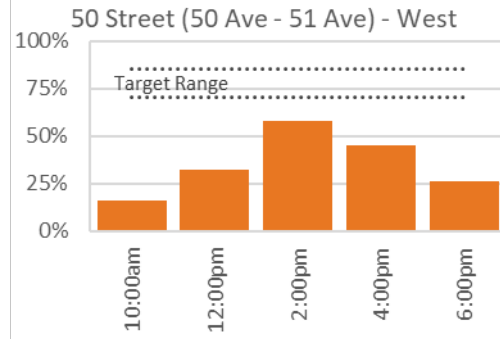
## PARKING OCCUPANCY

### Downtown Core Parking Occupancy by Time – 50 Street

Thursday

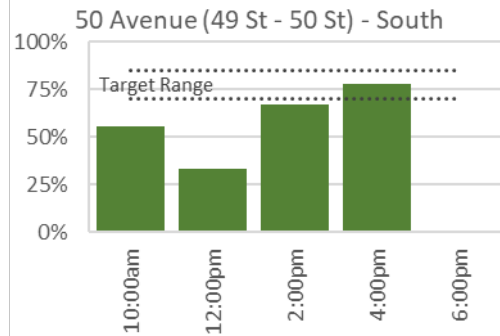
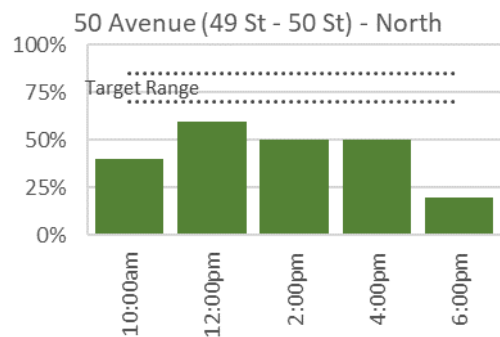
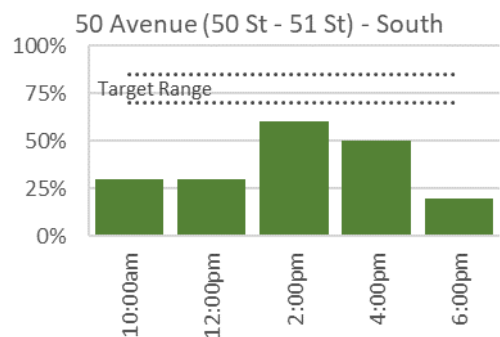
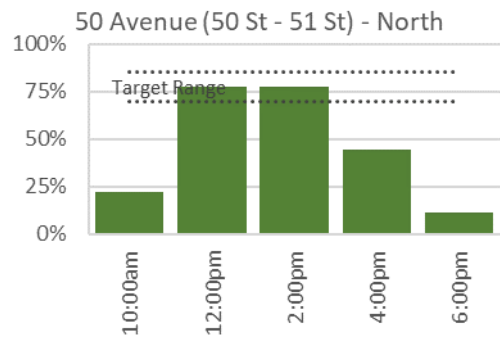


Saturday

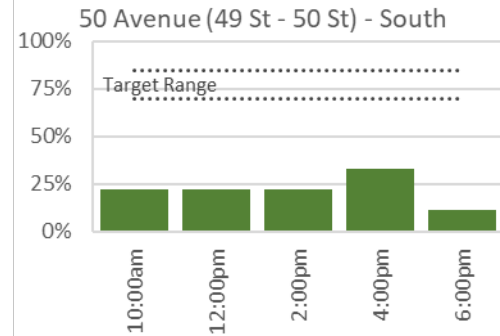
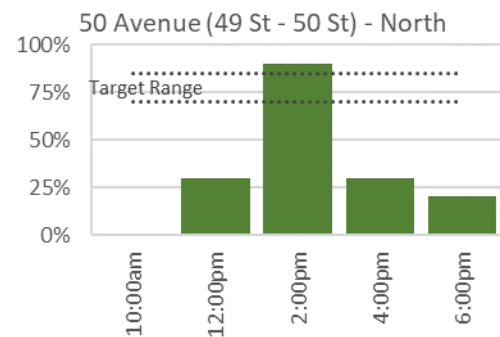
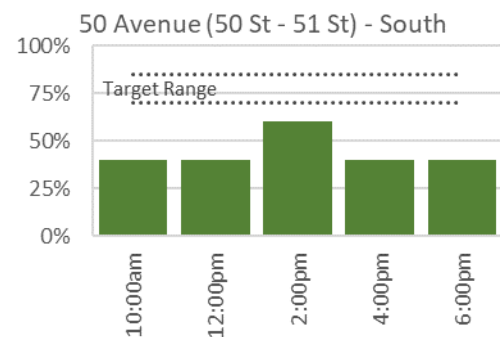
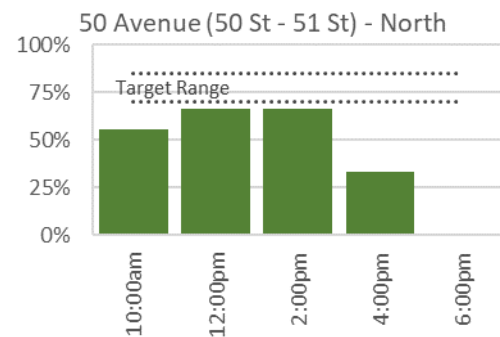


Downtown Core Parking Occupancy by Time – 50 Avenue

Thursday



Saturday



The block faces outside of the core area (portions of 50 Street, 50 Avenue, and 49 Avenue) with an occupancy rate higher than 50% are identified below

#### Road Segments with 51-100% Occupancy - Thursday

Road Segment	10:00	12:00	2:00	4:00	6:00
50 Ave (51 St – 52 St) – South Side	70%	-	60%		
48A Ave (51 St – 52 St) – South Side	57%	-			
48 St (48 Ave – 48A Ave) – East Side	70%	-	70%		
50 Ave (48 St – 49 St) – North Side	55%	-			
50 Ave (47 St – 48 St) – North Side		-	56%	78%	
50 Ave (47 St – 48 Ave) – South Side		-		58%	
50 Ave (46 St – 47 Ave) – South Side		-	70%		
50 St (48A Ave – 49 Ave) – East Side		60%	63%	51%	
52 St (south of 48A Ave) – West Side		-	55%	73%	82%

Note: “-” signifies data is not available for the timeframe, blank cells indicate a rate below 50%

#### Road Segments with 51-100% Occupancy - Saturday

Road Segment	10:00	12:00	2:00	4:00	6:00
46 St (48 Ave – 49 Ave) – West Side	76%	65%	71%	76%	53%
46 St (48 Ave – 49 Ave) – East Side	88%	63%	63%		56%
48 St (50 Ave – 51 Ave) – East Side			58%		
50 Ave (47 St – 48 St) – North Side			100%	56%	56%
50 Ave (47 St – 48 St) – South Side			83%		
48A Ave (48 St – 49 St) – South Side			75%	75%	75%
48 St (48 Ave – 48A Ave) – West Side			63%		
52 St (South of 48A Ave) – West Side		91%	82%	73%	

Note: “-” signifies data is not available for the timeframe, blank cells indicate a rate below 50%

The total number of these parked vehicles was divided by the available parking supply on each road segment. **Table 3.3** shows the percentage of stalls taken up by vehicles parked longer than two hours and four hours. These number assume the worst case that all vehicles are parked simultaneous and actual percentages would likely be lower at any one time during the day.

### Percentage of Stalls Occupied by Long Term Parkers

	Thursday		Saturday	
	>2 Hours	>4 Hours	>2 Hours	>4 Hours
50 Street – 51 Ave to 50 Ave – East Side	54%	20%	46%	17%
50 Street – 51 Ave to 50 Ave – West Side	23%	10%	23%	3%
Street – 50 Ave to 49 Ave – East Side	16%	3%	22%	13%
Street – 50 Ave to 49 Ave – West Side	34%	19%	25%	6%
50 Street – 49 Ave to 48A Ave – East Side	60%	26%	11%	0%
50 Street – 49 Ave to 48A Ave – West Side	9%	3%	6%	0%
50 Street – 48A Ave to 48 Ave – East Side	0%	0%	11%	11%
50 Street – 48A Ave to 48 Ave – West Side	32%	5%	11%	0%
50 Avenue – 51 St to 50 St – North Side	33%	11%	22%	11%
50 Avenue – 51 St to 50 St – South Side	50%	10%	30%	30%
50 Avenue – 50 St to 49 St – North Side	50%	20%	30%	20%
50 Avenue – 50 St to 49 St – South Side	0%	0%	22%	0%
49 Avenue – 51 St to 50 St – North Side	17%	17%	8%	8%
49 Avenue – 51 St to 50 St – South Side	0%	0%	0%	0%
49 Avenue – 50 St to 49 St – North Side	50%	30%	30%	0%
49 Avenue – 50 St to 49 St – South Side	0%	0%	17%	17%

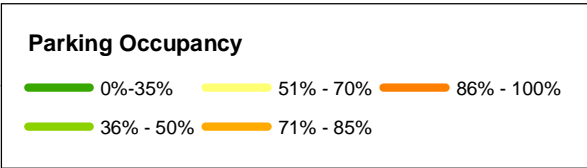
Note: The percentage includes all long term parkers and does not assess the arrival and departure time.





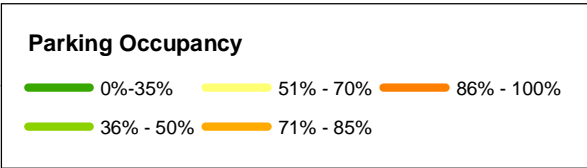
## **APPENDIX C: PARKING OCCUPANCY MAPS**





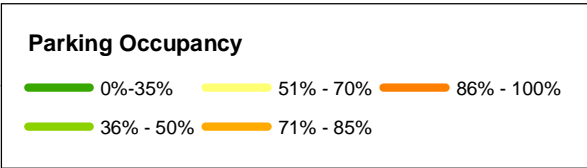
Existing Parking Occupancy Map  
Saturday November 4, 10:00am  
Camrose Transportation and Parking Plan  
March, 2018





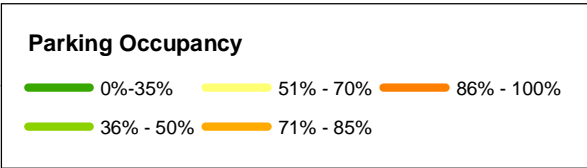
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Saturday November 4, 12:00pm  
Camrose Transportation and Parking Plan  
March, 2018





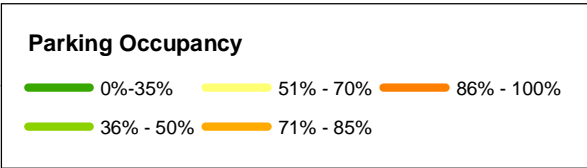
Existing Parking Occupancy Map  
Saturday November 4, 2:00pm  
Camrose Transportation and Parking Plan  
March, 2018





Existing Parking Occupancy Map  
Saturday November 4, 4:00pm  
Camrose Transportation and Parking Plan  
March, 2018





Existing Parking Occupancy Map  
Saturday November 4, 6:00pm  
Camrose Transportation and Parking Plan  
March, 2018





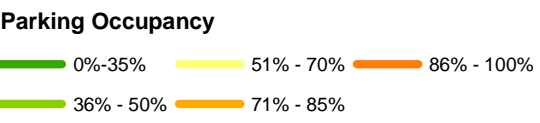
**Parking Occupancy**

- 0% - 35%
- 36% - 50%
- 51% - 70%
- 71% - 85%
- 86% - 100%



Existing Parking Occupancy Map  
Thursday November 9, 10:00am  
Camrose Transportation and Parking Plan  
March, 2018





Existing Parking Occupancy Map  
Thursday November 9, 12:00pm  
Camrose Transportation and Parking Plan  
March, 2018





**Parking Occupancy**

- 0%-35%
- 36% - 50%
- 51% - 70%
- 71% - 85%
- 86% - 100%



Existing Parking Occupancy Map  
Thursday November 9, 2:00pm  
Camrose Transportation and Parking Plan  
March, 2018





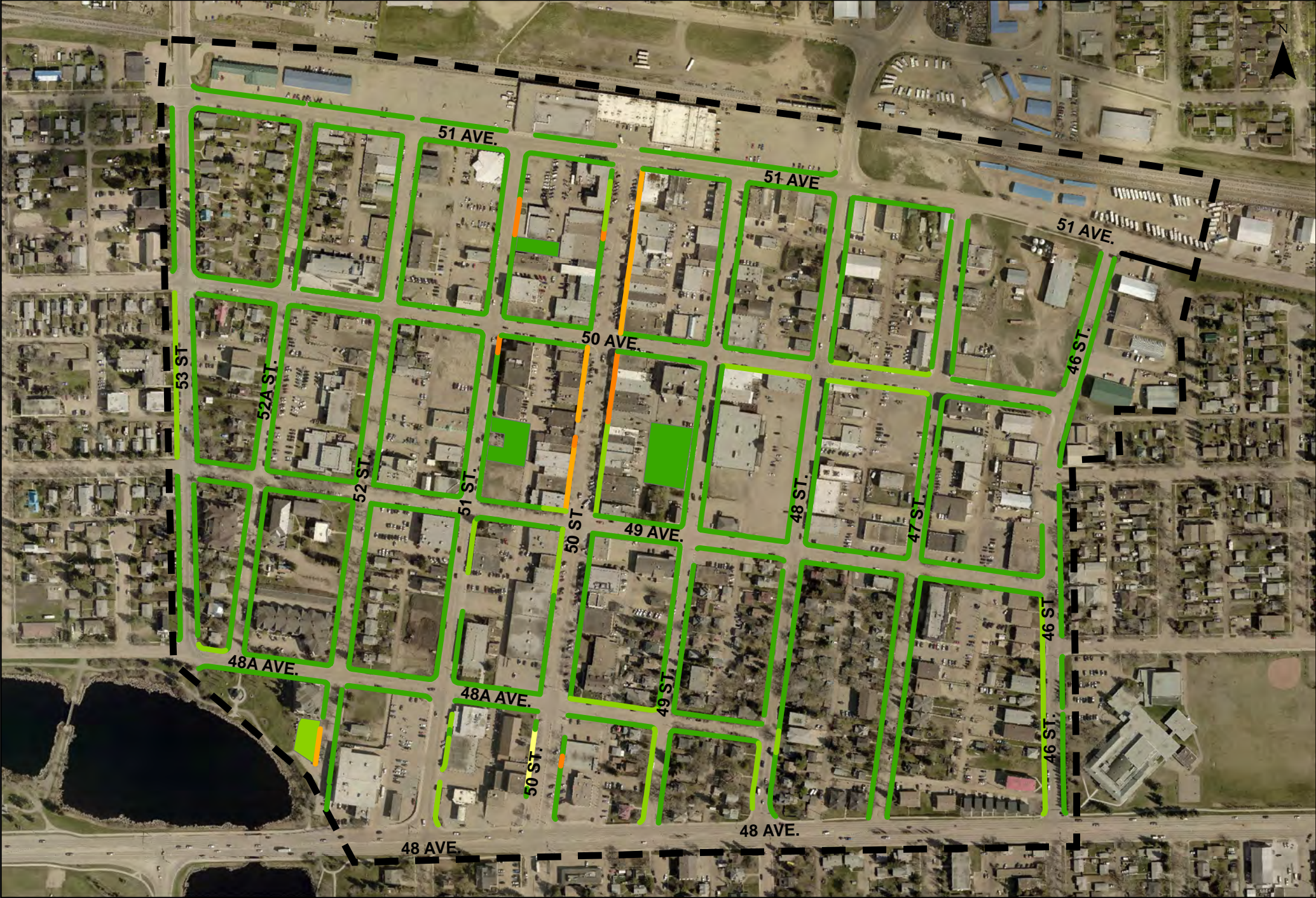
**Parking Occupancy**

- 0%-35%
- 36% - 50%
- 51% - 70%
- 71% - 85%
- 86% - 100%



Existing Parking Occupancy Map  
Thursday November 9, 4:00pm  
Camrose Transportation and Parking Plan  
March, 2018





**Parking Occupancy**

- 0% - 35%
- 36% - 50%
- 51% - 70%
- 71% - 85%
- 86% - 100%



Existing Parking Occupancy Map  
Thursday November 9, 6:00pm  
Camrose Transportation and Parking Plan  
March, 2018