

**City of Whitehorse  
Downtown Parking  
Management Plan  
2019**



## **CITY OF WHITEHORSE 2019 DOWNTOWN PARKING MANAGEMENT PLAN**

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CITY OF WHITEHORSE 2019 DOWNTOWN PARKING MANAGEMENT PLAN



## EXECUTIVE SUMMARY

Parking, as well as the entire transportation system, is currently in a rapidly changing environment. New technologies as well as new attitudes towards mobility are resulting in changes to the traditional delivery of parking in cities across North America. The City of Whitehorse, in response to changing circumstances, adopted the 2011 Downtown Parking Management Plan (2011 Plan) to address how parking should be managed over the next 10 years and beyond. The 2011 Plan included a recommendation that an update be conducted in approximately five years to evaluate the effectiveness of the measures implemented to-date, develop new recommendations based on current parking conditions, and assess / re-prioritize the remaining medium and long-term recommendations.

Stantec consulted with numerous stakeholders over the course of the 2019 Plan Update, with additional public engagement activities undertaken by the City. A collection of “What We Heard” reports that document our collective findings is provided in Section 2.7 and detailed in Appendix A. The results indicate that parking and transportation management remains a primary topic of interest for the public and key stakeholders.

In addition to the engagement activities, Stantec reviewed a number of background documents and data provided by the City and conducted site visits to measure on-street and off-street parking. Based on this information, Stantec has prepared the following recommendations and detailed implementation strategy.

Based on the available data, **three key categories** were identified as critical for the continued implementation of a parking management plan for the City. Application of these concepts is further outlined into short-term, medium-term, and long-term strategies for the City to initiate as part of the parking management plan. The three key over-arching categories are:

- **Technology Enhancements**
- **Supply / Demand Management**
- **Pricing Strategy**

**Short-Term Measures** | It is recognized that personal vehicles will continue to be the dominant mobility choice and as such, there are existing parking concerns that require mitigation. Therefore, short-term measures included in this report are focused on addressing these more immediate vehicular needs first, while laying the foundation to support other transportation modes.

**Medium, Long-Term, and Other Measures** | These measures help support the shift to transit and active modes in order to achieve the City’s various goals. These include Transportation Demand

Management (TDM) strategies aimed at encouraging sustainable transportation options and reducing reliance on single-occupancy vehicle usage.

### IMPLEMENTATION STRATEGY

To develop an implementation strategy, these general themes were refined into more specific measurable steps and separated into short-term, medium-term, and long-term recommendations, outlined below.

#### **Short-Term Recommendations (0 – 4 years):**

- Incrementally **adjust parking rates** to market rates in the Downtown core area and monitor other areas for market rate adjustments based on parking demand changes. Section 3.1.1, page 20.
- **Increase parking fines** as a further deterrent to abuse within the system. As identified in the Bylaw Services Review, parking violations represent the largest number of violations processed annually, with no indication that this trend is slowing. Section 3.1.2, page 21.
- Invest in **handheld devices** to improve enforcement capabilities and data collection of violations. Section 3.1.3, page 21.
- Consider a **pilot project to expand commuter parking supply**, such as the introduction of commuter parking (8-hour zone) in the periphery of Downtown where transit services exist or within walking distance to Downtown. Section 3.1.4, page 22.
- **Integrate the principles of this Parking Management Plan into other future documents**, such as the City-wide Transportation Study (TS) and Official Community Plan (OCP). Section 3.1.5, page 23.
- Review the parking-related zoning requirements associated with new developments once stronger parking data has been collected. **Implement Transportation Demand Management practices** to manage future parking demand in areas of limited supply. Section 3.1.6, page 23.
- **Consider the implications of the City's role relative to electric vehicles (EVs)**. As electric vehicles increase in popularity, private businesses are expected to provide charging services, similar to fossil fuel-based vehicles. The City should consider charging users for this service, if provided. Section 3.1.7, page 26.
- **Modify monthly parking passes for City-owned parking lots into daily passes**. This will encourage users to consider their travel options on a daily basis, encouraging users to try transit and sustainable transportation methods. Section 3.1.8, page 26.

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- **Expand the usage of four (4) hour parking as a pilot project** in select parking lots to encourage users to stay in Downtown longer and expand their visit to multiple businesses. This should be monitored for abuse by all-day parking needs. Section 3.1.9, page 26.
- **Upgrade and replace existing parking meters with new technology** that can integrate with mobile applications and cashless payment systems. Equipment should also be capable of continuously collecting parking supply and demand data to evaluate the progress of parking-related initiatives. Section 3.1.10, page 26.
- Consider **parking integration with mobile applications**. While a completely cashless payment system is not recommended as many users are expected to continue to rely on cash, expanding the payment options should be explored. Section 3.1.11, page 28.

### Medium-Term Recommendations (0 – 8 years):

- Undertake a **coordinated signage plan** for parking across Downtown. This will enhance the customer service experience and provide opportunities to integrate with mobile applications to manage parking payments and parking availability information. Section 3.2.1, page 30.
- Explore a **first-hour free program** for parking on a parallel roadway to Main Street due to existing high demand on Main Street. Section 3.2.2, page 30.
- **Permit the usage of the Parking Reserve Fund to support sustainable transportation initiatives**. There is a direct correlation to reducing parking demand through the greater usage of sustainable transportation systems, and can be a more cost effective method for improving parking conditions across Downtown. Section 3.2.3, page 31.

### Long-Term Recommendations:

- **Consider structured public parking to the periphery of the Downtown core** if parking demand exceeds the available supply and after other demand management tools have been fully implemented. While the short-term and medium-term mitigation measures are intended to reduce parking demand, the long-term need for additional parking may persist. Private structured parking proposed as part of other development projects could be supported. Section 3.3.1, page 32.
- **Evaluate, integrate and promote shared vehicle parking** as a potential traffic demand / parking demand management tool. This includes allocating curbside and / or off-street parking spaces should vendors offering these services arrive in the city. Section 3.3.2, page 33.
- **Monitor the progress of autonomous and connected vehicles** to evaluate their changes to parking behaviours and impacts to parking demand across the city. In the long term,

changes will be required on how municipalities manage their roadway and parking infrastructure. Section 3.3.3, page 33.

### Other Recommendations:

- **Re-assess parking demand and modal splits** based on the data collected after short-term recommendations have been implemented. Refine the medium and long-term strategies including market rates based on these findings. On-going assessment and monitoring should also be undertaken of the potential need and timing for an additional parking structure (see long-term recommendations). Section 3.4.1, page 34.
- **Develop consistency in the assessment of parking signage requests** by developing a clear and concise process that evaluates the existing parking demand to surrounding areas. Section 3.4.2, page 34.
- **Maintain adequate winter maintenance of pedestrian facilities** to encourage users to maintain active transportation choices even during winter conditions. Section 3.4.3, page 35.
- **Communicate with the public** of parking plan changes through a public education and outreach program, allowing residents to take full advantage of the proposed changes. Section 3.4.4, page 35.
- **Consider modifying payments for off-peak parking** particularly on Saturday mornings to encourage safe driving decisions. Section 3.4.5, page 35.

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## 1.0 INTRODUCTION

### 1.1 BACKGROUND

The City of Whitehorse undertook the development of a Downtown Parking Management Plan in 2011 to create a vision for how the City would manage its finite supply of parking within the Downtown area. The vision statement for this plan is as follows:

*The Downtown Whitehorse Parking Management Plan will result in more efficient use of parking resources and reduced parking demand while enhancing the livability and vitality of the downtown core at present and into the future.*

The 2011 Downtown Parking Management Plan (2011 Plan) created a number of immediate, short, medium, and long-term recommendations for achieving this vision. The 2011 Plan focused on Transportation Demand Management (TDM) measures intended to reduce single-occupancy vehicle (SOV) travel and promote sustainable transportation modes, including ride-sharing, transit, walking, and cycling. As part of the 2011 Plan, an inventory of the Downtown's parking supply as well as a snapshot of the parking demand were documented to establish a set of base conditions to compare any future parking supply and demand changes resulting from the implementation of proposed management strategies.

A number of immediate and short-term measures recommended from the 2011 Plan have now been implemented (see **Table 2** of this report). In addition, a number of additional policy and master plans that are connected to parking have also been approved by City Council following the adoption of the 2011 Plan (see Section 2.0 of this report). One of the medium-term recommendations from the 2011 Plan was to conduct a "check-in" in approximately 5 years to assess how parking supply and demand may have changed, as well as the impacts associated with the measures implemented to-date. This re-assessment of the City's parking needs is intended to address two primary areas of consideration:

- Since the 2011 Plan development, changes in technology and/or public opinion towards parking may have occurred. The update will identify opportunities to incorporate changes that are appropriate for the Downtown Whitehorse context.
- The medium and long-term recommendations from the 2011 Plan are expected to require significant investments from the City, which may be deferred if more cost-effective solutions are available or if the short-term recommendations have been effective at reducing parking demand levels in Downtown. The update will re-assess parking occupancy across the Downtown area to determine the prioritization for implementing medium and long-term recommendations, and any other steps that could be undertaken.

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Currently, there is a significant reliance on vehicle parking throughout the city. Collectively, this creates a transportation system that does not fully capitalize on alternative and sustainable travel. In addition, the added congestion associated with an auto-centric environment leads to reductions in roadway capacity and poorer traffic operations, and can trigger the need for investments into new, costly infrastructure. Through its Transportation Demand Management Plan the City has chosen to follow a more sustainable path that strives to achieve a more complete transportation system. This is necessary given the population growth patterns anticipated to occur over the next several years, anticipated land use changes, as well as the met and unmet parking demand that currently exists within the city.

The availability of short-term parking for customers is perceived as a necessity for most businesses, however some of the supply is used by workers, business owners, and residents that are competing for this space to address their long-term (all-day) parking needs. Therefore, a multi-faceted approach is appropriate for the successful implementation of a parking management strategy; one that addresses current needs as well as sets the stage for the implementation of medium and long-term solutions. Ideally, one of the goals of a successful implementation strategy is to minimize the allocation of funding towards temporary solutions that will become obsolete in subsequent stages of the overall strategy. As the Downtown continues to attract more population, there is also a need for the City to promote quality public space to maintain the vibrancy of the area. Addressing parking congestion in the area will be a positive initiative towards achieving this goal.

Reducing future parking demand requires making assumptions about future behavior patterns and choices that may evolve from current practices. With the implementation of the City's Transportation Demand Management Plan, Transit Master Plan, and Bicycle Network Plan, reliance on personal vehicles is expected to change as more travel options become available to residents and visitors. While vehicular travel will likely continue to be the dominant travel mode in the medium and long-term, the successful implementation of the City's various strategies will decrease that modal share.

Over the next 10 years, it is anticipated that the millennial generation (i.e. people born between 1980 and 1995) will become the dominant worker demographic, with the majority of baby boomers set to retire. With the generational change comes potential changes in how workers utilize the transportation network. While generational characteristics can be overly broad and not necessarily applicable to the city's context, some of these characteristic differences between generations may still persist. For example, the millennial generation proportionately owns fewer vehicles than the generations before them, preferring vehicle sharing services and alternative travel modes. This may dramatically alter how curb space and structured parking facilities are used by future workers. In addition, millennials have a more favourable view of transit services than previous generations and higher adoption rates of new information technologies. This may further impact modal choices, payment systems, and the integration of technology into infrastructure such as parking.

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In addition, significant technology changes within the transportation industry are expected to occur over the next 10 years that may impact how users, vehicles, and parking interact with one another. These include increased “mobility as a service” through the usage of ride-sharing services, “on-demand” goods movement direct to users, and the potential implementation of autonomous vehicles in some areas.

Changes in the type and size of vehicles may also impact how parking supply is defined – larger vehicles that require more physical space will reduce the parking supply, while smaller vehicles could lead to increases in the parking supply. Fuel prices may also influence modal choice as well as vehicle type – as prices increase, budget-conscious users may choose to take transit, bike, walk, use ride sharing services, or carpool, each impacting how parking is utilized in the future.

In the development of this document, understanding the local context of the city and its unique characteristics is key. Therefore, the proposed implementation strategy relies upon the data collected by Stantec and the data provided by the City as guidance towards the specific action items for the next phase of the City’s Parking Management Plan.

### 1.2 INDUSTRY PRACTICES

In addition to the City-specific background documents, several industry practices and standards should be considered applicable to the context of the city. Most critically is the practical occupancy level of 85% (e.g. 85% of parking stalls within a given area is occupied by vehicles). Practical occupancy in the context of parking is generally defined as the limit at which available parking stalls within a driver’s intended destination are easily accessible on their first pass through the parking area. The usage of 85% as the practical occupancy level is an industry standard based on the Institute of Transportation Engineers (ITE) *Transportation Planning Handbook*. As parking occupancy exceeds 85%, the number of remaining parking stalls can be challenging to access, sometimes resulting in vehicles circling the block as they search for these remaining parking stalls. Parking stall turnover, or the frequency with which parking stalls are utilized by different vehicles over the course of the day, is an important metric for commercial businesses that rely on the availability of parking for their customer shoppers. While this data was not collected in the development of this plan, enhanced data collection methods through smart meters / kiosks can be used to document these behaviours.

Another consideration is the relative cost of parking to transit. Generally, the cost of parking should be greater than the cost of transit to the consumer in order to create a minimum incentive to modify modal splits. This assumes reasonably direct transit routes, relatively frequent service availability, and comparable travel times between the two travel modes. An industry general rule of thumb is that a minimum price differential of approximately 30% can create a sufficient incentive for users to consider transit alternatives to personal vehicles.

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## 2.0 REPORTS AND BACKGROUND DATA

Several background documents were reviewed as part of this analysis. In addition, Stantec collected parking supply and demand data, reviewed data collected by Bylaw Enforcement, engaged with stakeholders, and conducted site visits. The focus of this background data review was to first understand the impacts to parking associated with each background document as well as the constraints within the parking system. Detailed below are a summary of findings associated with this review.

### 2.1 2011 PARKING MANAGEMENT PLAN

Data collected as part of the 2011 *Parking Management Plan* (2011 Plan) created a set of base parking supply and demand conditions and was used to craft the City's overarching vision statement as it relates to parking. This data, combined with industry best practices and other data sources, was used to formulate recommendations for the City to implement in the immediate, short, medium, and long-term. **Table 1** summarizes the recommendations outlined in the 2011 Plan separated into four (4) major theme areas – **Transportation Demand Management, On-Street Parking, Off-Street Parking, and Policies and Regulations.**

The recommendations identified in **Table 1** were then organized into an implementation strategy consisting of immediate and short-term, medium-term, and long-term actions. The immediate and short-term action items were generally expected to occur in the following four (4) years, and are summarized below in **Table 2**. The medium-term action items were generally expected to occur on the five (5) to ten (10) year horizon, and are summarized below in **Table 3**. The long-term action items were generally expected to occur over the ten (10) year horizon, and are summarized below in **Table 4**.

A number of the 2011 Plan recommendations have been implemented. **Table 5** provides a checklist of the proposed measures and a status update associated with each recommendation from the 2011 Plan.

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<b>Table 1: 2011 Parking Management Plan Recommendations</b>	
<b>Transportation Demand Management</b>	
A1	Prioritize capital infrastructure improvements in support of walking, cycling and transit
A2	Encourage the pursuit of a downtown shuttle service
A3	Support local carshare and rideshare services
A4	Pursue commute trip reduction strategies
A5	Establish a transportation coordination service
A6	Promote TDM options to the community
A7	Develop a comprehensive TDM plan
A8	Work with downtown employers in pursuit of TDM
A9	Implement proposed transit improvements
<b>On-Street Parking</b>	
B1	Retain existing on-street parking rates
B2	Consult with Persons With Disabilities Advisory Committee to determine needs
B3	Conduct an annual review of accessible stops
B4	Alter on-street parking restrictions to limit all-day parking
B5	Establish a residential parking program to limit downtown spillover
B6	Pursue 'first hour free' program for downtown customers
B7	Promote the tourist parking pass
B8	Identify 'priority' spaces for carpool, micro vehicles, and carshare vehicles
B9	Acquire new hand-held parking enforcement technologies
B10	Replace conventional parking meters with new 'pay-by-space' kiosks
B11	Retain existing parking violation rates
B12	Undertake coordinated signage planning
B13	Develop downtown parking map
B14	Conduct a five (5) year review
<b>Off-Street Parking</b>	
C1	Investigate options to increase long-term off-street parking supply
C2	Set off-street parking rates at \$160.00 per month in the Downtown Core
C3	Discontinue monthly parking passes in favour of daily passes
C4	Offer reduced rates in future, peripheral off-street parking lots (suggested price, \$80.00)
<b>Policies and Regulations</b>	
D1	Pursue cash-in-lieu contributions to fund public parking facilities
D2	Eliminate policy of reallocating Parking Development Reserve Fund monies
D3	Permit use of Parking Development Reserve Fund for sustainable transportation
D4	Establish maximum parking supply rates 25% greater than existing minimums
D5	Offer 25% parking reduction for developments less than 50% commercial area
D6	Favour parking supply variances on downtown residential proposals
D7	Define Class I and Class II bike parking in Zoning Bylaw
D8	Include requirement for Class I bik parking in Zoning Bylaw
D9	Adopt policy to reconsider TDM in all future development

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<b>Table 2: Summary of Immediate + Short Term Actions, 2011 - 2015</b>	
C1	Investigate options to increase long-term off-street parking supply
C2	Set off-street parking rates at \$160.00 per month in the Downtown Core
A7	Develop a comprehensive TDM plan
A8	Work with downtown employers in pursuit of TDM
B12	Undertake coordinated signage planning
B13	Develop downtown parking map
A5	Establish a transportation coordination service
B6	Pursue 'first hour free' program for downtown customers
B3	Conduct an annual review of accessible stops

<b>Table 3: Summary of Medium Term Actions, Within the Next Five to Ten Years (2011 - 2020)</b>	
B4	Alter on-street parking restrictions to limit all-day parking
B10	Acquire new 'pay-by-space' kiosks to expand metered zone
C1	Continue arrangements and steps necessary to supply off-street parking
B8	Identify 'priority' on-street spaces
B9	Acquire hand-held enforcement technologies
B14	Conduct a five (5) year review

<b>Table 4: Summary of Long Term Actions, Within the Next Ten Years (2011 - 2020)</b>	
B10	Review effectiveness of kiosks, potentially purchasing more if economically beneficial
B5	Review conditions in residential areas and consider residential parking program
A2	Pursue downtown shuttle service
C3	Shift to daily passes

Table 5: Status of 2011 Plan Recommendations - last updated Spring 2019

**Immediate Actions - 2011-2012**

Recommendation	Status	Implementation Notes
Set off-street parking lot rates at \$160 per month	Completed	Completed. Off-street parking stall rates have been largely stable.
Establish maximum parking supply rate	Completed	Completed. The Zoning Bylaw was amended with this recommendation in 2012.
Offer 25% reduction for mixed use developments	Completed	Completed. The Zoning Bylaw was amended with this recommendation in 2012.
Define Class 1 and Class 2 bike parking in Zoning Bylaw	Completed	Completed. The Zoning Bylaw was amended with this recommendation in 2012.
Include requirement for Class 1 bike parking in Zoning	Completed	Completed. The Zoning Bylaw was amended with this recommendation in 2012.
Implement transit improvements	Completed	Completed. The new transit system improvements have been in place since 2011. New Transit Master Plan adopted in 2018 that outlines transit improvements.
Increased design standards for parking lots	Completed	Completed. The new Zoning Bylaw was amended with increased standards in parking lots. This includes increased requirements for pedestrian circulation (i.e raised crossings, defined crosswalks, signage for accessible parking stalls, lighting restrictions to prevent light pollution and better energy use, requiring parking areas fronting streets to be screened with landscaping or fences) . There may be an opportunity to explore further design standards.
Adopt policies to consider TDM in all future developments	Underway	Underway. Zoning Bylaw amendments completed that support alternative modes of transportation (i.e. class 1 bike parking requirements, increased requirements for pedestrian access within private developments, maximum parking restrictions).
Permit use of Parking Reserve Fund for sustainable transportation	Remaining	Remaining. Requires an amendment to the Reserve Fund Bylaw.



Table 5: Status of 2011 Plan Recommendations - last updated Spring 2019, cont'd

**Short Term Actions - 2011-2015**

Recommendation	Status	Implementation Notes
Develop comprehensive TDM plan	Completed	Completed. TDM plan adopted in April 2014.
Develop Downtown parking map	Completed	Completed. A new parking map has been completed and is on City website. The new map is more user friendly and appealing to the public. There may be an opportunity to include active commuter trails on the map at a later date.
Establish transportation coordination services	Completed	Completed. Position filled by City.
Investigate options to increase long-term off-street parking supply	Ongoing	Options were identified by Planning. A redesign of a City parking lot at the west end of Main Street was completed in 2017 which has resulted in additional parking spaces for long-term parkers.
Conduct annual review of accessible parking stops	Ongoing	Ongoing. Since the 2011 plan was adopted, over 30 new accessible stalls have been created Downtown. Approximately 5 new handy bus stalls have been created.
Offer reduced rates for peripheral parking lots	Underway	Parking rates for the 6th Avenue parking lot is reduced to \$0.50 per hour.
Undertake coordinated signage planning	Remaining	Remaining. This involves 1) developing sign standards to eliminate inconsistent parking signs 2) indicating where alternative parking is located where there is a perceived parking shortage.
Pursue first hour free program for Main Street	Remaining	The City currently does not have effective technology instruments to consider this.

Table 5: Status of 2011 Plan Recommendations - last updated Spring 2019, cont'd

**Medium Term Actions - 2011-2020**

Recommendation	Status	Implementation Notes
Acquire new hand-held enforcement technologies	Underway	Underway. Acquired LPR, reviewing integration of hand helds.
Alter on-street parking restrictions to limit all day parking	Underway	Currently implemented on a case by case basis at City Traffic Committee. Requires a comprehensive review. Some businesses have illegally put up signage to restrict on-street to customer and/or employee-only. Needs to be done in conjunction with item C1.
Continue arrangements to expand off-street parking	Underway	Underway. Main Street/6th Avenue parking lot has been expanded and improved in 2017. Discussions with private sector ongoing regarding private parkade development.
Identify priority on-street spaces for carpool, micro vehicles, and carshare	Underway	Underway. Stalls created in 2nd/Steele parking lot for smaller cars. Zoning Bylaw updated to identify small vehicle parking stalls. Need to identify new on-street micro spaces. RideShare program implemented, so consider this as program continues.
Conduct a five-year review of parking plan	Underway	Consultant hired in 2018 to complete the update. Plan anticipated to be completed in 2019.
Acquire new 'pay-by-space' kiosks to expand metered zone	Remaining	Pay-by-space options exists if hand helds acquired.

**Long Term Actions - 2011-2020**

Recommendation	Status	Implementation Notes
Consider a Downtown residential parking permit program	Completed	Completed. Residential parking permit program created in 2012.
Pursue Downtown shuttle service	Completed	Completed. Transit has a downtown route with bus frequency every 15-20 minutes. One bus route runs along both 2nd and 4th with frequency every 60 minutes, creating a downtown loop.
Shift from monthly to daily parking passes for city lots	Underway	Underway. The City is transitioning towards weekly and daily parking passes within City parking lots.

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## 2.2 TRANSPORTATION DEMAND MANAGEMENT PLAN (2014)

In 2014, City Council adopted the Transportation Demand Management Plan, a collection of strategies aimed at improving the efficiency of the transportation network and infrastructure by increasing the modal share of sustainable transportation systems, such as transit, walking, and cycling. A key component within a transportation demand management (TDM) plan is a multi-faceted approach that includes infrastructure changes, communication, policy, and enforcement measures to provide the means for behavioural change in transportation mode choice. With an anticipated population increase of 12,000 new residents between 2018 and 2040<sup>1</sup>, the current modal split that is heavily reliant on single-occupancy vehicle travel cannot be accommodated within Downtown without significant investments into structured parking facilities and widening of roads. Illustrated below from the 2014 Transportation Demand Management Plan are the modal split targets that were established for the city.

### 25-year Mode Share Targets

	2011	2016	2021	2026	2031	2036
Walk	7%	8%	10%	12%	14%	15%
Bicycle	3%	4%	4%	5%	5%	6%
Public Transit	5%	7%	9%	11%	13%	15%
Vehicle (passenger)	8%	9%	10%	10%	11%	12%
Vehicle (driver)	75%	70%	65%	60%	55%	50%

## 2.3 TRANSIT MASTER PLAN (2018)

The City recently undertook an update to the Transit Master Plan that included revised transit routes from the major surrounding neighbourhoods such as Porter Creek, Riverdale, and Granger to the Downtown area. The enhanced route options provide alternatives to residents to the usage of single occupant driving and can significantly reduce parking demand within the Downtown area. Current transit ridership usage as a percentage of all travel modes was identified as 5.0%, with car usage at 84.0%.

<sup>1</sup> Yukon Bureau of Statistics, *Population Projections 2018 Report*, January 2019

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The implementation strategy is designed around achieving the modal split goals established in the 2014 Transportation Demand Management Plan, with a short-term focus on:

- Route changes to support demonstrated demand,
- Technology enhancements to improve scheduling and fare payment (including mobile fare payment),
- The procurement and maintenance of vehicles to meet the needs of the route network,
- Improvements to the efficiency of the Handy Bus program and encouraging multi-modal trips, and
- Rebranding and marketing efforts to promote transit usage.

Long-term recommendations include:

- Evaluating existing route success and increasing service as resources become available,
- Installing supporting cycling infrastructure at transit stops and on buses,
- Continuing to procure suitable vehicles to meet the needs of routes,
- Adding infrastructure such as seating and shelters as funding becomes available,
- Developing policies and procedures to improve performance, and
- Implementing the marketing plan and associated recommendations.

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## 2.4 BICYCLE NETWORK PLAN (2018)

In 2018, the City adopted the *Bicycle Network Plan* as a guiding document. The purpose of the plan is to establish a long-term vision for cycling and increase the percentage of residents using a bicycle for transportation year-round. As illustrated in Figure 1 of the *Bicycle Network Plan*, modal shifts have been occurring since 2011, though reductions to passenger travel (8% to 6%) have resulted in increases to single occupancy driver usage (75% to 78%).

The Plan illustrates a network of in-road and off-road facilities that would provide more direct connectivity between residential neighbourhoods and the Downtown area. Included in this network is a varying system of facilities designed to accommodate cyclists of multiple skill and comfort levels. Similar to the updated transit routes, the commuter cycling plan provides a viable alternative to single occupancy driving for residents and can reduce parking demand within the Downtown area.

On-street parking can work in conjunction with future road improvements such as separated bicycle paths. Parking can act as a buffer between vehicle and bicycle lanes, which improves the comfort level of cyclists. This is particularly relevant for roadways with higher posted speed limits, where cyclists can experience discomfort riding alongside higher speed vehicles.

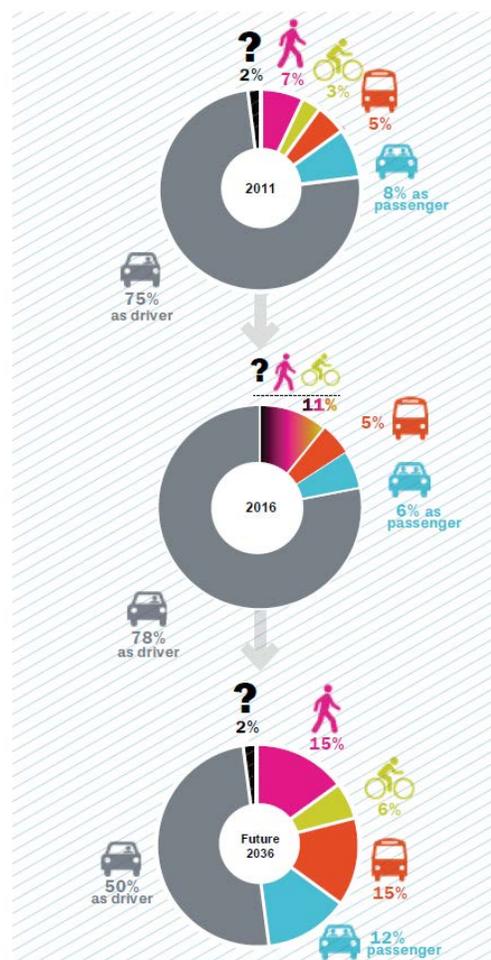


Figure 1 from the *Bicycle Network Plan 2018*

## 2.5 DOWNTOWN PLAN (2018)

The 2018 *Downtown Plan* is intended to inform the next Official Community Plan and provides an action-oriented implementation strategy to supporting a vibrant and successful Downtown Whitehorse. The Downtown Plan comprises nine major actions essential to continuing the success of Downtown:

- Civic Cultural Core Block Plan
- Core Area Arts and Cultural Programming
- Transit Station / Bike Storage Facility



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- 2<sup>nd</sup> Avenue Corridor Study
- Comfort Station Network Strategy
- Adaptive Re-Use of Riverfront Heritage Buildings for Active Uses
- Collaborative Working Group to Foster Social Wellness / Inclusiveness
- Formal Network of Paved and Unpaved Trails and Complete Loops
- Downtown Cycling Network Improvements

The *Downtown Plan* recognizes the importance of parking to the success of other initiatives. The *Downtown Plan* recommends an evaluation of potential changes to parking requirements for new developments, which also involves understanding the current parking supply and demand throughout Downtown. Other parking initiatives recommended in the *Downtown Plan* include understanding the parking needs of customers/employees/residential parking, identifying strategies to reduce employee long-term parking demand through sustainable transportation initiatives, and prioritizing parking for carpool and micro vehicles.

### 2.6 BYLAW SERVICES REVIEW (2018)

The overall objective of the 2018 Operational Review of By-Law Enforcement Services was to evaluate the service delivery of the Bylaw Services Department and recommend short and longer-term performance improvements. Currently, three (3) full-time employees (FTE) carry out the parking enforcement responsibilities across the city. The review notes that between 17,000 to 20,000 parking meter violations are processed annually. In addition, between 1,000 to 2,500 2-hour parking violations are processed annually. Compared to other types of violations, parking represents the highest number of violations.

The three-year (2014-2017) average annual meter collection revenues are approximately \$545,000. The three-year (2014-2017) average annual meter violation fines are approximately \$317,000. The three-year (2014-2017) average 2-hour zone violation fines are approximately \$89,000. Collectively, this amounts to a three-year total average annual revenue stream for parking of \$951,000.

The by-law services review also identified current challenges with customer service, such as a lack of online payment options and issues with the phone-in payment option. For example, in order to take advantage of the "early payment" option, violators are required to pay in person at City Hall. The Bylaw Services Review also notes that there is currently no city-wide parking budget, limiting the ability to fund one-time parking-related initiatives.

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Recommendations from the Bylaw Services Review includes implementation of virtual payment systems, mobile applications, and a meter replacement system using kiosk technology among other recommendations.

### 2.7 STAKEHOLDER INTERVIEWS & PUBLIC SURVEY

As part of this parking review, Stantec undertook a number of engagement interviews with key stakeholders. In addition to the interviews, the City conducted a nearly month-long online public survey in late summer 2018. In total, 1,062 responses were received. The results of the stakeholder meetings and online survey are included in Appendix A. Key findings from both engagement activities include:

#### Online Public Survey:

- 70% of survey respondents travel to Downtown five or more times per week, and 99% travel to Downtown at least once per week.
- Of the respondents, the majority travel alone in a private vehicle or as a passenger in a private vehicle.
- The least popular way to travel into Downtown is by taxi / vehicle by hire or transit.
- Shopping and working are the two primary reasons for travel to Downtown.
- On-street parking (either at meters, time-restricted parking, and parking in areas with no restrictions) are the most popular types of parking utilized.
- Approximately 47% of respondents categorize parking conditions within Downtown as poor, with 34% considering it fair, and 19% considering it good.
- Parking on Main Street was identified as challenging during peak times, and easy to find during non-peak periods.
- Approximately 58% of respondents feel there is not nearly enough parking in the immediate areas they want to park.
- Respondents appear to be relatively unaware of the initiatives undertaken by the City to improve parking, with the majority of respondents indicating minimal / no impact or "don't know" when ranking how these measures have influenced their modal choice.
- Respondents were asked to rank their level of support for potential initiatives. Improved snow clearing for pedestrian and cycling routes, creating long-term all-day and off-street parking, and coinless technology and app-payment functionality for meters/kiosks were the most supported.

#### Stakeholder Interviews:

- All day employee / worker parking is a concern, negatively impacting businesses that rely on high stall turnover rates.
- Parking is a benefit. Therefore paying for parking is a reasonable expectation from most users.

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- All-day parking within residential areas is a concern amongst residents, potentially increasing the need for residential permit parking program usage.
- Developers find it challenging to meet the City's on-site parking requirements, and relaxations could be considered.
- Smart meters and coinless payment options should be supported as they are convenient to users and reduce collection / maintenance requirements for the City.
- There is some support for a centralized structured parking facility that is aesthetically pleasing. Others expressed concern that a parking structure would be a detriment to the Downtown and overall transportation goals.
- Alternative travel modes to manage parking demand is supported.
- Parking enforcement should continue to discourage violations and encourage parking stall turnover.

### 2.8 2018 PARKING DATA

As part of the 2019 Plan, both on-street and off-street parking demand and supply data was collected and compiled to evaluate changes in parking occupancy levels across the Downtown area. It should be noted that in some areas where parking spaces are not clearly defined (such as gravel surface lots), the number of vehicles that can be parked (parking supply) is highly dependent on how vehicles choose to park and the layout of how vehicles park. Therefore, the approximate supply for these areas were estimated based on observable parking behaviours. Illustrated in **Figure 1** is the area boundaries applicable to his plan.

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December, 2017  
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LEGEND

 STUDY AREA BOUNDARY



Client/Project  
THE CITY OF WHITEHORSE  
PARKING STUDY

Figure No.  
1  
Title  
OVERVIEW

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For ease of data collection, the plan area was sub-divided into three areas – North Area, Central Area, and South Area. Data collection was conducted on a typical weekday (defined as either Tuesday, Wednesday, or Thursday during a week without a holiday). For this plan, data collection for the Central Area was conducted on Thursday, January 18, 2018. Data collection for the South Area was conducted on Thursday, January 25, 2018. Data collection for the North Area was conducted on Wednesday, January 31, 2018. City Bylaw Services collected on-street parking data, while Stantec staff collected parking data in off-street lots. Parking data in off-street lots was limited to areas considered accessible to the public. These off-street lots include both municipal lots as well as lots on private property that do not include restrictive signage or conditions that reserve their use for any specific user groups. For example, “employee parking” or “reserved for patrons”. Therefore, parking stalls displaying signage that restricts access to specific users, such as patrons of a specific business, were not considered accessible to the public. The on-street and off-street parking supply for the area are illustrated in figures provided in **Appendix B**. It should be noted that data collection occurred at a different time of year than the 2011 Plan. However, January was seen as a typical month with significant vehicle usage.

Parking demand data was collected approximately every hour from 8am until 5pm. The raw parking demand (parked vehicles) are provided in **Appendix B**. Comparing parking demand with the parking supply indicates the parking occupancy for that block face or area. As noted previously, a parking occupancy rate of 85% is an indication that the practical capacity has been reached. Additional figures are provided in Appendix B that illustrate the parking occupancy levels for on-street and off-street areas within the Downtown plan area for each hour (8am – 5pm) during the data collection days. Parking occupancy levels were divided into four (4) general categories:

- **No Parking:** Areas designated as No Parking, where occupancy was considered zero as no supply is available.
- **Low Occupancy:** Areas where public parking is permitted, where occupancy ranged between 0 – 49.9%. Low occupancy can be an indication of underutilized parking, which can generate limited parking revenues unless overflow parking from overcapacity areas can be re-directed to these areas.
- **Moderate Occupancy:** Areas where public parking is permitted, where occupancy ranged between 50.0 – 84.9%. Moderate occupancy is an indication of somewhat reasonably utilized parking, striking a balance between generating adequate parking revenues and adequately serving the public. A sufficient number of parking stalls are available that limits patrons from circling the block.
- **High Occupancy:** Areas where public parking is permitted, where occupancy exceeds 85.0% (practical capacity). High occupancy is an indication that capacity limits have been reached. While parking revenues are higher, customer service has been reduced, and drivers will typically experience challenges finding an available

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parking stall during the first pass of the block or lot area. This will result in vehicles circling the block (adding to traffic congestion) and driver frustration, and may result in vehicles parking 1-2 blocks away from their desired destination.

As illustrated in the figures, several areas were identified as reaching high occupancy levels over the course of the day. However, in each instance, parking was identified as available within 1-2 blocks of the high occupancy block. In the 2011 Plan, Main Street was noted as having the highest occupancy levels, reaching as high as 90%. Based on the data collected in 2018, the highest occupancy level on Main Street was 82%, achieved for a 1-hour period (between 3pm – 4pm). During that time period and others, the majority of Main Street remained at the moderate occupancy levels.

The 2018 data indicates there is sufficient on-street and off-street parking capacity within the Downtown core on an overall, average basis. However, high parking occupancy levels do occur during specific peak periods of the day that may temporarily limit parking supply on specific blocks and create concerns for local businesses. This includes off-street parking areas. The specific locations and time periods are identified in the figures provided in Appendix B using a color-coding system. Red indicates areas where parking is not permitted. Green indicates areas where parking occupancy levels are considered low (0 – 49.9%). Blue indicates areas where parking occupancy levels are considered moderate (50 – 84.9%). Yellow indicates areas where parking occupancy levels are considered high (greater than 85%).

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## 3.0 UPDATED IMPLEMENTATION STRATEGY

With the population of Whitehorse expected to increase over the next 20 years, the available parking supply may not be adequate to serve current and future residents. Therefore, additional measures are necessary to achieve the vision of the Parking Management Plan and its intended objectives.

Based on the available data, Stantec has identified **three key categories** that are critical for the continued implementation of a parking management plan for the City. It should be noted that the three categories are heavily inter-connected and rely upon each other. Application of these concepts is further outlined into short-term, medium-term, and long-term strategies for the City to initiate as part of the parking management plan.

The three categories are:

- **Technology Enhancements**
  - The use of technology is expected to improve customer service and monitor parking data across Downtown. This includes the upgrade of existing meters to 'smart' meters/kiosks, handheld devices for enforcement, cashless and mobile payment options, and public online tools for parking status and availability.
- **Supply / Demand Management**
  - The technology enhancements are expected to significantly improve the available parking demand data across the city. This will be used to develop refined strategies for addressing supply shortfalls, such as enhancing transit services, improving multi-modal infrastructure (such as additional bicycle routes and transit shelters, completing missing sidewalk links, etc), and additional parking stalls.
  - As re-developments occur across the city, understanding existing supply and demand is necessary for the appropriate planning for the additional demand that will be created. Determination if and when additional parking infrastructure such as a new parking garage or expanded parking facility may be necessary to keep pace with parking demand within the Downtown core.

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- **Pricing Strategy**
  - Parking demand and modal choice is heavily influenced by the City's parking rates, including its relative cost to transit fares and between high demand and low demand areas. A refined pricing strategy is necessary to create change in the city's current parking patterns. An effective strategy requires accurate, real-time data and focuses on applying market rates to peak demand areas and incentivizing users into sustainable transportation modes, such as transit.
  - A pricing strategy must be dynamic to changing conditions and purposefully tied to other City initiatives. Therefore, a gradual rollout of market rates should be connected to transit ridership goals, parking occupancy levels, parking turnover, and other objectives.

## 3.1 SHORT-TERM RECOMMENDATIONS (0 – 4 YEARS)

### 3.1.1 Incrementally Adjust Parking Rates to Market Rates in the Downtown Core Area

Due to the continued demand in the Downtown core area, it may be necessary to adjust parking rates to match market demand. This adjustment is to reflect the actual parking demand within these areas and to support the City's transit initiatives. While it is acknowledged that parking demand as a whole or as an average for the Downtown core area was manageable, specific peak demand periods were noted as high.

Market rate adjustments could be limited to specific peak demand periods to re-distribute parking demand onto adjoining streets and potentially create incentives towards sustainable transportation options. Market rate adjustments could be discussed further with Downtown stakeholders and limited to minor value changes that are applied only during peak periods to avoid creating a disincentive for users to come to the Downtown area and shop at local businesses. Revenues from the market rate adjustments may be directed to a separate dedicated Parking Fund, intended to be used to support sustainable transportation initiatives as well as the maintenance and replacement of parking meters and kiosks as their service lives end. Conversely, they could remain in the current Parking Reserve Fund with a greater commitment towards spending these revenues to achieve the goals outlined in this plan.

It is recognized that the market rate adjustments alone may not be adequate to achieve transit ridership targets. For a market pricing strategy of 30% greater than transit to be successful, it also requires the availability of transit routes to be viable alternatives to driving. In the absence of this, a market rate 30% higher than transit would not achieve the desired modal split. As future transit routes are added to the city and service frequency is enhanced, further adjustments to

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the market pricing should be contemplated, with a check-in in Year 5. The additional revenue from the market rate adjustments could also be used to support other transportation management initiatives.

**3.1.2 Consider Parking Fine Adjustments**

As identified in the Bylaw Services Review, parking violations represent the largest number of violations processed annually, with no indication that this trend is slowing. Therefore, to address abuse of the parking system from users exceeding the allotted time restrictions, the City may wish to consider applying a similar adjustment strategy to parking fines. At the time of this report, the fines associated with parking at an expired meter and exceeding the permitted parking period in Whitehorse are \$25.00 per infraction, with a reduced rate of \$10.00 if paid within the next business day. The fines associated with parking violations could be increased to further discourage violations. Appropriate fine rates should be discussed internally at the City and if a discounted rate should be offered for early payment. For example, the City of Fredericton recently increased their fines from \$15.00 to \$25.00 for early payment and increased fines from \$30.00 to \$50.00 after the early payment period.

<b>Municipality</b>	<b>Early Payment</b>	<b>After Early Payment Period</b>
Fredericton, NB	\$25.00	\$50.00
Saskatoon, SK	\$30.00	\$50.00
Regina, SK	\$30.00	\$65.00
Moose Jaw, SK	\$10.00	\$30.00
Edmonton, AB	\$50.00	\$50.00
Calgary, AB	\$40.00 - \$50.00	\$75.00
Winnipeg, MB	\$35.00	\$70.00

Generally, these adjustments may depend on the degree of abuse occurring in the system and how aggressively the City wishes to address this.

**3.1.3 Invest in Handheld Devices to Improve Enforcement Methods**

The City’s investments into license plate recognition (LPR) equipment to vehicles have significantly improved enforcement capabilities, however snow-covered license plates are unreadable by the technology and staff need to brush off license plates



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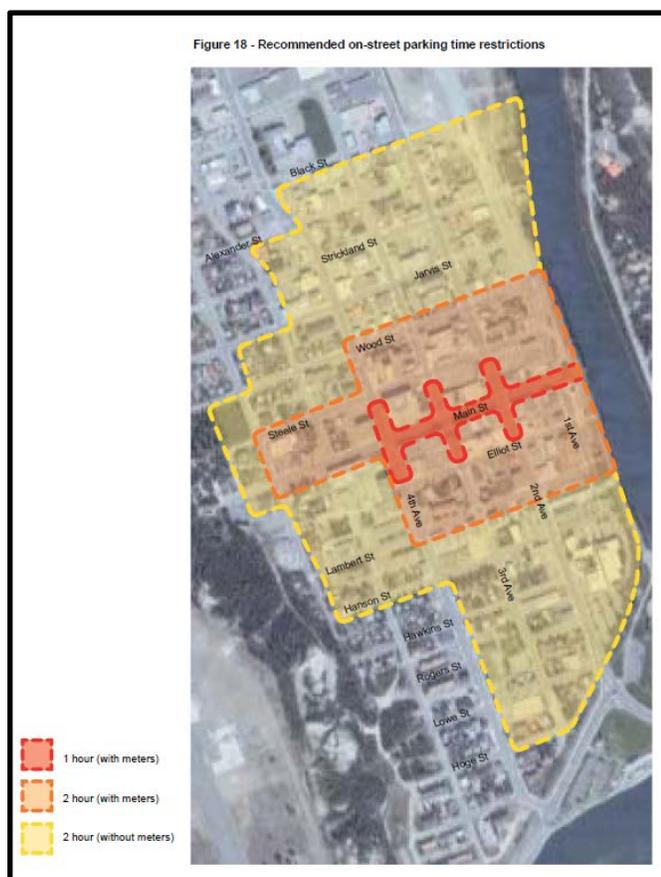
manually before the equipment can be used to read license plates. Therefore, investments into handheld devices are a necessity to adequately equip City resources to carry out enforcement duties. With a more complete system of available tools, enforcement can cover more areas of Downtown with the same staff resources, encouraging higher turnover across the city for the public's benefit.

### 3.1.4 Create Commuter Parking Zones; Alter On-Street Parking Restrictions to Limit All-Day Parking; Expand Off-Street Parking Options

Based on the results of the public survey and stakeholder engagement survey, it is presumed that high levels of longer-duration (commuter/employee) parking will continue to occur within the Downtown area. To address this demand for longer duration parking in the short-term, the City could consider implementing a pilot project that creates 8-hour parking zones in areas located on the periphery of Downtown. The pilot project location(s) could be selected based on the availability of transit services to provide an alternative travel mode for users (if walking or cycling is challenging). Pay-By-Phone or a Mobile Application (discussed later in the recommendations) could be considered to minimize staff resources and to collect continuous data over the course of the pilot project.

A key recommendation from the 2011 Plan was the expansion of 2-hour time restrictions within Downtown (as shown here in Figure 18 of the 2011 Plan). The intent of this recommendation was to encourage short trips to the Downtown core areas while discouraging long-term parking within this area.

The recommendation to create 8-hour parking zones is not intended to replace the 2011 Plan recommendation to expand 2-hour timed zones, but to supplement this strategy to meet the needs of commuter/employee parking demand. Proposed 8-hour parking zones should not be within the areas identified in the 2011 Plan for 2-hour parking. Payment for parking in the 8-hour areas should be required but could be structured at a higher parking rate for the added convenience to users, such as \$1.50 per hour. While typical practices



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are to have lower parking rates further away from the periphery, the higher costs proposed in these zones are for the added convenience of an extended parking zone. To discourage long-term parking in short-term zones, enhanced enforcement should be considered.

The expansion and formalization of some off-street parking (surface lots) is already underway by the City, such as Main Street / 6<sup>th</sup> Avenue, and can improve the efficiency of parking behaviours within the lot. However, it should be cautioned that structured parking facilities can be counter-intuitive to other TDM measures currently underway by the City. If successful in the long-term, parking demand levels could decrease and costly structured parking could be underutilized and not generate adequate revenues necessary for the facility's maintenance and construction costs. Discussions around structured parking considerations is noted in Section 3.3.1.

### 3.1.5 Integrate the Parking Management Plan into the City-wide Transportation Study and the Official Community Plan

Integration of this Parking Management Plan's recommendations into other City documents, such as the next Transportation Study (TS) and the Official Community Plan (OCP), will encourage the continuation of the measures outlined in the Parking Management Plan.

The City is currently undergoing a new OCP, which will provide overall direction on transportation goals in the city while the TS is tentatively scheduled to begin in 2020. Overall guiding principles and themes expressed in this plan should be integrated into both documents.

### 3.1.6 Review Zoning Requirements Associated with New Developments; Implement Transportation Demand Management Practices (On-Going)

Parking demand is expected to increase in Downtown as new developments occur. Complimentary land uses, such as residential and office, may have a net neutral impact on the overall Downtown parking demand as their respective peak parking demand periods have limited overlap. The majority of parking demand generated by new developments will be accommodated on-site. However, there is the potential that some demand will spillover to on-street and public parking areas. Two distinct zones – a "Primary Zone" and a "Secondary Zone" – could be created as illustrated in **Figure 2** based on current parking utilization. The intent of these zoning recommendations is to guide off-street parking requirements for private developments within each zone.

- Primary Zone Characteristics
  - Apply the maximum parking ratios currently in use to encourage greater densification and alternative travel modes.
  - Consider designating the greater of either 10% or two (2) of the required on-site parking spaces as Carpool Only
  - Encourage land uses to exceed current bicycle parking requirements, particularly along routes from the 2018 Bicycle Network as implementation occurs

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- Support the activation of alleyways for pedestrian / cyclist activities
- Consider wider sidewalks on all frontages
- Support transit usage by employees through their employers, including transit subsidies through partnerships with the City.
- Secondary Zone Characteristics
  - Maintain current parking requirements
  - Consider designating the greater of either 5% or one (1) of the required on-site parking spaces as Carpool Only
  - Encourage land uses to exceed current bicycle parking requirements, particularly along routes from the 2018 Bicycle Network as implementation occurs. This strategy will promote alternative travel modes in the Secondary Zone and allow for parking spillover created by the future demand in the Primary Zone.

TDM programs should be emphasized for large employers within Downtown to reduce their demand on public parking and in accordance with the 2014 Transportation Demand Management Plan.



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- - - - - Primary Zone
- - - - - Secondary Zone

City of Whitehorse

Downtown Parking Management Plan Update

Figure 2: Parking Zones

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### **3.1.7 Consider Implications of the City's Role Relative to Electric Vehicles**

Electric vehicles are gaining popularity throughout North America as vehicle costs continue to drop relative to fossil-fuel vehicles. Internal discussions with Council and stakeholders should occur to determine the appropriate level of involvement by the City for providing electric vehicle parking. Some considerations include:

- It is assumed that future fueling stations will provide options for electric vehicle charging at a cost, similar to how fueling stations currently operate for fossil-fuel vehicles. If charging options are offered by the City at parking stalls or stations, the City would be offering a competing service to these private businesses.
- If electric vehicle charging is offered, the City should charge users and determine an appropriate pricing structure to include with the cost of parking.
- The City does not offer free fossil-fuel to parked vehicles. This raises an equity issue in how electric vehicles and fossil-fuel vehicles are treated and how values are prioritized.
- The management of interruptions to the power supply should be considered. For example, if an hourly rate paid by an electric vehicle includes continuous charging but there was a service interruption, a refund may be warranted to the user.

### **3.1.8 Modify Monthly Parking Passes into Daily Parking Passes**

A shift from monthly parking passes into daily parking passes should continue to be explored. Monthly passes may discourage people from considering or trying alternative travel modes such as cycling and transit as users have "already paid" for parking. As a daily pass, users are forced to think about their transportation choice on a daily basis. Combined with a market pricing strategy that incentivizes transit usage, workers may be encouraged to try alternative travel modes on a routine basis.

### **3.1.9 Expand the Usage of Four (4) Hour Off-Street Parking as a Pilot Project**

The City has implemented four-hour meters in some parking lots that appear to be well used. Four-hour zones can be advantageous as it allows sufficient time for customers to comfortably shop, dine, and run errands in a single trip. However, four-hour zones can also be an incentive for employee / all-day parking, as it can coincide with the lunch hour and is easier for users to move vehicles between zones and parking spaces. It is recommended that a pilot project to expand four-hour parking zones be initiated in a select number of stalls in several off-street parking areas.

### **3.1.10 Upgrade / Replace Parking Meter / Kiosk Equipment**

Replacement of all existing meters to a single unified system is recommended. The single system may consist of both smart meters and kiosks that are capable of communicating within the same analytical software system. The specific deployment of smart meters and kiosks to areas within the City may depend on the public realm space and available supporting infrastructure.

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For example, along blocks with primarily residential uses, smart meters could be appropriate. Along blocks with high pedestrian activity, with commercial / office buildings or where streetscape enhancements are being deployed to improve the public realm space, kiosks could be the more appropriate application. Parking meters or kiosks that are equipped with mobile application connectivity and that accept multiple forms of payment that includes cash as well as cashless payment should be considered.

Currently, both meters and kiosks are deployed in the City. Newer types of equipment offer varying pros and cons that should be considered as part of this process of selecting the preferred system:

Equipment	Advantages	Challenges
Smart Parking Meters	<p>Simple to deploy where meters are currently deployed and convenient for users as they are located adjacent to parked stalls.</p> <p>A single meter requiring maintenance would only impact 1 parking stall.</p> <p>Accepts multiple payment methods.</p> <p>Newer 'Smart Meters' are capable of data collection, providing parking occupancy and parking duration in 'real-time'.</p>	<p>Can contribute to the "visual clutter" of a roadway. Many cities are removing parking meters to enhance the public realm space.</p> <p>More challenging for revenue collections if cash payment is allowed, as each meter will need to be collected.</p> <p>As the equipment ages, replacement parts are increasingly difficult to purchase.</p> <p>Does not provide change to cash-based users.</p>
Smart Kiosks	<p>Reduces visual clutter by consolidating all parking stall management to a single piece of equipment.</p> <p>Accepts multiple payment methods.</p> <p>Could provide change to cash-based users, however newer kiosks are eliminating this option.</p> <p>Easier for collections as a single location to manage.</p> <p>Most municipalities are using kiosks which reflects current trends.</p>	<p>Requires users to remember parking stall number / zone numbers and license plates, which can create a negative experience for users if kiosks are located longer distances away from parking stalls.</p> <p>Generally, more expensive than meters to install. Costs can vary significantly as a number of vendors provide equipment.</p> <p>Equipment failure can impact multiple parking stalls along a block.</p>

The City should:

- Identify the preferred replacement option and solicit input from vendors through a RFP to estimate per block cost, and ensure mobile applications integrate with the preferred option;
- Coordinate with Transit on the potential of a single payment system for both parking and transit; and

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- Request additional funding from Council for implementation of the replacement / upgrade program, if required, which may include usage of the City's Parking Reserve Fund.

Integration with enforcement is necessary when considering the appropriate parking management system, as well as the ability to extract data to evaluate parking demand and usage. The majority of new 'smart meters' are capable of tracking their usage, collecting both parking occupancy and parking duration information.

Once new systems are ready for implementation, a focused public awareness campaign should be undertaken to notify residents and visitors of the parking hardware changes and to encourage expanded use of the mobile application, Pay By Phone, and other cashless systems. This can also further increase usage of cashless payment methods, potentially reducing the need for collections in the long-term.

It is acknowledged through discussions with the City that a high number of Downtown workers continue to park within the area in short-duration parking stalls and move their vehicle to adjacent blocks as meters expire. These practices as well as parking duration data could be easily collected with the implementation of smart meters and kiosks.

### 3.1.11 Consider Parking Integration with Mobile Applications

Mobile applications are increasingly popular for managing parking payments, monitoring parking status, and identifying available parking areas. Examples include:

Municipality	Mobile Application
Yellowknife, NT	PingStreet
Calgary, AB	ParkPlus
Edmonton, AB	EPark
Fredericton & Moncton, NB	HotSpot
Saskatoon, SK	WayToPark
Winnipeg, MB	PayByPhone

Mobile applications also provide opportunities for the City to continuously collect parking demand data and evaluate parking utilization across the City. As a cashless system, this may also reduce the maintenance requirements and collection efforts by the City. There may be

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opportunities to integrate mobile applications with parking kiosks, however the current equipment in the City may not have this capability. Therefore, integration of mobile applications would be contingent on the upgrades of the current parking management equipment, as outlined in Section 3.1.10. In the long-term, this application could be used as part of a more comprehensive transportation application that integrates with the City's transit system. It should be noted that the intent of these mobile applications is to collect data and manage payment for parking usage, but should not be used to reserve parking spaces in advance of arriving.

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## 3.2 MEDIUM-TERM RECOMMENDATIONS (0 – 8 YEARS)

Medium-term recommendations are intended to partially overlap with the implementation of short-term recommendations. The medium-term recommendations may be impacted by the schedule and outcomes of the short-term measures as well as other City initiatives being undertaken (such as the Transportation Demand Management Plan, Transit Master Plan, and Bicycle Network Plan). Therefore, a longer completion period is assumed for medium-term recommendations to allow for additional planning.

### 3.2.1 Undertake Coordinated Signage Planning

A consistent signage standard for all parking in the Downtown area could be pursued further. This includes sign designs, sizes, and heights that are integrated into the City's Servicing Standards Manual. This will enhance the City's customer service and could be connected to future mobile applications that convey available parking (discussed in Section 3.2.2). The signage strategy should be in alignment with other City priorities including pedestrian circulation and mobility, public realm aesthetics, and public safety (e.g. reducing driver distraction).

### 3.2.2 First Hour Free Program for Alternatives to Main Street

The 2011 Plan included a recommendation for a first hour free program for Main Street, however there is no current handheld technology to monitor and enforce this program. As noted in the public engagement results, the limited availability of parking along Main Street represents a significant concern amongst residents. As indicated in the 2018 data collection, parking occupancy levels are relatively high along Main Street even without this program. While a first hour free program will benefit the businesses along Main Street, this may further increase occupancy levels and traffic circulation along Main Street as patrons continuously pursue a free parking stall in lieu of other paid stalls nearby. In lieu of this approach, it is recommended that the first hour free program should be implemented on an adjacent roadway within walking distance to Main Street, where parking occupancy levels are currently lower than Main Street. For example, Steele Street or Elliott Street are only one block away from Main Street but have significantly lower parking occupancy levels, and therefore could be reasonable alternatives. A pilot project could be implemented first to evaluate parking spillover effects and should include data collection to quantify changes in parking occupancy, and interviews with nearby businesses to measure impacts. In addition, the first hour free program should be implemented after the deployment of kiosks along Main Street to integrate with enforcement activities.

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### **3.2.3 Permit Use of Parking Reserve Fund for Sustainable Transportation**

As part of the development of the City's long-term financial plan, the City could explore an amendment to the Reserve Fund Bylaw to expand the Parking Reserve Fund for sustainable transportation initiatives. By applying the Parking Reserve Fund to improve alternative modes, the supply of parking that is needed to meet parking demand is reduced and may be a more cost-effective solution.

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### **3.3 LONG-TERM RECOMMENDATIONS**

Long-term recommendations were not assigned to a specific time frame as they are highly dependent on the results of short-term and medium-term measures and the impact of external factors beyond the City's immediate control. These influences are discussed in further detail with each long-term recommendation.

#### **3.3.1 Consider Additional Structured Public Parking**

In the long-term it is recognized that parking demand may exceed the available supply. While this is dependent on how growth across Downtown and the surrounding areas unfolds and the changes in modal split resulting from the Bicycle Network Plan, Transit Master Plan, and TDM Plan, it is important to strategize how this demand is managed.

If parking occupancy across the Downtown core continues to remain high despite other demand management practices implemented, the City may consider a long-term goal of adding a structured public garage to the periphery of the Downtown core if parking occupancy levels become elevated (above 85%) for longer periods of time. By locating the facility on the periphery, all groups potentially benefit. Residents and visitors in the Downtown core benefit through improved quality of life and manageable traffic congestion. Those traveling to the Downtown core also benefit by a garage more easily accessible than a centrally located facility. As the Downtown core remains the focal point for employment, commercial uses and unique city elements, the location of the structured garage on the periphery of the Downtown core but within walking distance to major destinations is not expected to deter people from traveling to Downtown. Structured parking garages also provide protection from typical winter elements, providing additional benefits such as a reduced need for vehicle auto-starts and therefore emissions.

Structured parking facilities generally have a long lifecycle; up to 75 years depending on the design. There is a high degree of uncertainty in how transportation systems will look and function over that time period. As such, the structured parking facility should be designed with flat, high 11-foot ceilings, internal ramp design, noise insulation, and other structural elements to accommodate for the potential future conversion to residential, commercial, or office uses if parking demand reduces in the long-term. Other design elements to support future re-purposing should also be considered. Based on these characteristics, the lead time necessary for the planning of a structured parking facility can be significant. Therefore, while this remains a long-term recommendation, the planning efforts for a structured facility may need to begin in the short to medium-term to keep pace with future parking needs.

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**However, it should be noted that based on the current parking occupancy levels in the Downtown area at this time, a structured public parking garage is NOT recommended.** A reassessment of this recommendation should be made once short-term measures are implemented and if parking occupancy levels begin to approach higher levels. In addition, this should not be viewed as a deterrent to the development of future *private* parking facilities. Should private developments propose the addition of structured parking facilities as part of their site development, there may be opportunities to allow some spaces to be made available to the public. The additional parking supply may decrease parking occupancy levels and further reduce the need for a future public parking facility.

### 3.3.2 Evaluate Shared Vehicle Services and Parking Impacts

Shared vehicle services such as ZipCar, Maven, Uber, and Lyft are ever-increasing in popularity to compete with traditional taxi services and are part of an industry trend towards “mobility as a service”. Combined with other future trends such as autonomous and connected vehicles (discussed later in this plan), this provides opportunities to provide services to those unable to drive or experiencing challenges with the current mobility choices.

Shared vehicles provide a valuable benefit to the overall transportation system by servicing areas inaccessible to transit and where cycling infrastructure is challenging. However, they also generate their own parking demand. Given their potential to discourage personal vehicle ownership, they may also reduce on-site parking demand in the long-term. Shared vehicles would likely be required to use public on-street or off-street parking areas to remain accessible to the public. While these services are currently not present in the city, it is important to consider how they will be managed and their impacts to the public parking supply if they do arrive. Generally, shared vehicle demand is expected to be created around denser developments, employment centres and popular commercial and recreational areas.

### 3.3.3 Monitor Progress of Autonomous and Connected Vehicles

The introduction of autonomous and connected vehicles (AV/CV) into the transportation network is among the most dramatic, long-term transformations of the transportation system. Users could be dropped off at their destination (increasing the need for pick-up / drop-off zones in lieu of parking) and AV/CV could be directed to park further away where parking rates are lower, resulting in parking demand determined by relative pricing structures. In addition, AV/CV could be directed to move from one zone to another as time limitations expire to avoid infractions. AV/CV could also simply be re-directed to return home, potentially reducing parking demand in paid parking areas entirely.

The primary challenge with AV/CV at this stage is the number of unknowns currently present. Therefore, it is recommended that the City continue to monitor the progress of this technology to determine the appropriate course of action.

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### 3.4 OTHER RECOMMENDATIONS (ON-GOING)

Other recommendations are identified that should be implemented as part of on-going internal discussions.

#### 3.4.1 Re-assess Parking Demand and Modal Split; Refine Strategy and Market Rate Fees; Parking Structure Monitoring

Prior to the implementation of any long-term recommendations, it is recommended that the City undertake a new assessment of the parking demand, supply, and modal split. Assuming other elements such as the transit strategy and TDM plan are being implemented concurrently and market rate adjustments to parking fares in the Downtown core have occurred, potential shifts in modal change may already be underway. Modal splits should be compared to current levels to assess if the parking changes are effectively coordinating with the goals of the cycling and transit strategies. Current parking occupancy levels indicate sufficient capacity is available both on-street and off-street on average, though periods of high occupancy were noted to occur on specific block for specific time periods (illustrated in Figures 4 – 23) that may negatively impact nearby businesses. If sufficient modal changes have not occurred and parking occupancy in these areas of the Downtown core continues to exceed 85% for these critical time periods, additional market rate adjustments to on-street and off-street parking rates should be considered. As part of this re-assessment, the potential need for an additional parking structure (see Section 3.3.1) should be evaluated to determine if and when a new facility is required.

#### 3.4.2 Define a Process for Parking Signage Requests

Private businesses will occasionally request that parking restrictions be placed on the parking outside their business. Currently, there is no consistency in how requests are processed. The formal methodology is recommended that generally follows the following guiding principles:

- **Define the Request:** Clear identification of the area, time restriction, and number of stalls requested.
- **Confirm Parking Availability:** Collect existing parking data on the proposed block and surrounding areas to determine current parking usage and if reasonable alternative parking accommodations can be provided.
- **Engage with Stakeholders:** Communicate the request with owners / operators along the block to assess concerns and potential parking alternatives for their patrons.

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### 3.4.3 Maintain Adequate Winter Maintenance of Pedestrian Facilities in Downtown

Adequate winter maintenance of sidewalks in the Downtown area is critical for both the promotion of active transportation modes, supporting transit usage as well as necessary for parking management. Currently, snow clearing is the responsibility of frontage owners, however this can result in an inconsistent level of snow clearing. Conversely, if the City undertakes snow clearing, maintenance costs would increase which may require tax increases or financial constraints. The debate over snow clearing responsibility is a highly complex topic and extends well beyond the realm of a parking management strategy despite having some direct correlations of impacts. As it relates to parking, it is recommended that if nearby businesses are unable or unwilling to undertake snow clearing, the City may undertake this service at an additional cost to the specific users requesting this service. It may be advisable that a public survey that includes the financial implications associated with snow clearing be undertaken to assess support levels. If supported, a separate process could be developed for city businesses and operators to request clearing from the City along with a fiscal strategy for obtaining compensation from the requested business. The City could also explore the possibility of a future Business Improvement Area to help implement this recommendation.

### 3.4.4 Develop a Public Education and Outreach Plan

Following approval of this plan, public education and outreach should be undertaken. At a minimum, this should include updating the City's parking-related maps illustrating changes to parking and updates to the City's website as it relates to parking changes. In addition, media outreach via radio, print, and television could be undertaken to alter users of proposed changes. This may include the use of temporary digital signage and static signage deployed along roadways. A hotline phone number can also be established to allow users to phone in and request clarification on any changes. Enforcement should proceed with a 2-3 month warning period before any citations are issued. Additional education and outreach may be necessary depending on the measures implemented. For example, if mobile applications are integrated into the parking management strategy, a help system may be necessary to facilitate users with installation and setup, including the usage of media outlets to promote usage of the mobile application.

### 3.4.5 Consider Modifying Off-Peak Parking Payment

While this Parking Management Plan focused on the 8am – 5pm weekday time period, it is acknowledged that Downtown parking is also utilized outside of these hours and on weekends. Currently, parking payment is required on Saturday mornings, however overnight demand associated with evening-oriented venues may spillover into morning hours, and could create unintended consequences. For example, intoxicated users on a Friday night may be inclined to drive home rather than take a taxi to avoid Saturday morning parking fees, and therefore

## CITY OF WHITEHORSE 2019 DOWNTOWN PARKING MANAGEMENT PLAN

July 2, 2019

create a significant roadway safety concern. As parking demand on Saturday mornings are assumed to be minimal in the Downtown area, it is recommended that payment requirements only begin at 1pm on Saturdays. This would also attract other users into the Downtown area and support local businesses through the lunch hour on Saturdays.

Similarly, parking demand on Friday evenings is assumed to be low. To encourage Downtown shopping on Friday evenings, payment requirements at meters and kiosks could end around 5:30pm on Fridays.

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### 4.0 SUMMARY

The City continues to make significant progress in the active management of parking demand across the Downtown core, starting with the measures implemented to date from the 2011 Plan. As part of this 2019 Plan, parking occupancy levels across Downtown were re-evaluated to determine how parking behaviours have changed. In addition, this 2019 Plan provides an opportunity to refine the next steps in this plan based on changes in attitudes towards parking as well as emerging technologies that should be integrated. The City's other initiatives, such as the Bicycle Network Plan, Transit Master Plan, and TDM Plan are complementary measures that will have significant impacts to the city's future parking needs.

A series of short-term, medium-term, long-term, and on-going recommendations have been developed to allow the City to continue to proactively manage this important city infrastructure system. Collectively, this plan will help balance transportation mode choices, improve the quality of life for area residents, and potentially delay more costly solutions such as a parking structure. It is recognized that changes to the current modal split are necessary to support the City's larger initiatives and projected population growth.

In developing this implementation strategy, it is recognized that in the short-term, personal vehicles will continue to be the dominant mobility choice and as such, there are existing parking concerns that require mitigation. Therefore, short-term measures included in this report are focused on addressing these more immediate vehicular needs first, while laying the foundation to support other transportation modes. Medium and long-term solutions are designed to strike a balance by supporting a need to shift to transit and active modes in order to achieve the City's modal split goals but also mitigating concerns related to vehicle demand. The short, medium, and long-term recommendations are intended to have some flexibility due to changing trends, technologies, and circumstances.

It is recommended that the City initiate a full review of the Parking Management Plan in approximately eight (8) years to track progress, review new conditions, and propose new measures.

# CITY OF WHITEHORSE 2019 DOWNTOWN PARKING MANAGEMENT PLAN

Appendix A: Stakeholder Engagement  
July 2, 2019

## APPENDIX A: STAKEHOLDER ENGAGEMENT

# 2018 Downtown Parking Survey

## What we Heard

### A SUMMARY OF THE ONLINE SURVEY RESULTS

#### Background

In early 2018, the City of Whitehorse initiated an update to its 2011 Downtown Parking Management Plan to track its progress and refresh it with new and emerging parking and transportation related priorities. The update is intended to examine and recommend a range of parking improvement initiatives and explore other transportation mode strategies that can ease the demand on Downtown parking. The update will result in a new parking plan that contains recommendations for the next 10 years and beyond.

As part of the update, the City released a Downtown parking online survey in August 2018. The survey, which was open for four weeks, asked the public about parking behaviours, parking conditions, and ideas for future improvements to parking, walking, biking, and transit. In total, the City received **1,062** completed surveys from the public.

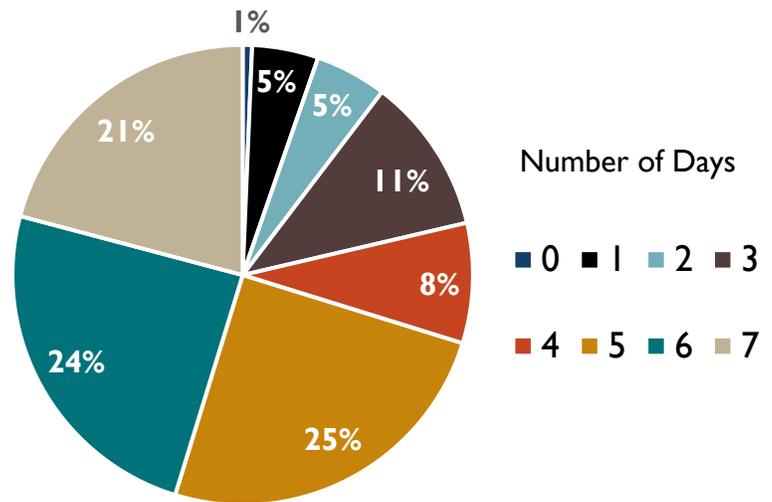
This “What we Heard” document provides a high-level summary of the survey results. For open-ended questions, project staff provided a snap-shot of the most commonly heard themes from the public. The City thanks all respondents for taking the time to answer the survey. Your responses will be used to help inform the final plan which is anticipated to be completed in spring 2019. Other components that will be integrated into the final plan include direction from other City-adopted plans, parking inventory results, and best practices and trends for Downtown parking.



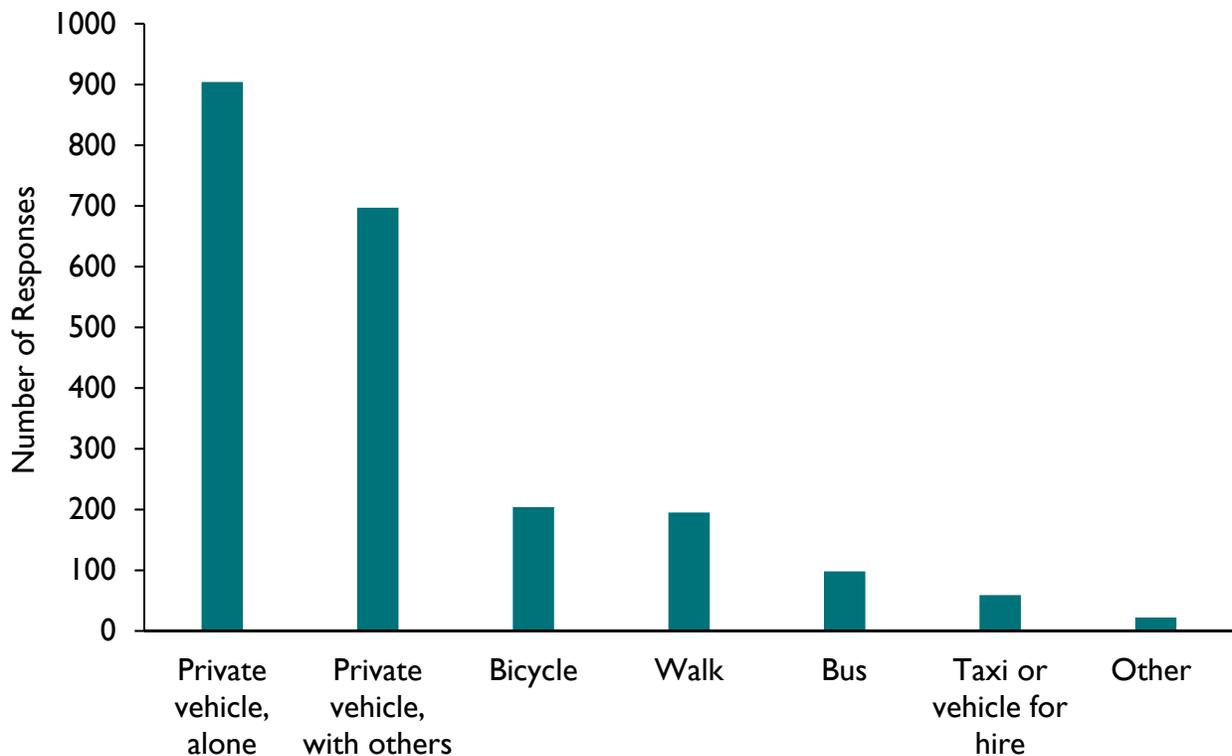
**Question 1. Approximately how many days in a typical week do you travel into Downtown Whitehorse?**

**Key Findings:**

- 70% of people travel into Downtown Whitehorse five or more days a week
- 99% of people travel into Downtown Whitehorse at least one day a week



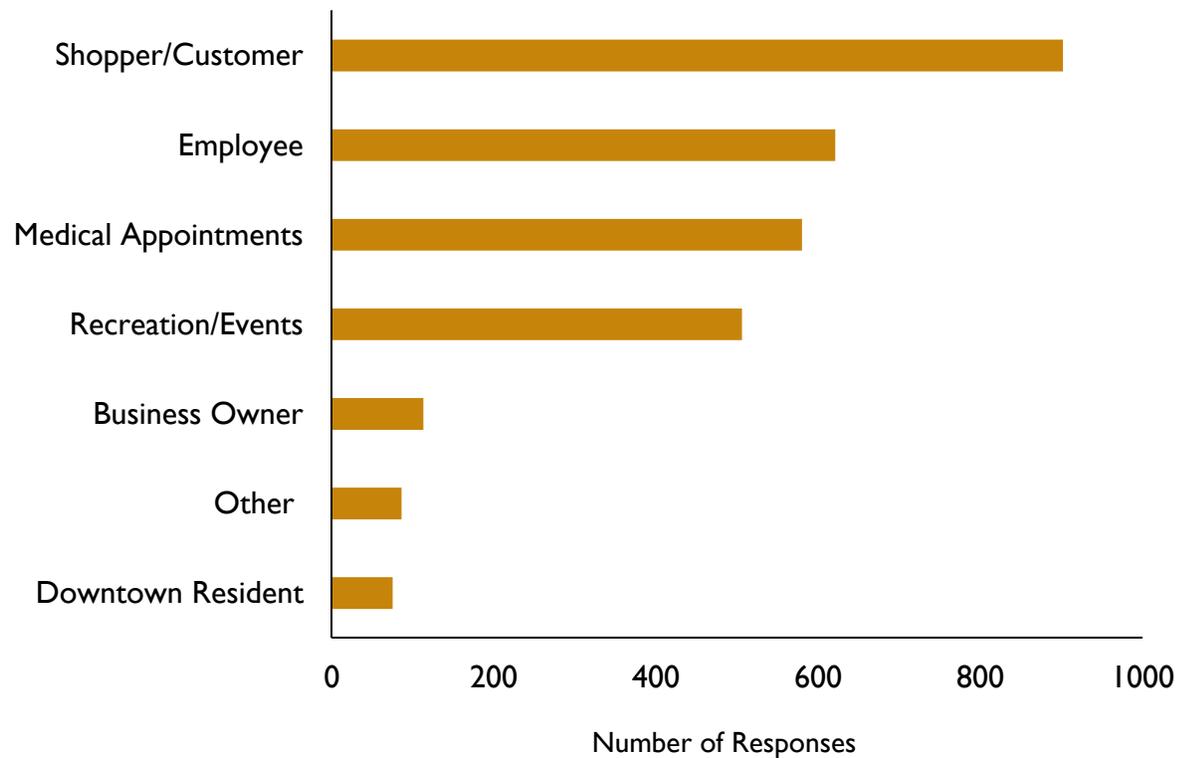
**Question 2. What are the typical ways you have travelled to/from Downtown Whitehorse in the past year? (check all that apply)**



### Key Findings:

- The most popular way to travel into Downtown Whitehorse is by private vehicle, either alone or with others
- The least popular ways to travel into Downtown Whitehorse is by taxi/vehicle by hire or bus

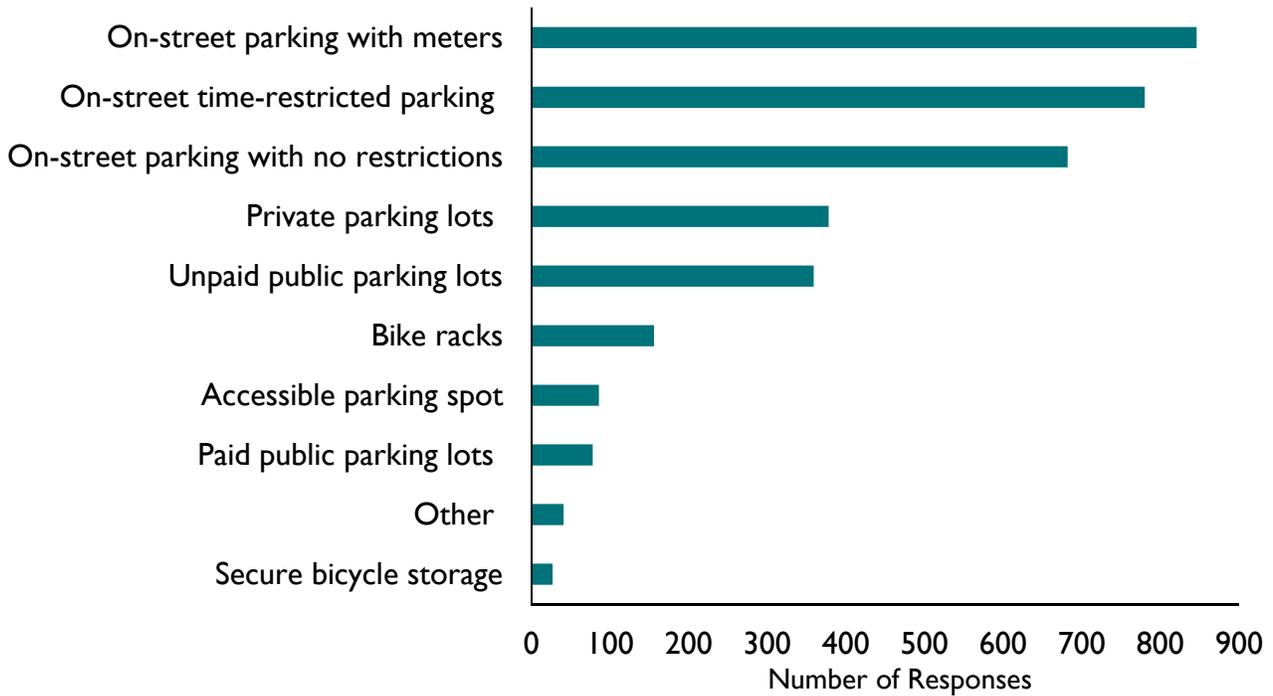
### Question 3: What are your primary reasons for going Downtown? (check all that apply)



### Key Findings:

- The main reasons people go into Downtown Whitehorse are for shopping, work, appointments, and recreation events
- The “other” reasons people go into Downtown are school, socializing, daycare, and banking

**Question 4. What type of parking do you typically use when Downtown? (check all that apply)**



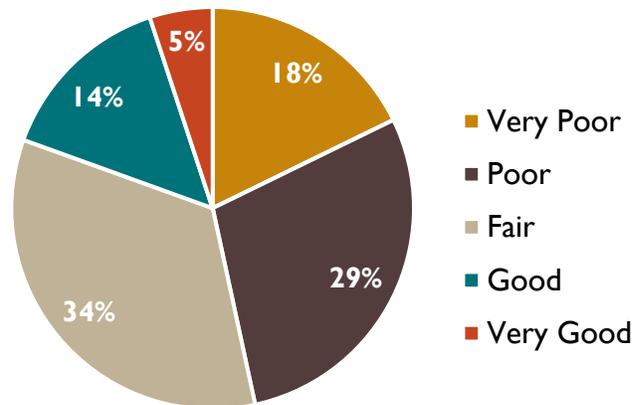
**Key Findings:**

- The most used types of parking are on-street parking with meters, on-street time-restricted parking (e.g. 2-hour zones), and on-street parking with no restrictions
- The least used type of parking is secure bicycle storage

**Question 5. Generally, how would you describe parking conditions in Downtown Whitehorse?**

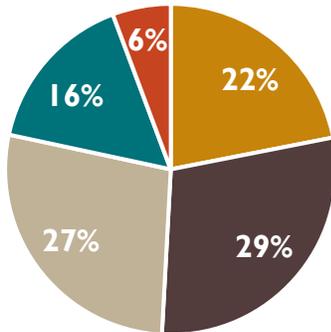
**Key Findings:**

- 47% of respondents believe that the parking conditions in Downtown are poor to very poor
- 34% of respondents believe that the parking conditions in Downtown are fair
- 19% of respondents believe that the parking conditions in Downtown are good to very good

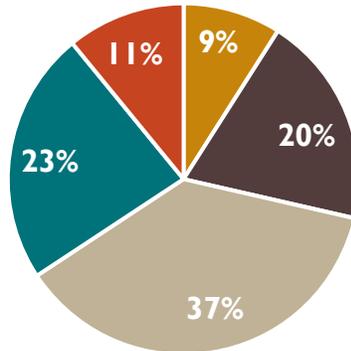


**Question 6: How would you rate the following aspects of parking in Downtown Whitehorse?**

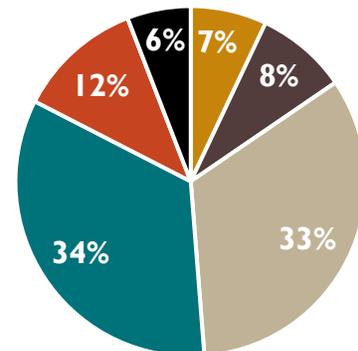
**Time/Restrictions**



**Proximity to Destinations/Services**

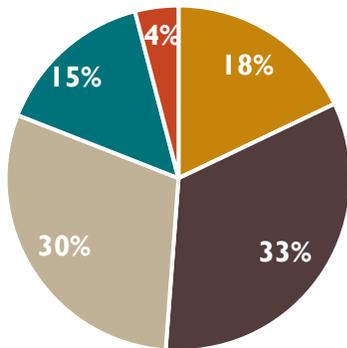


**Safety/Security**

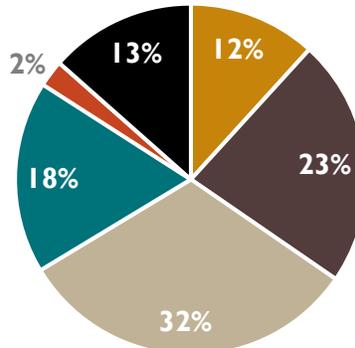


■ Very Poor ■ Poor ■ Fair ■ Good ■ Very Good ■ Don't Know

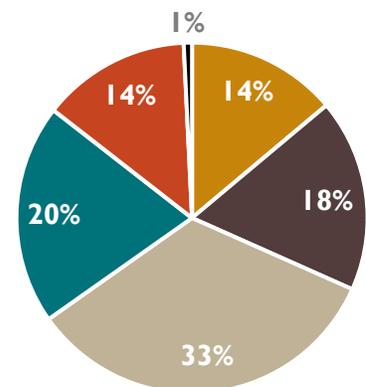
**Parking Availability**



**Parking Lot Design**



**Affordability/Parking Rates**



■ Very Poor ■ Poor ■ Fair ■ Good ■ Very Good ■ Don't Know

**Key Findings:**

- 51% of respondents found time restrictions to be poor or very poor
- 71% of respondents found that parking within proximity to their destination was fair or better
- 79% of respondents found that the safety and security of parking was fair or better
- 51% of respondents found parking availability to be very poor or poor
- 52% of respondents found parking lot design to be fair or better
- 67% of respondents found parking rates to be fair or better

### Question 7: In what areas of Downtown is it easy to find available parking?

**Note:** Results were summarized for this open-ended question

#### Key Findings:

- In general, parking was found to be easiest outside of business hours (Monday through Friday, 8:00am – 6:00pm).
- Most people did not find it easy to park on Main Street during peak times, however during off peak times people could usually find a spot directly on Main Street
- Box stores and malls were commonly cited as somewhere easy and free to park at all times
- 6<sup>th</sup> Avenue, 3<sup>rd</sup> Avenue, 5<sup>th</sup> Avenue, and Front Street were the most mentioned streets to find available parking
- Some felt as though there were no places or times that it was easy to park in Downtown. In contrast, some felt as though outside of business hours everywhere was easy to park.

### Question 8: In what areas of Downtown is it most difficult to find available parking?

**Note:** Results were summarized for this open-ended question

#### Key Findings:

- In general, parking was found to be most difficult during business hours (Monday through Friday, 8:00am – 6:00pm).
  - Saturday was often mentioned as being a difficult day to park as well
- Main Street was considered the most difficult place to park
- Other streets that were mentioned the most included Front Street, 4<sup>th</sup> Avenue, 2<sup>nd</sup> Avenue, and 3<sup>rd</sup> Avenue
- Metered parking and time limits were mentioned repeatedly as being a barrier for parking

#### Quotes

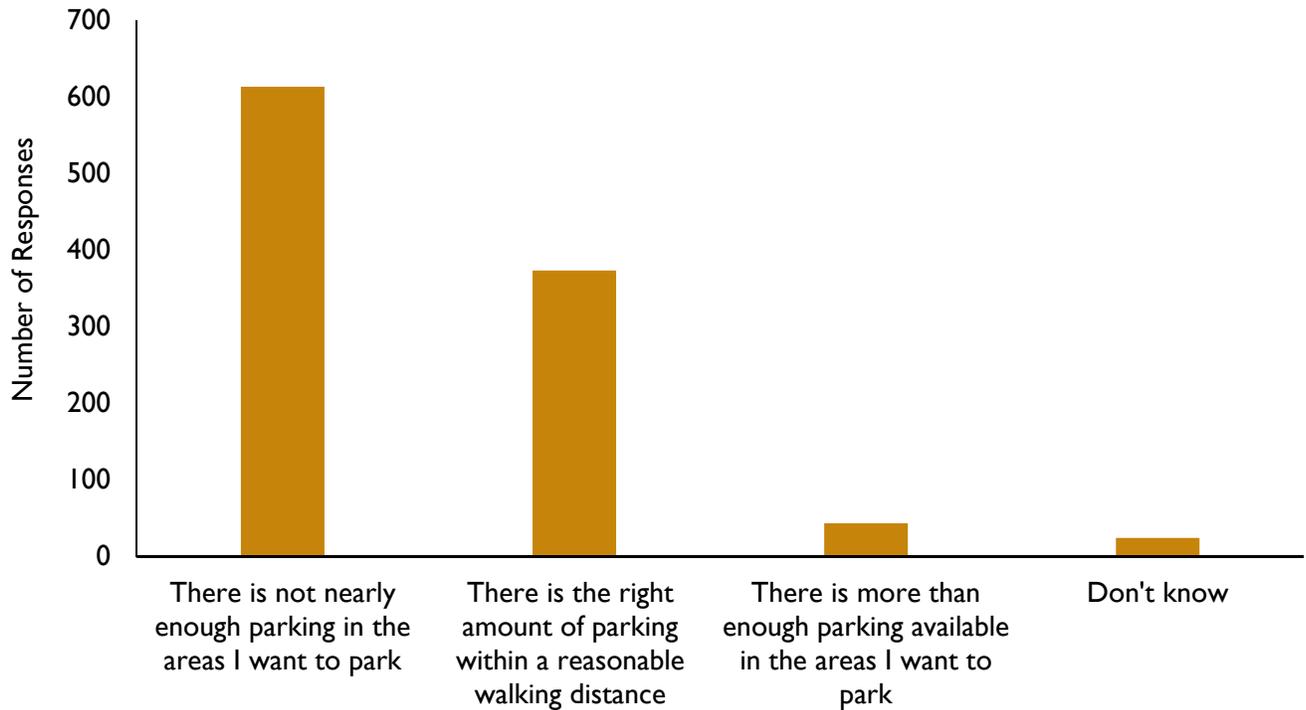
“Sure, it can be hard to find parking during peak times on main street (all working hours), but there’s always something nearby within reasonable walking distance.”

“Most of the rest of downtown is so constrained by time limits that it is difficult to find a place to park and work.”

“Bike: Most of Whitehorse has awful or no bike racks!”

“It’s extremely easy to find parking everywhere in Whitehorse all week long. There’s definitely an oversupply of parking. “

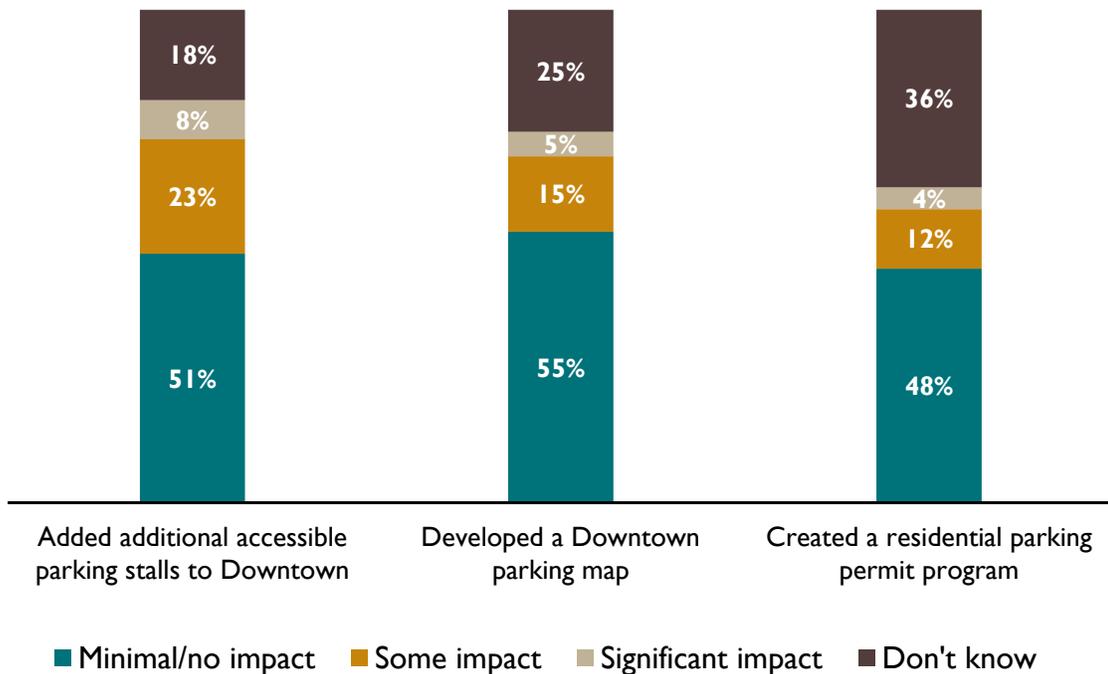
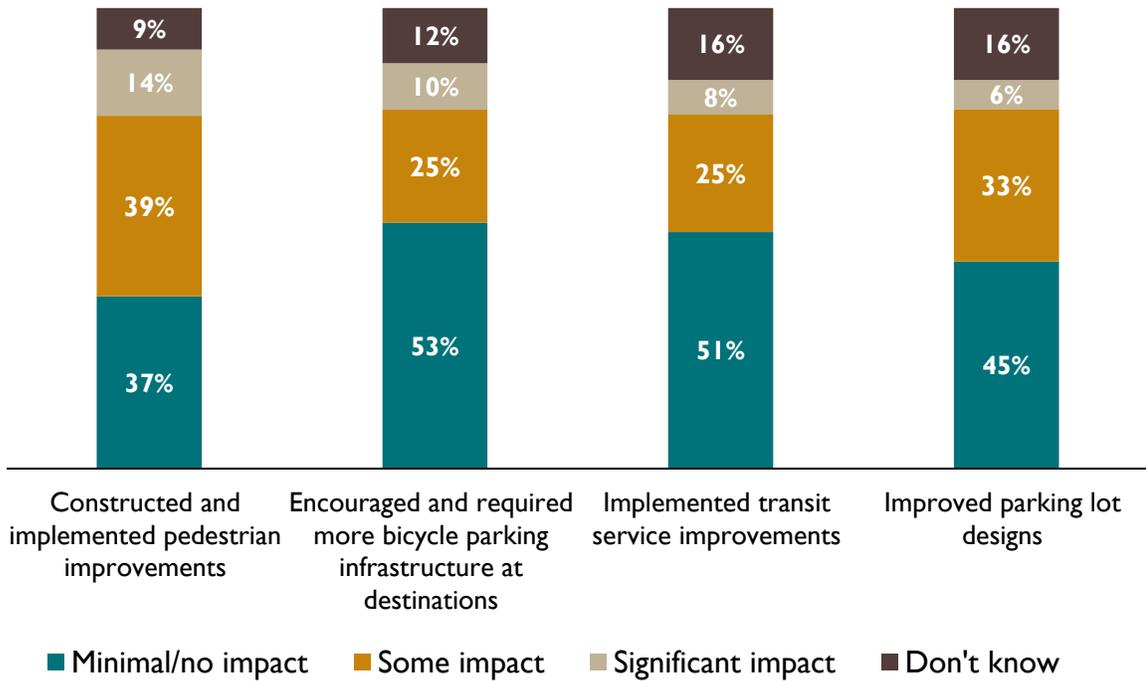
### Question 9: Which statement do you think best describes overall parking conditions in Downtown Whitehorse?



#### Key Findings:

- 58% of respondents felt as though there is not nearly enough parking in the areas they want to park
- 36% of respondents felt as though there is the right amount of parking within a reasonable walking distance
- 4% of respondents felt as though there is more than enough parking available in the areas they want to park

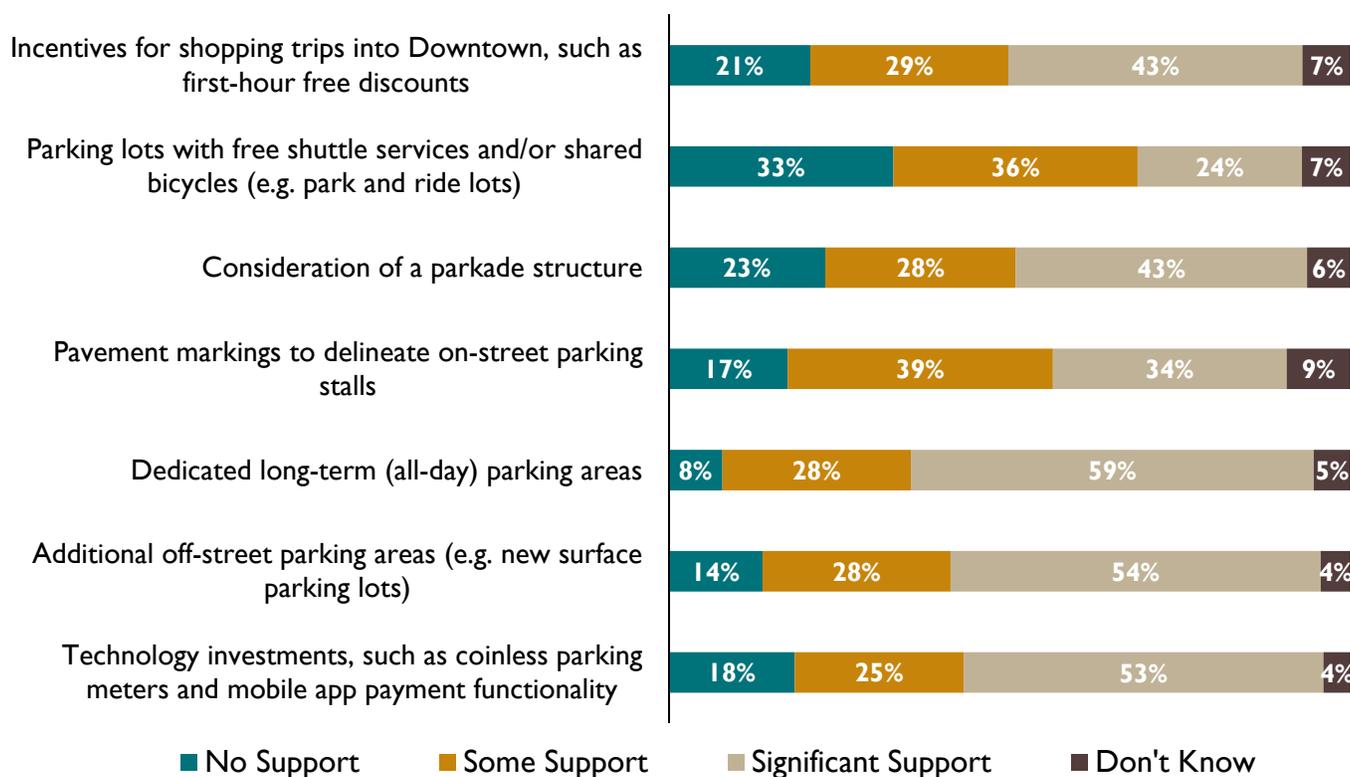
**Question 10: Since 2011, the City has undertaken a number of short- and medium-term measures to improve parking, sustainable transportation practices, and create efficiencies in how Downtown parking is better managed. Rank the level of impact these have had on how you travel and park Downtown.**

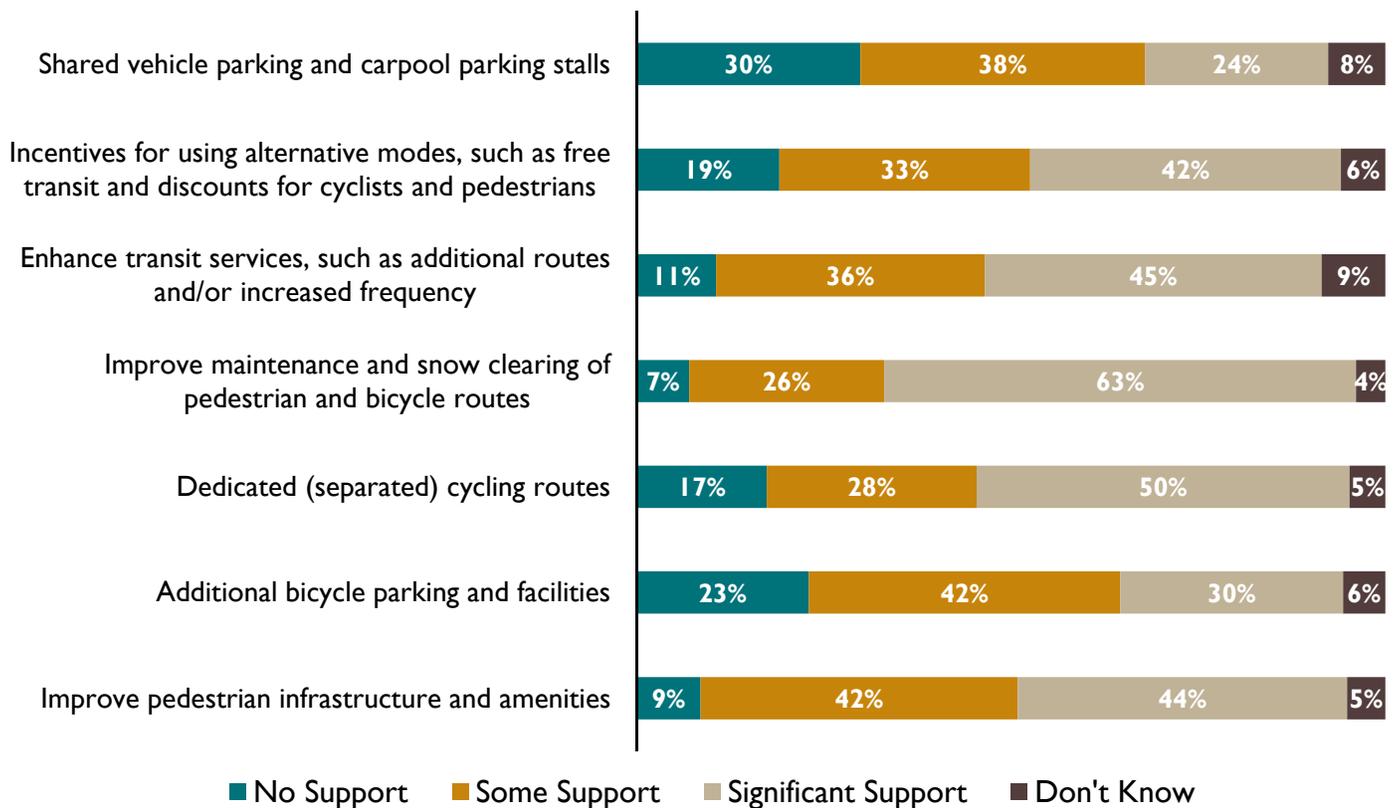


## Key Findings:

- Pedestrian improvements had the largest impact on respondents
- Around 50% of respondents felt as though the current measures taken to improve parking have had minimal to no impact
  - Adding accessible parking stalls to Downtown, developing a downtown parking map, creating a residential parking permit program, improving parking lot design, improving transit services, and encouraging/requiring more bike parking

**Question 11: Vehicle parking is just one component of the overall city transportation network, with many trips involving multiple modes of transportation. The Parking Plan update needs to take a comprehensive approach by considering all modes of transportation in order to reduce demand on parking, encourage more sustainable modes of transportation, and ensure the vibrancy of our Downtown. Additional measures to enhance parking conditions in Downtown are currently under consideration in the Parking Plan update. Rank your level of support for the following future considerations.**





### Key Findings:

- The most supported improvement ideas were improving snow clearing of pedestrian and cycle routes, creating long-term all-day parking, creating additional off-street parking, and coinless technology and app payment functionality for meters
- The least supported ideas were parking stalls for shared vehicles and parking lots with shuttle services or shared bikes
- Respondents were asked for other suggestions for inclusion in the Parking Plan. Below is a summary of the comments received:
  - Transit
    - The frequency of transit needs to increase in order for it be effective
    - Transit should be offered cheaper as an alternative to investing in more parking
    - Transit is currently difficult for people with families
    - Improve the ability for busses to carry bikes
  - Bicycles
    - People feel unsafe in cycling and would like more By-law enforcement around cycling rules

- Some people would like to see more motorcycle parking options
- Parkade
  - Create a parkade structure that could provide an affordable all day parking option
  - Creating a parkade would only encourage more people to drive
  - A parkade could be an eye sore for our Downtown
- Time/Cost on meters
  - Increase parking meter time limits
  - Extend meter start times on Saturdays to later in the afternoon
  - Long term parking options are needed
  - More free parking options
  - Support for a coinless meter option with the ability to also pay with coins
- Accessible Parking Spots
  - Misuse of accessible parking spots need to be enforced more
  - Increase the number of accessible parking spots

**Question 12: Do you have any other comments on Downtown parking that you want to share?**

**Note:** Results summarized for this open ended question

**Key Findings:**

- Meters
  - The ticketing system in Whitehorse is too harsh
  - Increase the time limits on the meters
  - We need coinless meter options that still accept coins
  - Increase the number of free parking spaces
- Bikes
  - Biking is not realistic in this climate
  - There needs to be more bicycle parking options
  - A driver and cyclist education program could help with the safety of cycling
- Transit
  - We need a more frequent transit service
  - The public transit service should be cheaper

**Quotes**

“While I don't love the idea of a parkade in downtown Whitehorse, I understand the need for it. We live in a very car-dependent city. While I don't see that changing, I think whatever we can do to encourage people to bring less cars into downtown during busy periods needs to happen to balance out building new parking spaces. I wonder if a good solution is to better connect Whitehorse neighbourhoods with non-car options.”

- There should be an incentive for taking transit
- If our transit system was more frequent and cheaper it could be a good way to reduce car traffic
- Parkade
  - Mixed feelings about the parkade
  - It would provide an affordable long term parking option
  - It could decrease demand for on-street parking
  - Concerned about the aesthetic of a parkade
  - Concerned that more people will drive if it is easier to park
- Employee Parking
  - There are not enough all day parking spots for employees that work Downtown
  - Most people need to move their vehicle throughout the day because of time restrictions
  - Downtown employees take up on-street parking during business hours making it difficult for others to park

## Quotes

“Free, more frequent transit - incentive period to get people on board. Free transit for a year, but you have to get more frequency on your main routes.”

“There needs to be more all-day parking so employees with full time jobs are not moving vehicles every two hours or getting parking tickets. “

“I really support free or low cost options for parking. Would be great to have park and ride or discounts for cyclists (I would bike to work from porter creek if I could get home cheaper on the bus than current rates).”

“Most important to me is coinless/credit card/app or online based meters. Don’t mind paying for parking at all but often don’t have cash and therefore shop at places with free parking rather than local businesses.”

# What We Heard

## SUMMARY OF STAKEHOLDER ENGAGEMENT

### Background

In 2011, the City of Whitehorse (COW) completed a plan for automobile parking in the downtown core. The plan was divided into short, medium and long-term mitigation strategies. Most of the short and medium strategies are implemented. The updated COW Parking Management Plan evaluates the progress and impacts of these strategies; looks at industry and societal changes related to parking and considers recent COW studies completed since the 2011 Parking Plan.

### Key Objectives set by COW

- track progress of the 2011 Plan to ensure implementation successfully remains on track;
- create an updated plan based on recent Downtown conditions, growth and emerging trends; and
- develop new parking priorities for upcoming years (e.g. 2018-2028)

### What We Did and Who We Interviewed

#### *Key stakeholders and the governments interviewed*

- |  |                                  |
|--|----------------------------------|
| 1. Hougen Group                        | 7. Northern Vision               |
| 2. Whitehorse Chamber of Commerce      | 8. Main Street Business Owner    |
| 3. Horwoods Mall Owners                | 9. Urban Cycling Coalition       |
| 4. Chu Niikwan Development Corporation | 10. Tourism Association of Yukon |
| 5. Kwanlin Dun Cultural Centre         | 11. Yukon Government             |
| 6. Downtown Resident's Association     | 12. Ta'an Kwäch'än Council       |

### *Emerging Trends*

- More people living in the downtown, walkable, sustainable
- Change in commuting by millennials (cycling, carpooling)
- Focus on environment
- Congestion
- Transit ridership increasing
- Aging population
- Cashless payment
- Real time communication (smart phones)
- Guidance systems that enable drivers to find parking
- Dynamic parking

The questions were semi- structured and allowed for the interviewee to elaborate as they wish with their ideas and concerns. The interviews were approximately an hour long and we carried out in January/February 2018 (apart from Horwood's Mall Owners which took place in May).

### KEY THEMES

The key themes that emerged from the interviews include:

### **1. All day employee parking is a problem**

There are limited locations for all day parkers who work in the downtown. The population of Whitehorse and the government is growing. More people are coming into the downtown daily. The development pattern of Whitehorse and the City's future approved land planning creates more vehicles coming into the downtown (Whistle Bend and Country Residential Infill). The Yukon Government needs to support/implement Transportation Demand Management. The Yukon Government requires large number of employee parking when leasing buildings. Consider park and rides.

### **2. Parking is a benefit**

People should pay for parking. Parking should be considered a benefit. Downtown retail workers are typically lower wage earners and they need places to park. There was some discussion that free parking provided by employers is a taxable benefit.

### **3. On-street all day (and longer) parking in residential areas is a problem for residents**

Parking by employees (YG was most referred to) in residential areas particularly in the south end of downtown is a problem for downtown residents. Residential Parking Permits should be used. The City should dedicate some streets to residents only. The City should not remove on street parking for all day parkers without creating additional spots.

### **4. COW onsite parking regulations are onerous considering all the amenities required (e.g. and the zero lot lines.**

It is difficult for developers to meet the City's parking requirements and amenities with the costs of development. The City needs to relax parking requirements. The City is putting increasing pressure on site areas (e.g. parking, landscaping, screening, garbage, recycling, bike racks, fuel tanks, transformers etc.) while holding the line on the number of parking stalls. Look at trade-offs. The parking requirements around KDCC may limit development opportunities.

### **5. Implement smart meters and coinless technologies**

There was overall support for meters that are coinless and interact with your smart phone. It was also noted that not all Yukoners have smart phones and credit cards, so coins need to be allowed also.

### **6. Time to densify the parking**

There is support to look at private/public partnerships to build a parking garage that does not look like a parking garage.

### **7. Alternative modes of transportation are supported**

All those interviewed supported alternative modes (transit and bikes) but it was also noted people bring cars into the downtown and this must be planned for. Cannot rely on bikes, transit and TDM to solve the all-day parking problem. Install more bike racks and bike lockers and not the wheel benders. Consider a bike coral on Main Street between Front and Second (take away a parking stall). Support bike subsidies (e.g. 10% off if you show your helmet). Transit needs to be more convenient (every 15 minutes) which is difficult with our small population. Develop bike routes that take you 15 minutes or less to get downtown - then people will bike.

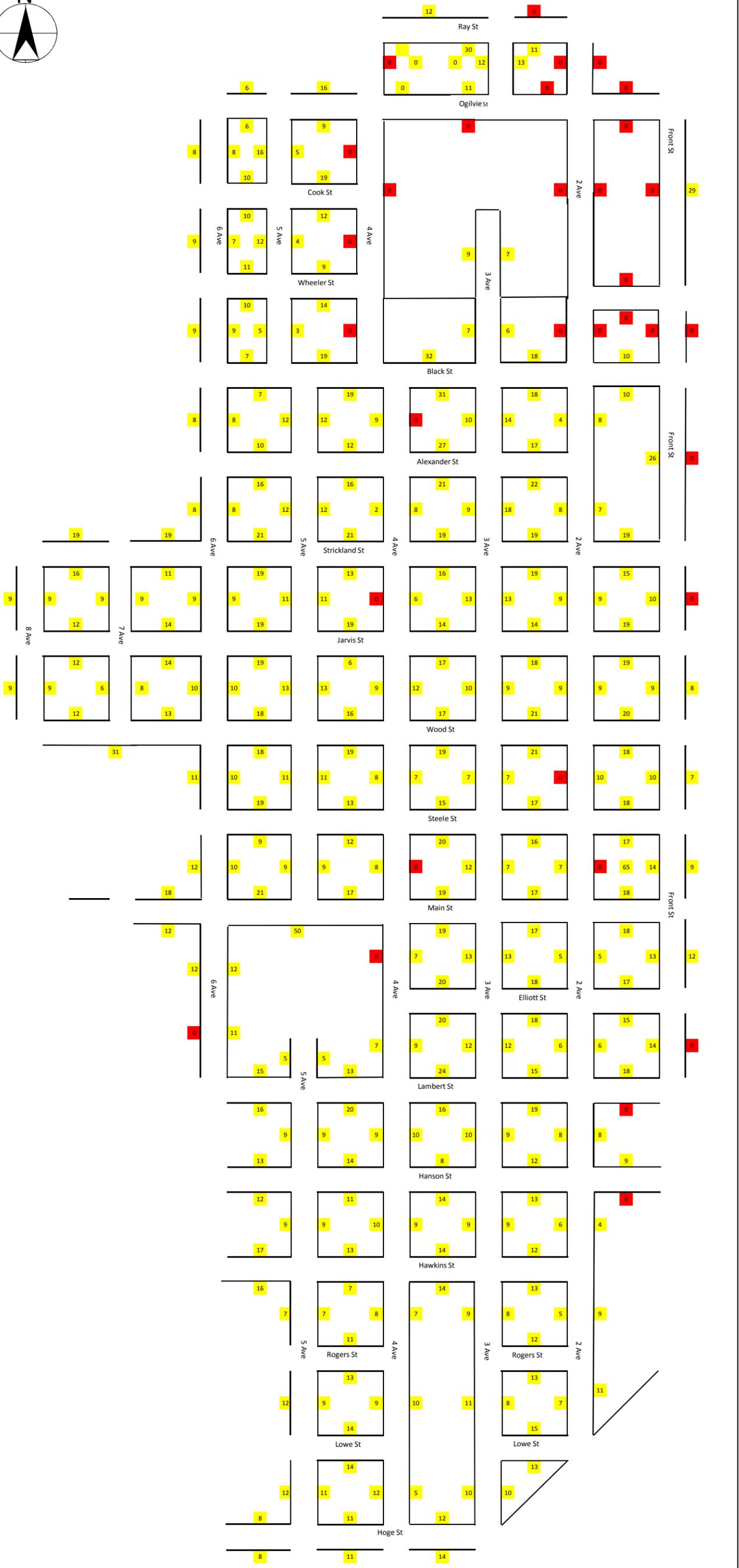
## **8. Parking enforcement works**

There was overall support that the enforcement works and that there is sufficient turn-over for shoppers in the core area. There was the desire to see the parking money reinvested into parking in the downtown including bike parking infrastructure. It was also noted that employees plugging meters during the day is unproductive. Do not issue tickets when there is no problem with turnover - (e.g. first thing Saturday morning)

# CITY OF WHITEHORSE 2019 DOWNTOWN PARKING MANAGEMENT PLAN

Appendix B: Parking Data  
July 2, 2019

## APPENDIX B: PARKING DATA



Stantec  
200 - 325 25 ST SE  
Calgary, AB

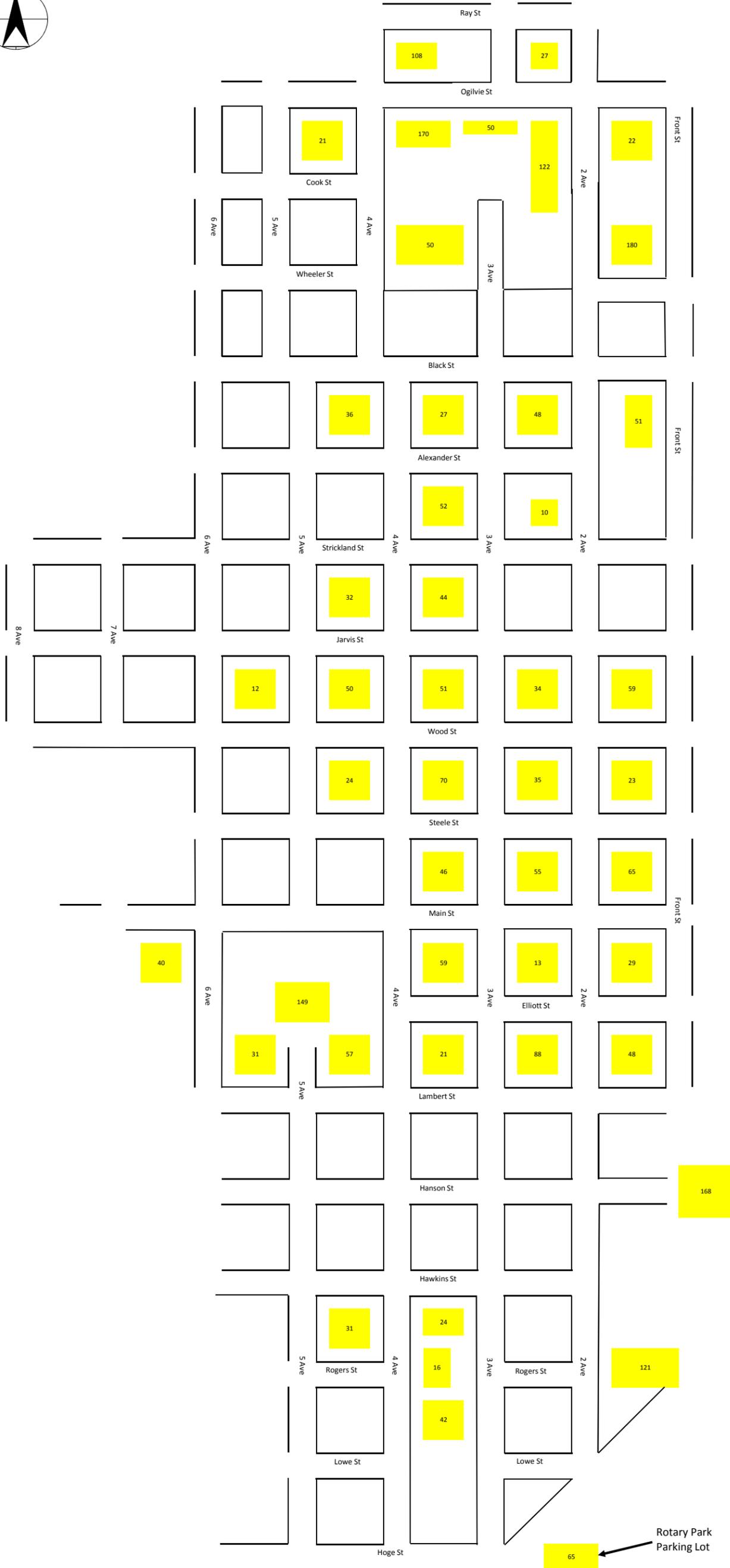
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow square	AREAS WHERE PARKING IS PERMITTED
Red square	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

Parking Inventory (On-Street)



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

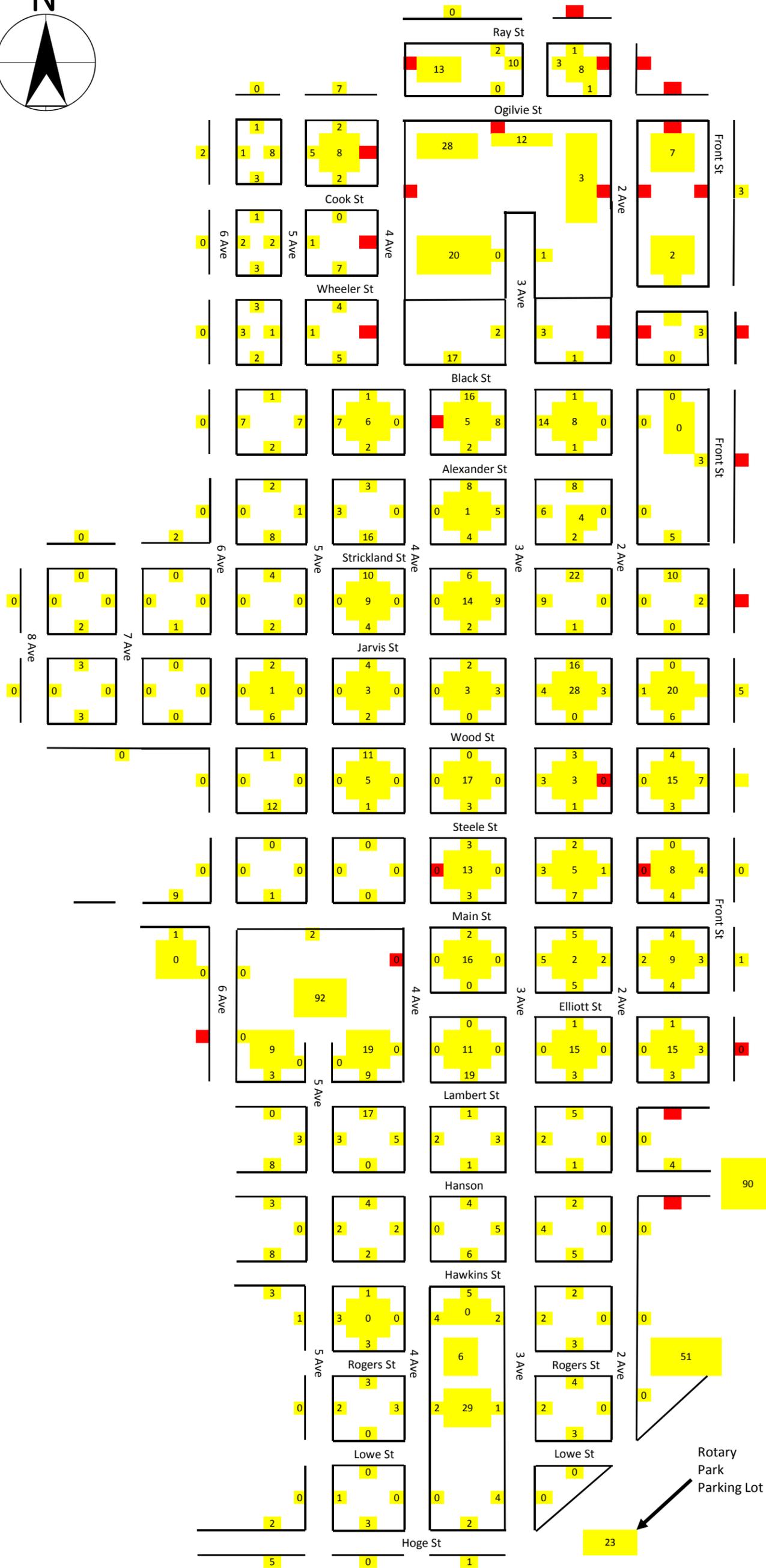
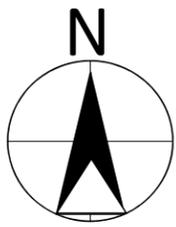
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow square	AREAS WHERE PARKING IS PERMITTED
Red square	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

Parking Inventory (Off-Street)



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

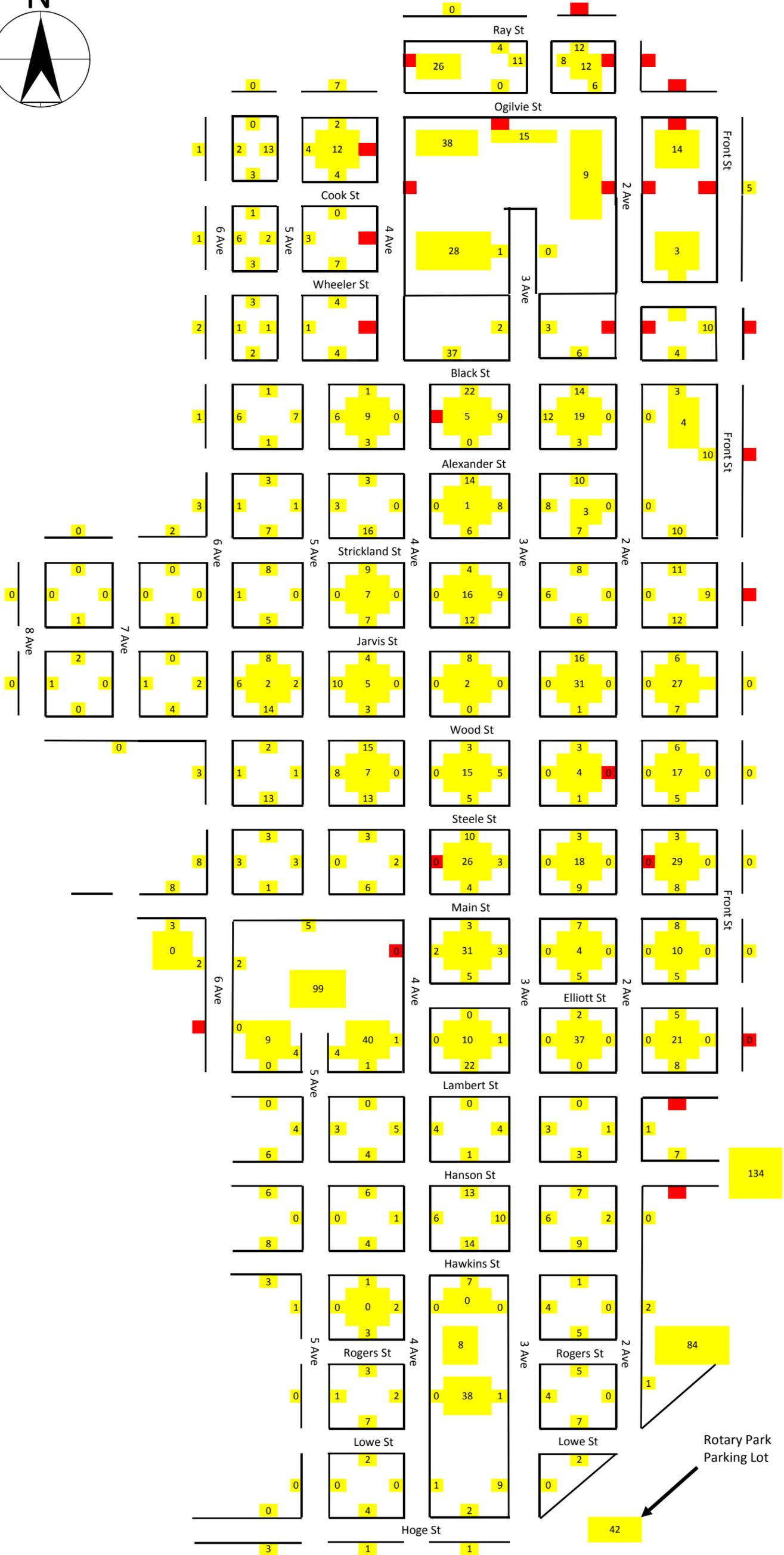
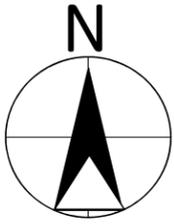
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow	AREAS WHERE PARKING IS PERMITTED
Red	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

8am Parked Vehicles



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

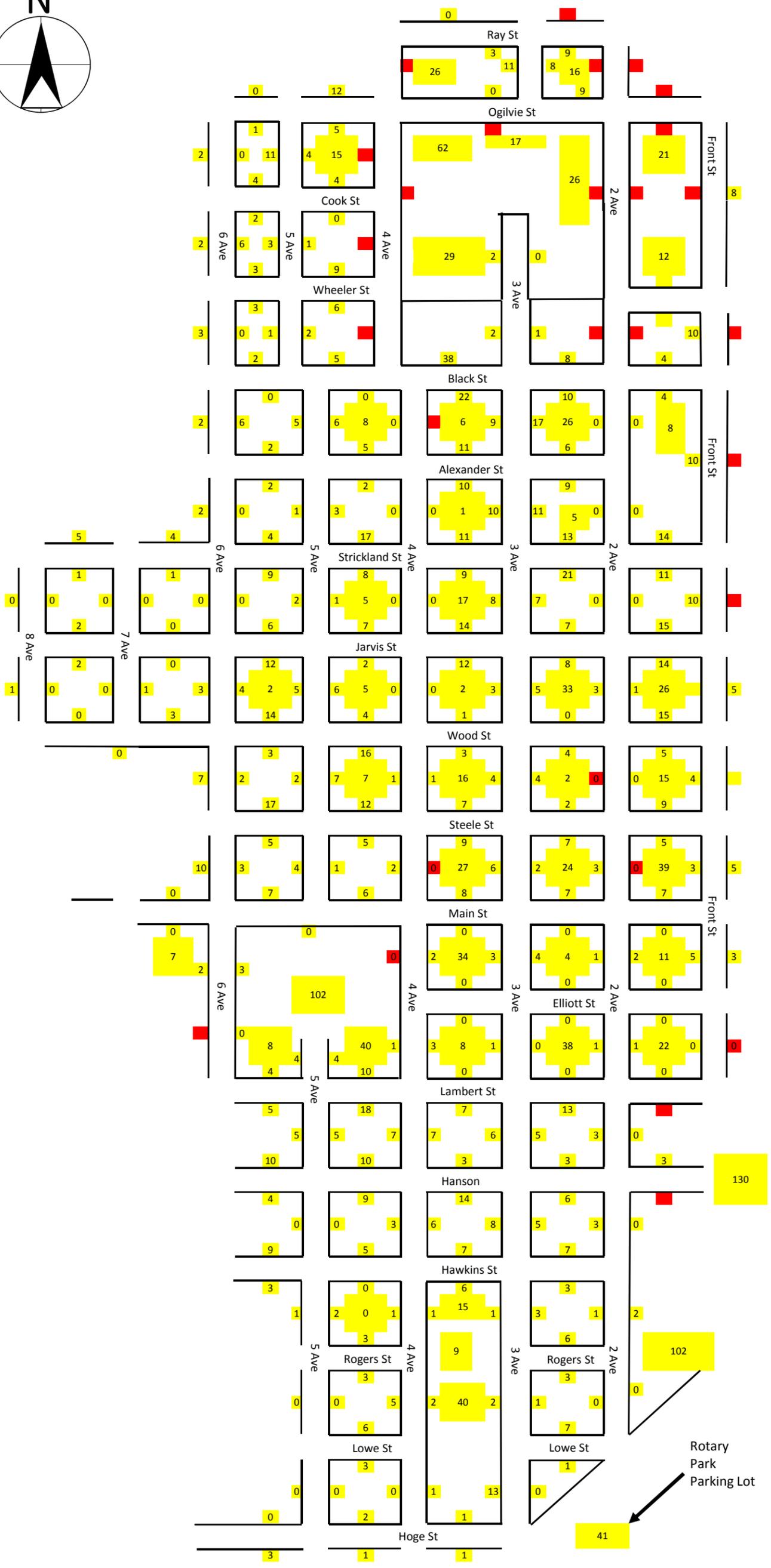
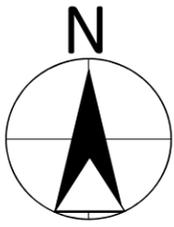
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow box	AREAS WHERE PARKING IS PERMITTED
Red box	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

9am Parked Vehicles



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

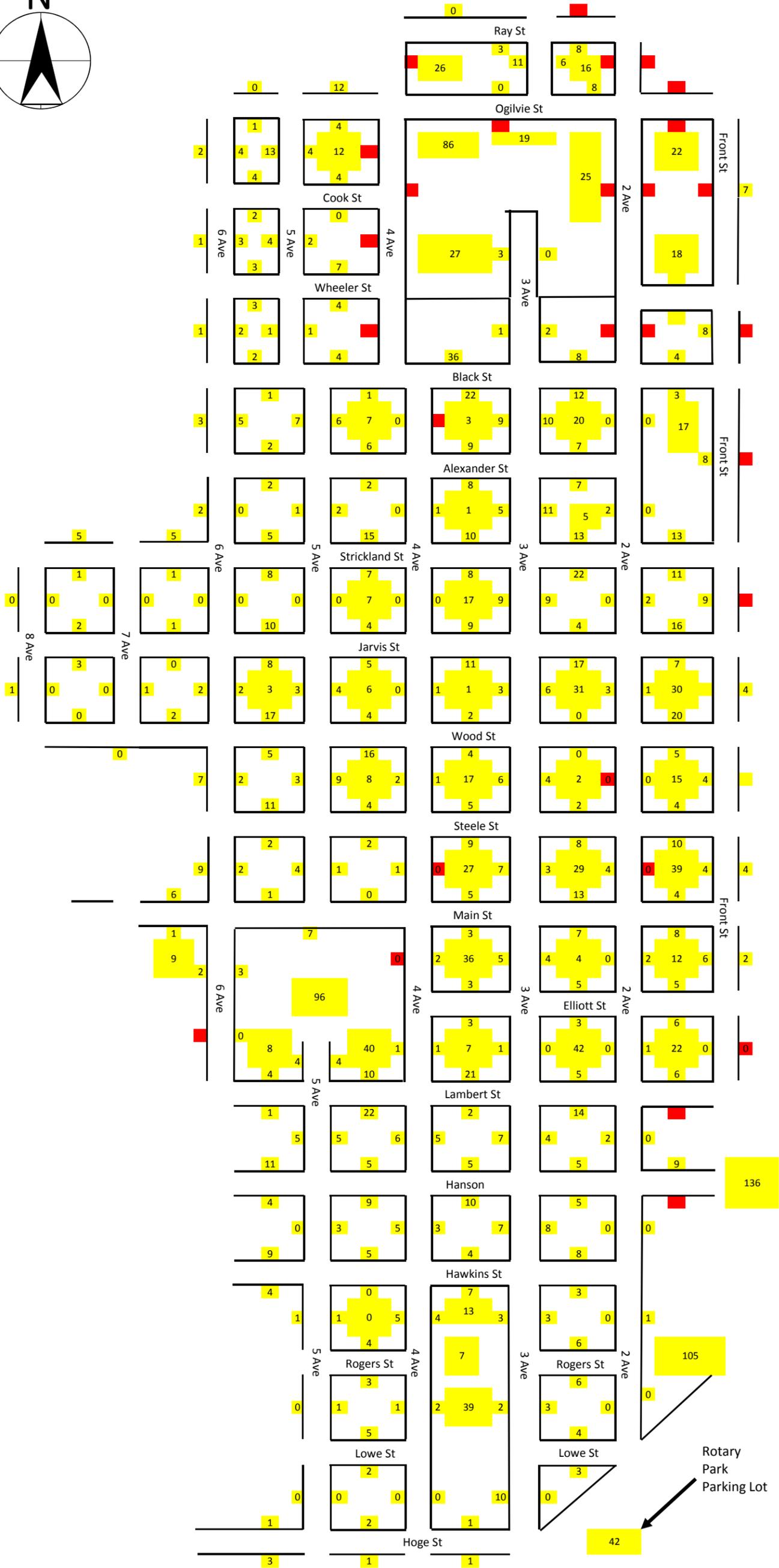
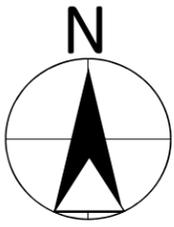
**LEGEND**

- ### NUMBER OF AVAILABLE PARKING SPACES
- AREAS WHERE PARKING IS PERMITTED
- NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

10am Parked Vehicles



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

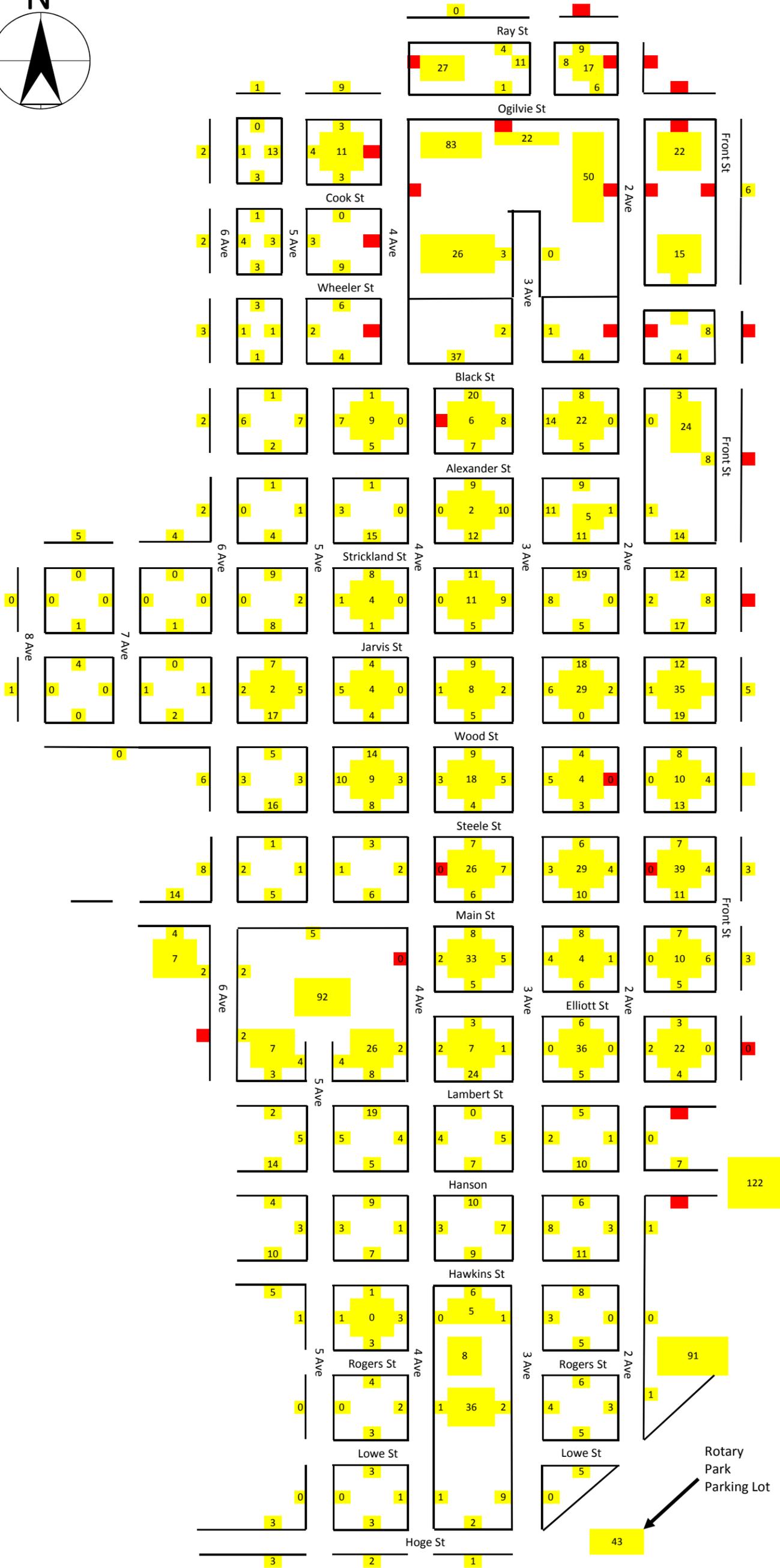
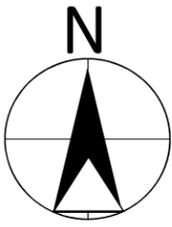
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow	AREAS WHERE PARKING IS PERMITTED
Red	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

11am Parked Vehicles



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

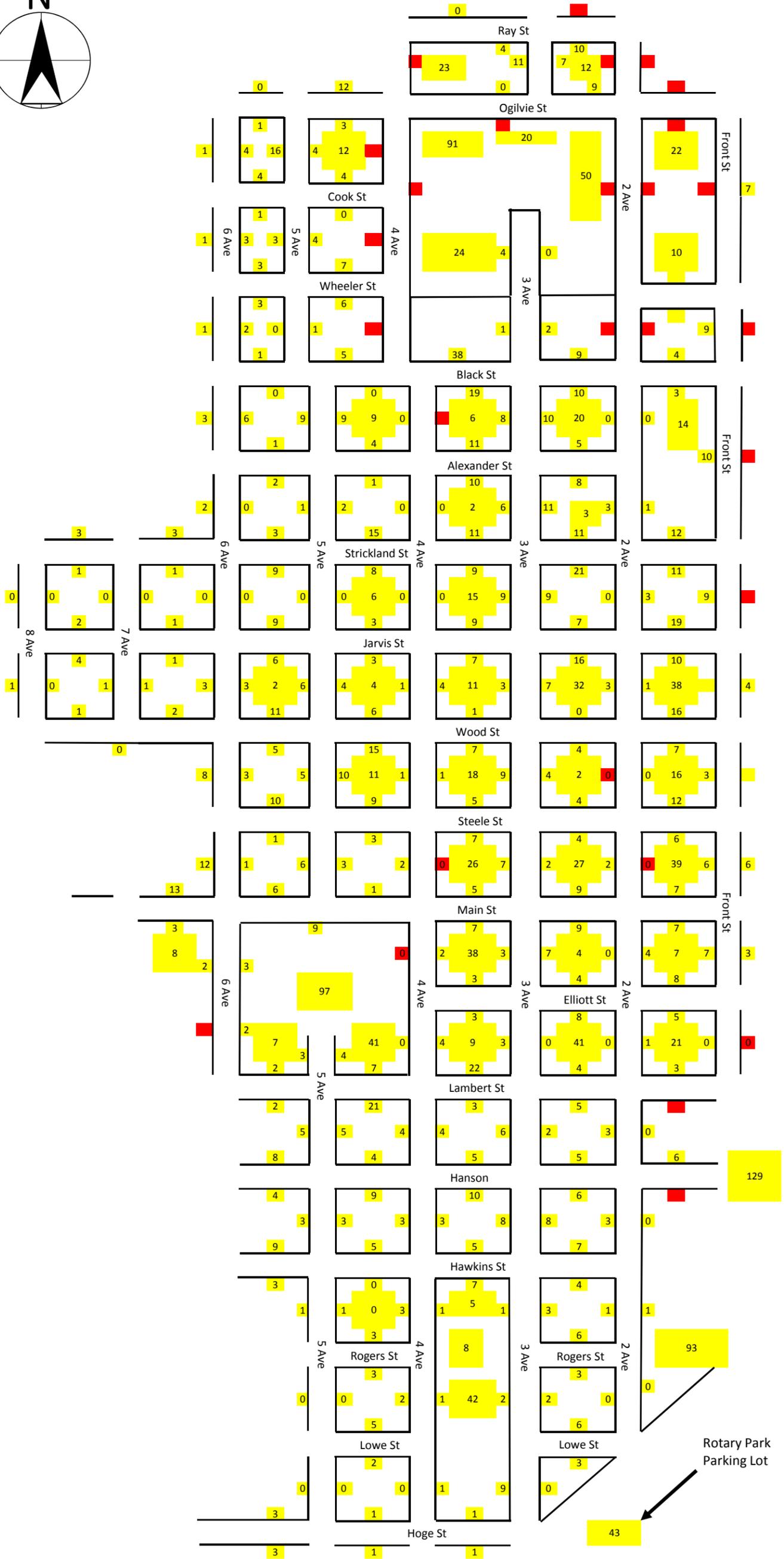
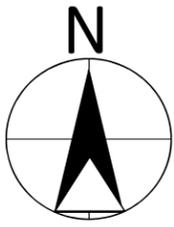
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	AREAS WHERE PARKING IS PERMITTED
<span style="background-color: red; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

Noon Parked Vehicles



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

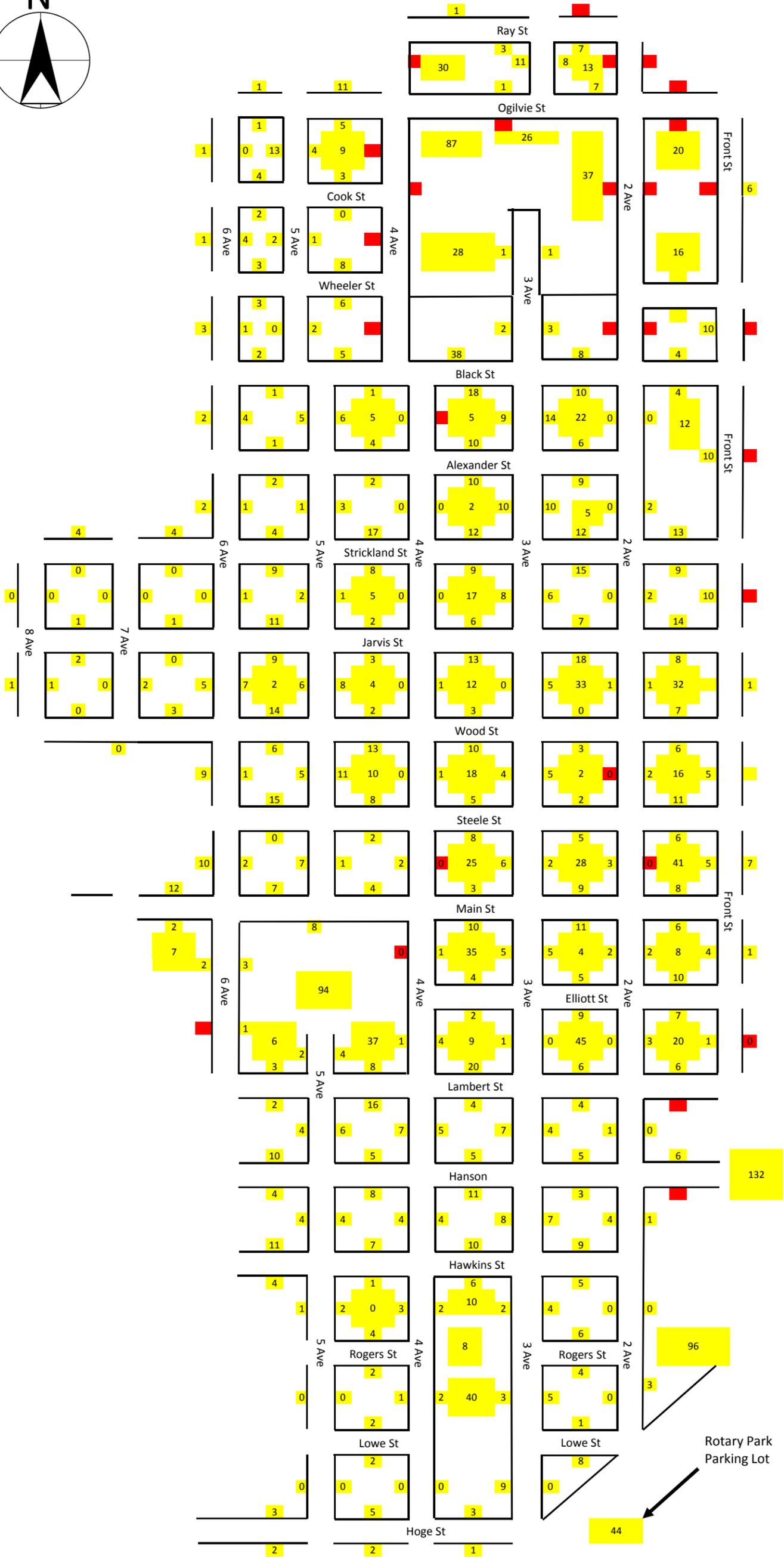
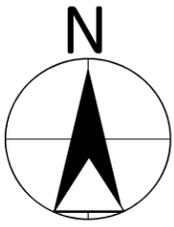
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	AREAS WHERE PARKING IS PERMITTED
<span style="background-color: red; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

1pm Parked Vehicles



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

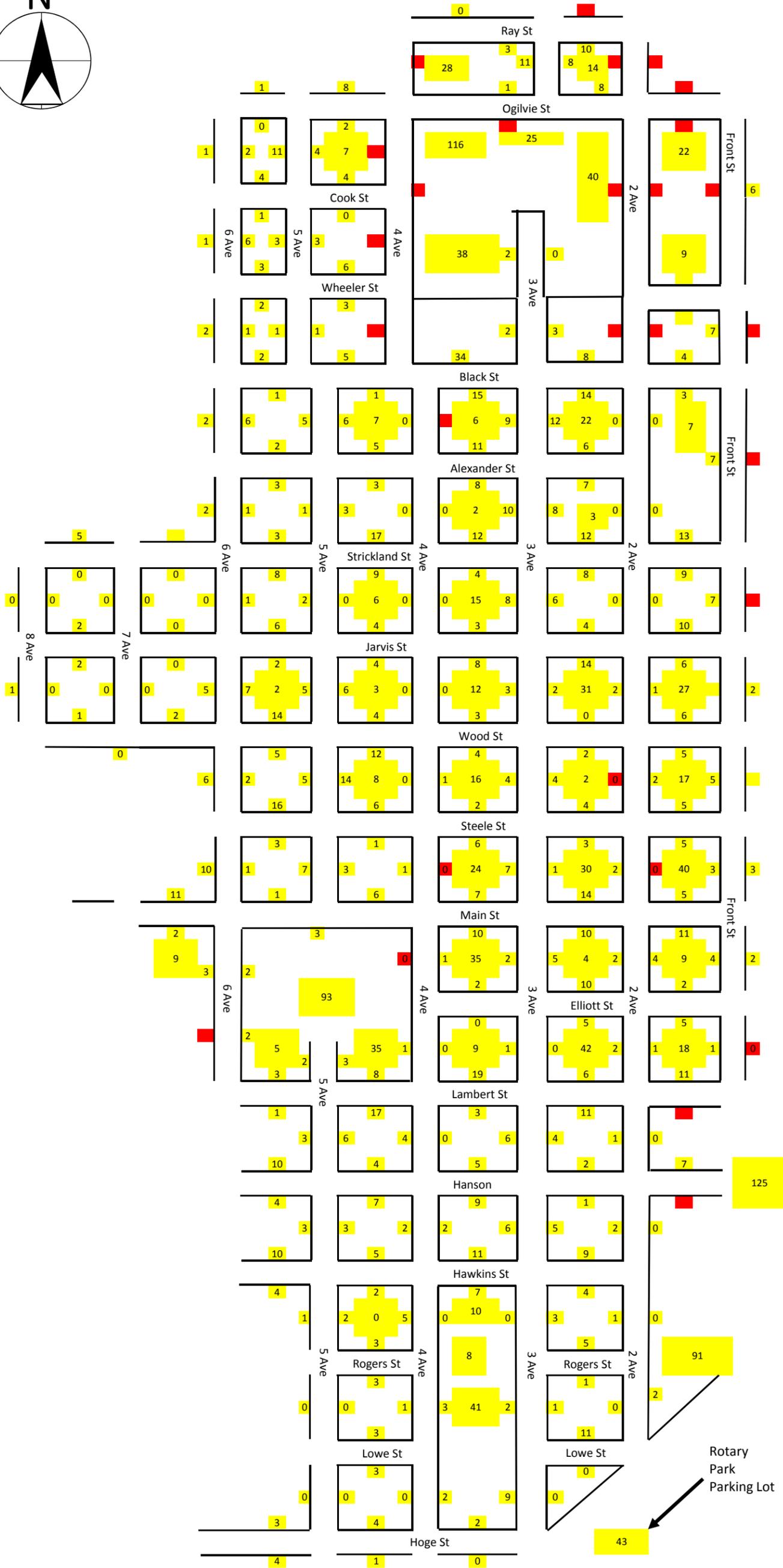
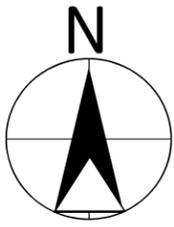
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
[Yellow Box]	AREAS WHERE PARKING IS PERMITTED
[Red Box]	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

2pm Parked Vehicles



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

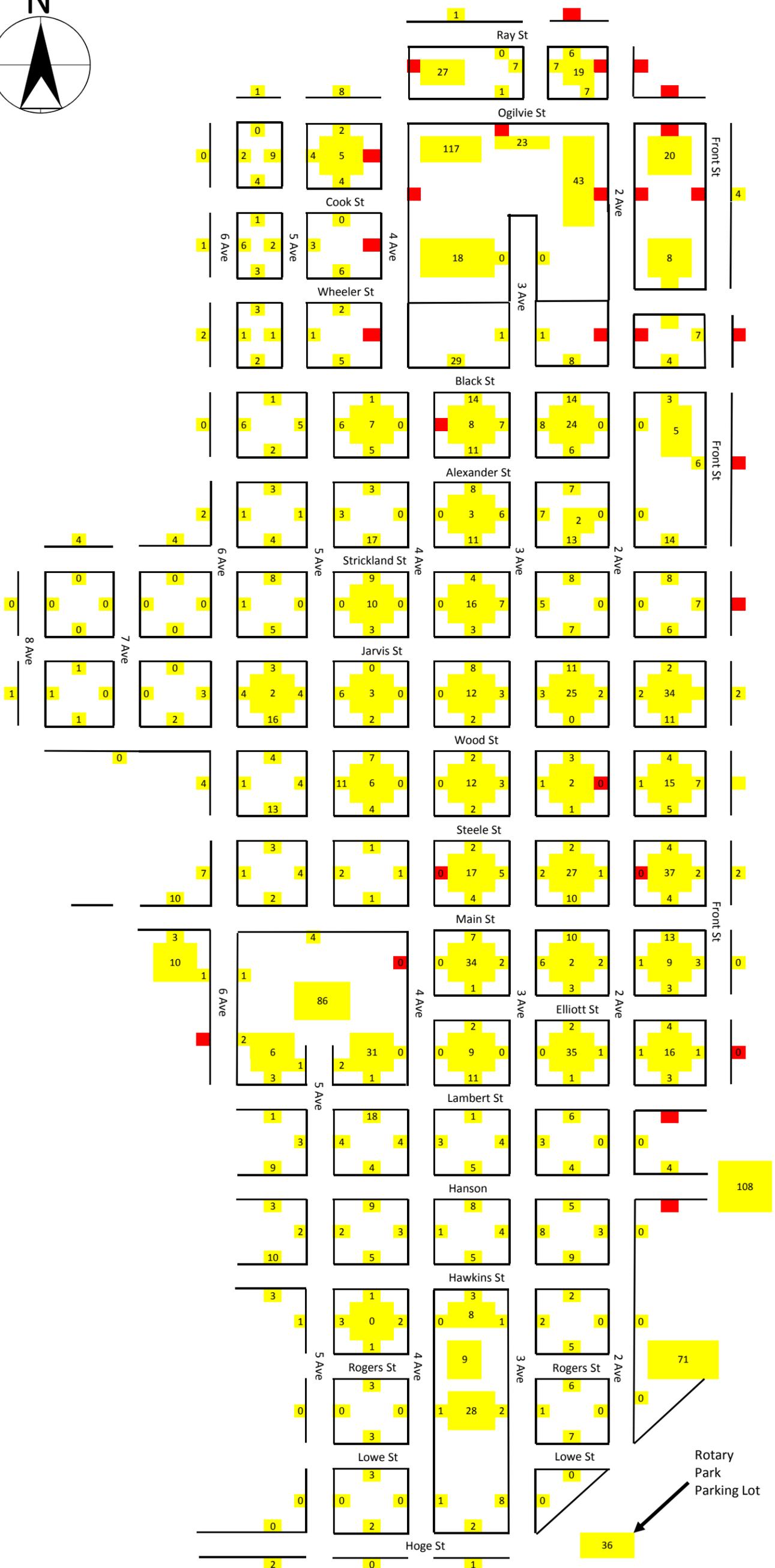
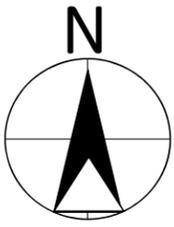
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow shading	AREAS WHERE PARKING IS PERMITTED
Red shading	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

3pm Parked Vehicles



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

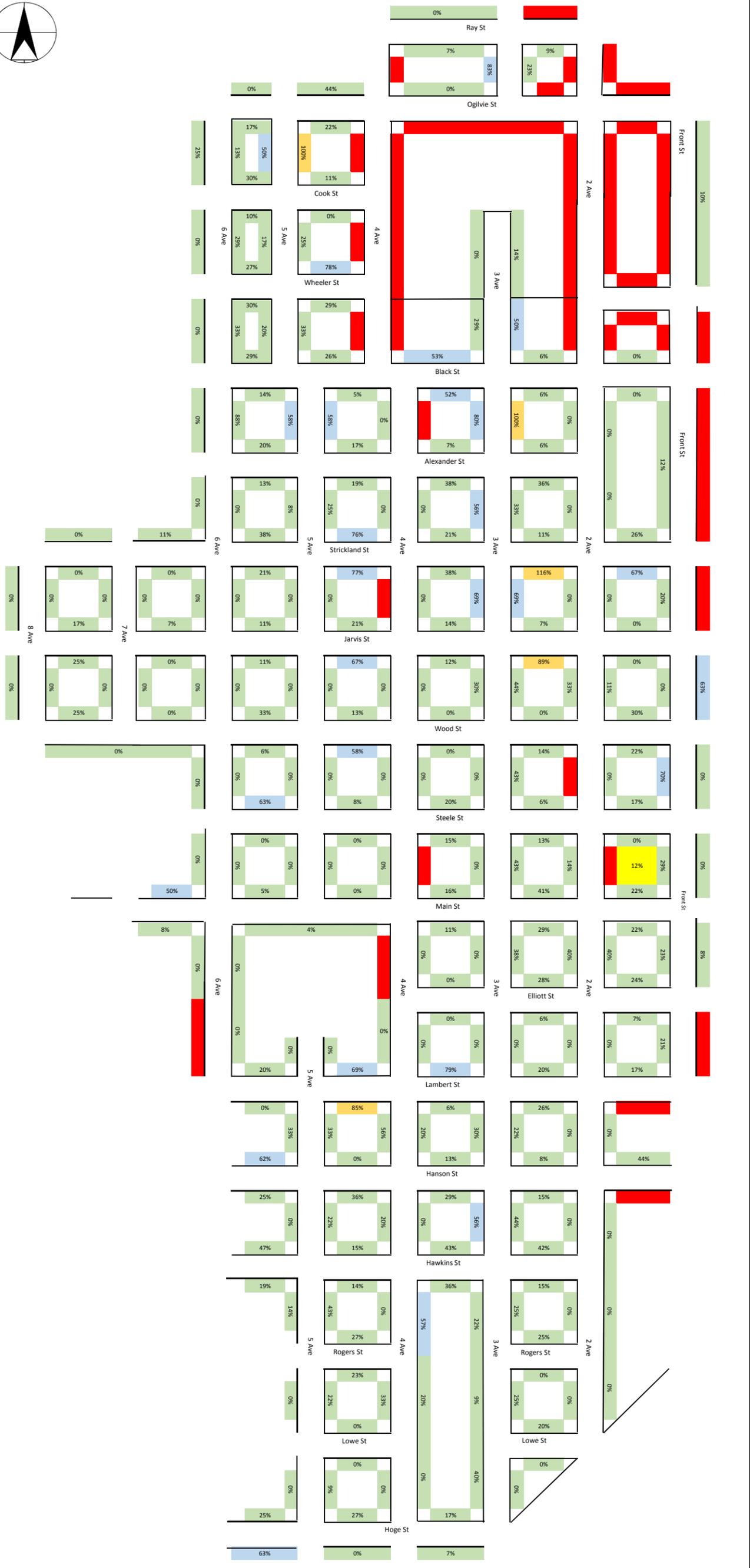
**LEGEND**

###	NUMBER OF AVAILABLE PARKING SPACES
Yellow box	AREAS WHERE PARKING IS PERMITTED
Red box	NO PARKING AREAS

City of Whitehorse

Downtown Parking Management Plan Update

4pm Parked Vehicles



Stantec  
200 - 325 25 ST SE  
Calgary, AB

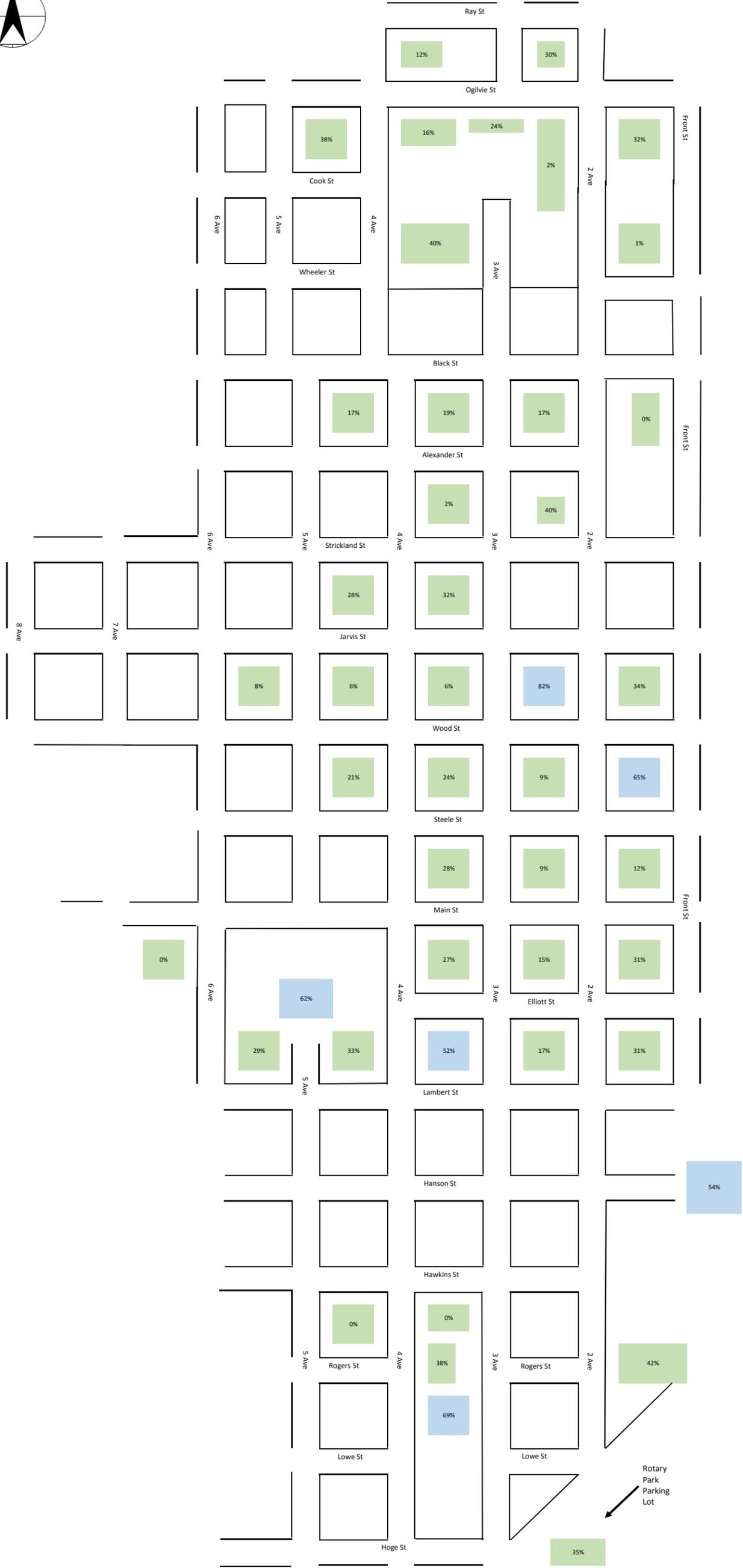
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

8 - 9am On-Street Parking Occupancy



Stantec  
200 - 325 25 ST SE  
Calgary, AB

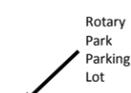
**LEGEND**

- # % Parking Occupancy
- Low Occupancy ( 0 - 49.9%)
- Moderate Occupancy ( 50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

8 - 9am Off-Street Parking Occupancy





**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

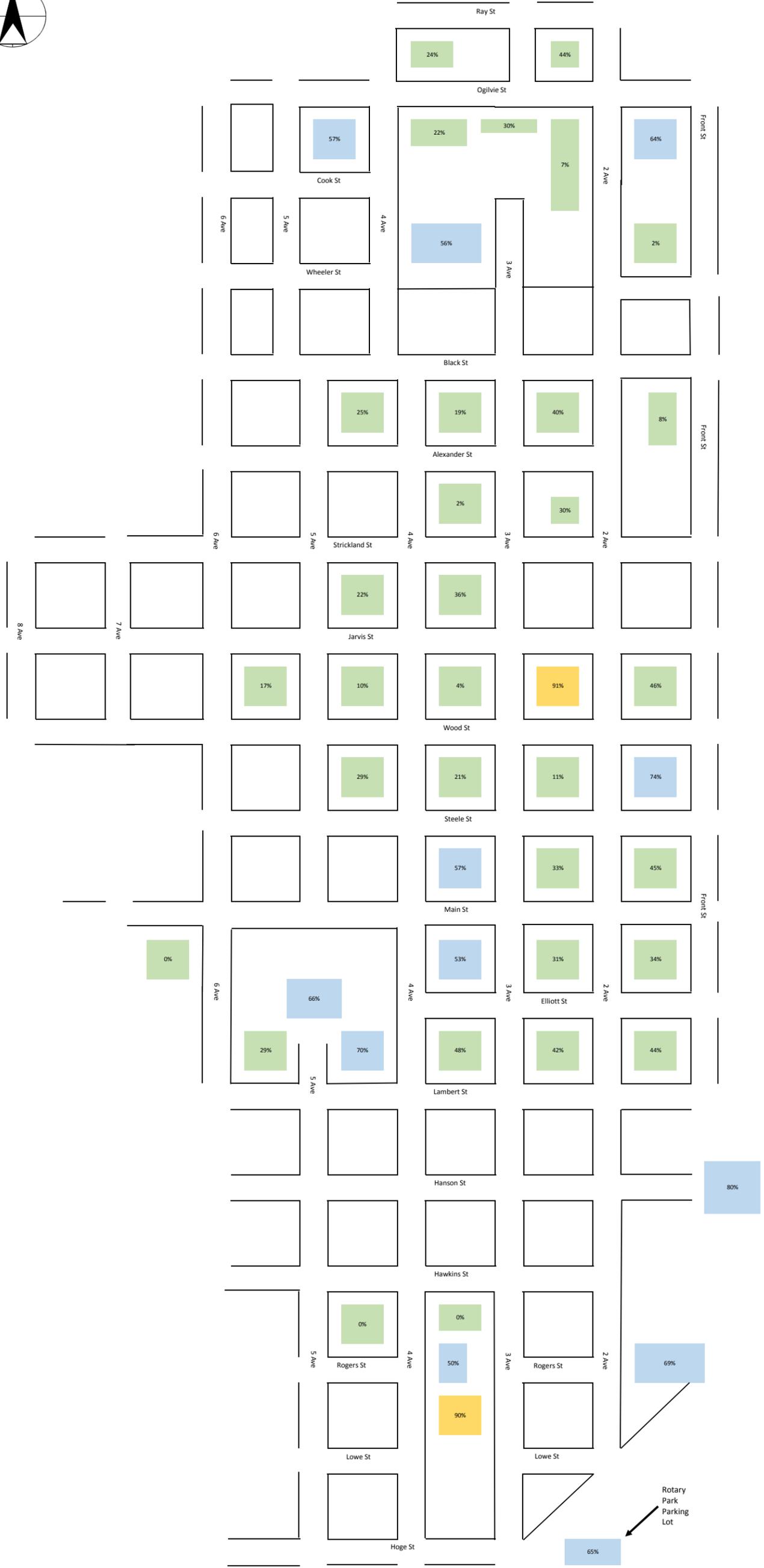
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

9 - 10am On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

9 - 10am Off-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

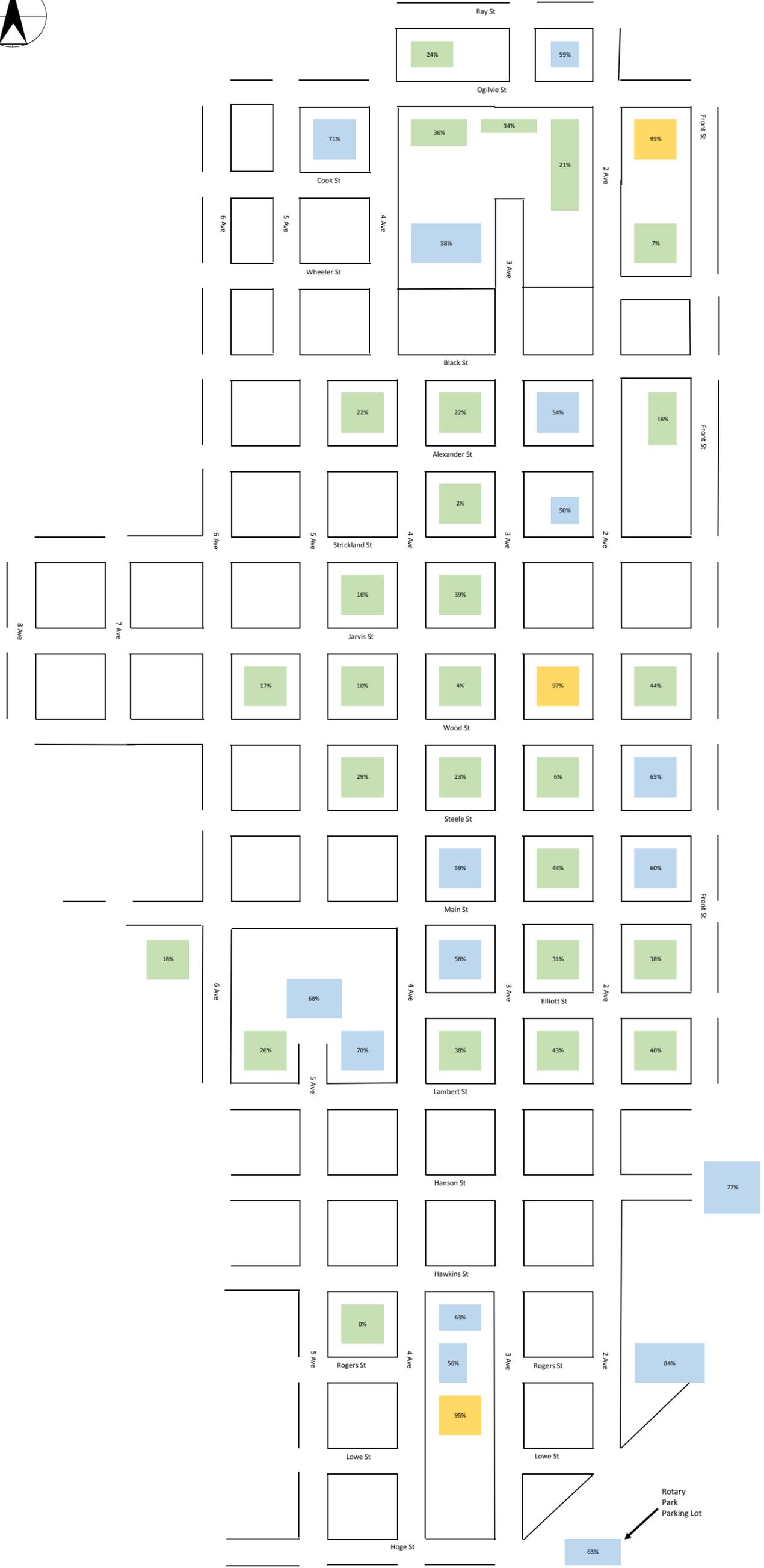
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

10 - 11am On-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

10 - 11am Off-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

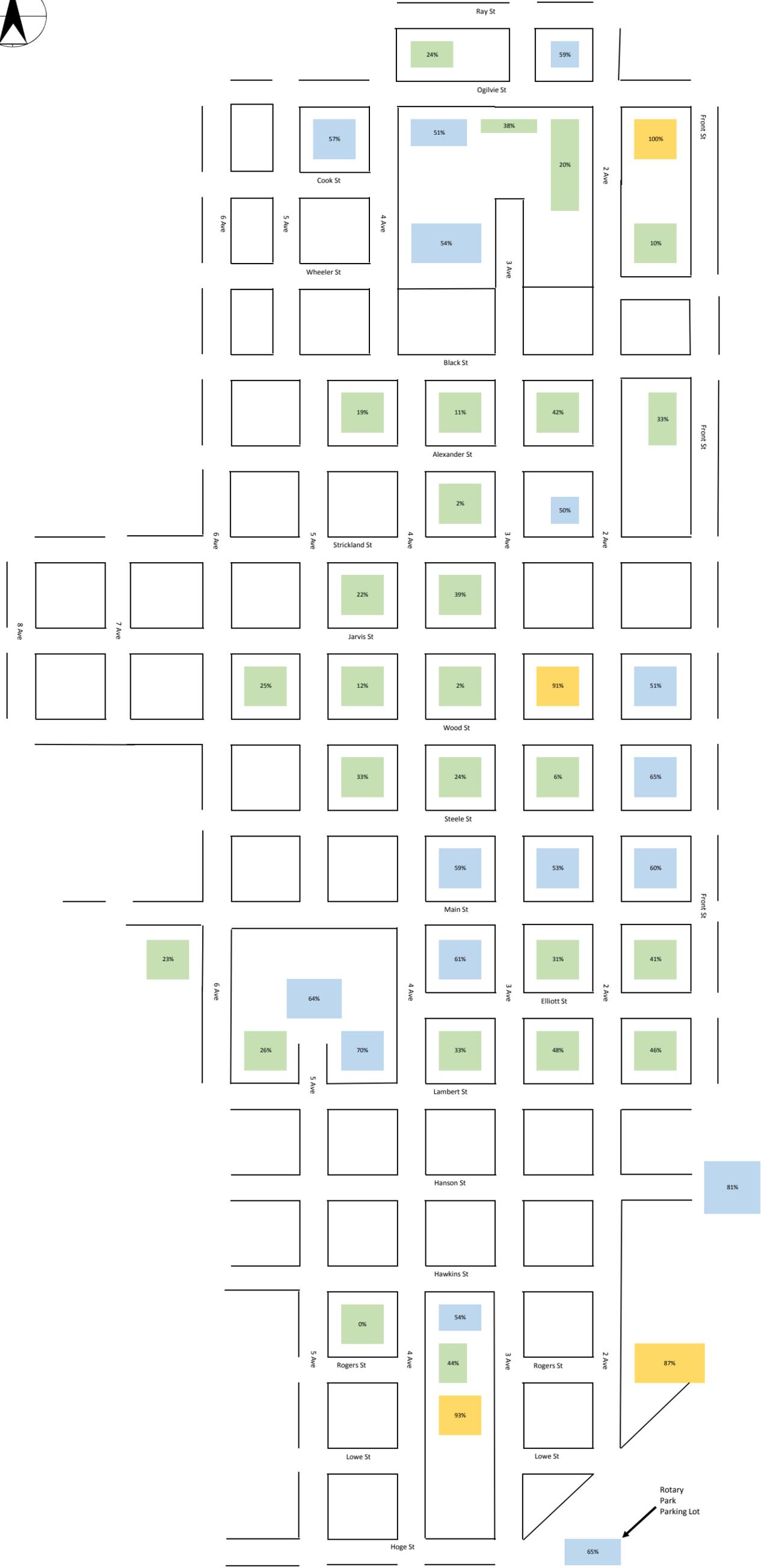
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

11am - Noon On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

11am - Noon Off-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

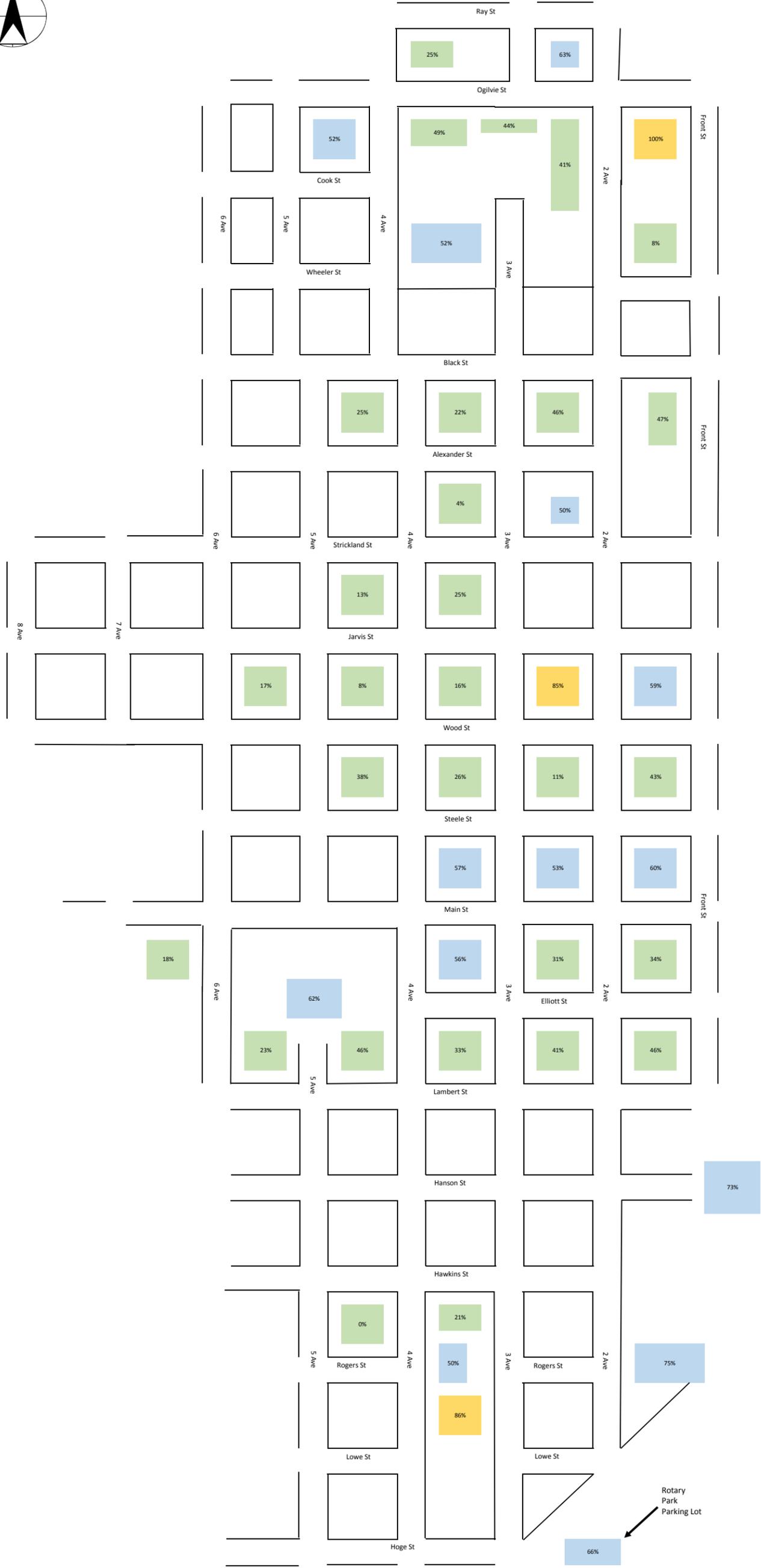
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy (85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

Noon - 1pm On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

Noon - 1pm Off-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

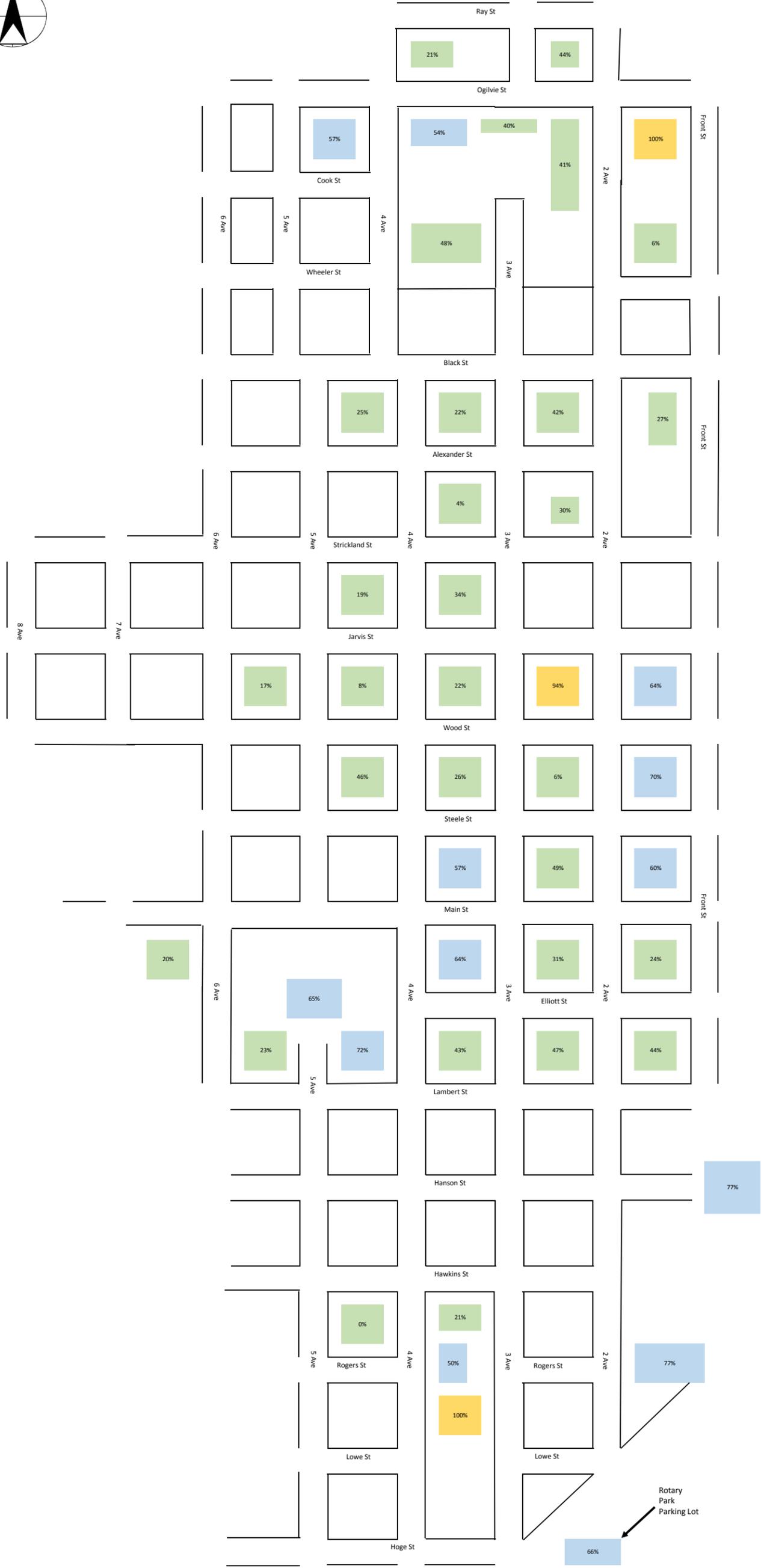
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy (85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

1 - 2pm On-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy (85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

1 - 2pm Off-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

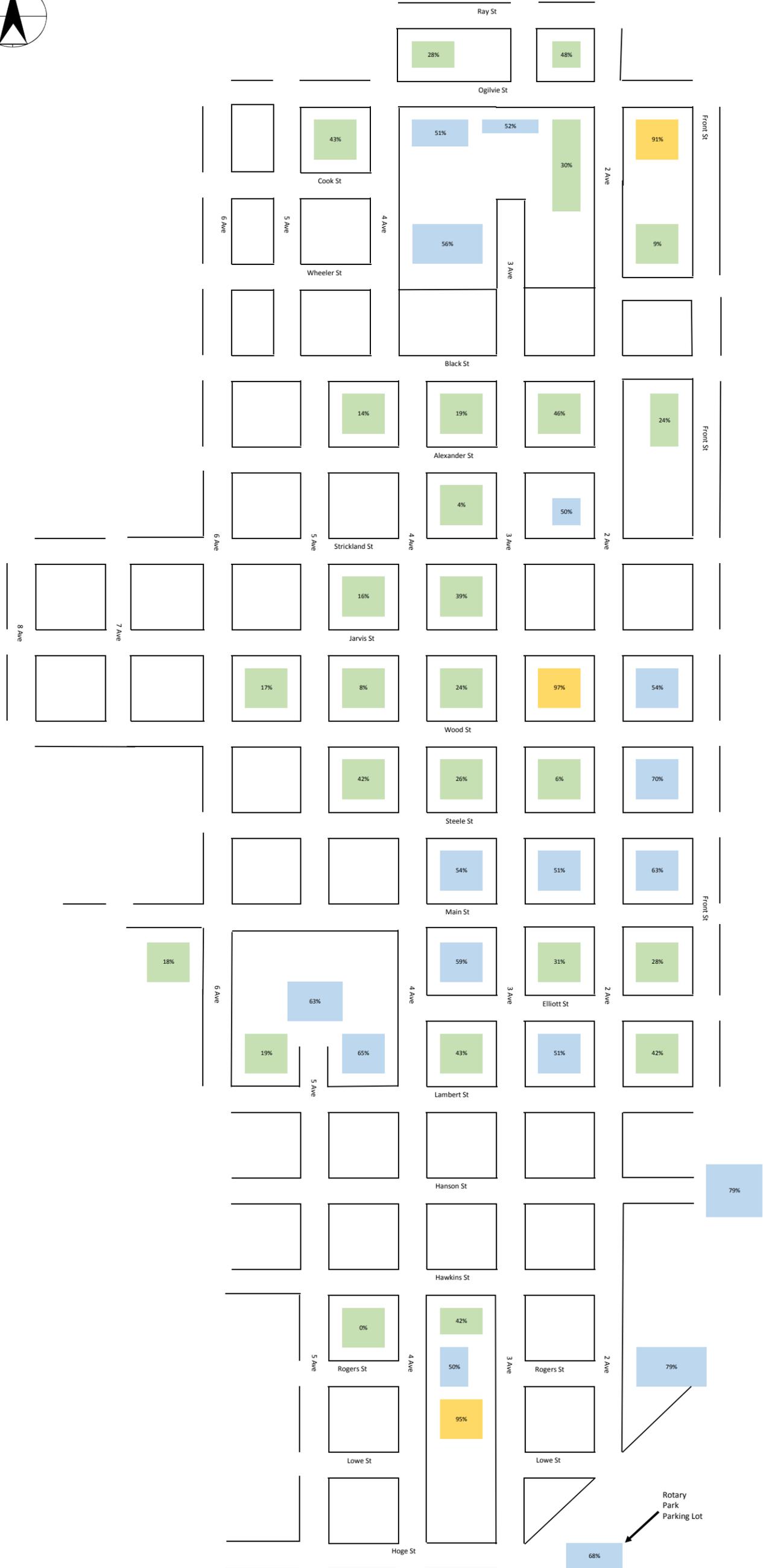
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

2 - 3pm On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

2 - 3pm Off-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

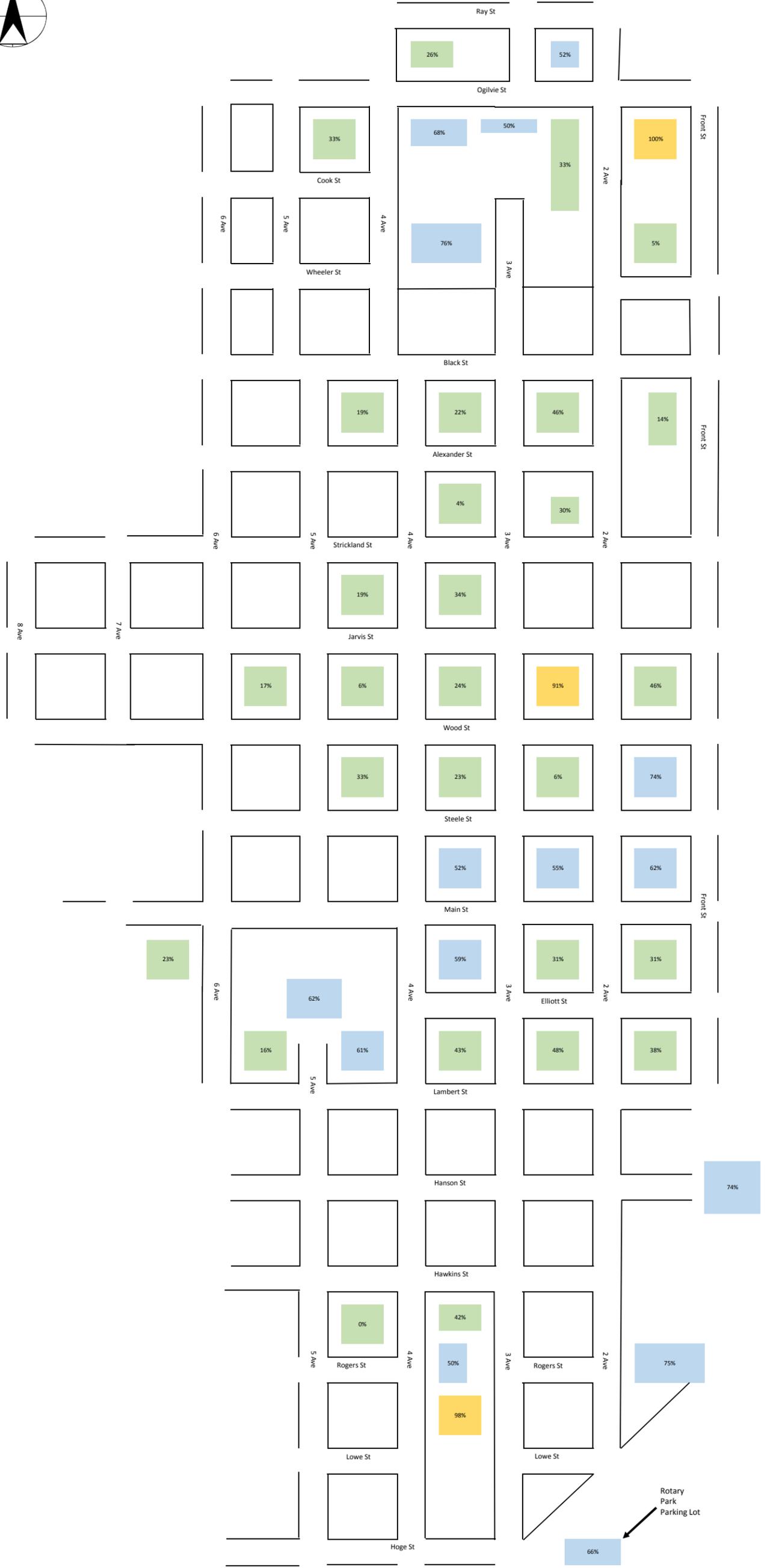
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy (85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

3 - 4pm On-Street Parking Occupancy



**Stantec**  
 200 - 325 25 ST SE  
 Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

3 - 4pm Off-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

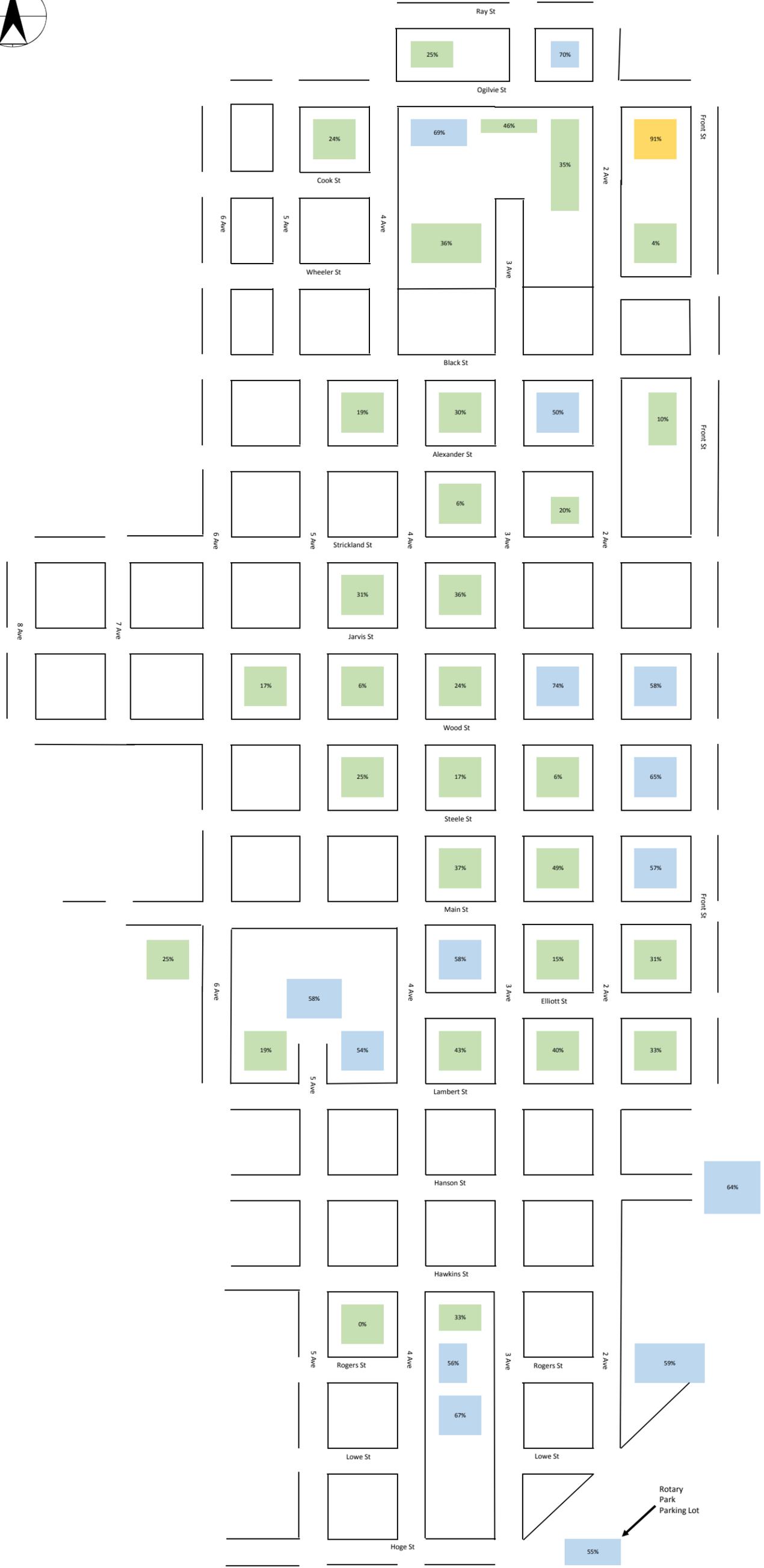
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy (85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

4 - 5pm On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

4 - 5pm Off-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

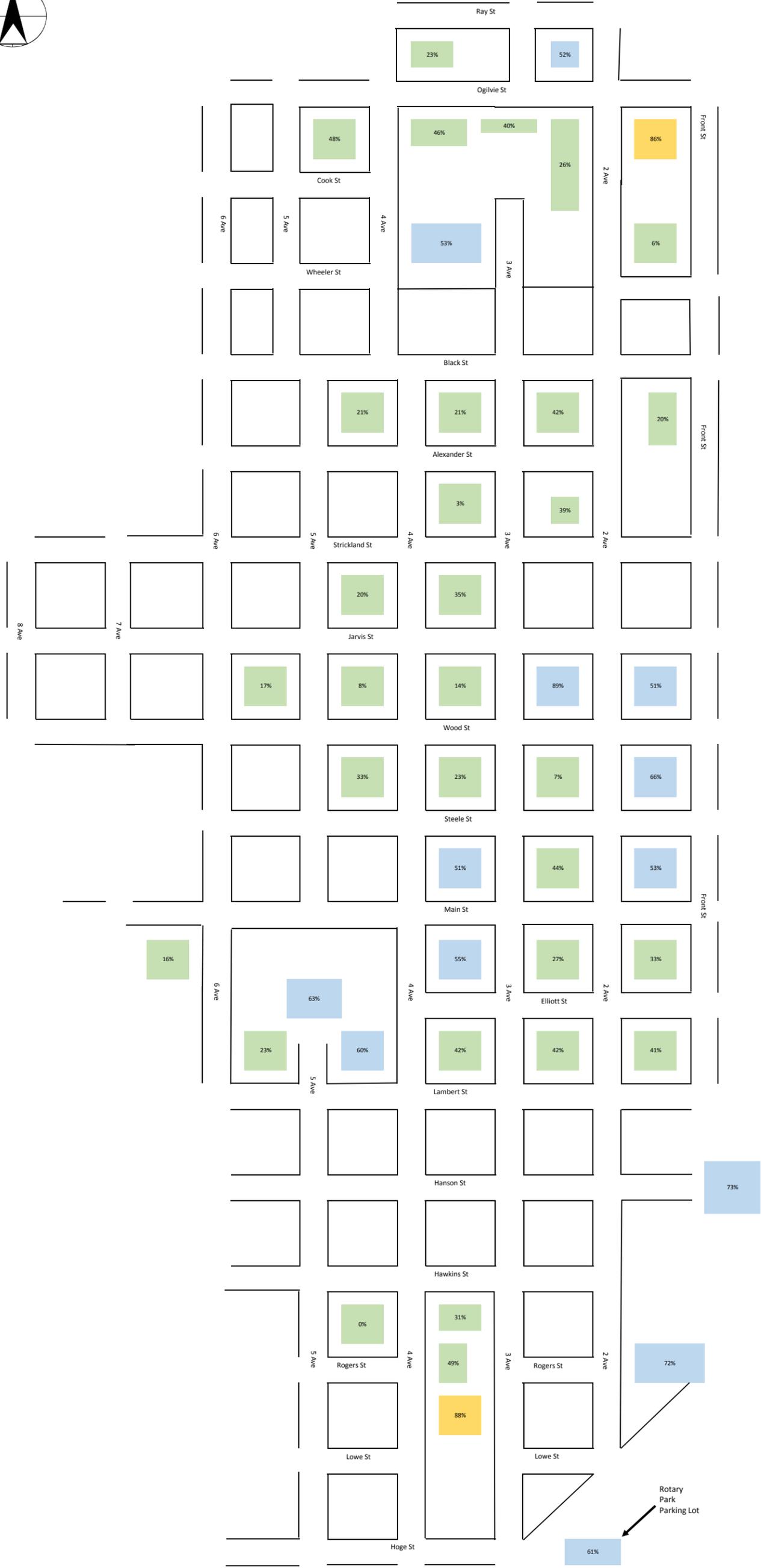
**LEGEND**

- # % Parking Occupancy
- No Parking
- Low Occupancy (0 - 49.9%)
- Moderate Occupancy (50% - 84.9%)
- High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

Average On-Street Parking Occupancy



**Stantec**  
200 - 325 25 ST SE  
Calgary, AB

**LEGEND**

- # % Parking Occupancy
- No Parking
  - Low Occupancy (0 - 49.9%)
  - Moderate Occupancy (50% - 84.9%)
  - High Occupancy ( 85% - 100%)

City of Whitehorse

Downtown Parking Management Plan Update

Average Off-Street Parking Occupancy