



DOWNTOWN PARKING STRATEGY CITY OF SASKATOON

Prepared For: City of Saskatoon

April 19, 2016



© BA Consulting Group Ltd.
45 St. Clair Avenue West, Suite 300
Toronto, ON M4V 1K9
www.bagroup.com

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
1.1	Study Purpose	1
1.2	Stakeholder Consultation	1
1.3	Existing Parking Conditions	2
1.4	Future Development Considerations	4
1.5	Key Conclusions & recommendations	6
2.0	INTRODUCTION	9
2.1	Study Purpose	9
2.2	Background	9
2.3	Study Scope	10
3.0	STAKEHOLDER & PUBLIC CONSULTATION PROCESS	12
4.0	EXISTING PARKING CONDITIONS	14
4.1	Study Area Overview	14
4.1.1	Study Area Boundaries	14
4.1.2	Parking Inventory	14
4.2	Existing Parking Supply	19
4.3	Existing Parking Demand Summary & Key Findings	20
4.3.1	Downtown	20
4.3.2	Kinsmen, Riversdale & Broadway.....	21
4.4	Downtown Office Vacancy Considerations	23
5.0	FUTURE DEVELOPMENT CONSIDERATIONS	24
5.1	Downtown.....	27
5.1.1	Future Development Considerations	27
5.2	Kinsmen	35
5.2.1	Existing Parking Vacancies.....	35
5.2.2	Future Development Sites	35
5.3	Riversdale	37
5.3.1	Existing Parking Demands.....	37
5.3.2	Future Development Sites	37
5.4	Broadway	39
5.4.1	Existing Parking Demands.....	39
5.4.2	Future Development Sites	39
5.5	Potential Future Parking Supply deficit Summary	41



5.5.1	With Existing Travel Characteristics	41
5.5.2	Downtown	41
5.5.3	Kinsmen, Riversdale and Broadway	43
5.5.4	Impacts of Increased Transit Mode Share on Future Parking Supply Deficits	43
5.5.5	Potential Long Range Parking Supply Deficits	45
5.5.6	Short Term Parking Supply Implications.....	46
6.0	PARKING MANAGEMENT STRATEGY	47
6.1	Rationale for Public Sector Parking Supply Involvement.....	48
6.2	Transportation Plan Considerations	50
6.3	Future Parking Garage Considerations	52
6.3.1	Recommended Municipal Approach.....	52
6.3.2	Recommended Downtown Parking Garage Locations.....	55
6.4	Zoning Bylaw Requirements	59
6.4.1	Minimum Vehicular Parking Supply Requirements.....	59
6.4.2	Bicycle Parking Requirements.....	60
6.5	Financial Considerations.....	62
6.5.1	User Fees.....	62
6.5.2	Payment in Lieu of Parking.....	63
6.5.3	Public Private Partnerships.....	65
6.5.4	Tax Increment Financing	65
6.5.5	Development Charges	66
6.5.6	Public Parking Garage Financing Example	66
6.6	Management considerations	70
7.0	OPERATIONAL CONSIDERATIONS	71
7.1	On-street Parking Time Limits.....	71
7.2	On-street supply	72
8.0	CONCLUSIONS AND RECOMMENDATIONS	73
8.1	Short Term Recommendations (2 Years or less)	73
8.2	Medium to Long Term Recommendations (2 to 10 Year Time Frame).....	74



LIST OF TABLES

Table 1	Study Area Existing Parking Supply	2
Table 2	Study Area Peak Parking Demand Summary.....	3
Table 3	Future Long Term Parking Supply Deficits Summary.....	5
Table 4	Study Area Parking Supply	19
Table 5	Downtown Parking Supply – By Area	20
Table 6	Downtown Peak Publicly Available Parking Demand	21
Table 7	Peak Publicly Available Parking Demand.....	21
Table 8	Downtown Study Area Office Vacancy Rates.....	23
Table 9	South Core (Downtown) – Potential Long-Term Future Developments	29
Table 10	Core (Downtown) – Potential Long-Term Future Developments.....	31
Table 11	North Core (Downtown) – Potential Long-Term Future Developments.....	32
Table 12	Warehouse (Downtown) – Potential Long-Term Future Developments	33
Table 13	Downtown – Potential Long-Term Future Developments (2.9 M ft ² Office).....	34
Table 14	Downtown – Potential Long-Term Future Developments (1.8 M ft ² Office).....	34
Table 15	Kinsmen Parking Vacancies	35
Table 16	Kinsmen – Potential Long-Term Future Developments.....	36
Table 17	Riversdale Parking Vacancies	37
Table 18	Riversdale – Potential Long-Term Future Developments.....	38
Table 19	Broadway Parking Vacancies	39
Table 20	Broadway – Potential Long-Term Future Developments.....	40
Table 21	Long Range Potential Parking Supply deficits.....	41
Table 22	Future Long Term Parking Supply Deficit Summary	45
Table 23	Bicycle Parking Supply Requirements.....	60
Table 24	Shower/Change Facility Requirements.....	61
Table 25	Typical Municipal Parking Garage Financial Outlook	68
Table 26	Typical Municipal Parking Garage Financial Outlook (with Upfront investment).....	69

LIST OF FIGURES



Figure 1 — Study Boundary.....	11
Figure 2 — Study Areas.....	16
Figure 3 — Downtown – Study Area Boundaries	17
Figure 4 — On-Street Parking Time Restrictions.....	18
Figure 5 — Potential Future Development Locations	26
Figure 6 — City of Saskatoon Future Conceptual Transit Network.....	44
Figure 7 — Potential Future Parking Structure Locations	57
Figure 8 — Downtown Transportation Network & Potential garage Sites	58

TABLE OF APPENDICES

APPENDIX A: Parking Study Open House Presentation Boards (Public Feedback Summary)
APPENDIX B: Parking Supply and Demand Survey Results (On- and Off-Street)
APPENDIX C: Restricted Access to Private Parking Lots
APPENDIX D: Detailed Parking Demand Analysis



1.0 EXECUTIVE SUMMARY

1.1 STUDY PURPOSE

In 2013, the City of Saskatoon completed a City Centre Plan (CCP) in order to provide a comprehensive planning framework for the Downtown and vicinity. This plan sets the groundwork for policy and development decisions that will guide and direct future growth throughout five key areas in the Downtown. The provision of parking to support and facilitate new development has been identified as a critical element of the plan.

Existing surface parking lots represent future development sites, however, many of these lots provide parking for Downtown employees and visitors that would have to be replaced. The key challenge will be how best to achieve a transition to structured parking garages that will facilitate new development on existing surface lots and encourage adaptive re-use of older buildings for new mixed use development.

At the same time, the City has been working on its new “Growing Forward” growth plan that will guide and direct an increase in population from 250,000 people to 500,000 people over the next 25 to 30 years, including a commensurate growth in employment throughout the city. This plan includes an overall transportation plan for the city to accommodate the growth and increase the use of Active Transportation options such as public transit, walking and cycling. The transportation plan is intended to achieve a decrease in single occupant vehicle travel into the downtown that will in turn reduce the long term need for parking, particularly employee or commuter related.

Although the major focus of this study is on the downtown, we have also considered the parking situation in the Riversdale and Broadway Business Improvement Districts as well.

Accordingly, we have reviewed existing parking conditions, considered future development potential including relevant aspects of the City’s Growth Plan and provided recommendations regarding:

- the City’s future role in the provision of shared public parking resources;
- the integration of Transportation Demand Management considerations into its parking strategy;
- proposed amendments to the parking supply requirements in the zoning by-law;
- the creation of a payment in lieu of parking policy;
- a funding plan;
- short term operational considerations;
- a parking system management structure.

1.2 STAKEHOLDER CONSULTATION

Valuable input has been invited and received from a wide variety of stakeholders over the course of the study including:

- the Steering Committee
- the Downtown Partnership BID, Broadway BID and Riversdale BID
- Downtown Retailers and Restaurateurs
- Large Downtown Employers
- Developers and Architects



- Private Parking Operators
- the general public

Two public open houses have been held, one on Wednesday March 25, 2015 to provide a preliminary report on existing conditions and next steps and more recently a second open house was held on Monday March 7, 2016 to provide a summary of the analysis and preliminary recommendations. Presentations were provided to various stakeholder groups during the course of the study. Public input was also invited via the Shaping Saskatoon website by submitting comments to parking.study@saskatoon.ca.

1.3 EXISTING PARKING CONDITIONS

The study area consists of four broad districts including Downtown, Kinsmen, Riversdale and Broadway (see Figure 1). The Downtown area was further divided into five sub areas (Warehouse, North Core, Core, South Core and Midtown) to provide a more localized review of supply and demand (illustrated in Figure 4).

A summary of parking supply by type and by area is provided in Table 1.

TABLE 1 STUDY AREA EXISTING PARKING SUPPLY

Parking Type	Downtown	Kinsmen	Riversdale ¹	Broadway	Total Supply	
Municipal On-Street	1,860	655	574	837	3,926	19%
Municipal Off-Street	418	346	70	-	834	4%
Commercial Off-Street	5,592	90	415	-	6,097	30%
Private Off-Street	5,399	2,594	1,239	545	9,777	47%
Total	13,269	3,685	2,298	1,382	20,634	100%

Notes:

1. Parking occupancy surveys were not conducted west of Avenue H within the Riversdale study area. This area's parking supply (688 spaces including 208 on-street and 480 off-street spaces) has been removed from the total study area supply in order to calculate parking occupancy.

There are a total of 20,634 parking spaces within the study area comprised of on-street, municipal (public) off-street (owned by the City), commercial (public) off-street (privately owned/operated) and private off-street parking (not available for public parking).

It is noteworthy that almost 50% of the total parking supply within the study area (41% in the downtown) is private off-street parking that serves specific employer buildings but is not available to the general public. Historically buildings in the downtown area have supplied at most, 50% of their parking needs on site because a large portion of the area is located in a parking exempt zone (i.e. B6) for commercial uses that does not require the provision any parking for these uses.

The municipal parking supply within the study area (23% of total supply) is significantly lower than most other municipalities. In the downtown, the municipal portion is only 17%. BA Group's experience has been that municipalities which play a strong role in providing shared public parking resources to support development



generally provide approximately 35% to 50% of the total supply in key areas, especially when a parking supply exempt zoning by-law area is provided in order to encourage new development.

In order to understand how much of the existing parking is being used and identify locations that might have a need for additional supply, parking occupancy counts were conducted for the study area parking supply. A summary of the publicly available parking supply, peak parking demand and number of vacant spaces based upon parking occupancy surveys conducted by the consulting team is provided in Table 2 for each of the sub-boundaries established within the study area. As a conservative approach only the publicly available parking supply has been included in the parking analysis. The study area's vacant parking supply could be increased if owners of private parking facilities have excess supply that they are willing to lease to the public (either for monthly or transient users).

TABLE 2 STUDY AREA PEAK PARKING DEMAND SUMMARY

Study Area	Total Parking Supply	Total Publicly Available Supply ¹		Peak Publicly Available Parking Demand				
		# spaces	% total supply	Time ²	# spaces	% OCCUPIED	Number of vacant spaces	
Downtown	Midtown	2,411	2,169	90%	1:00 pm	1,355	62%	814
	Core	3,843	2,005	52%		1,503	75%	502
	South Core ³	2,855	2,073	73%		1,340	65%	733
	Warehouse	1,538	399	26%		185	46%	214
	North Core	2,622	1,224	47%		464	38%	760
	Total	13,269	7,870	59%		4,847	62%	3,023
	Kinsmen	3,685	1,091	30%	2:00 pm	497	46%	594
	Riversdale	2,298	1,059	46%	1:00 pm	402	38%	657
	Broadway	1,382	837	61%	1:00 pm	590	70%	247

Notes:

1. Publicly available parking excludes private parking.
2. The peak parking demand across the Downtown study area occurred at 1:00 pm.
3. The below grade public parking facility (approximately 155 spaces) in the Remai Art Gallery of Saskatchewan was not included in the parking demand surveys as it was under construction. It is anticipated that most of the parking supply in the new garage will be utilized by visitors and staff to the Remai Art Gallery of Saskatchewan and the Persephone Theatre.

As summarized in Table 2, the *occupancy* level achieved in each of the study sub-areas is well below the 85 to 90% threshold typically considered to indicate a parking supply shortfall. It should also be noted that many of the private parking facilities not available to the public have significant vacancies as well, some of which could be used to accommodate additional parking demands generated by absorption of existing vacant office space.¹ However the following points should be noted:

¹ From current Downtown vacancy rate of 13.53% to a typical rate of 5%.



- While it appears that there is sufficient vacant public parking available within each area during the peak period, discussions with stakeholders suggests that some employers within the Downtown have difficulty securing large blocks of monthly rate off-site parking for employees on a long term basis.

For example, two large employers secure a substantial amount of parking for their employees within an existing private parking facility in order to supplement the insufficient supply provided in the buildings where they occupy space. However, they are vulnerable to losing this supply if the off-site parking is redeveloped.

- In general, many buildings throughout the Downtown meet only half of their actual parking needs on their own building sites and rely on the use of public surface lots to meet the remainder of the parking demand generated by employees in the buildings.
- A number of parking lots across the City provide dedicated reserved parking spaces within public parking facilities instead of providing a monthly parking permit with access to a common pool of parking. The practice of reserving particular spaces limits the effective capacity within a parking facility (as certain spaces can only be occupied by a specific user regardless of whether or not they are parking at a given time) and does not maximize a parking facility's revenue potential.
- Because the City of Saskatoon controls a relatively small portion of the overall parking supply (i.e. 23% in total, only 4% off-street), it has limited scope to assist in providing parking to meet employee demand in the Downtown area.
- On-street parking within the Downtown (particularly within the Core, South Core and North Core areas) typically peaks in the early evening (7:00 pm) when on-street parking is free and no parking restrictions are in place. However, there is an ample supply of publicly available off-street parking available to accommodate demands that cannot be met in the municipal on-street parking.

1.4 FUTURE DEVELOPMENT CONSIDERATIONS

One of the key components of the parking strategy is an assessment of future growth and its impact on future parking conditions and requirements, including the role that the City could play in facilitating development from a parking perspective.

In order to understand the potential parking implications associated with new development, we have worked with the City to create an estimate of future parking supply and demand for each study sub-area. While the estimates should be viewed as conceptual in nature, they do serve to provide an outline of the potential parking challenges in meeting the City's desired development goals and objectives for the Downtown as set out in the City Centre Plan that was created in 2013 and endorsed by City Council.

The parking demand generated by new development combined with the loss of existing surface lots that will become future development sites will present a significant challenge as many existing employers and employees rely on the use of the existing lots. Since most new developments provide only enough parking to meet approximately half of their actual needs, new development will create substantial additional demand for new off-site parking unless:



- public transit use increases substantially;
- existing public and private parking resources are managed more efficiently; and
- new developments increase the amount of parking they provide to meet their own needs and/or the City assists in meeting some of the demand with public parking garages.

Table 3 provides a summary of the potential parking impacts generated by future development within the study area for two levels of office development. The lower end of the range includes approximately 1.8 million square feet of new office space, which assumes that the downtown share of future office development declines to approximately 60% of its existing share.² The higher end of the range includes approximately 2.9 million square feet of new office space, which assumes that the existing downtown share of the office market continues into the future. It also provides an estimate of the impact of increased transit use on reducing the need for future parking supply over the long term in accordance with the transportation component of the growth plan.

If a strategy is not developed to address the transformation challenge from surface lots to development sites and the long term need for public parking resources, the future development aspirations included in the City Centre Plan will not be realized.

TABLE 3 FUTURE LONG TERM PARKING SUPPLY DEFICITS SUMMARY

Area	1.8 Million Sq.ft. New Office Downtown		2.9 Million Sq.ft. New Office Downtown	
	Existing 10% Transit Mode Split	Future 25% Transit Mode Split	Existing 10% Transit Mode Split	Future 25% Transit Mode Split
Midtown	-671 spaces	-378 spaces	-671 spaces	-378 spaces
South Core	-1,037 spaces	-531 spaces	-1,810 spaces	-1,134 spaces
Core	-541 spaces	-121 spaces	-683 spaces	-172 spaces
North Core	-306 spaces	-98 spaces	-580 spaces	-296 spaces
Warehouse	72 spaces	+113 spaces	+33 spaces	+83 spaces
Downtown Sub-Total	-2,483 spaces	-1,015 spaces	-3,711 spaces	-1,897 spaces
Kinsmen	-205 spaces	+76 spaces	-205 spaces	+76 spaces
Riversdale	-236 spaces	+38 spaces	-236 spaces	+38 spaces
Broadway	-31 spaces	+104 spaces	-31 spaces	+104 spaces
Sub-Total	-472 spaces	+218 spaces	-472 spaces	+218 spaces

² This lower share of future office development has been used for planning purposes in the new growth plan.



It is apparent from Table 3 that an important consideration in future parking requirements is the expected increase in transit utilization from the existing level of 10% to 25% due to the substantial investment in new transit service proposed in the growth plan, including BRT service for the downtown. Increased transit use over the long term will reduce the need for office related parking facilities in the downtown by 1450 to 1800 parking spaces, resulting in a capital cost savings of \$72.5 to \$90.0 million at existing prices of approximately \$50,000 per space for new above grade garages.

However, even with the improved transit system in place, the need for public parking facilities beyond those provided on specific development sites could range from 1,000 to 1,900 parking spaces, depending upon the level of office development achieved over the long term. This represents the need for a potential long term municipal investment of \$50.0 million to \$95.0 million at existing prices for new above grade garages in order to address the deficiency and facilitate the realization of the downtown City Centre Plan endorsed by Council.

1.5 KEY CONCLUSIONS & RECOMMENDATIONS

1. The City needs to play a greater role in the provision of off-street public parking facilities in order to facilitate future development in the downtown in accordance with the Council approved City Centre Plan.
 - a) In the long term, 1,000 to 1,900 public parking spaces in three or more garages could be required in addition to the supply that will be provided by new development;
 - b) The new public parking facilities need to be strategically located to facilitate economic development, maximize utilization and minimize development cost;
 - c) In order to maximize future development potential in the Midtown area, approximately 600 new parking spaces may be required for the existing TCU Place which presently does not supply any parking to meet its own needs;
 - d) In order to facilitate future development in the Core and South Core areas of the downtown, 650 to 1,300 new public parking spaces may be required in at least two locations;
2. The parking deficiencies and need for public parking garages identified within the various sub-areas of the Downtown are a result of numerous factors including:
 - o there are not any parking supply requirements for a large part of Downtown area in the B6 zone;
 - o the parking supply typically provided by developers for commercial development is well below the typical demand; and
 - o the redevelopment sites are all located on existing commercial parking facilities that would be removed as part of the redevelopment.



3. The need for additional parking across the study area will be substantially reduced by :
 - o Continuing to implement Transportation Demand Management (TDM) initiatives focused on increasing mobility options and reducing parking demand over time, especially improved transit service to/from the Downtown;
 - o Improving the efficiency of the existing public and private parking supply by eliminating the practice of dedicated reserved spaces within parking lots and encouraging private parking operators to offer more spaces to the general public;
 - o Amending the Zoning Bylaw to require new development to include a minimum supply of parking on site and/or making a cash in lieu contribution to the City for parking that cannot be provided on site in order to assist in funding municipal shared public parking resources in key areas.
4. In order for the City to position itself to effectively address future parking planning and management challenges it should:
 - a) Consolidate parking operations and finances for both on-street facilities and off street parking lots and potential future garages in one department;
 - b) Create a plan to allocate net revenue from both on-street and off street parking operations to a parking reserve fund to assist in financing future shared public parking resources;
 - c) Allocate the proceeds of any future parking lot sales to the parking reserve fund;
 - d) Maintain ownership of all existing surface parking lots until a plan is created that clearly confirms which lots are not required to meet future parking needs;
 - e) Explore joint venture development opportunities on the old Police Station site to secure additional public parking.
 - f) Plan for the construction of a public parking garage on the surface lots it already owns adjacent to the YMCA in the Midtown sub-area of the Downtown;
 - g) Identify preferred locations in the South-Core area of the Downtown to provide a future public parking facility by acquiring a development site or in joint development with an existing landowner/developer;
 - h) Implement a minimum parking supply requirement for new commercial development in the downtown of one space per 37 square metres GFA (2.7 spaces per 100 square metres).
 - i) Consider a Payment in Lieu (PIL) parking policy that would allow a developer to make a cash payment per space to the City for each parking space they are unable to provide on the site of the new development.



5. In the short term, the City should undertake the following initiatives to improve existing parking operations:
- a) Increase the maximum duration of stay time limits for on-street parking in the Downtown to three hours everywhere except for 21st Street and 2nd Avenue which should be two hours (except the block in front of the Scotiabank Theatre);
 - b) Investigate opportunities to provide additional on-street parking including changes from parallel to nose in parking where feasible;
 - c) Ensure that the surface parking lots it controls do not lease out reserved parking spaces;
 - d) Work with owners of private surface parking lots and encourage them to consider the strategic importance of eliminating/ minimizing reserved parking in order to increase general public parking availability.
 - e) Lease strategically located surface lots with a view to operating them with monthly employee scramble parking in place of reserved monthly parking.



2.0 INTRODUCTION

2.1 STUDY PURPOSE

In December 2013, the City completed the City Centre Plan (CCP) in order to provide a comprehensive planning framework for the Downtown and vicinity. This plan sets the groundwork for policy and development decisions that will guide and direct future growth throughout five key areas in the Downtown. The provision of parking to support and facilitate new development has been identified as a critical element of the plan. Existing surface parking lots represent future development sites, however, many of these lots provide parking for existing downtown employees and visitors that would have to be replaced. The key challenge will be how best to achieve a transition to structured parking garages that will facilitate new development on existing surface lots and encourage adaptive re-use of older buildings for new mixed use development.

Although the major focus of this study is on the Downtown, we have also considered the parking situation in the Riversdale and Broadway Business Improvement Districts as well.

2.2 BACKGROUND

Improved urban design is one of the key strategies of the City Centre Plan. The reduction of surface parking and conversion of these land resources into new building sites will substantially improve the quality of urban design by creating an urban streetscape and more compact development form. This will in turn provide more feet on the street to support local commercial business. However, the parking demand generated by new development combined with the loss of existing surface lots will amplify the need to develop strategically located parking structures in the Downtown area.

The City has also completed studies for both the Riversdale and Broadway districts that are intended to guide and direct future development in these areas.

The City currently provides parking services to support the Downtown and surrounding areas (including the Kinsmen, Riversdale, Broadway and River Landing areas) predominantly by supplying some 3,926 on-street spaces and 457 spaces in 10 off-street surface lots.³ Commercial and office uses in the Downtown's B6 Zoning District are exempt from providing parking (i.e. no parking requirements set out in the Zoning Bylaw) as a development incentive. This has resulted in the provision of insufficient supply on most development sites to meet the parking demand generated by the building on the site. This in turn has encouraged the demolition of buildings to create surface parking lots instead of new development because land values and parking market pricing were insufficient to cover the cost of constructing structured parking from a development economics perspective. It has also contributed to the misuse of some on-street parking (intended for use by short duration visitors) by employees in the Downtown because they are unable to find proximate off-street parking.

Growing Forward – Shaping Saskatoon is examining various options for moving around including improved public transit, corridor redevelopment and potentially a new core bridge. Improving transportation access

³ This includes 4 public parking lots operated by the parking department, 3 lots owned by the land division (including the old Police Station) but operated by private parking companies and 3 lots used for City Hall employees.



to/from Downtown by increasing transit service, enhancing the cycling and pedestrian network are also identified in the City Centre Plan as important goals for long term sustainable development. Managing transportation demand over the medium to long term is an important element of a municipal parking strategy because it will, if done effectively, reduce demand for expensive parking structure spaces, thereby improving development economics and minimizing the amount of space required for parking. It will also facilitate higher density development and the demand for active transportation.

2.3 STUDY SCOPE

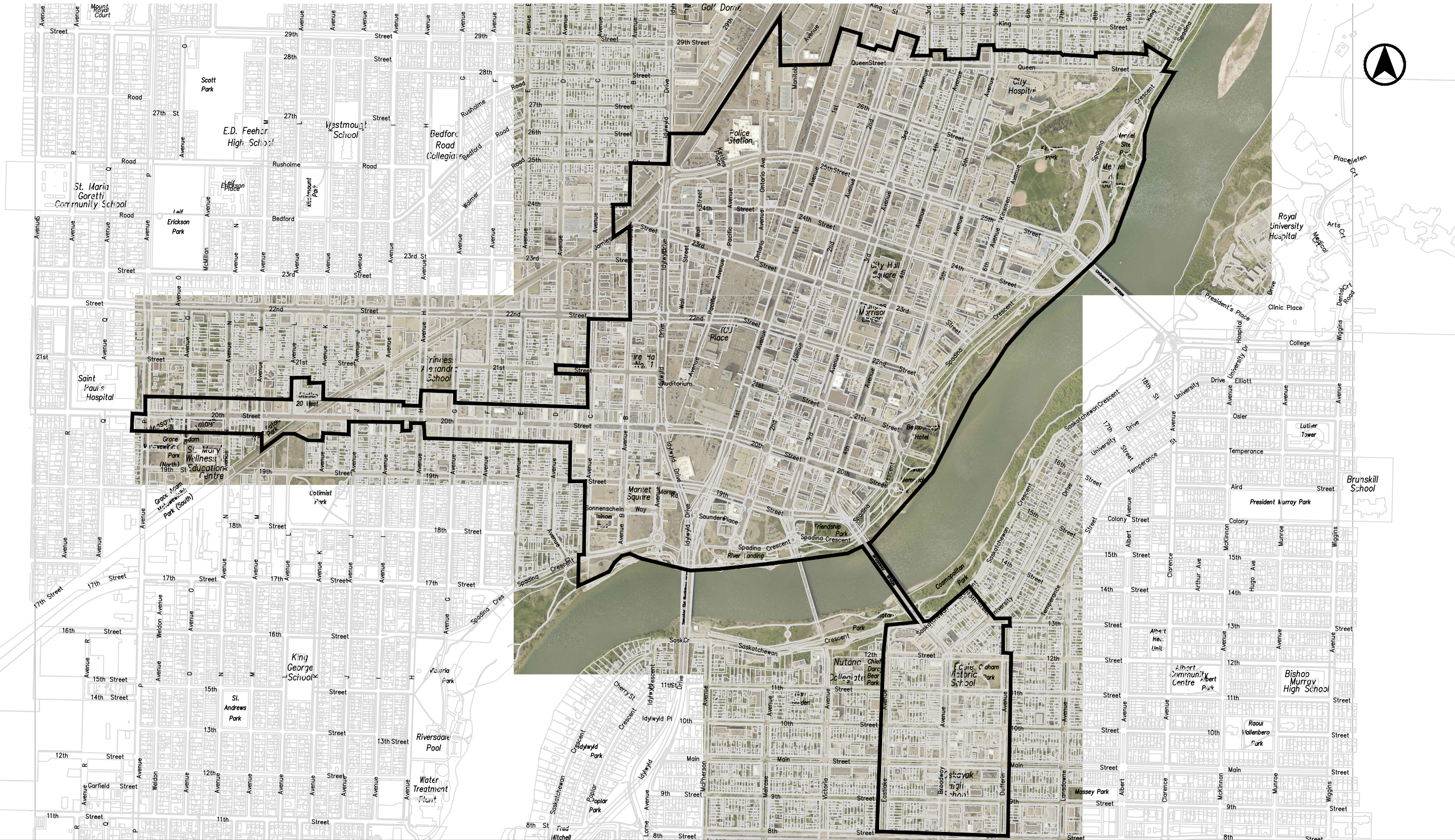
This Downtown Parking Strategy reviews the existing parking demand within the Downtown, Kinsmen (north of Downtown), Riversdale and Broadway areas. It should be noted that the Riversdale and Broadway study areas discussed within this study do not follow the exact boundaries of the actual Riversdale and Broadway Business Improvement (BID) Districts. For the purposes of this study, the Riversdale and Broadway area boundaries include key corridors within the area rather than exact Business Improvement District boundaries and River Landing has been incorporated into the Downtown and Riversdale study areas.

The overall study boundary is illustrated in Figure 1.

This report provides an overview of the following:

1. A review of the consultation process undertaken as part of this study.
2. A profile of existing parking conditions within the study area.
3. A review of potential future developments within the study area.
4. The development of a Parking Management Plan based on future parking demand estimates and taking into account existing vacancies and future development sites within the study area.
5. The opportunities to potentially reduce future parking demands using Transportation Demand Management (TDM) initiatives.
6. A review of the financial considerations to meet future parking needs (including considerations for structured parking, metered parking, and surface parking).
7. The development of short and long-term recommendations regarding a parking management strategy for the future.

Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\Fig01-07-SB.dwg



STUDY BOUNDARY

3.0 STAKEHOLDER & PUBLIC CONSULTATION PROCESS

Public consultation has been undertaken throughout the study in order to inform and guide the process. Meetings with key stakeholders were held early on in the study over a three day period (November 3 – 5, 2014) to ensure that those who are or feel that they are affected by parking issues within the study area have been given the opportunity to provide feedback early on in the process. Consultation included meetings with the following stakeholders:

- Steering Committee
- Downtown Partnership BID, Broadway BID and Riversdale BID
- Downtown Retailers and Restaurateurs
- Large Downtown Employers
- Developers and Architects
- Private Parking Operators

A subsequent meeting was held with the Steering Committee on March 24, 2015 to discuss initial findings. The Steering Committee includes members from numerous City of Saskatoon departments (including Planning and Development Division, Transportation and Utilities Department, Environmental and Corporate Initiatives Division, Saskatoon Land Division and Community Services Department), the Downtown Partnership Business Improvement District, the Broadway Business Improvement District, the Riversdale Business Improvement District, the parking manager of the Midtown Plaza and the manager of the City's new parking meter system.

An open house was held on March 25, 2015 (4:00 pm to 9:00 pm) to present initial findings to the public and collect feedback. A presentation was made by BA Group at two separate times during the open house (5:00 pm and 7:00 pm) in an attempt to accommodate as many people as possible. Each presentation was followed by a question and answer period. Downtown, Broadway and Riversdale BID representatives attended the open house as well as some City Councillors and members of the public. City staff was also present to answer questions and solicit feedback.

Public feedback regarding Downtown parking has been ongoing. City staff prepared presentation boards for the open house summarizing key insights and findings that had been received to date (Presentation Board information is attached in Appendix A) and to determine if there were any additional concerns that may have been missed. Additional feedback from the Open House (March 25, 2015) was collected through a variety of methods including response forms, suggestion/idea board, email, and social media. An online poll was also conducted asking members of the public (visitors, business owners, residents and employees) to identify key challenges to parking and what actions they believe would help address parking concerns. Comments were received regarding the cost of parking, increasing the parking time restrictions, insufficient parking for Downtown employees, improvements to alternative modes of travel including public transit, carpooling and cycling facilities.

Stakeholder meetings as well as meetings with local private parking operators, the City of Saskatoon and BA Group were held on March 26, 2015 to discuss existing parking operations, general area parking demands and vacancies.



A Steering Committee meeting was held on January 19, 2016 in order to present preliminary conclusions and recommendations and secure comments.

An additional series of stakeholder meetings and a public open house was held on Monday March 7, 2016 to provide an overview of the preliminary study conclusions and recommendations and obtain comments (Presentation boards are provided in Appendix A). People were also invited to submit comments by emailing parking.study@saskatoon.ca

4.0 EXISTING PARKING CONDITIONS

4.1 STUDY AREA OVERVIEW

A review of parking availability across the entire study area has been undertaken to establish the existing parking supply (public and private), to determine what is driving existing parking conditions, how well the existing supply is being used or managed and how this information should be used to forecast future parking demand.

4.1.1 Study Area Boundaries

The study area boundary (including the Central Business District boundary) was developed by the City of Saskatoon as part of the RFP (Request for Proposals) process. Based on discussions with City staff the study area was broken down into sub-boundaries (Downtown, Kinsmen, Riversdale and Broadway), as follows (illustrated in Figure 2):

- The Downtown area was further subdivided into five areas (Warehouse, North Core, Core, South Core and Midtown) to provide a more localized review of supply and demand throughout this study (illustrated in Figure 3).
- The Kinsmen study area is generally bounded by 25th Street to the south, Spadina Crescent to the east, Queen Street to the north and Idylwyld Drive to the west.
- The Riversdale study area extends from Idylwyld Drive (on the east) along 20th Street West to Avenue P. The Riversdale area also includes the area generally bounded by Spadina Crescent West to the south, Avenue C to the west, Idylwyld Drive to the east and 25th Street West to the north. For the purposes of this study, the Riversdale area boundaries have been modified to include key corridors within the area rather than exact neighbourhood boundaries.
- The Broadway study area is generally bounded by Saskatchewan Crescent to the north, Eastlake Avenue to the west, 8th Street East to the south and Dufferin Avenue to the east. For the purposes of this study, the study boundaries also include key corridors within the area rather than exact neighbourhood boundaries.

4.1.2 Parking Inventory

A comprehensive inventory of public and private parking and parking rates was conducted by CIMA+, in partnership with BA Consulting Group. Area parking supply information was provided by the City of Saskatoon and confirmed by CIMA+, where possible. Parking supply information was also obtained from the private parking operators for public off-street pay lots and directly from property owners and/or managers for some buildings. The area parking supply consists of public on-street parking, public off-street parking (municipal and privately owned parking that is available for public use) and private off-street parking. A general description of each type of parking is provided below:

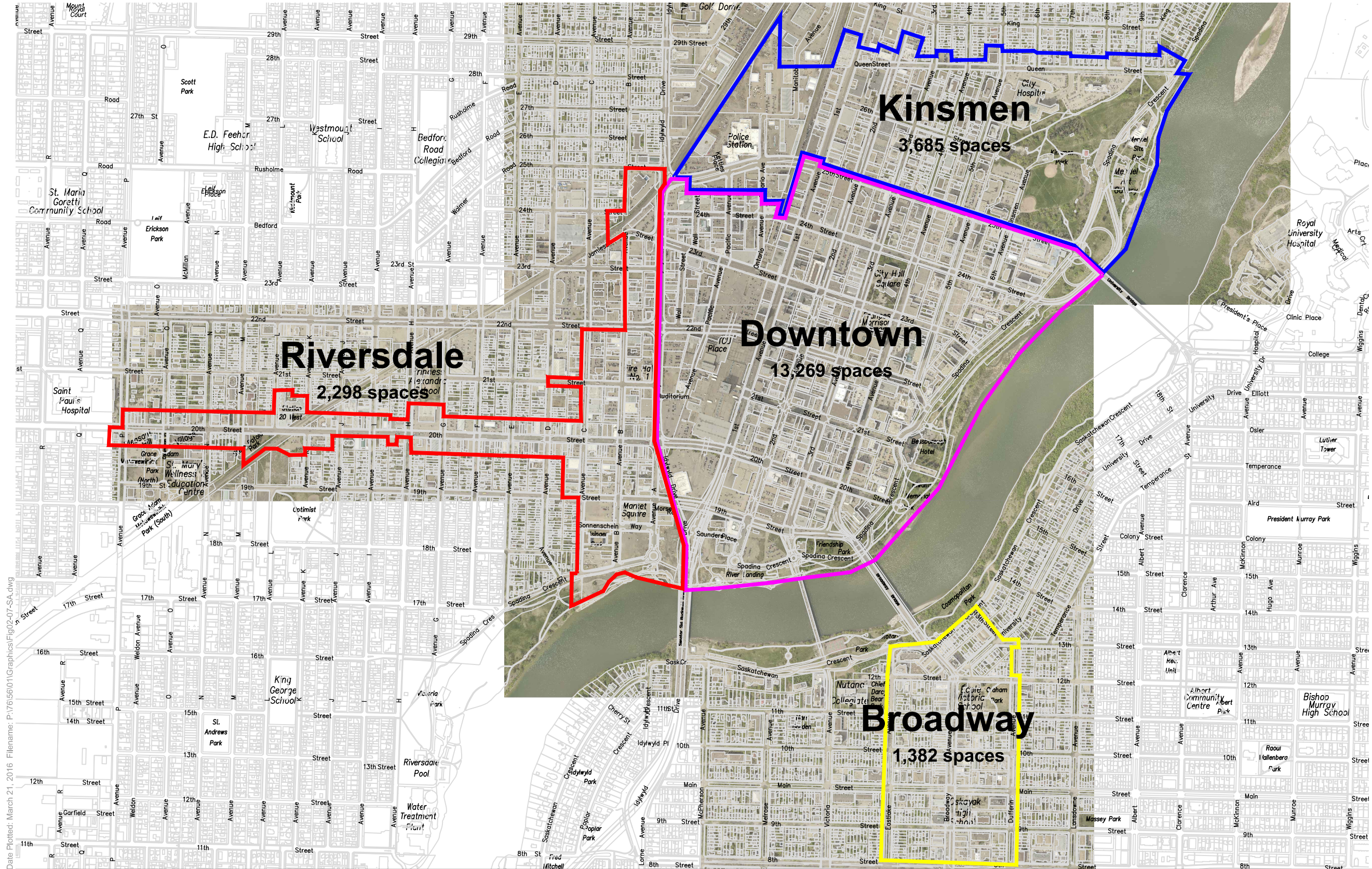
- **Public on-street parking:** includes “metered” parking (delineated street parking with meter heads), pay by license plate street blocks and free non-delineated street parking that is available for public



use. Two dollar (\$2) hourly rates are standard for paid on-street parking. Parking meters require payment from Monday to Saturday from 9:00 am to 6:00 pm. Time limits for metered parking range from 90 minutes to 3 hours with the majority being either 90 minutes or 2 hours. An overview of the on-street parking time restrictions is illustrated in Figure 4. The City has implemented a new on-street parking system that replaced meters with pay by license plate machines, from February to November 2015.

- **Municipal off-street parking:** includes paid and unpaid municipally owned parking lots and structured parking facilities that are available for public use including facilities controlled by the Land Division as well as lots provided for City Hall employees. Nine hour time restrictions apply to several lots across the Downtown (illustrated in Figure 4). Where applicable, hourly rates are two dollars (\$2) at paid facilities. Monthly parking is also provided in certain lots.
- **Commercial (public) off-street parking:** includes paid commercial (privately owned) parking lots and structured parking facilities that are available for public use. Where applicable, hourly rates range from one (\$1) to four (\$4) dollars, daily rates range from five (\$5) to fifteen (\$15) dollars, and monthly rates ranged from seventy-five (\$75) to three hundred (\$300) dollars depending on parking lot type (i.e. above-grade, surface or below-grade) and option to reserve a dedicated parking space within the lot.
- **Private off-street parking:** consists of parking that is not available to the general public (free or paid). Private off-street parking includes spaces located in private parking lots and garages and reserved parking spaces dedicated to a specific user or group.

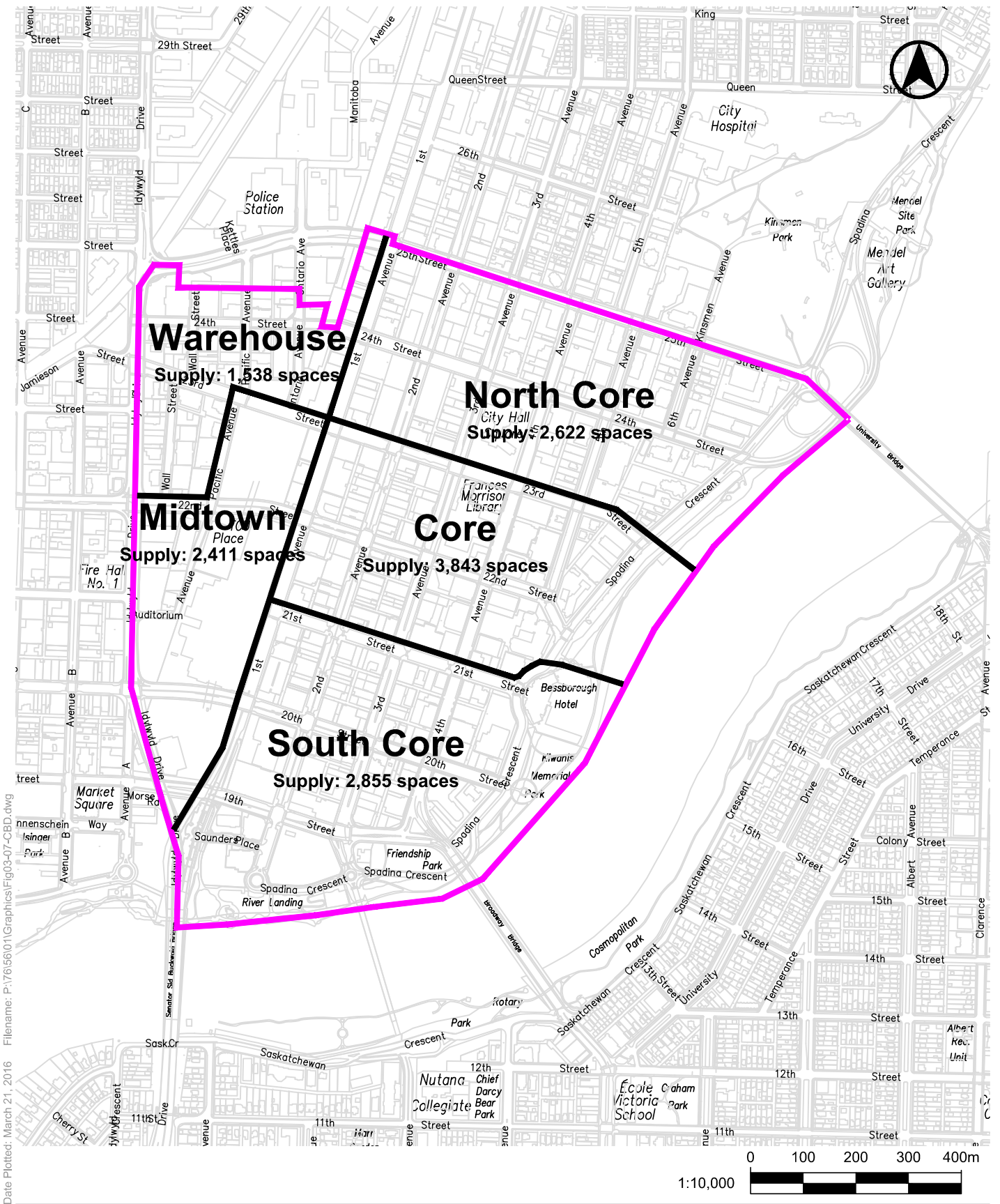




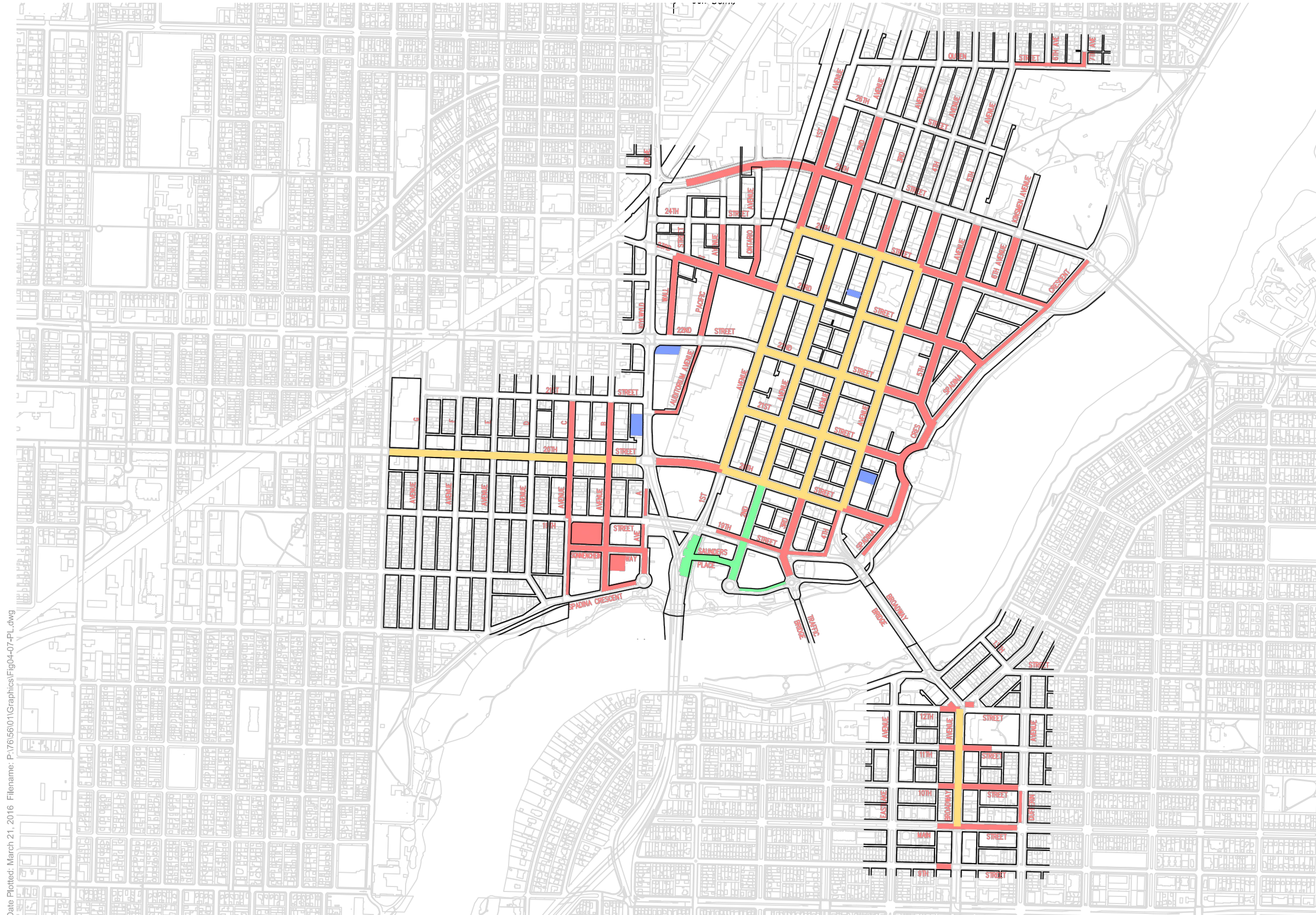
LEGEND
1,382 AREA SUPPLY

STUDY AREAS

Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\Fig02-07-SA.dwg



DOWNTOWN - BY AREA



Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\Fig04-07-PL.dwg

- 1.5 HOUR PARKING
- 2 HOUR PARKING
- 3 HOUR PARKING
- 9 HOUR PARKING

MAXIMUM PARKING METER TIMES

4.2 EXISTING PARKING SUPPLY

In total, the study area's parking supply consists of 20,634 spaces of which there are 3,926 on-street parking spaces, 6,698 publicly available off-street parking spaces (including 457 municipal off-street parking spaces and 6,241 commercial (paid) parking spaces) and 10,010 private off-street parking spaces⁴. A summary of the parking supply within the study area is provided in Table 4 and detailed information is provided in Appendix B.

TABLE 4 STUDY AREA PARKING SUPPLY

Parking Type	Downtown	Kinsmen	Riversdale ¹	Broadway	Total Supply	
On-Street	1,860	655	574	837	3,926	19%
Municipal Off-Street	418	346	70	-	834	4%
Commercial Off-Street	5,592	90	415	-	6,097	30%
Private Off-Street	5,399	2,594	1,239	545	9,777	47%
Total	13,269	3,685	2,298	1,382	20,634	100%

Notes:

1. Parking occupancy surveys were not conducted west of Avenue H within the Riversdale study area. This area's parking supply (688 spaces including 208 on-street and 480 off-street spaces) has been removed from the total study area supply in order to calculate parking occupancy.

The City of Saskatoon controls 23% of total parking supply within the study area. It predominantly consists of on-street parking with little off-street facilities (19% on-street and 4% off-street). It is noteworthy that the municipal off-street parking supply (4% of total supply) within the study area is significantly lower than most other municipalities. BA Group's experience has been that municipalities which play a strong role in providing shared public parking resources to support development generally provide approximately 35 to 50% of the total supply in key areas. Examples include the Cities of Barrie (50%), Brampton (57%), Kitchener (44%), Oakville (60%), Oshawa (70%) and Waterloo (70%).

⁴ It should be noted that based on discussions with the City, parking occupancy surveys were not conducted west of Avenue H within the Riversdale area. This area (west of Avenue H) has an estimated parking supply of 688 spaces, including 208 on-street and 480 off-street spaces, which has been excluded from the total parking supply for the purposes of calculating area parking demands.

4.3 EXISTING PARKING DEMAND SUMMARY & KEY FINDINGS

The following sections provide a summary of the key findings of the parking demand surveys across the study area. Detailed parking demand analysis is provided in Appendix D.

4.3.1 Downtown

- A summary of the parking supply by type (on-street, municipal, commercial and private) within each area in the Downtown is provided in Table 5.

TABLE 5 DOWNTOWN PARKING SUPPLY – BY AREA

Parking Type	Midtown	Core	South Core	Warehouse	North Core	Total Supply	
On-Street	107	496	700	223	334	1,860	14%
Municipal Off-Street	187	158	56	0	17	418	3%
Commercial Off-Street	1,875	1,351	1,317	176	873	5,592	42%
Private Off-Street	242	1,838	782	1,139	1,398	5,399	41%
Total	2,411	3,843	2,855	1,538	2,622	13,269	100%

- The limited municipally controlled off-street parking within the Downtown (1% of the total supply) restricts the City’s ability to manage overall supply and maintain a sufficient amount of parking within an area.
- There are a total of 5,071 vacant parking spaces available within the Downtown during the busiest daytime period of which 3,023 spaces are publicly available and 2,048 are private parking spaces.
- On-street parking within the Downtown (particularly within the Core, South Core and North Core areas) typically peaks in the early evening (7:00 pm) when on-street parking is free and no parking restrictions are in place.

It is noteworthy that publicly available off-street parking demands decrease substantially after 5:00 pm, when on-street parking demands are reaching their peak.

- A summary of the parking supply (total and publicly available) and peak publicly available parking demands is provided in Table 6.

TABLE 6 DOWNTOWN PEAK PUBLICLY AVAILABLE PARKING DEMAND

Downtown Area	Total Parking Supply	Total Publicly Available Supply ¹		Peak Publicly Available Parking Demand			
		# spaces	% total supply	Time ²	# spaces	% occupied	Number of vacant spaces
Midtown	2,411	2,169	90%	1:00 pm	1,355	62%	814
Core	3,843	2,005	52%		1,503	75%	502
South Core	2,855	2,073	73%		1,340	65%	733
Warehouse	1,538	399	26%		185	46%	214
North Core	2,622	1,224	47%		464	38%	760
Total	13,269	7,870	59%		4,847	62%	3,023

Notes:

1. Publicly available parking excludes private parking.
2. The peak parking demand across the Downtown study area occurred at 1:00 pm.

4.3.2 Kinsmen, Riversdale & Broadway

A summary of the Kinsmen, Riversdale and Broadway parking supplies (total and publicly available) and peak parking demands are provided in Table 7.

TABLE 7 PEAK PUBLICLY AVAILABLE PARKING DEMAND

Study Area	Total Parking Supply	Total Publicly Available Supply ¹		Peak Publicly Available Parking Demand			
		# spaces	% total supply	Time	# spaces	% occupied	Number of vacant spaces
Kinsmen	3,685	1,091	30%	2:00 pm	497	46%	594
Riversdale	2,298	1,059	46%	1:00 pm	402	38%	657
Broadway	1,382	837	61%	1:00 pm	590	70%	247

Notes:

1. Publicly available parking excludes private parking.

4.3.2.1 Kinsmen – Key Findings

- There are a total of 3,685 spaces located within the area “Kinsmen” including 655 on-street parking spaces, 346 municipal off-street parking spaces, 90 commercial (paid) parking spaces and 2,594 private parking spaces.
- The majority of the area’s parking supply is private off-street parking (70%) which is not available for public use.
- A total of 1,514 spaces are vacant during the overall study area peak period (2:00 pm) of which 594 spaces are publicly available.

4.3.2.2 Riversdale – Key Findings

- More than half of the area's parking supply is private off-street parking (54%) which is not available for public use.
- A total of 1,387 spaces are vacant during the peak period (1:00 pm) of which 657 spaces are publicly available.
- Municipal off-street parking is well utilized throughout the afternoon and is approaching its practical capacity (i.e. 90-95% occupied) in the evening.

4.3.2.3 Broadway – Key Findings

- The municipality plays the dominant role in the supply of parking within Broadway. Sixty-one percent (61%) of the area parking supply is municipal (public) on-street parking.
- Seventy percent (70%) of the total publicly available parking (excluding private parking) is in use during the study area's busiest period (1:00 pm – 590 spaces). An additional 247 spaces are available for public use during the peak period.
- There is a significant amount of free on-street parking within the adjacent residential neighbourhood (not included as part of this study). Any changes to the parking within the adjacent residential neighbourhood (i.e. a residential permit parking program) could impact the available on-street parking supply and demand within the Broadway area.

4.4 DOWNTOWN OFFICE VACANCY CONSIDERATIONS

It should be noted that according to Colliers International's Saskatoon Office Market Report, Fourth Quarter 2014, at the time of the study the vacancy rate within the Central Business District (CBD) was 12.54% (304,314 ft²). A review of the Second Quarter 2015 Office Market Report indicated an increased vacancy rate of 14.83% within the CBD. In our experience, a typical vacancy rate within most downtown areas is approximately 5%.

Colliers International provided BA Group with a further breakdown of office vacancies within the Downtown area based on localized areas specific to the study area. The vacancy rate within the Downtown study area was 13.53% during the period in November 2014 and February 2015 when the parking occupancy surveys were conducted. A decrease in Saskatoon's vacancy rate, towards the typical rate (5%), could generate a demand for approximately 615 additional spaces in the Downtown, predominantly for employees.

This increased demand would increase the occupancy level of publicly available parking to 69% which is still well below the 85 to 90% occupancy rate that would indicate the need to provide more parking and/or implement parking demand management measures. It should also be noted that some of this new demand would likely be accommodated in the 2,092 vacant parking spaces available in existing private parking facilities many of which serve the buildings with the vacant space that would be filled. However, employers who wish to secure large amounts of monthly employee parking may find it hard to do so.

A summary of the existing vacancy rates within the localized areas of the Downtown and projected additional parking demands generated by a reduced vacancy rate (5%) is provided in Table 8.

TABLE 8 DOWNTOWN STUDY AREA OFFICE VACANCY RATES

Downtown – By Area	Total Floor Area (ft ²)	Existing Vacancy (ft ²)		Potential GFA to be occupied assuming 5% Vacancy Rate (ft ²)	Projected Parking Demands based on 5% Vacancy Rate ¹
South Core	704,684	61,953	8.79%	26,719	80 spaces
Core	1,072,721	148,542	13.85%	94,906	285 spaces
North Core	472,036	75,192	15.93%	51,590	155 spaces
Midtown	96,884	9,417	9.72%	4,573	14 spaces
Warehouse	57,322	30,000	52.34%	27,134	81 spaces
Total				204,922	615 spaces

Notes:

1. Projected parking demands are calculated based on a rate of 3.0 spaces per 1,000 ft² GFA.



5.0 FUTURE DEVELOPMENT CONSIDERATIONS

As mentioned in the Introduction (Section 1.0), one of the key components of the parking strategy is an assessment of future growth and its impact on future parking conditions and requirements, including the role that the City could play in facilitating development from a parking perspective.

The Growth Plan to 500,000 is intended to address the best way to accommodate a doubling of the existing population from approximately 250,000 people today to 500,000 people 30 to 40 years into the future. In order to continue to capture its current share of office employment demand, roughly 3.0 million square feet of new office space would need to be accommodated in the Downtown area.⁵ This would generate a demand for approximately 9,000 parking spaces assuming existing travel characteristics remain the same. We have also tested the impact of a lower range of future office development at approximately 1.8 million square feet of new space which represents about 60% of the demand that would occur if the downtown continued to attract its current share of new space construction. This lower share of new office space has been used in the new growth plan for planning purposes.

To date, newer office buildings in the Downtown have been supplying on-site parking at a rate that at best meets only 50% of the actual demand, relying on off-site parking in other lots to accommodate the difference. In addition, in order to accommodate the demand for new office space, most of the large surface lots in the Downtown area would have to be redeveloped. Since all of these surface lots presently accommodate employees and some visitors from nearby buildings, the people parking in these lots will also have to be replaced if existing travel characteristics remain the same.

In order to understand this issue more clearly, BA Group has worked with the City to prepare future development estimates for each of the existing larger surface parking lots in the Downtown and a number of sites that have been identified as having future development potential. In some cases, a reasonably accurate picture of future development potential is available from development proposals (e.g. The Banks and River Landing development areas and the City Centre development announced by North Prairie Developments). In some cases, information has been obtained from leasing agencies (e.g. First Nations Bank site) and finally in other cases BA Group has developed estimates based upon typical height and parking supply patterns evident on the other sites. While the estimates should be viewed as conceptual in nature and subject to change, they will help identify the general magnitude and location of future long term parking demands and potential supply shortfalls within each study subarea.

Figure 5 illustrates the potential future development sites that have been considered within the study area.

Saskatoon's Zoning Bylaw 8770 does not require parking to be provided for office, hotel or commercial/retail uses within the core commercial areas in Riversdale, Broadway or a large portion of the Downtown that is located in the B6 zone. In addition, the Zoning Bylaw does not require parking to be provided for multi-unit

⁵ This estimate is based upon the future office demand estimates contained in the November 2011 "Commercial and Industrial Development Study prepared for the City by MXD Development Strategists. This study suggested a future demand of approximately 22.6 square feet of office space for every person would be generated. A 250,000 person increase in population would generate a need for approximately 5,650,000 ft² of new office space City wide. Based upon Colliers real estate statistics for the Downtown and suburban office market in Saskatoon, approximately 55% of the total office space is located in the Downtown area. If future City wide demand follows the same pattern, a demand for approximately 3.1 million ft² of new office space would be attracted to Downtown.

dwelling use in the core Downtown area. In order to estimate the additional parking demand that would be generated by new development BA Group has utilized parking demand rates based on our experience in other cities for the potential future office, residential, hotel and commercial/retail uses. The hotel and residential demand ratio (1 space per unit/room) used is consistent with the base parking requirement set out in the Saskatoon Zoning Bylaw 8770 for the Riversdale and Broadway areas.

The following parking demand ratios have been applied to each development to estimate future parking requirements across the study area:

- Office Use: 3.23 spaces per 100 m² (3.0 spaces per 1000 ft²)⁶
- Residential and Hotel Uses: 1 space per unit/hotel room⁷
- Retail - Commercial Uses: 2.94 spaces per 100 m² (2.75 spaces per 1000 ft²)⁸

These demand rates are approximate and assume that existing travel characteristics in terms of transit use, car-pooling, walking and cycling remain the same as today.

The following sections review the future potential developments across the study sub-areas, taking into account existing parking demands, estimated future parking demands and supply and net parking impact on a given area. The net parking impact is calculated based on the proposed parking supply for the development and subtracting the estimated parking demand generated by the proposed use and existing peak parking demand on the site. Existing parking vacancies have been utilized to help meet the future potential development parking requirements that exceed the supply provided on-site. It is recommended that a minimum 10% vacancy buffer should be maintained within the publicly available parking supply in order to allow people to find a vacant parking space in a reasonable amount of time.

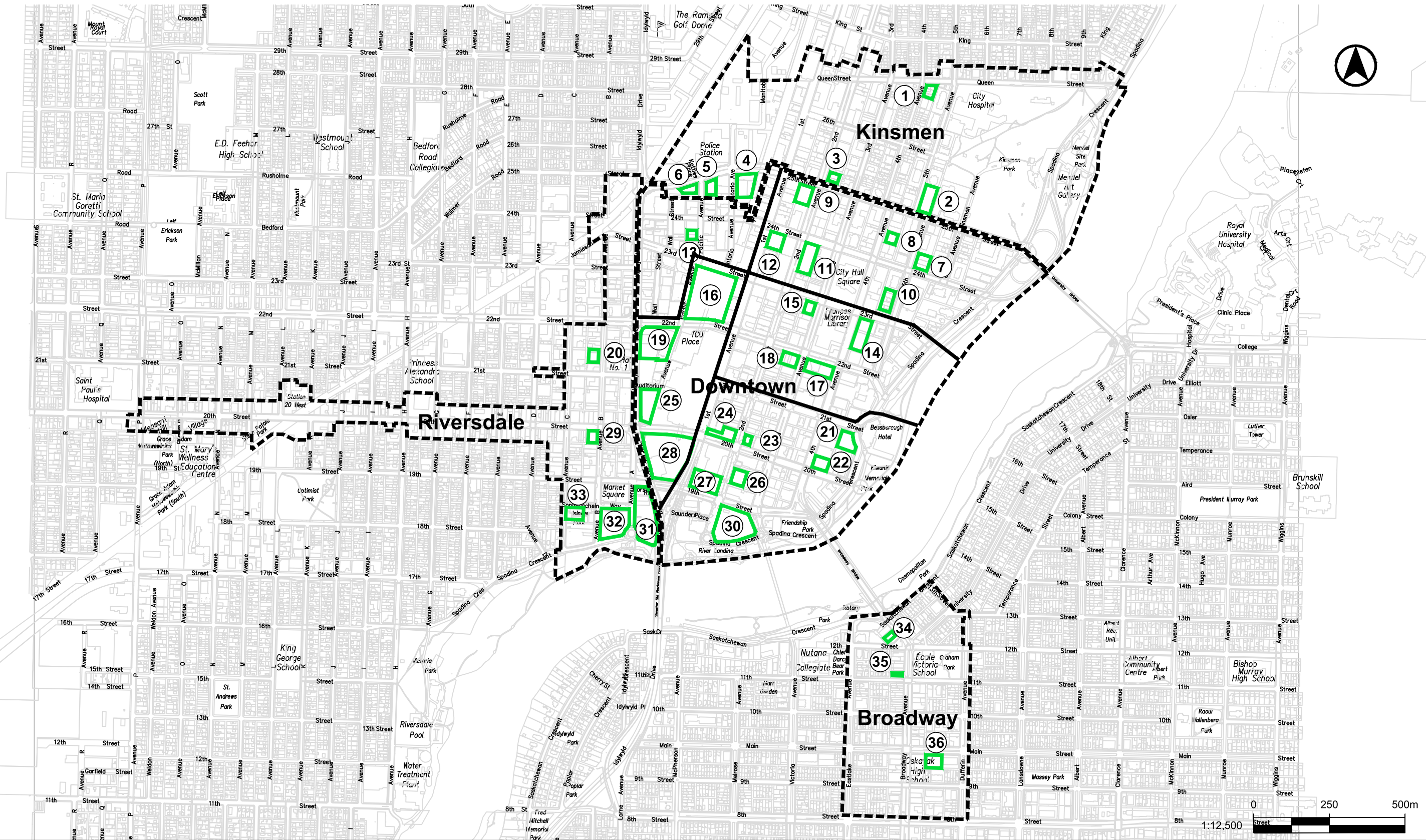
A number of sites that currently provide public parking have been identified as potential future development sites across the study area. The vacant parking supply available within these lots during the peak parking demand period has been removed from the total vacant publicly available parking as they will no longer be available for use.

⁶ Based upon typical office employee density of 4 people per 1,000 ft², transit use of 10%, walk and cycle of 5% and an average vehicle occupancy rate of 1.10 and a visitor demand of 8%.

⁷ Based upon minimum rates for Downtown locations. Hotel rates do not include meeting and banquet facilities typically found in larger hotels.

⁸ Based on typical rates found in other Downtown parking studies conducted by BA Group and others.

Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\Fig05-07-PFD.dwg



POTENTIAL FUTURE DEVELOPMENT LOCATIONS

5.1 DOWNTOWN

5.1.1 Future Development Considerations

There are twenty two (22) sites within the Downtown that have been considered as potential future development. The following sections review the implications of the potential future developments within the five areas in the Downtown (Midtown, South Core, Core, Warehouse and North Core) taking into account existing parking demand, estimated future parking demands and supply and net parking impact. The net parking impact is calculated based on the proposed parking supply for the development and subtracting the estimated parking demand generated by the proposed use and existing peak parking demand on the site.

Figure 5 illustrates the location of the potential future developments that have been considered within the study area.

This conceptual estimate of future development includes a total of 2,900,000 ft² GFA (Gross Floor Area) of new office development, 188,000 ft² of new retail-commercial space, 256 hotel units and 1,502 residential apartment units. The amount of new office space is similar to the 3.0 million ft² of space that would replicate the existing Downtown share of overall office space demand generated by a doubling of the existing population as per the Growth Plan.

5.1.1.1 Midtown – Future Development Sites

The Midtown sub-area is predominantly made up of the Midtown Plaza properties, including the main mall site as well as the large north and south side surface parking lots. It also includes the existing TCU Place Arts and Convention Centre as well as the existing YMCA and City owned surface parking lots west of the YMCA with frontage along Idylwyld Drive.

The Midtown Plaza surface lots represent substantial future development potential for a mix of office, retail – commercial, hotel and residential apartment uses. The large size and location of these surface lots (illustrated as sites 16, 19, 25 and 28 in Figure 5) provide considerable flexibility for the design of new development and the provision of the substantial amount of new parking that would be required to meet new demand and replace the existing parking that is well used throughout most periods in the year.

Midtown Plaza currently provides approximately 1875 parking spaces including 1079 spaces in four surface lots and 796 spaces in underground parking beneath the mall even though the B6 zoning classification does not require the provision of any parking. This parking is generally sufficient to meet the demands generated by the 650,000 ft² retail mall and the 97,000 ft² office building (“Tower at Midtown” - formerly known as the CN Office Building), most of the year. Some of the parking is also used to meet parking demand generated by other non- related uses in the area.

TCU Place is a large convention centre that includes approximately 100,000 ft² of function space and a 2000 seat performing arts theatre. Although the convention space has a theoretical maximum capacity of some 5,500 people if each and every space was occupied simultaneously in a theatre type setting, it is unlikely that more than 2,250 people would be accommodated at any one time due to overlapping use of the function space by the same event. An appropriate design condition for parking purposes would likely be approximately 1500 people at any one time.

TCU Place does not supply any parking to meet its needs on-site, relying to a large extent on the parking provided by Midtown Plaza and the surface lots adjacent to the YMCA. It is possible that an evening concert could generate a parking demand for 500 to 600 cars. A 1500 person peak daytime event at the convention centre might also generate a parking demand of 500 to 600 cars. When this type of demand occurs it would result in close to capacity conditions at the Midtown Plaza parking facilities. Larger events would require the use of other parking facilities in addition to those at Midtown Plaza. Although TCU Place's reliance on Midtown Plaza's parking supply has existed for many years, its continued dependence presents a considerable logistical and financial challenge to the full development potential of Midtown Plaza's existing surface parking lots. As the surface lots redevelop and TCU Place's parking demands can no longer be accommodated by parking supplied on other sites, the TCU Place parking demand will need to be accommodated in future parking garages.

Based upon our experience in working on many similar redevelopment projects that include a variety of uses on existing surface lots and large quantities of garage parking, it would not be unusual to expect that over 1.2 million ft² of new office-retail-commercial space could be developed on the Midtown Plaza site as well as some residential apartment buildings, if the considerable challenge of providing enough parking could be met. The new commercial development alone could generate the need for up to 3,500 parking spaces plus the replacement of the existing 1875 spaces of which approximately 600 spaces would be required to serve TCU Place.

It is important the City and Midtown Plaza continue to work together to support each other's growth needs and enable development across the Midtown area.

For the purposes of this study, we have assumed that the parking demand associated with existing uses plus any future development of the Midtown sub-area will be accommodated within the sub-zone and not require additional parking facilities off site. However, this would require approximately 600 spaces to meet TCU Place parking needs.

5.1.1.2 South Core – Future Development Sites

There are seven sites that have been identified in the South Core as potential redevelopment sites. The majority of the sites currently provide commercial parking with a peak demand of 391 spaces across all sites.

An overview of the net parking impact on each site (taking into account existing demand, estimated parking demand for the proposed uses and estimated parking supply) is provided in Table 9.

The total estimated parking demand generated by the future development sites is 3,168 spaces and the estimated proposed supply is 1,391 spaces. Taking into account the existing demand, proposed supply and estimated parking demand for the potential redevelopment sites, the net parking impact on the South Core area is a deficiency of 2,168 parking spaces. This deficiency exceeds the vacant parking supply (358 spaces-including a 10% vacancy buffer) available within the area by 1,810 spaces. Therefore, substantial additional parking supply will need to be provided over and above the amount that is typically provided in new development within this area to accommodate the growth potential described in Table 9.

The potential deficiency is a result of a number of factors including 1) there are no parking supply requirements for the Downtown area 2) the potential supply, particularly for office uses, is well below the

typical demand 3) the redevelopment sites are all located on existing well used commercial parking facilities that will be removed as part of the redevelopment.

TABLE 9 SOUTH CORE (DOWNTOWN) – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Potential Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Estimated Supply	
21	Justice Site	79 spaces	Office	75,000 ft ²	225 spaces	66 spaces	-238 spaces
22	240 4th Avenue South	49 spaces	Office	75,000 ft ²	225 spaces	66 spaces	-208 spaces
23	2nd Ave / 20th Street (NE corner)	14 spaces	Office	40,000 ft ²	120 spaces	0 spaces	-134 spaces
24	265 2nd Ave South (2nd Avenue / 20th Street)	65 spaces	Office	203 459 ft ²	610 spaces	70 spaces	-605 spaces
26	2nd Ave between 19th Street and 20th Street	60 spaces	Office	100,000 ft ²	300 spaces	80 spaces	-280 spaces
27	1st Avenue / 19th Street	102 spaces	Office	185,000 ft ²	555 spaces	278 spaces	-379 spaces
30	River Landing Village Parcel YY - Building A	0 spaces	Residential	15 units	162 spaces	255 spaces	93 spaces
			Hotel	147 units			
	River Landing Village Parcel YY - Building B	0 spaces	Office	267,008 ft ²	801 spaces	345 spaces	-456 spaces
	River Landing Village Parcel YY - Building C	22 spaces	Residential	170 units	170 spaces	231 spaces	39 spaces
Total		391 spaces			3,168 spaces	1,391 spaces	-2,168 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							358 spaces
Parking Surplus / Deficit							-1,810 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 ft². Retail: 2.75 spaces/1000 ft² and Hotel:/Residential 1 space/unit.

The potentially large 1800 parking space deficiency⁹ in the south core area would inhibit full development of the sites and create a considerable demand/supply imbalance unless the City develops a plan to effectively address the parking impacts. Potential solutions include:

1. Continuing to implement a range of Transportation Demand Management (TDM) initiatives focused on increasing mobility options and reducing parking demand over time.
2. Elimination of the current parking exempt zone and the creation of minimum parking supply requirements in the Zoning Bylaw.
3. The provision of municipally owned/controlled shared public parking resources in surface lots/garages.

5.1.1.3 Core – Future Development Sites

Four potential future development sites have been identified within the Core, the majority of which are comprised of office uses with some residential and retail at-grade. Today, these sites provide private parking (66 spaces), municipal parking (88 spaces) and commercial parking (114 spaces). Peak demand across all sites was 172 spaces. An overview of the net parking impact on each site (taking into account existing demand, estimated parking demand for the proposed uses and estimated parking supply) is provided in Table 10.

The peak existing parking demand at the future development sites is 172 spaces. The total estimated parking demand generated by the future development sites is 1,909 spaces with an estimated proposed supply of 1,162 spaces. The net parking impact of the potential future development in the Core is a deficiency of approximately 671 spaces.

There are a total of 1,112 vacant spaces available during the peak period, of which 236 spaces are available for public use (including the removal of parking supply on development sites and a 10% vacancy buffer). The projected demand exceeds the available public parking supply within the area by 683 spaces however there is a substantial inventory of vacant private parking in the area (610 spaces) that has the potential to help meet the additional parking demands within the Core if these facilities are opened to the general public and the use of reserved parking is minimized in order to maximize the utilization of the parking resources.¹⁰

A Transportation Demand Management (TDM) strategy focused on increasing mobility options and reducing parking demand over time may limit the need to rely on private parking or additional publicly accessible parking to meet future demands in the Core sub-area.

⁹ It is anticipated that most of the parking supply in the new below grade public parking facility (approximately 155 spaces) in the Remai Art Gallery of Saskatchewan will be utilized by visitors and staff to the Gallery and the Persephone Theatre and will not help off-set the potential parking space deficiency in the south core area.

¹⁰ There are private parking facilities within the area that provide dedicated reserved spaces to permit holders within a portion or an entire parking facility (as opposed to offering parking on a first come first serve basis). This practice of offering large proportions of reserved parking spaces dedicated to a single user results in an underutilization of the overall parking supply that could otherwise be used to meet additional area demands.

TABLE 10 CORE (DOWNTOWN) – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Potential Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Estimated Supply	
14	Vacant Police Building	48 spaces	Office	60,000 ft ²	180 spaces	91 spaces	-137 spaces
15	3rd Avenue / 23rd Street	35 spaces	Office	75,000 ft ²	225 spaces	66 spaces	-194 spaces
17	City Centre Tower (3rd Avenue / 22nd Street) – Phases 2 & 3	19 spaces	Office Commercial Residential	209,896 ft ² 37,781 ft ² 290 units	630 spaces 104 spaces 290 spaces	805 spaces	-238 spaces
18	3 rd Avenue at 22 nd Street	70 spaces	Office	160,000 ft ²	480 spaces	200 spaces	-350 spaces
Total		172 spaces			1,909 spaces	1,162 spaces	-919 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							+236 spaces
Parking Surplus / Deficit							-683 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 s.f., Retail: 2.75 spaces/1000 s.f. and Hotel:/Residential 1 space/unit.

5.1.1.4 North Core – Future Development Sites

There are six sites within the North Core area that have been identified as potential redevelopment sites. Commercial and private parking are currently provided on the sites including 316 commercial spaces and 160 private spaces. Peak parking demand across all four sites is 257 spaces. An overview of the net parking impact on each site (taking into account existing demand, estimated parking demand for the proposed uses and estimated parking supply) is provided in Table 11.

Taking into account the existing demand, proposed supply and estimated parking demand for the potential redevelopment sites, the net parking impact on the North Core area is a deficiency of 1,048 parking spaces. There are a total of 1,352 vacant spaces available during the peak period, of which 468 are available for public use (including a 10% vacancy buffer).

The net parking impact anticipated from the six potential redevelopments would result in a deficiency of approximately 580 parking spaces. This demand exceeds the available public parking supply within the area; however there is a substantial inventory of private parking in the area (592 spaces) that has the potential to meet the additional parking demands within the North Core area.

If there are no opportunities long-term to utilize area private parking facilities additional parking may need to be secured to support the potential redevelopment sites within the North Core area. Implementation of a TDM strategy focused on increasing mobility options and reducing parking demand over time could also reduce the existing and future parking demands within the area.

TABLE 11 NORTH CORE (DOWNTOWN) – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Potential Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Estimated Supply	
7	5 th Street / 24 th Avenue	43 spaces	Office	75,000 ft ²	225 spaces	66 spaces	-202 spaces
8	4 th Avenue North between 24 th Street and 25 th Street	49 spaces	Office	15,000 ft ²	45 spaces	24 spaces	-70 spaces
9	2 nd Avenue / 25 th Street	55 spaces	Office	100,000 ft ²	300 spaces	200 spaces	-155 spaces
10	5 th Avenue North between 23 rd Street and 24 th Street	56 spaces	Residential	160 units	160 spaces	160 spaces	-56 spaces
11	2 nd Avenue/ 24 th Street	91 spaces	Office	150,000 ft ²	450 spaces	132 spaces	-409 spaces
12	1 st Avenue / 24 th Street	68 spaces	Office	82,500 ft ²	248 spaces	160 spaces	-156 spaces
Total		362 spaces			1,428 spaces	742 spaces	-1,048 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							+468 spaces
Parking Surplus / Deficit							-580 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 s.f., Retail: 2.75 spaces/1000 s.f. and Hotel:/Residential 1 space/unit.

5.1.1.5 Warehouse

One potential future office development site has been identified within the Warehouse area. Today, this site provides commercial parking (45 spaces) for public use with a peak demand of 32 spaces. A summary of the net parking impact on the site on the area parking supply (taking into account existing demand, estimated parking demand for the proposed uses and estimated parking supply) is provided in Table 10.

The peak existing parking demand at the future development site is 32 spaces. The total estimated parking demand generated by the future development site is 144 spaces with an estimated proposed supply of 48 spaces. The net parking impact of the future development sites on the Warehouse area is a deficiency of approximately 128 spaces.

There are a total of 161 vacant spaces available for public use (including a 10% vacancy buffer). There is sufficient public parking within the Warehouse area to accommodate the additional parking supply required to support the future development sites.

TABLE 12 WAREHOUSE (DOWNTOWN) – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Potential Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Estimated Supply	
13	Pacific Avenue between 23 rd and 24 th	32 spaces	Office	48,000 ft ²	144 spaces	48 spaces	-128 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							+161 spaces
Parking Surplus / Deficit							+33 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 s.f., Retail: 2.75 spaces/1000 s.f. and Hotel:/Residential 1 space/unit.

5.1.1.6 Downtown – Future Development Summary

The estimated impact of the potential future development across the Downtown could result in a parking deficit of approximately 4,863¹¹ spaces if existing travel and new development parking supply characteristics continue into the future. There are a total of 1,152 publicly available parking spaces across the Downtown at the peak parking demand period (including the removal of parking supply on development sites and a 10% vacancy buffer). Therefore a net parking supply deficit of approximately 3,711 spaces would need to be accommodated by the construction of additional, strategically located parking facilities that serve a variety of developments in the area.

The amount of additional parking required could be reduced if single occupant auto travel is reduced by increased transit use as well as increased walking, cycling and carpooling. More efficient management of existing private parking resources by opening up private sites for off-site customers and minimizing the use of reserved parking could also reduce the need for additional parking.

A summary of the parking impacts of potential future developments across the Downtown (assuming an additional 2.9 million ft² in office) is provided in Table 13.

We have also tested the impact of 1.8 million square feet of new office development which assumes that the share of future development in the downtown declines to approximately 60% of its current level as per the assumptions used in the new growth plan. A summary of the parking impacts associated with this lower level of development is provided in Table 15.

¹¹ Includes peak existing parking demand (957 spaces) on future potential development sites, estimated parking demand for future potential developments (7,249 spaces) and estimated parking supply provisions for future potential developments (3,343 spaces).

TABLE 13 DOWNTOWN – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS (2.9 M FT² OFFICE)

Area	Peak Existing Parking Demand ¹	Potential Development		Vacant Publicly Available Parking ³	Net Parking Impact
		Estimated Parking Demand ²	Estimated Parking Supply		
Midtown	N/A	600 spaces	N/A	-71 spaces	-671 spaces
South Core	391 spaces	3,168 spaces	1,391 spaces	358 spaces	-1,810 spaces
Core	172 spaces	1,909 spaces	1,162 spaces	236 spaces	-683 spaces
North Core	362 spaces	1,428 spaces	742 spaces	468 spaces	-580 spaces
Warehouse	32 spaces	144 spaces	48 spaces	161 spaces	33 spaces
Total	957 spaces	7,249 spaces	3,343 spaces	1,152 spaces	-3,711 spaces

Notes:

1. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
2. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 s.f., Retail: 2.75 spaces/1000 s.f. and Hotel:/Residential 1 space/unit.
3. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.
4. The 600 space demand in the Midtown area is related to TCU Place which does not presently supply any parking of its own.

TABLE 14 DOWNTOWN – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS (1.8 M FT² OFFICE)

Area	Peak Existing Parking Demand ¹	Potential Development		Vacant Publicly Available Parking ³	Net Parking Impact
		Estimated Parking Demand ²	Estimated Parking Supply		
Midtown	N/A	600 spaces	N/A	-71 spaces	-671 spaces
South Core	391 spaces	2,034 spaces	1,030 spaces	358 spaces	-1,037 spaces
Core	172 spaces	1,303 spaces	698 spaces	236 spaces	-541 spaces
North Core	362 spaces	921 spaces	509 spaces	468 spaces	-306 spaces
Warehouse	32 spaces	86 spaces	29 spaces	161 spaces	72 spaces
Total	957 spaces	4,944 spaces	2,266 spaces	1,152 spaces	-2,483 spaces

Notes:

1. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
2. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 s.f., Retail: 2.75 spaces/1000 s.f. and Hotel:/Residential 1 space/unit.
3. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.
4. The 600 space demand in the Midtown area is related to TCU Place which does not presently supply any parking of its own.

5.2 KINSMEN

5.2.1 Existing Parking Vacancies

As discussed in Section 4.3, there are a total of 1,565 vacant spaces available within the Kinsmen during the peak period of which 594 spaces are publicly available (see Table 15).

A number of sites that currently provide public parking have been identified as potential future development sites. As such, the vacant parking supply available within these lots during the peak parking demand period have been removed from the total vacant publicly available parking demand.

In order to provide a reasonable level of service for people searching for parking, it is recommended that a minimum 10% vacancy should be maintained within the area. As such, a 10% vacancy buffer has been applied to the total publicly available spaces resulting in an available supply of 374 spaces.

TABLE 15 KINSMEN PARKING VACANCIES

Area	Total Vacant Parking during Peak Period	Vacant Public Parking during Peak Period	
		Total ¹	Total (with 10% vacancy buffer) ²
Kinsmen	1,565 spaces	483 spaces	374 spaces

Notes:

1. A number of sites that currently provide public parking have been identified as potential future development sites. As such, the vacant parking supply available within these lots during the peak parking demand period have been removed from the total vacant publicly available parking demand.
2. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.

5.2.2 Future Development Sites

There are six sites within the Kinsmen area that have been identified for future development. Table 16 provides an overview of each site, existing parking demand, potential development and net parking impact.

The proposed redevelopment sites include commercial, office and residential uses. The net parking impacts of the proposed development, taking into account the peak existing parking demand on the site, the estimated parking demand generated by the proposed uses and the proposed supply will be a deficiency of 579 spaces. This deficiency exceeds the vacant parking supply (374 spaces including a 10% vacancy buffer) available within the area by 205 spaces. Additional parking supply will need to be provided within this area to accommodate the development potential described in Table 16.

As discussed in Section 4.3, there is an inventory of vacant private parking in the area (1,091 spaces) that has the potential to meet the additional parking demands within Kinsmen if these facilities are opened to the general public use and the use of reserved parking is minimized in order to maximize utilization.



TABLE 16 KINSMEN – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Proposed Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Estimated Supply	
1	550 4th Avenue North	0 spaces	Residential	94	94 spaces	106 spaces	+12 spaces
2	410 5 th Avenue North	59 spaces	Commercial Office Residential	25,000 ft ² 210,000 ft ² 200	69 spaces 630 spaces 200 spaces	684 spaces	-274 spaces
3	2 nd Avenue / 25 th Street (NE Corner)	23 spaces	Office	15,000 ft ²	45 spaces	45 spaces	-23 spaces
4	Ontario Ave / 25 th Street (se corner)	86 spaces	University of Saskatchewan ⁴				N/A
5	Pacific Ave / 25 th Street E (se corner)	10 spaces	Office	72,000 ft ²	216 spaces	80 spaces	-146 spaces
6	Pacific Ave / 25 th Street E (SW corner)	45 spaces	Office	51,000 ft ²	153 spaces	50 spaces	-148 spaces
Total		223 spaces		-	1,407 spaces	965 spaces	-579 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							+374 spaces
Parking Surplus / Deficit							-205 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 ft², Retail: 2.75 spaces/1000 ft² and Hotel:/Residential 1 space/unit.
4. This site is intended to be redeveloped for the University of Saskatchewan. It is assumed that the parking demand generated by the University project will be accommodated by the on-site parking supply.

5.3 RIVERSDALE

5.3.1 Existing Parking Demands

As discussed in Section 4.3, there are a total of 1,387 vacant spaces available within Riversdale during the peak period of which 356 spaces are publicly available (see Table 17).

In order to provide a reasonable level of service for people searching for parking, it is recommended that a minimum 10% vacancy should be maintained within the area's public parking supply. As such, a 10% vacancy buffer has been applied to the total publicly available spaces resulting in an available supply of 250 spaces.

TABLE 17 RIVERSDALE PARKING VACANCIES

Area	Total Vacant Parking during Peak Period	Vacant Public Parking during Peak Period	
		Total ¹	Total (with 10% vacancy buffer) ²
Riversdale	1,387 spaces	356 spaces	250 spaces

Notes:

1. A number of sites that currently provide public parking have been identified as potential future development sites. As such, the vacant parking supply available within these lots during the peak parking demand period have been removed from the total vacant publicly available parking demand.
2. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.

5.3.2 Future Development Sites

Five sites have been identified with Riversdale as potential redevelopment sites. Table 18 provides an overview of each site, existing parking demand, potential development and net parking impact.

The proposed redevelopment sites include commercial, office, hotel and residential uses. Minimal parking is currently provided on the redevelopment sites.

The net parking impact anticipated from the four potential redevelopments would result in a deficiency of approximately 486 parking spaces. This demand exceeds the available public parking supply within the area by approximately 236 spaces however; there is a substantial inventory of private parking in the area (730 spaces) that has the potential to meet the additional parking demands within the Riversdale area.



TABLE 18 RIVERSDALE – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map # ¹	Intersection / Address	Peak Existing Parking Demand ²	Proposed Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ³	Proposed Supply	
20	123 Avenue B South (The Blok)	6	Office	28,926 ft ²	87 spaces	17 spaces	-76 spaces
29	20 th Avenue at Avenue B	27	Residential / Commercial	24 units 10,000 ft ²	24 spaces 30 spaces	27 spaces	-54 spaces
31	Parcel D/E - 2.25 acres	0	Residential/ Office/ Hotel	137 units 197,586 ft ² 109 rooms	137 spaces 593 spaces 109 spaces	137 spaces 255 spaces 109 spaces	-338 spaces
32	Parcel BB -1.7 acres	0	Residential	211 units	211 spaces	211 spaces	0 spaces
33	Parcel A -1.4 acres	N/A	Residential / Commercial	176 units 21,785 ft ²	176 spaces 60 spaces	218 spaces	-18 spaces
Total		33 spaces			1,426 spaces	973 spaces	-486 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)							+250 spaces
Parking Surplus / Deficit							-236 spaces

Notes:

1. The location of each potential future development site is illustrated in Figure 5.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.0 spaces / 1000 ft², Retail: 2.75 spaces/1000 ft² and Hotel:/Residential 1 space/unit.

5.4 BROADWAY

5.4.1 Existing Parking Demands

As discussed in Section 4.3, there are a total of 597 vacant spaces available within Broadway during the peak period of which 247 spaces are publicly available (see Table 19). In order to provide a reasonable level of service for people searching for parking, it is recommended that a minimum 10% vacancy should be maintained within the area. As such, a 10% vacancy buffer has been applied to the total publicly available spaces resulting in an available supply of 163 spaces.

TABLE 19 BROADWAY PARKING VACANCIES

Area	Total Vacant Parking during Peak Period	Vacant Public Parking during Peak Period	
		Total	Total (with 10% vacancy buffer) ¹
Broadway	597 spaces	247 spaces	163 spaces

Notes:

1. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.

5.4.2 Future Development Sites

Three sites have been identified within Broadway as potential redevelopment sites. Table 20 provides an overview of each site, existing parking demand, potential development and net parking impact.

There are a total of 163 on-street parking spaces available (including a 10% vacancy buffer) during the peak demand period and an additional 342 private parking spaces available within the area. The available on-street parking supply would meet the majority of the parking needs of the proposed development in the short term.

It should be noted that this area is substantially reliant on the supply of municipal on-street parking for both employee and customer parking demand and that over time it would be advantageous to identify off-street locations where longer stay employee parking demand could be accommodated, thereby freeing up some on-street parking for short duration visitor parking.



TABLE 20 BROADWAY – POTENTIAL LONG-TERM FUTURE DEVELOPMENTS

Map #	Intersection / Address	Peak Existing Parking Demand ¹	Proposed Development				Net Parking Impact
			Use	Approx. GFA / # Units	Estimated Parking Demand ²	Proposed Supply	
34	Broadway Avenue at Saskatchewan Crescent East ³	16 spaces	Residential Retail	25 units 4,300 ft ²	25 spaces 12 spaces	47 spaces	-6 spaces
35	Farnam Block (11th Street East and Broadway Avenue)	0 spaces	Commercial Office	5,700 ft ² 11,400 ft ²	16 spaces 34 spaces	6 spaces	-44 spaces
36	616 Main Street ⁴	0 spaces	Office	74,206 ft ²	223 spaces	79 spaces	-144 spaces
Total		16 spaces			310 spaces	132 spaces	-194 spaces
Available Publicly Available Parking Supply (Including 10% Vacancy Buffer)⁵							+163 spaces
Parking Surplus / Deficit							-31 spaces

Notes:

1. City of Saskatoon Zoning Bylaw 8770 does not require parking to be provided within the Downtown area. As such, estimated parking demands are based on the following rates: Office: 3.3 spaces / 1000 ft², Retail: 3 spaces/1000 ft² and Hotel:/Residential 1 space/unit.
2. Peak existing parking demand is based on peak parking demand observed at each site throughout the course of the survey day. Future development on a site will displace existing demands which need to continue to be accounted for as part of the area's parking demand.
3. Site is located on the west side of Broadway Avenue between Saskatchewan Crescent E and 12 Street East. No development stats known at this time. Development stats were estimated based on other comparable developments within the study area. Retail estimate is based on typical floor plate.
4. This building was under construction when parking surveys were undertaken.
5. In order to provide a reasonable level of service for people searching for parking a minimum 10% vacancy buffer has been applied to the total publicly available parking supply.

5.5 POTENTIAL FUTURE PARKING SUPPLY DEFICIT SUMMARY

5.5.1 With Existing Travel Characteristics

Table 22 provides a summary of the potential parking impacts generated by future development within the study area if existing travel characteristics remain the same into the future. The Downtown estimates include the range in potential future office development from 1.8 million to 2.9 million square feet described earlier in Section 5.1.2.6.

TABLE 21 LONG RANGE POTENTIAL PARKING SUPPLY DEFICITS

Area	1.8 Million Sq.ft. New Office Development	2.9 Million Sq.ft. New Office Development
	Existing 10% Transit Mode Split	Existing 10% Transit Mode Split
Midtown	-671 spaces	-671 spaces
South Core	-1,037 spaces	-1,810 spaces
Core	-541 spaces	-683 spaces
North Core	-306 spaces	-580 spaces
Warehouse	72 spaces	+33 spaces
Downtown Sub-Total	-2,483 spaces	-3,711 spaces
Kinsmen	-205 spaces	-205 spaces
Riversdale	-236 spaces	-236 spaces
Broadway	-31 spaces	-31 spaces
Sub-Total	-472 spaces	-472 spaces

5.5.2 Downtown

1. The parking implications of potential future development within the Downtown are summarized as follows:

- **Midtown**

The Midtown area has extensive future development potential on its existing surface parking lots. The large size and shape of the parking lots should provide the flexibility to meet new parking demand within the sub-area. In order to maximize future development potential in Midtown, approximately 600 parking spaces would be required for TCU Place which presently does not supply any parking to meet its own needs and could be impacted significantly if new development takes place on the Midtown Plaza blocks and the parking available for TCU Place is reduced or restricted significantly.

- **South Core**

In order to accommodate future development potential in the South Core, 1,000 to 1,800 parking public parking spaces may be required in strategically located parking garages that would be



available to serve a variety of parkers in the area. The amount of parking might be reduced if increased transit use, walking, cycling and carpooling are achieved over the long term.

The large parking space deficiency would inhibit full development of the sites and create a considerable demand/supply imbalance unless the City develops a plan to effectively address the parking impacts.

- **Core**

In order to accommodate future development potential in the Core, 540 to up to 685 parking spaces may be required in strategically located parking garages that would be available to serve a variety of parkers in the area. The amount of parking might be reduced if increased transit use, walking, cycling and carpooling are achieved over the long term. The need for the additional parking could also be reduced if existing private parking in the area is made available to the general public.

- **North Core**

In order to accommodate future development potential in the North Core sub-area, 300 to 580 parking spaces may be required in strategically located parking garages that would be available to serve a variety of parkers in the area.

- **Warehouse**

The potential parking deficiency generated by the future development site in the Warehouse sub-area could be accommodated using area public parking supply.

2. The parking deficiencies and need for public parking garages identified within the various sub-areas of the Downtown are a result of numerous factors including 1) there are no parking supply requirements for the Downtown area 2) the proposed supply, particularly for office uses, is well below the typical demand 3) the redevelopment sites are all located on existing commercial parking facilities that will be removed as part of the redevelopment.
3. Continuing to implement Transportation Demand Management (TDM) initiatives focused on increasing mobility options (i.e. transit use, walking, cycling and carpooling) and reducing parking demand over time will reduce the need to rely on private parking or additional publicly accessible parking to meet future demands. The benefits of TDM modal split targets on parking requirements are discussed in Section 6.2.
4. The need for the additional parking could also be reduced if existing private parking in the area is made available to the general public.
5. There are private parking facilities within the Downtown that provide dedicated reserved spaces to permit holders within a portion or an entire parking facility (as opposed to offering parking on a first come first serve basis). This practice of offering large proportions of reserved parking spaces dedicated to a single user results in an underutilization of the overall parking supply that could otherwise be used to meet additional area demands.



5.5.3 Kinsmen, Riversdale and Broadway

6. The net parking impact anticipated from the six potential developments in Kinsmen would result in a deficiency of approximately 205 parking spaces. The need for the additional parking could also be reduced if existing private parking in the area is made available to the general public.
7. The potential parking impact anticipated from the five potential developments in Riversdale would result in a deficiency of approximately 486 parking spaces. This demand exceeds the available public parking supply within the area by approximately 236 spaces however; there is a substantial inventory of private parking in the area (730 spaces) that has the potential to meet the additional parking demands within the Riversdale study area.
8. The available public parking supply in Broadway (163 spaces) could accommodate the majority of the area's potential future developments; however there is a substantial inventory of private parking in the area that has the potential to meet the additional parking demands within the Broadway study area. It should be noted that the Broadway study area relies on public on-street parking to meet a substantial portion of its parking needs. Therefore any future loss of public on street parking for visitors and employees in the area would necessitate its replacement in off street parking lots or garages.

Over time it would be advantageous to identify off-street locations where longer stay employee parking demand could be accommodated, thereby freeing up some on-street parking for short duration visitor parking.

9. There may be the potential to explore parking opportunities on the borders of Kinsmen, Riversdale and Broadway and the Downtown.

5.5.4 Impacts of Increased Transit Mode Share on Future Parking Supply Deficits

The City of Saskatoon's *Growing Forward! Shaping Saskatoon* is a planning initiative to help develop a growth strategy for the City as the population is expected to double over the next 30 to 40 years. One of the objectives identified in the *Growth Plan Summary Report #1*, dated May 2014, is to increase peak period transit mode share in the Downtown from 10% to 25% over the next 30 years.

Figure 6 illustrates the future conceptual transit network as prepared in the June 2015 session of the Growing Forward Growth Plan Summary Report #2. The plan includes the two future rapid transit corridors that would connect the Downtown with major population and employment areas throughout the city. The rapid transit corridors will consist of exclusive Bus Rapid Transit (BRT) lanes in order to provide convenient, reliable service into/out of the Downtown.

Table 22 provides an illustration of the beneficial impacts of an increase of 15% in transit/non-auto travel mode share related to the investment in new transit services proposed in the new growth plan.

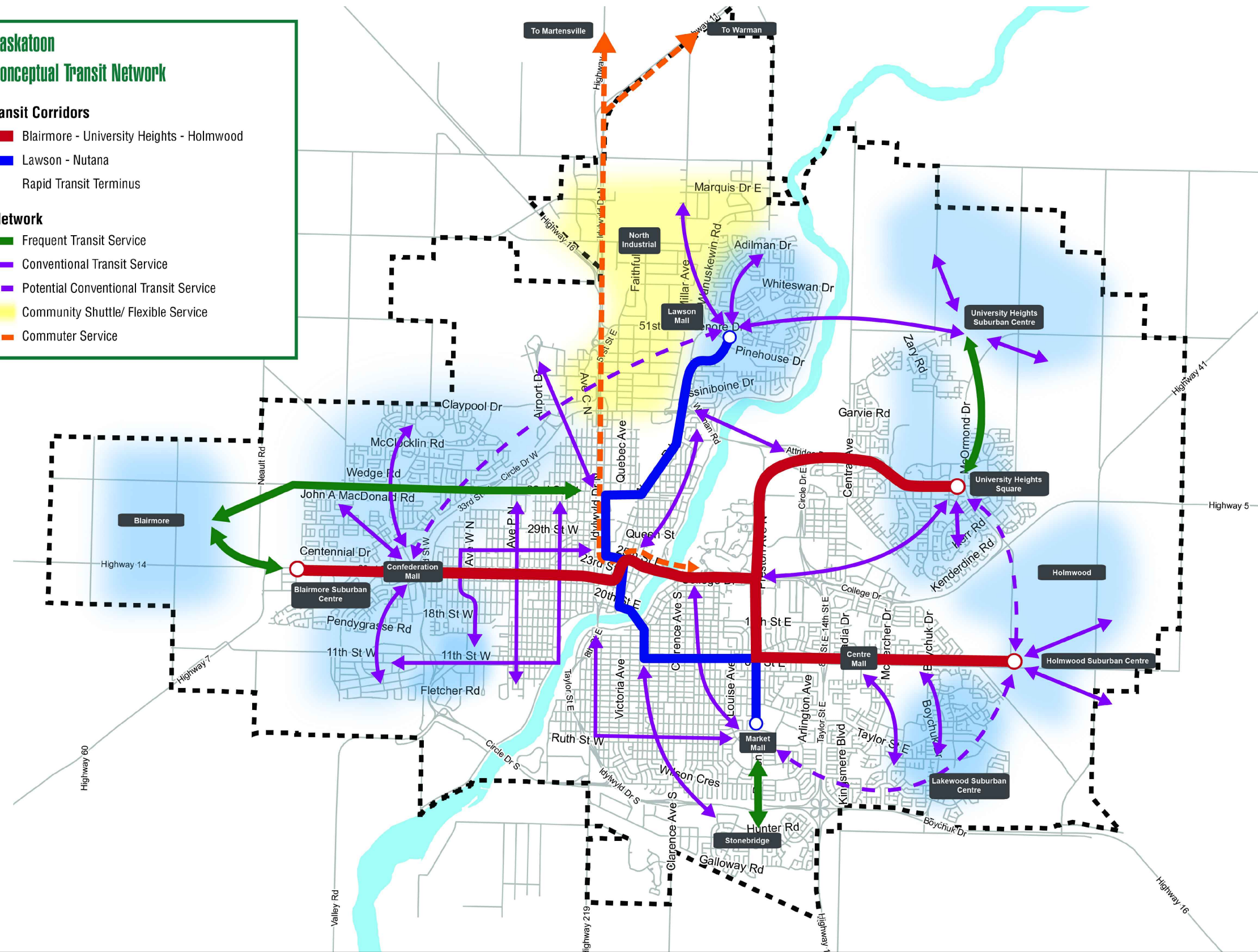
**City of Saskatoon
Future Conceptual Transit Network**

Rapid Transit Corridors

- Blairmore - University Heights - Holmwood
- Lawson - Nutana
- Rapid Transit Terminus

Transit Network

- Frequent Transit Service
- Conventional Transit Service
- Potential Conventional Transit Service
- Community Shuttle/ Flexible Service
- Commuter Service



Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\Fig06-07-FCTN.dwg

N.T.S.

FUTURE CONCEPTUAL TRANSIT NETWORK
Source: City of Saskatoon. Received February 18, 2016

TABLE 22 FUTURE LONG TERM PARKING SUPPLY DEFICIT SUMMARY

Area	1.8 Million Sq.ft. Office Downtown		2.9 Million Sq.ft. Office Downtown	
	Existing 10% Transit Mode Split	Future 25% Transit Mode Split	Existing 10% Transit Mode Split	Future 25% Transit Mode Split
Midtown	-671 spaces	-378 spaces	-671 spaces	-378 spaces
South Core	-1,037 spaces	-531 spaces	-1,810 spaces	-1,134 spaces
Core	-541 spaces	-121 spaces	-683 spaces	-172 spaces
North Core	-306 spaces	-98 spaces	-580 spaces	-296 spaces
Warehouse	72 spaces	+113 spaces	+33 spaces	+83 spaces
Downtown Sub-Total	-2,483 spaces	-1,015 spaces	-3,711 spaces	-1,897 spaces
Kinsmen	-205 spaces	+76 spaces	-205 spaces	+76 spaces
Riversdale	-236 spaces	+38 spaces	-236 spaces	+38 spaces
Broadway	-31 spaces	+104 spaces	-31 spaces	+104 spaces
Sub-Total	-472 spaces	+218 spaces	-472 spaces	+218 spaces

5.5.5 Potential Long Range Parking Supply Deficits

The potential long-term parking supply deficits without any increase in transit/non-auto mode share are substantial, up to 3,700 spaces (rounded) in the Downtown and 470 spaces (rounded) in the Kinsmen/Riversdale/Broadway areas.

Should the City achieve the long range improvements in transit mode share related to their \$100 million investment (rough preliminary cost estimate) in the proposed BRT system, the parking supply deficits would be reduced considerably, to only 1,900 spaces (rounded) in the Downtown and no deficit in other areas. The potential 1,800 space reduction in the Downtown parking supply deficit represents a savings in future garage capital costs of at least \$90 million dollars (2015 \$).

Although the exact magnitude of municipal parking infrastructure to support long-range development is dependent upon the success in converting drivers to transit and other modes over the long-term, it is apparent the City might need to consider providing at least 1,900 spaces in the Downtown area over the long-term even with the substantial improvements in transit mode split that should be achieved with the new rapid transit plan. The approximate cost of providing such infrastructure would be roughly \$95 million (2015\$) assuming it is provided in above ground garages.

5.5.6 Short Term Parking Supply Implications

In the short-term, the amount of parking that the City should consider providing is related to the need to free up existing surface lots for future development (i.e. by replacing the parking currently being used in these lots to serve existing development). Such an investment could serve as a catalyst for new development when market demand exists for it, and minimize the impacts on existing employers and building owners who rely on the surface lots to meet their parking needs.

A number of the future development sites identified within the Downtown currently provide publicly available parking (municipal and privately operated). These existing parking demands (a total of 925 spaces across the Downtown including 362 spaces in the North Core, 172 spaces in the Core and 391 spaces in the South Core) would need to be replaced in order to permit redevelopment on these sites. The provision of this supply within municipal parking garages could enable redevelopment in the core areas of the Downtown

In the Midtown area, the parking needs of the TCU Place are largely met in the publicly available parking facilities owned by the Midtown Plaza. Should the owners of the Midtown Plaza decide to renovate/expand the mall and/or add new development on the two large surface lots they own, TCU Place would be faced with challenges in meeting the parking requirements associated with their customers. As mentioned earlier in Section 5.1.1.1, approximately 600 spaces should be provided to meet TCU Place recurring demands. If the City were to provide a garage of 600 spaces this would secure a reasonable supply to meet the business needs of the TCU Place and also facilitate the redevelopment of the Midtown Plaza large surface lots.

6.0 PARKING MANAGEMENT STRATEGY

As summarized in Section 4.0, the existing parking occupancy levels achieved in each of the study sub-areas is well below the 85 to 90% threshold typically considered to indicate a parking supply shortfall (detailed parking supply, demand and vacancies (at 1:00 pm and 7:00 pm) are summarized in Appendix B). It should also be noted that many of the private parking facilities not available to the public have significant vacancies as well, some of which could be used to accommodate additional parking demands generated by absorption of existing vacant office space. However the following points should be noted:

- While it appears that there is sufficient vacant public parking available within each area during the peak period, discussions with stakeholders suggests that some employers within the Downtown have difficulty securing large blocks of monthly rate off-site parking for employees on a long term basis.
- A number of parking lots across the city provide dedicated reserved parking spaces within public parking facilities (municipal or privately operated) as opposed to simply providing a monthly parking permit with access to a common pool of parking. The practice of reserving particular spaces limits the effective capacity within a parking facility (as certain spaces can only be occupied by a specific user regardless of whether or not they are parking at a given time) and does not maximize a parking facility's revenue potential.
- Because the City controls a relatively small portion of the overall parking supply compared to most mid-sized municipalities, it has limited scope to assist in providing parking to meet employee demand in the Downtown area.
- On-street parking within the Downtown (particularly within the Core, South Core and North Core areas) typically peaks in the early evening (7:00 pm) when on-street parking is free and no parking restrictions are in place. However, there is an ample supply of publicly available off-street parking available to accommodate demands that cannot be met in the municipal on-street parking.

Looking to the future, the parking demand generated by new development combined with the loss of existing surface lots that will become future development sites will present a transformation challenge because many existing employers and employees rely on the use of the existing lots. Since most new developments provide only enough parking to meet approximately half of their actual needs, new development will create substantial additional demand for new off-site parking unless public transit use increases substantially, existing public and private parking resources are managed more efficiently and new developments increase the amount of parking they provide to meet their own needs and/or the City assists in meeting some of the demand with public parking garages. If a strategy is not developed to address the transformation challenge from surface lots to development sites and the long term need for public parking resources, future office development in the Downtown, may be limited to well below its historic share of the total office supply.

The proposed parking management strategy involves the following elements:

1. **Rationale for Public Sector Parking Supply Involvement** - the provision of shared public parking resources.

2. **Transportation Demand Management** - the importance of integrating parking management and transportation management policies and the potential long term impact of the City's public transit strategy (as articulated in their Growth Plan).
3. **Potential Future Parking Garage Considerations** - the potential magnitude and locations for future municipal shared public parking resources.
4. **Zoning Bylaw Requirements** – a review of Zoning Bylaw changes regarding future development parking supply requirements for vehicles and bicycles.
5. **Financial Considerations** - a review of funding options.
6. **Management Considerations** – a review of organizational considerations and shorter term operational considerations.

The following sections discuss the rationale for each of the elements within the proposed parking management strategy.

6.1 RATIONALE FOR PUBLIC SECTOR PARKING SUPPLY INVOLVEMENT

Most municipalities, especially in smaller and mid-size cities like Saskatoon, invest in public parking resources in order to encourage and facilitate development in their Downtown core areas. Municipal parking systems in the very large cities such as Calgary, Vancouver, Toronto, Montreal and Ottawa operate with substantial annual revenue surpluses that are returned to the City to fund other non-parking related initiatives, thereby reducing the general realty tax rate. Some smaller mid- size cities have adopted a “parking enterprise” approach whereby they intend to operate the municipal parking system as a self-sustaining break even basis over the long run. The enterprise model requires parking fees to be high enough to cover operating costs, capital repairs and build a reserve fund to finance future parking infrastructure. In many mid-sized cities, surplus funds generated by on-street parking and off-street surface lots are used to off-set the financial shortfalls associated with building more expensive parking garages. It is not unusual for many municipalities to control up to 50 to 60% of the overall parking supply in the Downtown areas of small to mid-sized cities. It is unusual to see a municipal parking operation that controls less than 25 to 35% of the overall parking supply, which is the case in Saskatoon, especially in a parking exempt Zoning By-law environment.

The provision of municipally controlled public parking infrastructure can encourage new commercial and institutional uses to locate within various sub-areas which, otherwise, may have found the amount and/or cost of providing the required parking prohibitive.

Parking policies can foster economic development by:

- encouraging the provision of well-designed and strategically located municipal parking facilities which will allow multiple users and property owners to benefit from economies of scale, efficient use of parking and land resources;

- allowing builders to provide a cash payment to the municipality in lieu of providing parking for a building on the same site, thereby reducing the proliferation of many small parking facilities and facilitating the intensification of building sites; and
- allowing the municipal government to provide financial support in terms of developing parking facilities for shared use at less cost than the private sector.

In short – shared public parking resources – rather than providing parking in independent private buildings – can be provided at cheaper cost and provide more efficient use of expensive parking infrastructure, thereby supporting sustainable economic development and fostering a more compact urban built form that is transit supportive.

An additional opportunity for the City to support existing and future development would be to own/control and better manage a greater proportion of the overall parking supply by acquiring or developing new surface lots, especially in locations where it is apparent that they will likely be required for future public garages. City control of temporary surface lots would improve their ability to influence parking pricing and better manage the supply for the overall benefit of visitors and employees in the area. A detailed review of potential future parking garage sites and associated costs is provided in Section 6.3.

6.2 TRANSPORTATION PLAN CONSIDERATIONS

The City has been working on its new Growth Plan that will guide and direct an increase in population from 250,000 people to 500,000 people over the next 25 to 30 years, including a commensurate growth in employment throughout the city. This plan includes an overall transportation plan for the city to accommodate the growth and increase the use of alternative modes of transportation such as public transit, walking and cycling. The transportation plan is intended to achieve a decrease in single occupant vehicle travel into the downtown that will in turn reduce the long term need for parking, particularly employee or commuter related.

The City Centre Plan recommended the development of a well thought out pedestrian system and cycling network throughout the downtown in order to encourage active transportation for short trips inside the downtown and to/from the Riversdale and Broadway Business Improvement Districts. As the downtown attracts more residents who live, work and shop in the area it is important to have active transportation options in order to reduce the need for short trip travel by using single occupant vehicles. The new growth plan includes the identification of priority pedestrian and cycling corridors to/from and through the downtown and also includes the staged implementation of a bus rapid transit system to encourage longer distance commuting trips. An overlay of the key transportation plan elements for the downtown are included on Figure 8.

The implementation of a transportation demand management (TDM) strategy focused on increasing mobility options and reducing parking demand over time can play a significant role in reducing the existing and future parking demands within the study area.

As transportation planners and government officials have increasingly realized, there is a limit to the amount of road and freeway infrastructure that can be constructed from a financial and environmental sustainability perspective. More emphasis must be placed on developing effective transit service and on managing transportation infrastructure in a more efficient manner through TDM policies and techniques. The provision of parking services is an important but often overlooked component in this process.

Parking related TDM policies and techniques which can be used to encourage transit use, car/van pooling, walking, cycling and moped/motorcycle use include:

- parking pricing that is the same or higher than transit fares;
- full cost pricing for parking facilities at the individual user level;
- cash-in-lieu of parking & reduced cost transit benefits;
- co-ordinating parking supply strategies with transit initiatives;
- provision of specially designated car/van pool stalls in convenient locations;
- reduced parking fees for car/van pooling;
- provision of parking stalls for bicycles and motorcycles;
- provision of car share and bike share services in both public and private parking facilities;

- provision of a guaranteed ride home service for personal emergencies¹²;
- implementing parking supply limits in zoning ordinances (minimum and maximum parking requirements);
- demonstrating leadership by applying all of the above policies and techniques to municipal employee parking.

Most of these policies and techniques can be applied to the study area in order to encourage reduced single-occupancy vehicle use over time.

The ultimate goal of Transportation Demand Management is to provide well co-ordinated mobility options for commuters and visitors. This will increase the productivity of an area by making the commute more convenient, cost effective and less stressful as well as improve the environment by reducing congestion. It will also facilitate the more efficient use of land and effective urban design. Parking planning, design, management and operation are very important parts of this system.

In order to influence travel demand characteristics, particularly for employees, both the supply and price of parking must be effectively managed. The City can control supply by implementing minimum and maximum supply requirements in the Zoning Bylaws for the area. However, this alone will not necessarily result in the desired change in travel behaviour. In addition to supplying reasonable alternatives to single occupant vehicle travel through enhanced transit services and other transportation demand management initiatives, one of the single most effective measures in reducing parking demand is the implementation of parking pricing. Monthly parking rates in the Downtown are currently transit supportive because they range from \$150 to \$250 per month per space which is well in excess of the \$83 cost of a monthly transit pass. It is important that this price differential continue or increase into the future in order to provide a strong economic incentive to use public transit.

It is also important to complement the investment in increased transit and active transportation infrastructure and services with many of the TDM measures described earlier. For example:

- the provision of a car and bike share service will increase the likelihood that people will take transit, if they know that they can access an automobile or bike for short duration business or personal trips when required;
- the provision of a guaranteed ride home service will increase the likelihood that people will take transit or cycle if they can access a ride home for a personal emergency;
- the provision of secure bicycle parking in municipal and private parking facilities will encourage more people to try cycling for commuter trips;
- the provision of shower and change facilities at places of employment will encourage people to cycle for commuter trips;
- the provision of carpool parking in priority locations and the creation of a ride matching service will encourage more people to carpool for at least some of their commuting trips;
- monthly bus pass discounts for employer groups in specific areas will provide an additional economic incentive to use public transit;

¹² Provides commuters who regularly use alternative modes are provided with a reliable and free ride home in a personal emergency. This service is typically available to users a certain number of times per year and a maximum reimbursable cost (e.g. taxi fare).

- regular surveys of employee commuting characteristics and their propensity to consider the use of alternative travel modes will provide current information to plan and implement new measures to improve mobility options.

We have found that a co-ordinated and well-founded transportation demand management plan can be best deployed at the parking management level because this is where the interaction with people who drive regularly occurs and where the opportunity to engage them about changing travel modes as an alternative to driving is most effective. We have also found that TDM efforts are most successful when trying to address an important parking challenge. Therefore, many of these services should be managed, promoted and funded through the municipal parking operation in co-ordination with other municipal departments, especially Saskatoon Transit. The municipal parking office should also be able to sell transit passes as an alternative to more expensive monthly parking or a lengthy wait list, perhaps at an introductory discount. The formal implementation of the TDM function should occur in conjunction with a major new parking or transit project such as a new parking garage and /or the proposed BRT service through the Downtown.

The City has been quite advanced in its approach to using a portion of parking revenue proceeds generated by the municipal parking operation to fund streetscape improvements in critical areas which will in turn encourage walking and cycling trips and mixed use development. Similarly, a portion of the parking revenues could be used to fund a guaranteed ride home service, subsidize the initial start-up of a ride share service, fund secure bike storage facilities and provide discounts or special memberships in local health clubs for access to shower and change facilities.

6.3 FUTURE PARKING GARAGE CONSIDERATIONS

6.3.1 Recommended Municipal Approach

In order to effectively facilitate future sustainable development the City should play three roles:

1. Invest in the provision of new parking garages in advance of major development in order to free up existing surface parking lots for new development and make it clear what parking will be available to meet future development needs in a timely manner.
2. Invest in joint venture projects by participating with developers to top up or provide additional parking where it is desirable to do so.
3. Implement a comprehensive TDM program to reduce the amount of costly parking garage(s) required in the future. This program would include local transit improvements, the provision of auto share services, a ride matching service, preferential parking for carpool vehicles, enhanced bicycle parking, a guaranteed ride home service and the continued use of parking rates for employee parking that are significantly higher than the cost of a transit pass.

Parking demands should be monitored over time, as development occurs within the area, to confirm the timing and number of spaces required in strategically located parking garages. Implementation of TDM strategies (including increased transit modal split) and the introduction of Zoning Bylaw parking supply

requirements could delay or reduce the need for a parking structures in the future. Payment -in-lieu policies could help meet the cost of constructing parking garages over the long term.

Figure 7 illustrates the location of seven sites that have been identified as potential future parking structure locations based on area parking needs, reasonable walking distance as well as lot size and configuration. Figure 8 illustrates the potential parking garage sites in the context of the key transportation infrastructure planned for the downtown including the future BRT lines, active transportation features and major vehicular access routes.

Lot #1

This site is located on municipally owned lands adjacent to Idylwyld Drive and south of 19th Street within River Landing (within the Riversdale study area). This site is part of the Phase 2 River Landing mixed-use development (residential, hotel, office and restaurant uses are currently being contemplated).

Construction of a four and a half level freestanding parking structure could provide approximately 630 public parking spaces (140 spaces per level).

This site is located within 400 metres of the southwestern corner of the South Core area of the Downtown and could help alleviate some of the parking deficiency identified within this area. However, access from the site to the Downtown is limited from a pedestrian perspective. An east-west pedestrian crossing from the parking lot site to the Downtown would not be possible due to the existing road configuration (at-grade 1st Avenue South and elevated Idylwyld Drive Freeway ramp). As such, pedestrians would be required to travel northbound to the 1st Avenue South and 19th Street East signalized intersection in order to gain access into the Downtown.

A parking structure in this location would also help meet more localized demands generated by the Farmers Market, the Banks and other future developments (i.e. the Pump house).

Lot #2

This site is located on privately owned lands at the northwest corner of 19th Street and 2nd Avenue within the South Core area of the Downtown. The site is currently occupied by a commercial surface parking lot.

The City would need to acquire the site or an agreement would need to be secured between the City and the developer to construct a public parking structure as part of a larger development. Construction of a five level parking structure could provide approximately 800 public parking spaces (160 spaces per level) compared to the 280 spaces the developer would typically provide on this site for the proposed development, a net gain of up to 520 spaces.¹³

The site is located within 400 metres of the majority of the South Core area, where significant parking deficiencies may occur in the future. Other nearby uses that could benefit from the additional parking include a cinema (with significant evening parking demands), River Landing and the Midtown Plaza.

¹³ The parking supply provided by the developer was assumed to be provided at a rate of 1.5 spaces per 1000 sf² of GFA. This rate is comparable to the proposed parking supply of other comparable developments across the Downtown (where more complete development information was provided).

Lot #3

This site is located on City owned lands at the southwest corner of 22nd Street and Pacific Avenue, adjacent to the Midtown Plaza and TCU Place. The site is currently occupied by a commercial surface parking lot.

Construction of a six level parking structure could provide approximately 1,200 public parking spaces (200 spaces per level).

A parking structure in this location (either freestanding or part of a larger development) could help accommodate the reoccurring parking demands of the TCU Place and support the redevelopment of other sites in the area.

As mentioned earlier, a garage with 600 spaces would meet the recurring needs at TCU Place, but not peak demands.

Lot #4

For parking efficiency purposes, two lots have been reviewed as a single parking structure. This site is located south of 21st Street, east of 4th Avenue and west of Spadina Crescent and is currently occupied by two surface parking lots.

Construction of a two to four level parking structure could provide between 200 and 400 public parking spaces (100 spaces per level). This site is located within the South Core area of the Downtown, where significant parking deficiencies may occur in the future.

The size and configuration of the site may not make it the most optimal parking structure but its location in relation to the Downtown does make it a viable option.

Lot #5

This site is located on City owned lands at the southeast corner of 23rd Street and 4th Avenue within the Core area of the Downtown. The site is currently occupied by the vacant police station building and a surface parking lot.

Construction of a four and a half level standalone parking structure could provide approximately 630 public parking spaces (140 spaces per level) and would require the demolition of the existing building.

The City is currently pursuing a sale of the Site. If sold, the City should look to secure a public parking facility in the redevelopment of the site.

The site location is within 400 metres of the entire Core area and would also serve a portion of the South Core and North Core areas of the Downtown.

Lot #6

This site is located on privately owned lands at the southeast corner of 24th Street and 2nd Avenue within the North Core area of the Downtown.

An agreement would need to be secured between the City and the developer to construct a public parking structure as part of a larger development or the City could acquire the site for a future development and public

parking garage. The garage would be located within a five minute walk of most future development in the core zone as well as the north Midtown block.

Construction of a four and a half level parking structure could provide approximately 630 public parking spaces (140 spaces per level).

Lot #7

This site is located on City owned lands at the northeast corner of 5th Avenue and 25th Street north of the Downtown.

Construction of a four and a half level parking structure could provide approximately 540 public parking spaces (120 spaces per level).

While this site is well configured for a parking structure there is sufficient publicly available parking in the Kinsmen area to accommodate existing and future parking demands. Future parking deficiencies are concentrated in the North and South Core areas of the Downtown and the location of this parking structure would have a minimal impact on alleviating the demands in these areas.

6.3.2 Recommended Downtown Parking Garage Locations

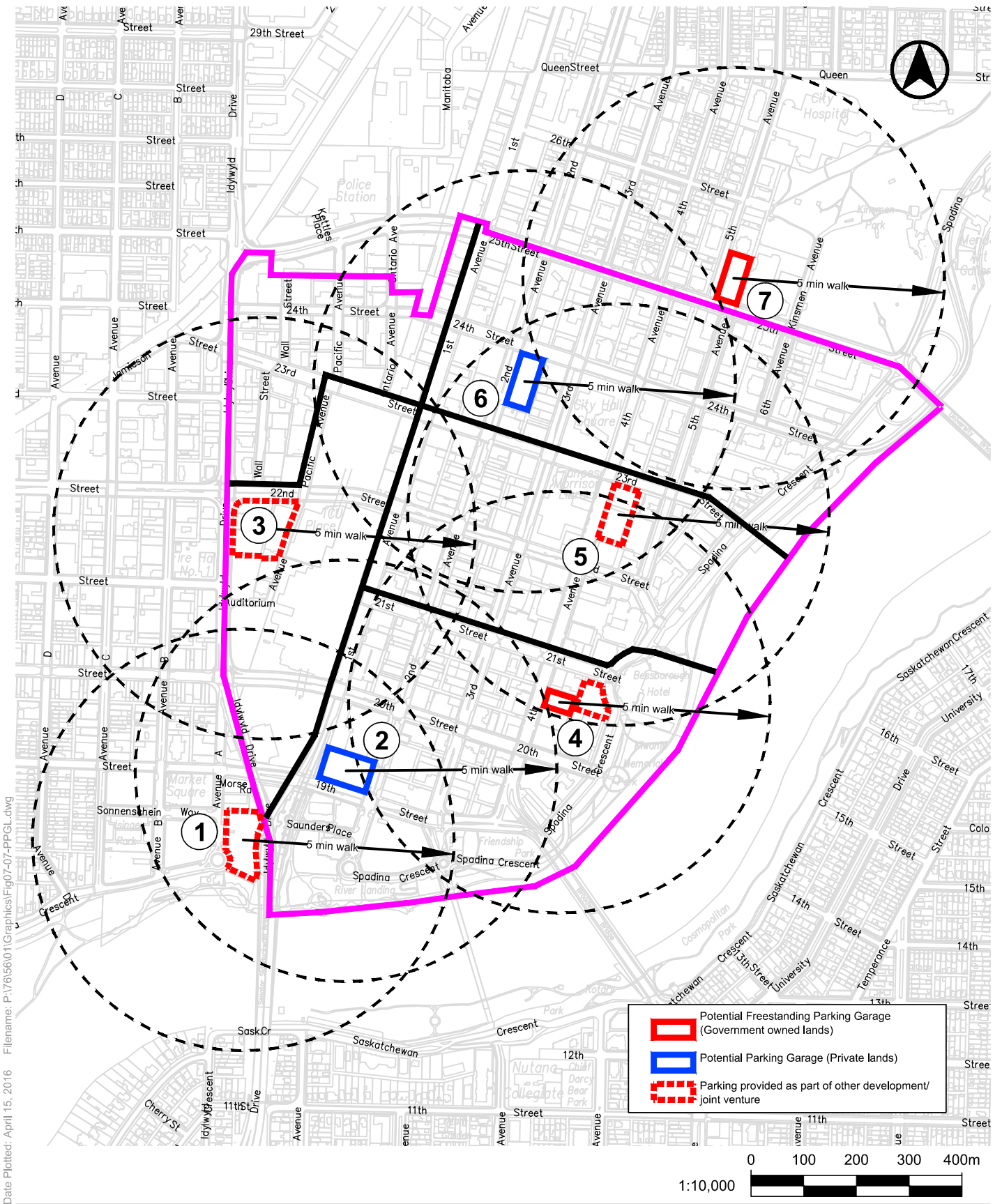
Based upon this preliminary screening of potential locations for strategically located parking garages to serve future development needs, the following sites appear to be the best locations for the City to consider for providing future public parking garages:

1. Site 5 or 6 to serve the core and north core sub areas. Site 6 is better located to serve future development. However, the City already owns Site 5 (the Police Station and adjacent parking lot) which may be sold. Development of a 600 space garage on site 5 or 6 or some combination of the two would serve to free up existing surface lots in the North Core and Core sub-areas of the Downtown for future development.
2. Site 3 to provide a TCU Place parking supply of 600 spaces and potentially more parking in joint venture with Midtown Plaza to serve their needs related to future development. The City already owns this site.
3. Site 2 to serve the South Core sub-area with up to 520 public parking spaces.
4. The City may also need to partner with several development projects to provide up to 600 additional public parking spaces in the South Core.

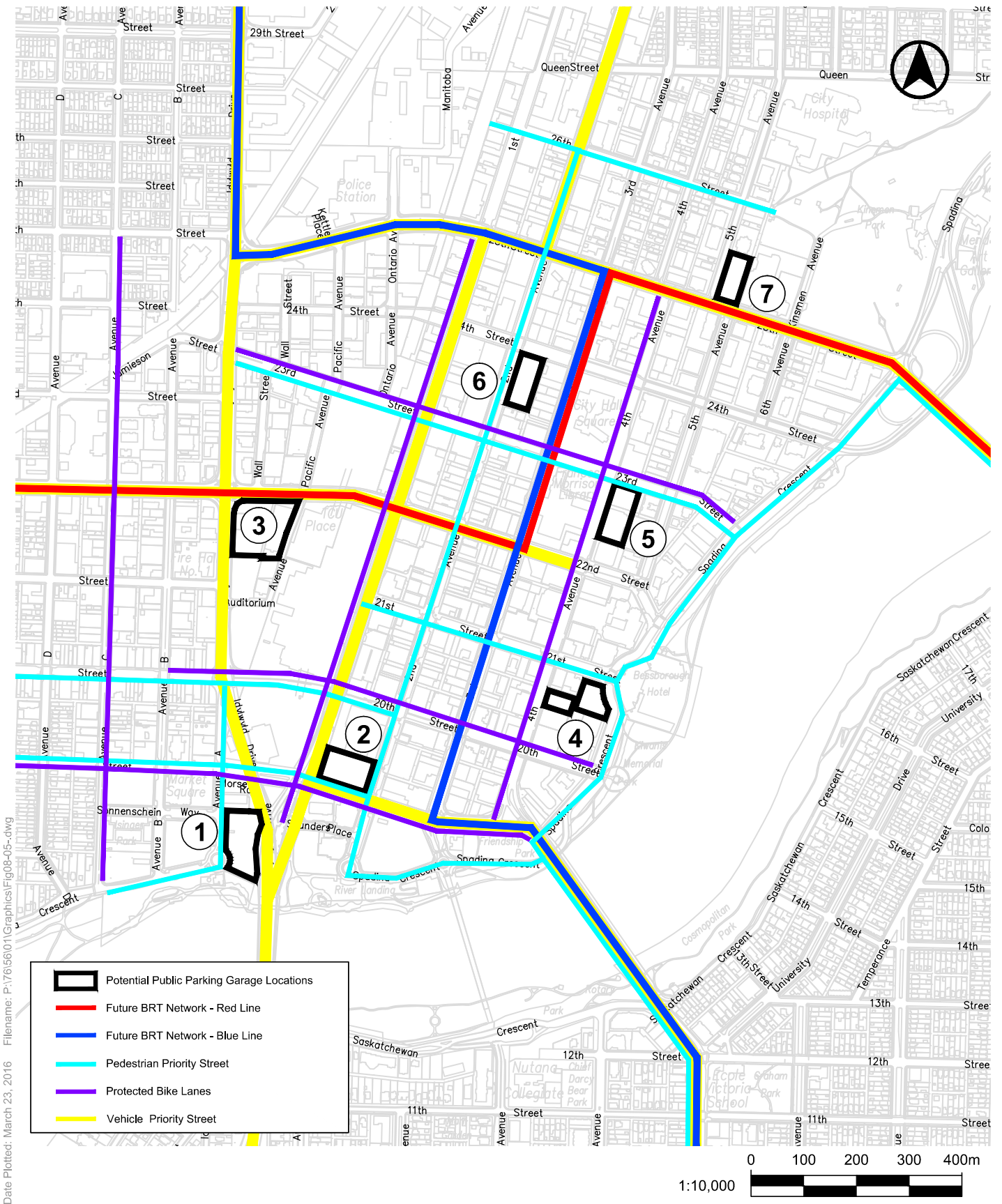
The City already requires that grade level commercial space be incorporated into new developments, which is important from an urban design and economic development perspective. In addition the City should encourage additional mixed use development by providing air rights on top of any new municipal garage, the sale of which would be used to offset some of the cost of acquiring the land or building the new garage.

An additional opportunity would be for the City to construct park and ride lots on the outer edges of the future BRT line that would accommodate some Downtown employee parking demand, thereby reducing the need and perhaps some of the cost to provide it Downtown.

As mentioned earlier, the City should also consider topping up the supply of parking in specific development projects with the intention that such facilities will be operated as shared public parking resources for the general area and not just the specific development site. It appears that this approach may be necessary in the South Core area of the Downtown.



POTENTIAL PUBLIC PARKING GARAGE OR JOINT VENTURE LOCATIONS



Date Plotted: March 23, 2016
 Filename: P:\176\66\01\Graphics\Fig08-05-.dwg

DOWNTOWN TRANSPORTATION NETWORK AND POTENTIAL PUBLIC PARKING GARAGE LOCATIONS

6.4 ZONING BYLAW REQUIREMENTS

6.4.1 Minimum Vehicular Parking Supply Requirements

The City of Saskatoon's Zoning Bylaw 8770 does not require parking to be provided for residential, office or commercial uses in the core commercial area of the Downtown as a means to incentivize development. Based on a review of development proposals within the study area it appears that the majority of developments are supplying significantly less parking than required to meet the parking needs of the proposed uses. For example, the average on-site parking supply rates for existing office buildings is approximately 1.0 space per 1000 ft² (1.0 space per 93 m²) GFA, with some development supplying as much as 1.5 spaces per 1000 ft² (1.0 space per 62 m²). This compares to an estimated average actual demand rate of approximately 3.0 spaces per 1000 ft² (1.0 space per 31 m²). Therefore office developers are supplying at most 50% of the anticipated need for parking and in many cases less than 50%. This parking supply pattern was probably related to the fact that the value of land was less than the cost of providing parking in a garage and some development sites preclude the efficient provision of structured parking in a cost effective manner. This has led to the present proliferation of surface parking lots that need to become future development sites if the Council endorsed City Centre Plan is to be realized.

More recently, land values in the core area of the Downtown are at/or exceed the cost of providing garage parking, which should result in the provision of more parking subject to site design constraints. However, Downtown office developers compete with the cost of suburban office developments that provide much cheaper surface parking. This in turn will lead new office developers to minimize the cost gap by undersupplying parking in new development, relying on the use of existing surface lots in the area.

In order to minimize the future impacts of new commercial development parking demand undersupply, the City should at least revise the Zoning Bylaw to require the provision of on-site parking at the same rates required for the M4 Institutional zone on the east side of the downtown. This would be 2.0 spaces per 100 square metres (one space per 50 square metres) GFA (2.15 spaces per 1000 ft²) of office/commercial development. However this would still result in significant parking supply deficits until future transit improvements are implemented and transit use increases.

An alternate approach that would align strategically with the new Growth Plan would be to set commercial parking supply rates to reflect future transit mode split targets for the Downtown, in this case a rate of (2.7 spaces per 100 square metres GFA (1.0 space per 37 m²) or approximately 2.5 spaces per 1000 ft².

However, introducing zoning by-law parking supply requirements in the Downtown may discourage new development because it will be at a competitive cost disadvantage with suburban development in building structured parking compared to surface parking in the suburbs. In order to off-set this disadvantage the City should implement a payment-in-lieu (PIL) of parking policy (discussed in greater detail in Section 6.5.2) that would allow developers to make a cash payment for each space they do not supply to meet the Zoning Bylaw requirement. The amount of this payment should be set to match the estimated cost of providing such parking in a suburban surface lot (including land costs) and rise overtime as demand for Downtown space and land values increase. Small scale commercial development or conversions of existing buildings could be exempt from the PIL policy.



6.4.2 Bicycle Parking Requirements

The provision of adequate, safe and convenient bicycle parking and support facilities are important to encourage increased cycling as a regular mode of transportation for both commuters (employees) and visitors to commercial, institutional, recreational and residential uses in urbanized areas. In contrast the absence of these facilities will deter regular cycling for non-recreational purposes. Increased cycling will reduce the growth in vehicle trips and future parking needs as well as support more sustainable urban travel patterns.

Based upon a review of the recent City of Toronto study and best practice information provided by the Victoria Transport Policy Institute, we suggest the City adopt bicycle parking requirements for the Downtown, Riversdale and Broadway areas that require a secure and covered supply for approximately 4% of the estimated employee load for all non-residential uses. In the case of office space this would amount to 0.17 spaces per 100 m². For retail and restaurant and personal service uses, the requirement for employee bicycle parking would be 0.085 per 100 m².

For visitor bicycle parking a similar goal of providing enough space for approximately 4% of the visitors should be considered. In the case of retail/personal service/restaurant uses, this would require 0.25 per 100 m². For office space, the requirement for visitors would be about 8% of the employee demand or 0.014 per 100 m²; however, the greatest demand for visitor bicycle parking in Downtown core areas of large cities is for courier deliveries, which could increase the rate to 0.03.

Bicycle parking should also be provided for high density residential buildings, townhouses and horizontal multiple dwellings which do not have exclusive use garages and driveways. The City of Toronto recently reviewed its requirements and concluded that the existing rate of 0.75 spaces per unit including 90% for residents and 10% for visitors was sufficient for the city except in the Downtown core where it should be increased to 1 space per unit. The parking has to be provided in a secure weather protected area of the building which would include bicycle racks in a monitored area, a limited access room or garage and bicycle lockers. The 0.75 rate would be sufficient for the study area. The visitor parking component can be met through external or internal bike racks which do not have to be in a secure area, but should be visible and weather protected.

The recommended Bicycle parking requirements are summarized in Table 23.

TABLE 23 BICYCLE PARKING SUPPLY REQUIREMENTS

Use	Bicycle Parking Standard
Office Uses	0.17 spaces per 100 m ² GFA staff plus 0.03 spaces per 100 m ² GFA visitor
Retail Uses	0.085 spaces per 100 m ² GFA staff plus 0.25 spaces per 100 m ² GFA visitor
All other non-residential uses	4% for staff and 4% for visitors
Residential Apartments & Townhomes	0.68 resident spaces per unit 0.07 visitor spaces per unit

Notes:

1. Residential requirement applies to apartments and townhouses that do not have an exclusive garage.



It is also important that shower and change facilities be provided for employee cyclists in order to encourage the use of this alternative travel mode. The Cities of Toronto and Vancouver require washroom, change and shower facilities for each gender. Toronto requires one shower/change facility for each gender in non-residential buildings greater than 20,000 m² (215,300 sq. ft.) while Vancouver requires one facility per gender when 4 to 29 employee bicycle spaces are required and one additional facility per gender for every 30 spaces thereafter. Converting the Vancouver shower/change room requirement to square metres suggests that an office building would have to be 2,353 m² GFA (i.e. approximately 25,000 sq. ft.) before shower/change facilities are required. For retail/restaurant/personal service uses, the floor area would have to be 4,705 m² (approximately 50,600 sq. ft.). The Vancouver Bylaw also requires clothing lockers at 0.7 times the number of employee parking spaces provided.

It is recommended that an exemption threshold for renovations and small developments that may find it onerous to comply with the recommended bicycle parking provisions. The exemption limit in Toronto of 20,000 square metres (215,300 sq. ft.) is significantly larger than any potential non-residential development that will occur in the study area. We therefore recommend applying the exemption limit based on the Vancouver Bylaw of 2,325 square metres (25,000 sq. ft.) for office developments and 4,705 square metres (50,650 sq. ft.) for retail/restaurant/personal service uses. The Vancouver requirements should be applied to the study area as outlined in Table 24.

TABLE 24 SHOWER/CHANGE FACILITY REQUIREMENTS

Required No. of Employee Bike Spaces	Number of Shower Stalls per gender
0-4	0
5-29	1
30-59	2
60-89	3
90-119	4
120-149	5
150-179	6
over 179	7 plus 1 for each additional 30 bike spaces

Notes:

1. *Each gender will also require a change and washroom facility, including storage lockers equal to 0.70 times the number of employee parking spaces provided.*

In summary, the City of Saskatoon should implement the bicycle parking and shower/change facility requirements outlined in Table 23 and Table 24 into the Zoning Bylaw for the Downtown, Riversdale and Broadway areas. Developments that require less than five bicycle parking spaces in total should be exempt from the requirements. This would exempt office buildings less than 2,353 square metres GFA and all other commercial space less than 4,705 square metres GFA from providing the shower/change facility requirements.



6.5 FINANCIAL CONSIDERATIONS

Municipalities can draw upon several sources of funding to finance municipal shared public parking resources such as:

- User Fees for parking services;
- Payment in Lieu (PIL) of parking fees from builders;
- Joint Venture projects with private development;
- Tax Increment Financing;
- Development Charges.

These potential revenue sources should also be used to finance TDM initiatives that reduce the need for future parking facilities, promote sustainable mobility and facilitate Transit Oriented Development (TOD).

Tax Increment Financing has been used extensively for many years in the United States to fund public parking facilities and is starting to be considered in Canada. Some municipalities are also beginning to use Development Charges to partially fund new parking resources.

Except in the high density core areas of Canada's largest cities, parking fees rarely cover the full cost of providing parking infrastructure. Most municipalities fund parking from several of the sources mentioned above. A more detailed description of these options is provided below.

Generally, the emphasis should be on creating a municipal parking system that is financially self-sustaining over the long term and which includes fees that encourage people to consider public transit and active transportation alternatives.

6.5.1 User Fees

User fees for municipal public parking should be set to recover the actual cost of providing the parking less the anticipated funds generated from other sources.

As mentioned earlier, most municipalities use the surplus generated by on-street parking to fund a significant portion of their off-street surface lot and garage infrastructure which operates in a deficit position in terms of recovering development and operating costs. In Saskatoon, the City has a somewhat complex but unique and innovative revenue sharing policy that is used to fund streetscape improvements in the Riversdale, Broadway and Downtown areas. A small 3.5% portion of the revenue is also placed in the parking reserve account for future parking initiatives. The parking capital reserve fund is expected to have a balance of approximately \$300,000 at the end of 2016 which is insignificant in terms of funding future municipal parking garages or lots. A much larger portion of on-street meter revenue would have to be allocated to help fund future parking garages and/or land acquisition for garages.

The City Land Division also operates three paid surface lots which generate net revenues that could also be used to fund future parking investments with a consolidated financial approach.

At the present time short duration hourly parking rates for on-street parking are set at \$2.00 per hour with a maximum permitted durations ranging from 1.5 hours to 3 hours. The hourly rate for most off-street parking



lots is \$2.00 per hour with some locations as low as \$1.00 per hour and as high as \$4.00 per hour. Short term hourly rates for off-street public parking should be set lower than the rate for prime on-street spaces in order to encourage turnover of convenient on-street parking and higher utilization of off street parking for people staying longer periods of time. Some side street on-street parking could be priced lower and have longer parking time limits depending upon demand. A 25% increase in the existing \$2.00 per hour rate for on-street parking that was last increased in 2011 could generate roughly \$1.0 million per year in additional revenue which would allow the City to build a first garage or put money in the reserve fund to offset the future capital costs of building a garage.

Some of the revenue generated by parking customers should also be directed to the establishment and development of transportation demand management programs, such as a ride sharing program, an auto share program, the provision of bicycle lockers and parking in off street public parking facilities and a discounted transit pass program, all of which should be targeted to reducing the need for costly public or private parking garages over the medium and long term.

At the present time, the City has surface off-street lots that are operated independently from the on-street parking system. In the future, the net revenue and asset value of these facilities should be utilized to assist in funding the capital costs of new municipal off-street parking resources. It would also be beneficial to have all of the City's public parking resources managed by one parking focused entity.

6.5.2 Payment in Lieu of Parking

The financial resources required to provide the parking garages to support redevelopment are substantial and addressing them will be a formidable challenge. The implementation of a payment in lieu of parking policy would assist in generating funds to assist in financing public parking garages thereby reducing the gap between markets based parking fees and the actual cost of building, maintaining and operating the facilities.

“Cash in lieu” contributions from developers who cannot or do not want to provide minimum parking requirements on their own sites should play a role in financing future public parking structures. Cash in lieu rates are usually set at a discount to the actual cost of development, typically ranging from 25 to 50% of the actual cost to reflect that they are not as valuable as directly owned stalls and that the City will recover some of the cost through parking fees. Typically, the lower percentage is applied to small infill developments which require the economic incentives to develop, while larger sites with more flexibility and presumably more ample financial resources are assessed the higher 50% amount. In some cases, the actual cost of developing parking is a municipal parking system wide average rather than the marginal cost of developing the next stall. A PIL system usually works in a thriving economic area where land and parking facilities are relatively scarce. In areas where redevelopment is just beginning and economic stimulus is required, payment in lieu policies have limited success.

The payment in lieu amount would be set at a discount to the actual cost of providing the parking to:

- provide a financial incentive for developers to contribute to the creation of strategically located public parking facilities.
- recognize that the City will be able to recover some of the costs through user fees.



- recognize that as a municipal facility, the parking facilities would not be subject to certain taxes.
- recognize that the parking spaces are not allocated to specific users on a reserved basis, although the general supply will be available to meet demand.
- recognize that the cash in lieu contributor will not obtain an ownership position in the garage.

Parking garage costs of \$50,000 to \$70,000 per space for above and below grade parking have been reported for the Downtown Saskatoon area, which would result in a payment in lieu rate of \$25,000 to \$35,000 per space using a 50% recovery rate. At existing parking rates and using estimated garage development costs, new garages would run a financial deficit of roughly \$1,700 per space per year.¹⁴ Therefore, from the City's perspective, they would need to collect approximately \$25,000 per space in cash-in-lieu funds in order to break even over the long run on new above grade garage construction.¹⁵ However, in order to have Downtown developers be able to compete with suburban developments, the rate would likely have to be set much lower initially – probably in the \$10,000 to \$15,000 per space range.

It is important to note that the success of the payment in lieu of parking policy can be substantially compromised if the City approves parking variance requests in order to relieve owners from some or all of the obligation to provide parking according to the Zoning Bylaw which would then relieve them of the need to provide cash in lieu. Variance requests should only be approved where the applicant can clearly demonstrate that the Bylaw requirement is excessive, not simply to allow an applicant to proceed because they are unable to provide what is deemed to be an appropriate amount of parking. Should the City approve a reduction in the cash in lieu Bylaw amount because it is technically justifiable, the applicant would still have the ability to use the program to reduce the amount of parking required on site.

A special payment in lieu rate for small developments could be considered in order to assist individual property owners who are not large scale developers and property investors who renovate or add onto their buildings. Some municipalities provide reduced payment in lieu rates for changes of use within an existing building where the Zoning Bylaw would require more parking. For example, the City of Toronto provides reduced rates for smaller building or additions, less than 400 sq. metres in floor area and a further reduction for less than 200 sq. metres.

In order to enact the payment in lieu program, the City should establish a corporate policy for the Downtown, Riversdale and Broadway areas to indicate where the program would apply and to provide guidance regarding appropriate application and costs. A draft outline of such a policy is provided below:

In the Downtown, Riversdale and Broadway areas, the City may at its sole discretion consider accepting payment in lieu funds for all or part of the Zoning Bylaw requirements for parking, having regard for the following:

- *the existing municipal public parking supply in the surrounding area can or will be able to accommodate the on- site parking supply deficiency at the time of development;*

¹⁴ Estimated annual deficit for an above grade parking garage costing \$50,000 per space, 100% fully financed at 4.25% over 25 years with 80% monthly employee parking and 20% short duration visitor parking during the weekday daytime.

¹⁵ Present value of the \$1700 per year deficit with a 4.25% discount rate over 25 years.

- *the presence of site constraints that prevent the provision of the required number of parking spaces;*
- *the use of the property is not considered overdevelopment of the site;*
- *the development or applicant has prepared a formal TDM Plan for the project which is likely to reduce the need for parking.*

The payment in lieu amount will be reviewed and set annually based upon current information regarding the anticipated cost of providing shared municipal public parking resources and the desire to provide economic development incentives.

It should be noted that the decision to accept payment in lieu should remain at the discretion of the City and not become an automatic right. This will allow the City to ensure that if it accepts cash in lieu payments, there is a reasonable expectation municipal parking is already available to serve the development or that the City will be able to provide a supply increase in the short term.

6.5.3 Public Private Partnerships

As mentioned in the City Centre Plan, the City should also consider potential opportunities to deliver parking infrastructure through partnerships and collaboration on specific development projects, where this would result in achieving the goals and objectives established in the Parking Strategy as described in this report. The primary goals being to support good urban design, transportation demand management, and economic development. For example, the City is currently pursuing a sale of the old Police Station site. If sold, the City should look to secure a public parking facility in the redevelopment of the site. Another example might be a joint venture garage serving TCU Place and Midtown Plaza.

The City should determine the need to incorporate public parking facilities in any new development that might be considered for any of the existing and all future surface lots they may own.

In order to achieve the primary goals described above, it is important the City control any partnership arrangement including the price of parking, the use of the spaces, and the ability to expand the garage. It is also important the City maintain control over the design of the garage to ensure it meets reasonable urban design, functional design and life cycle cost considerations. As an example, the Parking Authority of Toronto often engages in private sector partnerships to achieve substantial development on their parking lots. However, they maintain strict control over the cost and design aspects of their garages as well as operational control or the development does not proceed.

A detailed evaluation of the financial costs would also be required in order to ensure that the City was not paying more for the parking than it would otherwise be able to do on its own.

6.5.4 Tax Increment Financing

A Directed Tax Reserve could include the use of the increased realty tax increment associated with higher order development in the Downtown compared to the base tax assessment that would otherwise have been obtained with traditional low density development. This tax uplift could be used to finance various infrastructure projects that are required to support increased density in the area, including future parking garages.



The extent of such financing would depend in large part upon the proportion of the real estate tax that would be available to the municipality. The City already offers a tax increment type incentive to encourage new development on vacant building sites referred to as the Vacant Lot Adaptive Reuse Strategy (VLARS). This program allows developers or builders to obtain an up-front grant or annual reduction in realty taxes based upon the incremental increase in taxes compared to the vacant lot use (which includes parking lots) up to a limit of \$200,000. Therefore, it would be increment above this amount that might be used in part to assist in funding future public parking garage development in strategic locations.

There are currently a myriad of different calculations and assumptions which could be made regarding the Dedicated Area Tax Reserve, depending upon how much the uplift in taxes actually turns out to be and how much of the uplift ultimately ends up being used to support the capital costs of the parking strategy.

However, it is important to note that increased availability of tax uplift funding should not be used to create a situation where the user fees for parking would be reduced below that of a transit pass, in order to use parking pricing as an incentive to use public transit. It should also be recognized that a broader based TIF program might also be utilized to fund other infrastructure initiatives, not just public parking. This will tend to reduce the potential for this tool to fund a substantial portion of the municipal parking program.

6.5.5 Development Charges

We understand the City is considering new ways to fund future growth related infrastructure. This program could include designated shared public parking resources in the study area. However, the funding would be shared with the existing commercial areas and would not fully finance future development costs. The net capital costs after receipt of payment in lieu funds would also have to be considered.

6.5.6 Public Parking Garage Financing Example

As described in Section 6.3, the City may have to supply up to 1900 spaces in strategically located public parking garages over the long term in order to facilitate continued office development in the Downtown. This would best be achieved in three separate garages. In the short term, the City will need to provide one garage in order to free up existing surface parking lots for new development, most likely on the surface lots adjacent to the existing YMCA or perhaps on the Police Station site.

In order to illustrate the order of magnitude financial implications for the City to build a first garage in the Downtown area, we have prepared a preliminary revenue/cost analysis for a 600 space above ground garage¹⁶ with a capital cost of \$50,000 per space or \$30 million. We have also utilized existing hourly and monthly rates of \$2.00 and \$200 respectively and assumed that the garage would be allocated 80% (480 spaces) to hourly visitor parking and 20% (120 spaces) to monthly employee parking. A garage serving TCU Place would serve more short term visitor parking and have slightly better revenue generation.

¹⁶ A below ground parking garage would likely cost up to \$70,000 per space.



Table 25 indicates that the garage would incur an annual deficit of approximately \$1.0 million in Year 1 which is equivalent to approximately \$1675 per space per year. The present value of the annual deficit in Year 1 would be approximately \$25,500 per space using a discount rate the same as the assumed interest rate of 4.25% per year. In other words, the City would need to provide an upfront payment of \$25,500 per space to eliminate the annual deficit of approximately \$1.0 million per year.

Table 26 illustrates the impact of providing an upfront investment of \$25,000 per space or \$15.0 million. These funds would typically come from a reserve fund built up from annual operating surpluses for the municipal parking system, from payment in lieu funds received from building developers or perhaps from land sales proceeds received from selling off City surface parking lots or air rights for development on the garage site itself. In practical terms, the City might not receive all of the funds necessary to offset the deficit in advance of building a garage, but would instead receive them over the 25 year finance period.

An additional source of revenue that is often used by municipalities to fund new garage construction, is the annual net revenue surplus generated by the on-street parking operation. However most of it is used to fund streetscape improvements in the Downtown, Broadway and Riversdale BID's with the remainder directed to City general revenue and only 3.5% allocated to the parking reserve fund. The City would have to allocate a much larger portion of existing parking revenue to the parking reserve fund in order to sustain future parking garage investment. Alternatively, as mentioned in Section 6.5.1, a 25% (\$0.50) rate increase for on-street parking might generate an additional \$1.0 million per year that would also offset the annual loss for a first parking garage and also achieve the desirable pricing objective of having on-street parking be more expensive than off-street parking.

TABLE 25 - Typical Municipal Parking Garage Financial Outlook (with Upfront Investment)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Annual Parking Revenue										
Monthly parkers	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400
Weekday Hourly parkers 7am to 6pm	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000
Weekday Hourly parkers 6pm to 12am	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600
Weekend Hourly parkers 7am to 12am	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500
Total Gross Annual Parking Revenue	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500
Less GST	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500
Net Annual Parking Revenue	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000
Net Annual Revenue per space	\$ 2,850.00									
Annual Parking Expenses										
Operating & Maintenance Costs	\$ 285,000	\$ 293,550	\$ 302,357	\$ 311,427	\$ 320,770	\$ 330,393	\$ 340,305	\$ 350,514	\$ 361,029	\$ 371,860
Staff & Security	\$ 35,000	\$ 36,050	\$ 37,132	\$ 38,245	\$ 39,393	\$ 40,575	\$ 41,792	\$ 43,046	\$ 44,337	\$ 45,667
Credit Card Processing Costs	\$ 20,000	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820
PARC System Technology/Software	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Parking Management Fee Allowance	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200
Total Annual Operating Costs before reserve	\$ 384,200	\$ 445,620	\$ 455,508	\$ 465,693	\$ 476,183	\$ 486,988	\$ 498,117	\$ 509,580	\$ 521,386	\$ 533,547
Capital Reserve Contribution	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000
Total Annual Operating Costs with reserve	\$ 744,200	\$ 805,620	\$ 815,508	\$ 825,693	\$ 836,183	\$ 846,988	\$ 858,117	\$ 869,580	\$ 881,386	\$ 893,547
Total Annual Operating Costs per space	\$ 1,240.33									
Net Annual Parking Operating Revenue	\$ 965,800	\$ 904,380	\$ 894,492	\$ 884,307	\$ 873,817	\$ 863,012	\$ 851,883	\$ 840,420	\$ 828,614	\$ 816,453
Annual Debt Service Costs	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436	-\$ 1,971,436
Annual Debt Service Cost per space	-\$ 3,285.73									
Net Annual Revenue after debt service	-\$ 1,005,636	-\$ 1,067,056	-\$ 1,076,944	-\$ 1,087,128	-\$ 1,097,619	-\$ 1,108,423	-\$ 1,119,552	-\$ 1,131,015	-\$ 1,142,822	-\$ 1,154,983
Net Annual Revenue after debt service per space	-\$ 1,676.06									
Present Value of Annual Deficit	\$25,505.16									

Revenue (2015 \$)

Number of parking spaces	600	on both levels	Highlighted text indicates input values
Percent Monthly Parking	80%	estimated allocation	
Monthly Parking Spaces Available	480	Monday to Friday 7am to 6pm non reserved	
Months Available	12	for monthly parkers	
Monthly Rate	\$ 200	estimated for non- reserved covered parking	
Number of weekday hourly parking spaces	120	available from 7am to 6pm	
Weekday hourly parkers per year 7am to 6pm	81,000	based upon an hourly space turnover rate of 3.0 per day and 90% occupancy	
Weekday hourly parkers per year 6pm to 12am	8,100	approximately 105 of weekday daytime demand	
Weekend Hourly parkers per year 7am to 12am	8,100	approximately 105 of weekday daytime demand	
Hourly parking slippage factor	1.00	to account for customers evading payment	
Hourly parking rate	\$ 2.00	estimated 2015 market rate	
Evening Flat Rate	\$ 5.00	estimated 2015 market rate	
GST	5%	assuming City must remit to Province	

Costs (2015 \$)

Operating & Maintenance Costs	\$ 475	estimated typical for garage, including utilities
Staff & Security	\$ 35,000	to be confirmed
Credit Card Processing Costs	4%	to be confirmed
PARC System Technology/Software	\$ 10,000	includes 4 pay by plate stations and management software
Capital Reserve Contribution	1.20%	City mandated
Parking Management Fee Allowance	2.00%	to be confirmed
Garage Construction Cost	\$ 30,000,000	estimate
Equity Contribution	\$ -	from City (PIL funds)
Debt Financed Ammount	\$ 30,000,000	from City
Interest rate	4.25%	from City
Finance Term (no. of years)	25	from City
O&M Inflation factor	1.03	estimate

TABLE 26 - Typical Municipal Parking Garage Financial Outlook (with Upfront Investment)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Annual Parking Revenue										
Monthly parkers	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400	\$ 1,382,400
Weekday Hourly parkers 7am to 6pm	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000	\$ 324,000
Weekday Hourly parkers 6pm to 12am	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600	\$ 48,600
Weekend Hourly parkers 7am to 12am	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500	\$ 40,500
Total Gross Annual Parking Revenue	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500	\$ 1,795,500
Less GST	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500	-\$ 85,500
<i>Net Annual Parking Revenue</i>	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000	\$ 1,710,000
Net Annual Revenue per space	\$ 2,850.00									
Annual Parking Expenses										
Operating & Maintenance Costs	\$ 285,000	\$ 293,550	\$ 302,357	\$ 311,427	\$ 320,770	\$ 330,393	\$ 340,305	\$ 350,514	\$ 361,029	\$ 371,860
Staff & Security	\$ 35,000	\$ 36,050	\$ 37,132	\$ 38,245	\$ 39,393	\$ 40,575	\$ 41,792	\$ 43,046	\$ 44,337	\$ 45,667
Credit Card Processing Costs	\$ 20,000	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820	\$ 71,820
PARC System Technology/Software	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Parking Management Fee Allowance	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200	\$ 34,200
<i>Total Annual Operating Costs before reserve</i>	\$ 384,200	\$ 445,620	\$ 455,508	\$ 465,693	\$ 476,183	\$ 486,988	\$ 498,117	\$ 509,580	\$ 521,386	\$ 533,547
Capital Reserve Contribution	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000	\$ 360,000
<i>Total Annual Operating Costs with reserve</i>	\$ 744,200	\$ 805,620	\$ 815,508	\$ 825,693	\$ 836,183	\$ 846,988	\$ 858,117	\$ 869,580	\$ 881,386	\$ 893,547
Total Annual Operating Costs per space	\$ 1,240.33									
Net Annual Parking Operating Revenue	\$ 965,800	\$ 904,380	\$ 894,492	\$ 884,307	\$ 873,817	\$ 863,012	\$ 851,883	\$ 840,420	\$ 828,614	\$ 816,453
<i>Annual Debt Service Costs</i>	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718	-\$ 985,718
<i>Annual Debt Service Cost per space</i>	-\$ 1,642.86									
Net Annual Revenue after debt service	-\$ 19,918	-\$ 81,338	-\$ 91,226	-\$ 101,410	-\$ 111,901	-\$ 122,706	-\$ 133,835	-\$ 145,297	-\$ 157,104	-\$ 169,265
Net Annual Revenue after debt service per space	-\$ 33.20									
Present Value of Annual Deficit	\$505.16									

Revenue (2015 \$)

Number of parking spaces	600	on both levels	Highlighted text indicates input values
Percent Monthly Parking	80%	estimated allocation	
Monthly Parking Spaces Available	480	Monday to Friday 7am to 6pm non reserved	
Months Available	12	for monthly parkers	
Monthly Rate	\$ 200	estimated for non- reserved covered parking	
Number of weekday hourly parking spaces	120	available from 7am to 6pm	
Weekday hourly parkers per year 7am to 6pm	81,000	based upon an hourly space turnover rate of 3.0 per day and 90% occupancy	
Weekday hourly parkers per year 6pm to 12am	8,100	approximately 105 of weekday daytime demand	
Weekend Hourly parkers per year 7am to 12am	8,100	approximately 105 of weekday daytime demand	
Hourly parking slippage factor	1.00	to account for cutomers evading payment	
Hourly parking rate	\$ 2.00	estimated 2015 market rate	
Evening Flat Rate	\$ 5.00	estimated 2015 market rate	
GST	5%	assuming City must remit to Province	

Costs (2015 \$)

Operating & Maintenance Costs	\$ 475	estimated typical for garage, including utilities
Staff & Security	\$ 35,000	to be confirmed
Credit Card Processing Costs	4%	to be confirmed
PARC System Technology/Software	\$ 10,000	includes 4 pay by plate stations and management software
Capital Reserve Contribution	1.20%	City mandated
Parking Management Fee Allowance	2.00%	to be confirmed
Garage Construction Cost	\$ 30,000,000	estimate
Equity Contribution	\$ 15,000,000	PIL funds at \$25,000 per space for 600 spaces
Debt Financed Ammount	\$ 15,000,000	from City
Interest rate	4.25%	from City
Finance Term (no. of years)	25	from City
O&M Inflation factor	1.03	estimate

6.6 MANAGEMENT CONSIDERATIONS

In the short term the City should:

- Consolidate the management and operation of both on-street and off-street parking in one department. The land value of the surface lots when sold should be deposited in the parking reserve fund to assist in funding future garages;
- Increase the allocation of the on-street parking revenue to the parking capital reserve fund in order to finance future garage development;
- Actively identify locations to increase the supply of on-street parking;
- Seek to lease private surface lots in order to ensure less parking is allocated to reserved monthly parking and more parking is made available through monthly scramble parking;
- Conduct detailed feasibility studies regarding new public parking garages on the former Police Station site and the surface lots adjacent to the YMCA; and
- Develop a financial plan that will allow the municipal parking system to operate on a financially self-sustaining basis over the long term (i.e. 25 years).

Ultimately, the City could operate the consolidated parking system by using an Enterprise Model. Under this model, the municipal parking system is operated by a City department or division on a financially sustainable basis in terms of operation, life cycle costing and future development funding. Long term budgeting would be prepared for the department and approved by Council with the intent that little or no external funding would be required. Examples include the Cities of Kingston, Kitchener, Oakville, Oshawa and Ottawa with Kitchener having the most explicit mandate. Other cities are currently examining the feasibility of converting to this option, including Waterloo and London.

Alternatively, the City could consider the eventual creation of financially independent Parking Authority or Commission that would be guided by an independent board of directors and managed by a group of senior executive level staff who report to the board of directors with the objective of operating with annual revenue surpluses that could then be disbursed to the city as a dividend to be used for other purposes. The board of directors usually consists of downtown stakeholders with business experience and could include the Mayor and or councillor who would represent the BIDS where the authority operates. Examples include the Cities of Montreal, Toronto, Saint John and Winnipeg.

7.0 OPERATIONAL CONSIDERATIONS

In the short term, the City should undertake the following initiatives to improve existing parking operations:

- Increase the maximum duration of stay time limits for on-street parking in the Downtown to three hours everywhere except for 21st Street and 2nd Avenue which should be two hours (except the block in front of the Scotiabank Theatre);
- Investigate opportunities to provide additional on-street parking;
- Ensure that the surface parking lots it controls do not lease out *reserved* parking spaces;
- Strongly encourage private surface parking lot owners to not provide reserved parking for monthly employee parkers as a condition of renewal for a business parking license; and
- Consider leasing strategically located surface lots with a view to managing them to provide monthly employee scramble parking in place of reserved monthly parking.

7.1 ON-STREET PARKING TIME LIMITS

At the present time, most on-street parking in the Downtown, Riversdale and Broadway areas operate with duration time limits of ninety minutes to two hours with a few exceptions in the Downtown where three hour limits are provided near the Persephone Theatre and Cinemas (see Figure 4). The Downtown Partnership BID and some of its members have indicated that the existing parking duration time limits of ninety minutes to two hours across most of the Downtown area are not sufficient for customers conducting many business engagements and for people having lunch, attending medical appointments or some personal service appointments. Although there are two municipal surface lots in the Downtown which permit longer (9 hour) duration time limits they do not provide enough coverage within convenient walking distance for many business locations and the availability of short duration parking in private lots is limited. Under these circumstances, people will often exceed the posted time limits or reduce the amount of time they spend in the area on each visit.

It has been our experience that people strongly resent receiving parking tickets for overstaying time limits when they are willing to pay for the extra time. Typically, most of the vocal complaints about parking fines are related to the duration overstay factor. It is generally preferable from a customer service perspective to maximize revenue from people who pay for parking and minimize the amount of revenue obtained from parking fines for people who wanted to pay more to park longer but could not. The Downtown Partnership has recently polled its membership regarding on-street parking time limits and based on this research, the BID supports an increase in on-street parking time limits to three hours throughout the area, except for the right angle nose in parking on 21st Street and 2nd Avenue which should have two hour time limits. The three hour time limits near the Cinema and Persephone Theatre would remain in place.

We are supportive of increased time limits in general and the specific proposal put forward by the Downtown Partnership BID, however, the following impacts should be considered:

- The increased durations can make it easier for some employees to misuse on-street parking and move their vehicles around throughout the day;
- Some business locations that depend on very short stay customers may need to be provided with some parking with a 20 to 30 minute duration limit; and
- Increased on-street parking duration could result in increased occupancy during peak periods which will make it more challenging to find a space in a reasonable amount of time.

In order to counteract the tendency for people to exceed the increased time limits, increased enforcement may be required and/or parking charges for on-street parking should be increased. As mentioned earlier, it is generally desirable to price on-street parking at a higher level than hourly parking in off-street lots and garages to encourage price sensitive customers to use off street parking, thereby freeing up more convenient on-street parking. This could be accomplished by increasing rates from \$2.00 per hour to say \$2.50 per hour or by employing a graduated rate that increases for each hour starting with \$2.00 per hour for the first hour, \$2.50 for the second hour and \$3.00 for the third hour.

7.2 ON-STREET SUPPLY

The City should work with the BID's in each area to determine whether a limited amount of very short stay parking should be provided in specific locations.

In order to counteract the potential increase in occupancy levels, the City should actively research locations where additional on street parking can be provided. Increased on street parking is the most cost effective way to provide additional parking that should be generally more convenient to use than off-street parking. For example, the Riversdale BID has been suggesting that some on-street parking could be added to 19th Street between Avenues A and C. There might also be some potential to add angled nose in parking on 23rd Street between 3rd Avenue and Spadina Crescent and perhaps on 3rd Avenue between 22nd and 19th Street. Adding angled nose in parking has the potential to add up to 25 spaces per block depending on the number of driveways and curb side obstructions. The angled parking on 3rd Avenue might have to be removed in the longer term when the proposed north-south BRT line through the Downtown is implemented.

8.0 CONCLUSIONS AND RECOMMENDATIONS

If a strategy is not developed to address the transformation challenge from surface lots to development sites and the long term need for public parking resources, the Council approved City Centre Plan will not be realized and future office development in the Downtown may be limited to well below its historic share of the total office supply.

8.1 SHORT TERM RECOMMENDATIONS (2 YEARS OR LESS)

- Consolidate the management of both on-street and off-street municipal parking in one department. The land value of the surface lots when sold should be deposited in the parking reserve fund to assist in funding future garages;
- Develop a financial plan that will allow the municipal parking system to operate on a financially self-sustaining basis over the long term (i.e. 25 years) including the provision of public parking garages and lots.
- Increase the allocation of the on-street parking revenue to the parking capital reserve fund in order to increase funding available for future garage development;
- Actively identify locations to increase the supply of on-street parking;
- Increase the maximum duration of stay time limits for on-street parking in the Downtown to three hours everywhere except for 21st Street and 2nd Avenue which should be two hours (except the block in front of the Scotiabank Theatre);
- Ensure that the surface parking lots the City controls do not lease out reserved parking spaces;
- Consider leasing strategically located surface lots with a view to managing them to provide monthly employee scramble parking in place of reserved monthly parking;
- Strongly encourage private surface parking lot owners to not provide reserved parking for monthly employee parkers as a condition of renewal for a business license for their commercial parking lot;
- Conduct detailed feasibility studies regarding the provision of public parking in new garages on the former Police Station site and the surface lots adjacent to the YMCA.

8.2 MEDIUM TO LONG TERM RECOMMENDATIONS (2 TO 10 YEAR TIME FRAME)

- Revise the Zoning Bylaw commercial parking supply requirements to include the on-site provision of parking at 1.0 space per 37 m² GFA (2.7/100 square metres);
- Implement a Payment in Lieu of Parking (PIL) Policy to allow developers to reduce their on-site supply in return for making payment towards future municipal parking and TDM infrastructure;
- Own and better manage a greater proportion of the overall parking supply by acquiring or developing new surface lots, especially in locations where it is apparent that they will likely be required for future public garages. City control of temporary surface lots would improve their ability to influence parking pricing and better manage the supply for the overall benefit of visitors and employees in the area.
- Invest in the provision of new parking garages in advance of major development in order to free up existing surface parking lots for new development and make it clear what parking will be available to meet future development needs in a timely manner.
- Continue to target a 15% increase in transit/non-auto mode split which could significantly reduce the area's future parking demands and result in substantial future garage capital cost savings for the private sector as well as the cost of future municipal public parking garages.
- Review the feasibility of providing park and ride surface lots at the outer portions of the future BRT lines in order to reduce the amount of parking required Downtown.
- Implement a comprehensive TDM program to reduce the amount of costly parking garage(s) required in the future. This program would include local transit improvements, the provision of auto share services, a ride matching service, preferential parking for carpool vehicles, enhanced bicycle parking, a guaranteed ride home service and the continued use of parking rates for employee parking that are significantly higher than the cost of a transit pass.
- Review the feasibility of implementing a number of additional sources of funding to finance municipal shared public parking resources such as:
 - **Joint Venture projects** with private development to top up or provide additional parking where it is desirable to do so, especially on land the City already owns;
 -
 - **Tax Increment Financing** to finance various infrastructure projects that are required to support increased density in the area, including future parking garages; and
 - **Development Charges** to help support public parking resources in the study area.

**APPENDIX A:
Parking Study Open House Presentation Boards
(Public Feedback Summary)**



What we have heard

Challenges

- Availability of parking is the main issue.
- Parking availability and cost are always the first questions by potential office renters and staff.
- People working Downtown are using on-street meters for long-term parking.
- There is adequate parking for retailers, but a shortage for office uses, and people working Downtown which affects the availability of parking meters for the retail sector.
- Parking shortages are pushing businesses and office uses to the suburbs.
- People want certainty; they want to know they will have a parking space when they get to work.
- People want their parking space reserved for 24 hours, which makes the sharing of parking spaces difficult.
- Evening parking is even more difficult than daytime parking.
- Restaurants use up a lot of available parking spaces in the evenings.
- There is little enforcement of parking violations in the area, especially the 2 hour maximum time limit.
- Safety concerns about parking in rear lanes, both Downtown and surrounding neighbourhoods.
- Delivery vehicles often block traffic.
- Crossing Idylwyld Drive is challenging, and improvements are needed.
- There are very few drop-off spaces Downtown, which causes problems for people with mobility issues.

What we have heard

Opportunities

- Develop vacant lands near the Downtown/Broadway Avenue to provide inexpensive (or free) parking.
- People will walk a long way for free parking; provide free parking peripherally as part of the overall plan.
- Consider a shuttle bus from parking lots peripheral to the Downtown.
- Develop on-street “parking malls” near the Downtown with angled parking, long-term parking, and provide a more walkable (streetscaped) linkages into the Downtown.
- Consider “parking parks” that become an amenity; they provide parking, park space, and other amenities.
- Consider park and ride options.
- Consider marketing and technology opportunities, such as a mobile application, or signage directing people to available parking spaces.
- Need a more efficient use of existing parking spaces, as well as the expansion of parking.
- Rent Downtown spaces for evenings (just like daytime). Someone rents the space by day, and someone rents the space in the evening. It is effectively “time-share parking”.
- Improved signage could help identify parking locations.
- Need to allow parking to exceed the maximum time limit; for instance, if you are in a meeting or appointment and your meter expires, there needs to be a way to remotely add time even if over the time limit.

What we have heard

Role of the City of Saskatoon

- City needs to provide incentives for the private sector to develop parking spaces.
- Encourage office buildings to provide more parking, because stand-alone parking structures may not be viable due to construction costs.
- Implement development standards for surface parking lots, and at some point they should no longer be considered temporary.
- The City could give land or some parking levels away that would then be provided for public use.
- Consider making spaces available, and free, for scooters and potentially motorcycles to encourage their use.
- Additional parking requirements Downtown would have no effect on the amount of parking that is developed; the market already provides what would be required.
- The parking plan needs to consider both day and evening parking.
- Should consider limiting the number of reserved parking spaces in the evening/weekends.
- Difficult to control private parking lots. Need someone to manage the whole system.
- Encourage car share programs to help reduce the need for parking.

What we have heard

Alternative Modes of Transportation

- Parking for bikes needs to be considered.
- People don't want to take transit for a variety of reasons.
- Bus system does not work for many people, including those with young families.
- Transit is not an option for people from out of town.
- Transit is not flexible and is inefficient. Needs to become an efficient system.
- Can't force people onto transit, but other transportation options need to be available.
- Need increased population density to help make transit work (critical mass).
- This is a car oriented City; we need to be realistic about the how much effect there will be with other forms of transportation. Continue to grow these other forms, but the car will always be dominant.
- Need to accommodate other forms of transportation and transit needs to be improved.
- There are some safety concerns about walking around Downtown.
- Pedestrian amenities need to be improved so walking can become a better option.

What we have heard

New Parking Structures

- Any new structure will need daytime and night time occupancy.
- Perhaps consider a parking structure in the Broadway BID and Riversdale BID areas.
- Shoring costs are high, so it is expensive to provide underground parking.
- City needs to encourage office buildings to provide more parking, because stand-alone parking structures may be not viable due to construction costs.

What we have heard

Change in Approach Needed

- Looking to fix parking challenges; need to start with changing attitudes.
- We have a small-town mentality and expect to park close to where we are going.
- People view convenient and free parking as a right.
- Some people complain about a long walk from their parking space to their destination; however, the walk may be just as far in malls and big box centres.
- Need to change attitudes about parking. Parking lots could become scramble parking and can oversell spaces.
- Need to examine the 2 hour time limits. May not need longer times everywhere, but some areas do need longer time limits.
- Consider lower rates where we are trying to attract people and higher rates where we want to encourage movement.

Challenges

- Most buildings supply only 50% or less of their actual parking demand and therefore rely on other parking lots to meet their remaining needs.
- Almost 50% of off-street parking spaces are reserved.
- Some employers have difficulty securing large blocks of employee parking off-site.
- Some Downtown employees are parking at on-street meters, thereby making it more difficult for customers to find conveniently located parking.
- Increased office occupancy or new development will increase the challenges described above.

Actions

- Reduce the amount of reserved parking spaces Downtown.
- Provide additional publicly available off-street parking spaces.
- Discourage employees from using on-street parking meters.
- Amend the time limits for parking meters; add some 3 hour meters, but keep 2 hour meters in key commercial areas.

Key Directions

Challenges

The City of Saskatoon controls a very small amount of the overall parking inventory.

- The City controls approximately 21% of parking spaces, where most cities control 40% to 60%.

Actions

- The City needs to control a higher percentage of the overall inventory by developing or operating additional off-street parking facilities (this can influence prices, reduce the amount of reserved parking, and can direct revenues to parking improvements).

Key Directions

Challenges

Amend the Zoning Bylaw to add a required parking standard for all uses Downtown.

- The lack of a parking requirement is leading to the parking challenges we currently face, and will limit our ability to provide sufficient parking in the future.

Actions

- Amend the Zoning Bylaw to provide parking requirements for commercial uses Downtown.
- Provide a payment in lieu option for required parking with funds used to build public parking structures.

Challenges

Structured parking will permit the Downtown to increase in density, which in turn will support other transportation options.

- Our current development pattern is a low density Downtown. By providing structured parking, vacant lots can become developed and will help add density to the Downtown. Density is key for the transit system and active transportation options to become viable.

Actions

- We need to ensure additional structured parking facilities are developed, by both the private and public sectors.
- Improve the transit, cycling and pedestrian system to help reduce the number of people driving to the Downtown.
- The City needs to develop a strategy to build public parking garages into the future.

Challenges

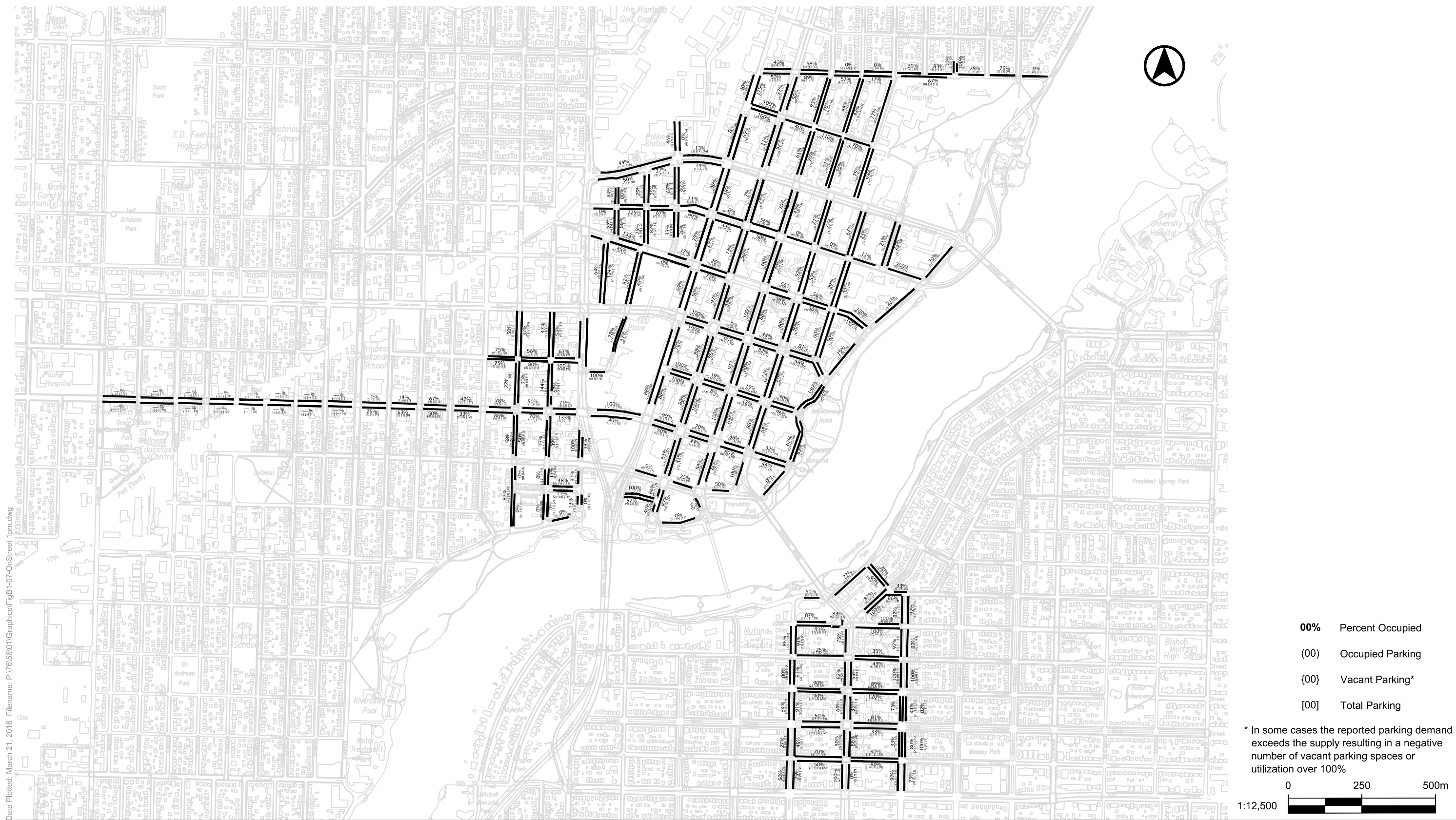
The success of our Downtown over the long-term is dependent upon additional parking inventory, particularly structured parking facilities.

Actions

- The City needs a centralized municipal parking operation.
- The City needs to create a financial strategy and management structure to develop and effectively manage additional off-street parking resources.
- The City needs to develop a strategy to build public parking garages into the future.

**APPENDIX B:
Parking Supply and Demand Survey Results (On- and Off-
Street)**





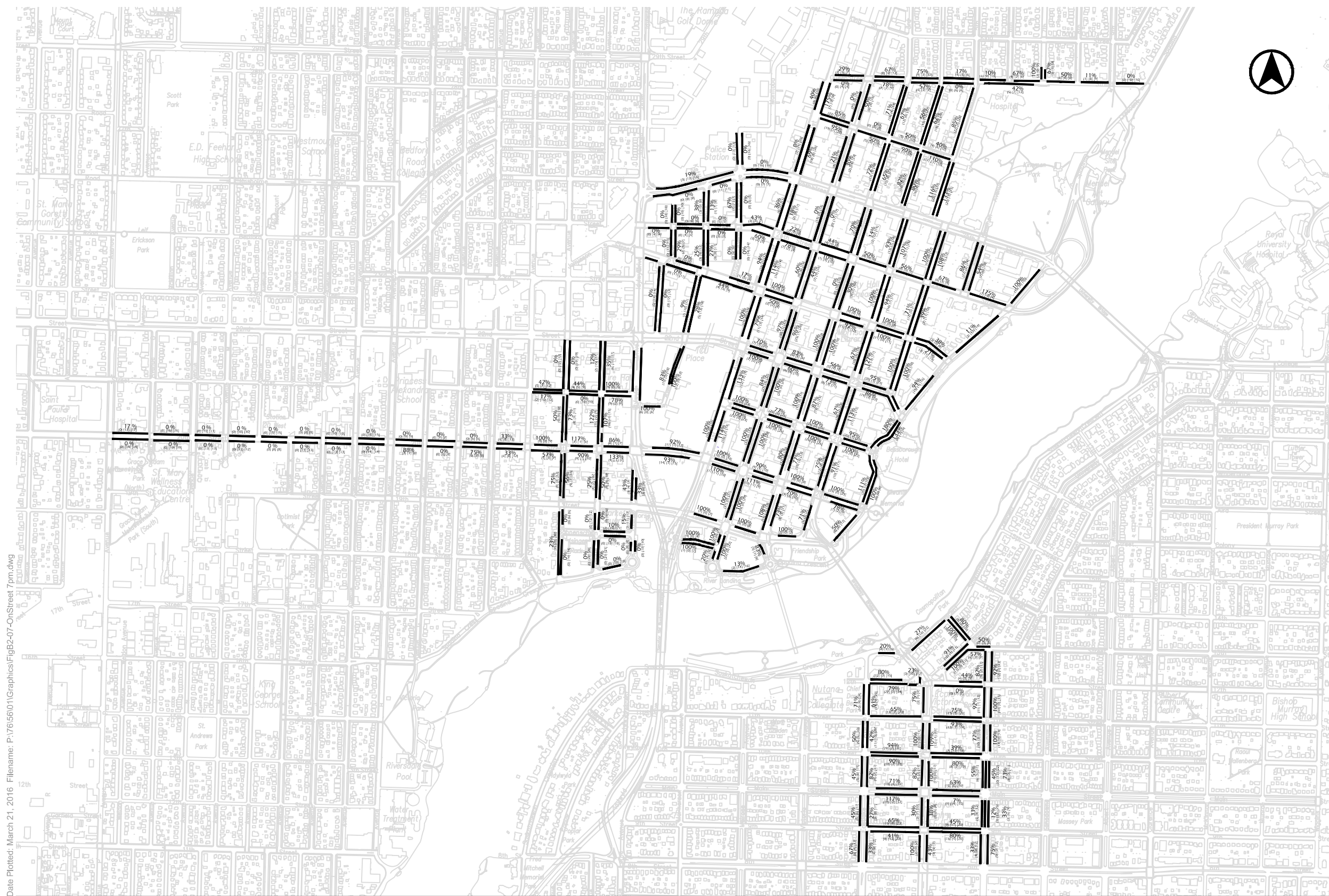
Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\FigB1-07-OnStreet 1pm.dwg

ON-STREET PARKING 1PM

00% Percent Occupied
(00) Occupied Parking
{00} Vacant Parking*
[00] Total Parking

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%

0 250 500m
 1:12,500



Date Plotted: March 21, 2016. Filename: P:\76156\01\Graphics\FigB2-07-OnStreet 7pm.dwg

ON-STREET PARKING 7PM

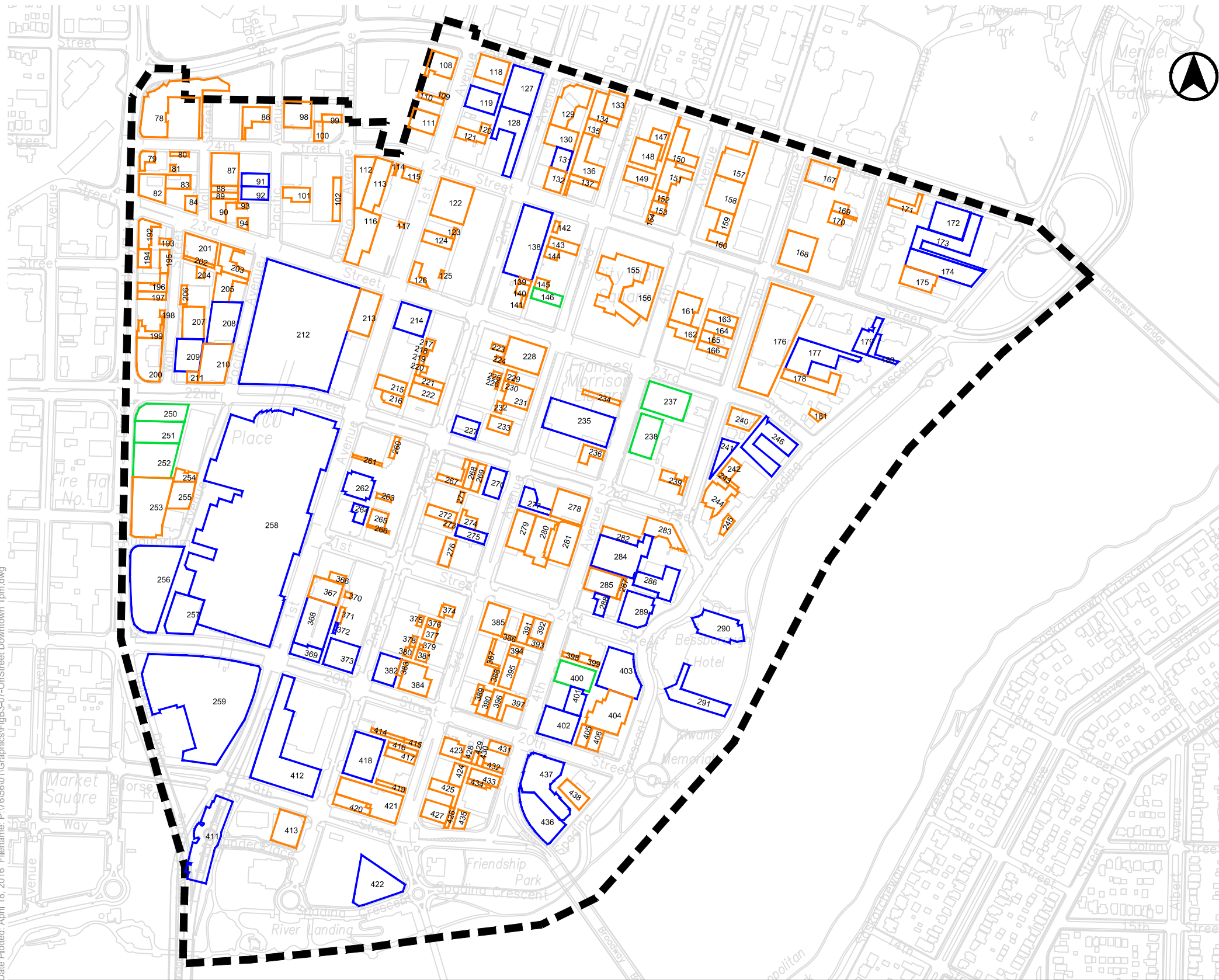
Downtown Saskatoon Parking Strategy
7656-01 March 2016

00% Percent Occupied
(00) Occupied Parking
{00} Vacant Parking*
[00] Total Parking

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%

0 250 500m
 1:12,500

Date Plotted: April 18, 2016 Filename: P:\7656\01\Graphics\FigB3-07-OffStreet Downtown 1pm.dwg



Lot #	Total Supply	Demand	Vacant *	Occupied
78	168	79	89	47%
79	10	8	2	80%
80	7	1	6	14%
81	2	3	-1	150%
82	14	4	10	29%
83	5	4	1	80%
84	14	11	3	79%
86	35	14	21	40%
87 a	20	4	16	20%
87 b	42	0	0	100%
88+89+90	20	10	10	50%
91+92	45	19	26	42%
93	3	3	0	100%
94	1	4	-3	400%
98	45	28	17	62%
99	10	8	2	80%
100	6	7	-1	117%
101	20	2	18	10%
102	15	6	9	40%
108	35	20	15	57%
109	2	2	0	100%
110	4	4	0	100%
111	27	9	18	33%
112	40	37	3	93%
113	68	43	25	63%
114	5	1	4	20%
115	10	1	9	10%
116	60	33	27	55%
117	2	2	0	100%
118	26	21	5	83%
119	52	4	48	8%
120	4	4	0	100%
121	5	5	0	100%
122	90	62	28	69%
123	3	3	0	100%
124	26	13	13	50%
125	3	1	2	33%
126	5	5	0	100%
127	150	47	103	31%
128	47	12	35	26%
129	22	10	12	45%
130	10	8	2	80%
131	44	10	34	23%
132	42	9	33	21%
133	44	31	13	70%
134	44	34	10	77%
135	29	10	19	34%
136	27	16	11	59%
137	14	13	1	93%
138	166	88	78	53%
139	2	3	-1	150%
140	9	7	2	78%
141	4	2	2	50%
142	4	4	0	100%
143	22	17	5	77%
144	14	0	14	0%
145	18	3	15	17%
146	17	13	4	76%
147	11	8	3	73%
148	96	65	31	68%
149	28	17	11	61%
150	21	13	8	62%
151	45	42	3	93%
152	3	2	1	67%
153	12	10	2	83%
154	6	5	1	83%
155	59	27	32	54%
156	47	23	24	49%
157 a	8	1	7	13%
157 b	45	7	38	16%
158	68	49	19	72%
159	24	18	6	75%
160	16	11	5	69%
161	16	13	3	81%
162	14	12	2	86%
163	20	14	6	70%
164	26	15	11	58%
165	9	4	5	44%
166	14	12	2	86%
167	35	16	19	46%
168	70	39	31	56%
169	6	4	2	67%
170	4	2	2	50%
171	21	5	16	24%
172 a	81	24	57	30%
172 b	51	13	38	25%
173	45	25	20	56%
174	100	13	87	13%
175	30	5	25	17%
176	133	63	70	47%
177	77	53	24	69%
178	35	19	16	54%
179+180	60	26	34	43%
181	9	4	5	44%
192	13	10	3	77%
193	4	4	0	100%
194	4	4	0	100%
195	8	9	-1	113%
196	15	10	5	67%
197	8	4	4	50%
198	3	3	0	100%
199	15	14	1	93%
200	30	6	24	20%
201	44	0	0	100%
202	14	11	3	79%
203	28	23	5	82%
204	5	2	3	40%
205	24	17	7	71%
206	8	3	5	38%
207	42	25	17	60%
208+209	131	39	92	30%
210	180	51	129	28%
211	4	4	0	100%
212	503	176	327	35%
213	145	0	145	0%
214 a	155	0	155	0%
214 b	52	0	52	100%
215	72	72	0	100%
216	13	2	11	15%
217	67	1	66	1%
218	3	5	-2	167%
219	4	5	-1	125%
220	5	4	1	80%
221	12	10	2	83%
222	24	16	8	67%
223	4	4	0	100%
224	3	3	0	100%
225	3	3	0	100%
226	3	2	1	67%
227	24	18	6	75%
228	66	24	42	36%
229	4	2	2	50%
230	3	1	2	33%
231	29	0	0	100%
232	3	3	0	100%
233 a	20	13	7	65%
233 b	17	12	5	71%
234	5	5	0	100%
235 a	490	441	49	90%
235 b	39	21	18	54%
236	50	35	15	50%
237	70	66	4	94%
238 a	43	25	18	58%
238 b	45	22	23	51%
239	20	11	9	55%
240	20	11	9	55%
241	49	28	21	57%
242	18	8	10	44%
243	7	4	3	57%
244	33	14	19	42%
245	13	9	4	69%
246	46	35	11	76%
250	43	5	38	12%
251+252	144	133	11	92%
253	56	50	6	89%
254	8	6	2	75%
255	33	28	5	85%
256	192	88	104	46%
257	56	42	14	75%
258	796	757	39	95%
259	328	90	238	27%
260	9	8	1	89%
261	6	5	1	83%
262	248	228	20	92%
263	3	2	1	67%
264	40	7	33	18%
265	14	9	5	64%
266	11	10	1	91%
267	16	12	4	75%
268	13	10	3	77%
269	6	3	3	50%
270	48	35	13	73%
271	5	5	0	100%
272	4	2	2	50%
273	4	1	3	25%
274	15	15	0	100%
275	24	11	13	46%
276	38	0	0	100%
277	24	19	5	79%
278	13	0	13	0%
279	65	51	14	78%
280	30	23	7	77%
281	476	251	225	53%
282	16	9	7	56%
283	44	14	30	32%
284	77	47	30	61%
285	29	15	14	52%
286	103	53	50	51%
287	10	6	4	60%
288	12	7	5	58%
289	275	275	0	100%
290	68	26	42	38%
291	67	32	35	48%
292	16	12	4	75%
293	16	4	12	25%
294	6	2	4	33%
295	30	0	0	100%
296	19	11	8	63%
297	2	5	-3	250%
298	2	1	1	50%
299	340	323	17	95%
300	50	43	7	86%
301	6	3	3	50%
302	5	4	1	80%
303	8	3	5	38%
304	8	3	5	38%
305	8	3	5	38%
306	3	2	1	67%
307	8	7	1	88%
308	7	6	1	86%
309	8	1	7	13%
310	22	13	9	59%
311	12	2	10	17%
312	21	21	0	100%
313	33	33	0	100%
314	6	5	1	83%
315	5	0	5	100%
316	7	6	1	86%
317	4	4	0	100%
318	8	0	8	0%
319	20	15	5	75%
320	26	0	0	100%
321	5	2	3	40%
322	5	5	0	100%
323	62	62	0	100%
324	11	7	4	64%
325	14	10	4	71%
326	6	3	3	50%
327	8	4	4	50%
328	56	22	34	39%
329	80	30	50	38%
330	70	26	44	37%
331	100	66	34	66%
332	18	0	0	100%
333	10	17	-7	170%
334	10	9	1	90%
335	60	17	43	28%
336	113	85	28	75%
337	41	0	0	100%
338	2	5	-3	250%
339	6	1	5	17%
340	10	6	4	60%
341	13	13	0	100%
342	77	56	21	73%
343	30	8	22	27%
344	25	4	21	16%
345	42	0	0	100%
346	97	17	80	18%
347	23	5	18	22%
348	20	15	5	75%
349+350	36	30	6	83%
351	28	28	0	100%
352	5	2	3	40%
353	4	2	2	50%
354	3	2	1	67%
355	12	1	11	9%
356	10	3	7	30%
357	18	13	5	72%
358	38	39	-1	103%
359	40	13	27	33%
360	178	108	70	61%
361	18	9	9	50%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%
 ■ Access not provided/lot closed (# indicates estimate)

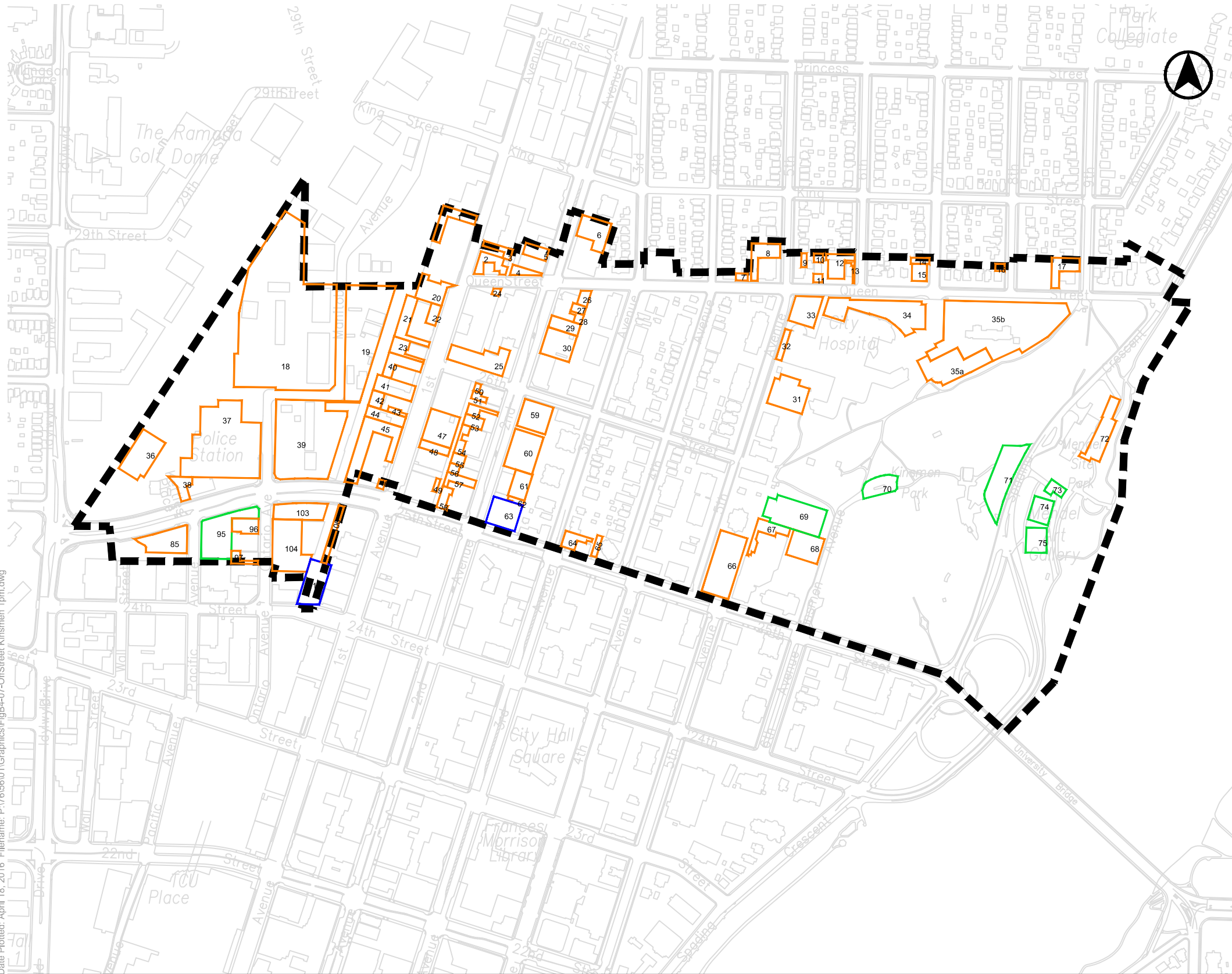
OFF-STREET PARKING - DOWNTOWN 1PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number



Date Plotted: April 18, 2016 Filename: P:\7656\01\Graphics\FigB4-07-OffStreet Kinsmen 1pm.dwg



Lot#	Total Supply	Demand	Vacant *	Occupied
1	40	24	16	60%
2	24	26	-2	108%
3	3	4	-1	133%
4	5	2	3	40%
5	12	8	4	67%
6	57	39	18	68%
7	4	1	3	25%
8	35	4	31	11%
9	3	2	1	67%
10	4	5	-1	125%
11	3	1	2	33%
12 a	12	8	4	67%
12 b	34	1	33	3%
13	7	4	3	57%
14	16	3	13	19%
15	14	12	2	86%
16	7	4	3	57%
17	24	3	21	13%
18+19	166	119	47	72%
20	49	25	24	51%
21	20	21	-1	105%
22	9	4	5	44%
23	31	17	14	55%
24	5	0	5	0%
25	55	41	14	75%
26	15	12	3	80%
27	5	2	3	40%
28	10	5	5	50%
29	79	74	5	94%
30	28	22	6	79%
31	235	142	83	63%
32	8	9	-1	113%
33	36	8	28	22%
34	107	102	5	95%
35 a	103	73	30	71%
35 b	260	201	59	77%
36	REMOVED		#VALUE!	#VALUE!
37	REMOVED		#VALUE!	#VALUE!
38	23	15	8	65%
39	32	11	21	34%
40	5	15	-10	300%
41	23	19	4	83%
42	28	2	26	7%
43	8	2	6	25%
44	10	7	3	70%
45	76	4	72	5%
46	3	3	0	100%
47	51	50	1	98%
48	7	6	1	86%
49	6	7	-1	117%
50	5	4	1	80%
51	5	4	1	80%
52	10	3	7	30%
53	10	9	1	90%
54	11	9	2	82%
55	10	7	3	70%
56	8	3	5	38%
57	12	9	3	75%
58	12	3	9	25%
59	81	44	37	54%
60	89	57	32	64%
61	45	22	23	49%
62	6	5	1	83%
63	54	21	33	39%
64	8	8	0	100%
65	9	4	5	44%
66	127	55	72	43%
67	34	20	14	59%
68	50	38	12	76%
69	114	47	67	41%
70	53		53	0%
71	40		40	0%
72	30	14	16	47%
73	12	5	7	42%
74	26	11	15	42%
75	26	5	21	19%
85	60	45	15	75%
95	75	10	65	13%
96	6	0	6	0%
97	6	2	4	33%
103	44	24	20	55%
104	53	38	15	72%
105	34	21	13	62%
106	27	16	11	59%
107	36	21	15	58%
339	15	10	5	67%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%.

■ Access not provided/lot closed (# indicates estimate)

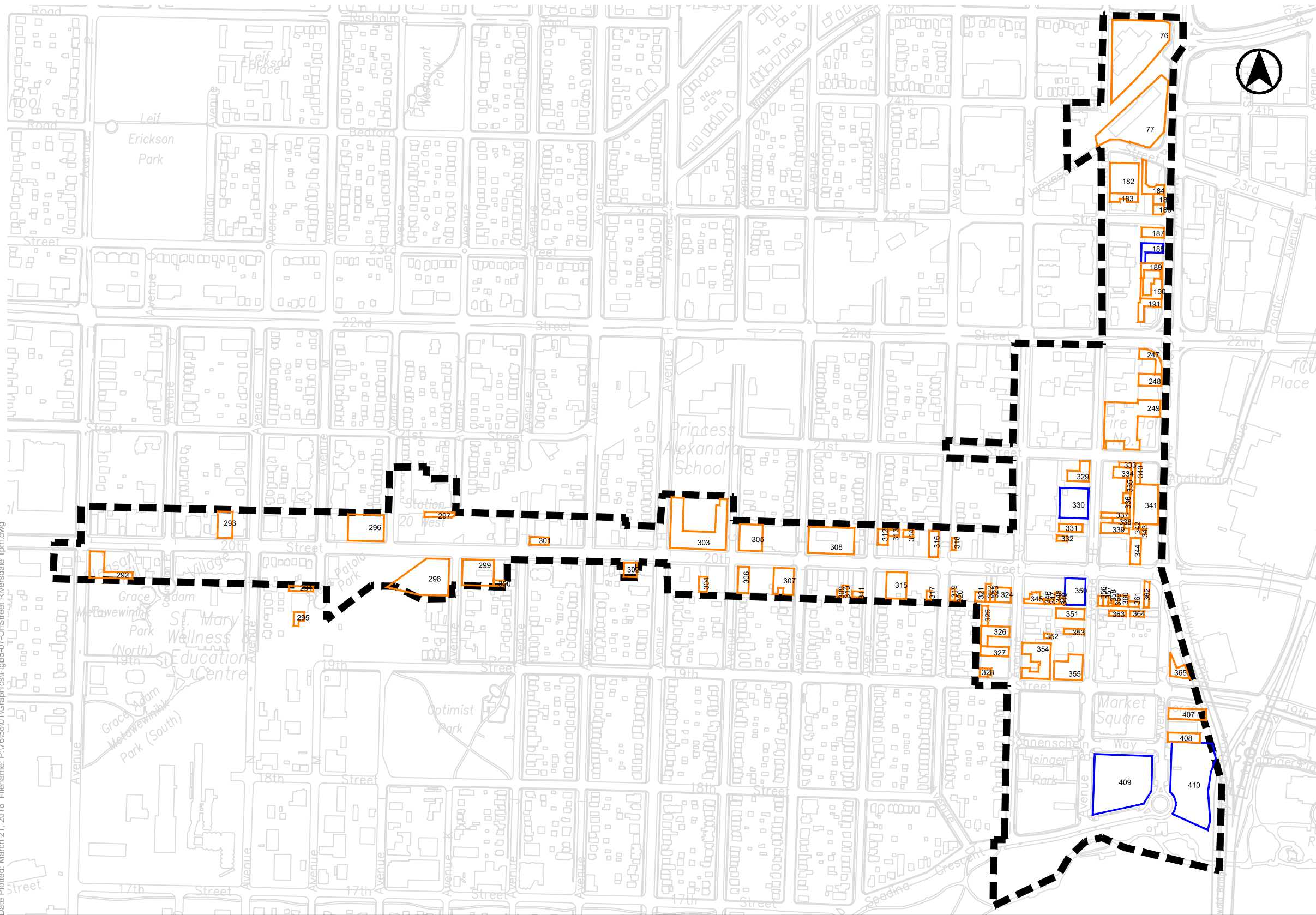
OFF-STREET PARKING - KINSMEN 1PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number

Appendix Figure B4

Date Plotted: March 21, 2016 File name: P:\7656\01\Graphics\FigB5-07-OffStreetRiversdale-1pm.dwg



Lot #	Total Supply	Demand	Vacant *	Occupied
36	20	6	14	30%
76	100	35	65	35%
77	76	38	38	50%
182	90	22	68	24%
183	6	3	3	50%
184	25	10	15	40%
185	6	4	2	67%
186	5	5	0	100%
187	10	3	7	30%
188	12	5	7	42%
189	5	2	3	40%
190	9	6	3	67%
191	14	11	3	79%
247	7	4	3	57%
248	15	5	10	33%
249	24	12	12	50%
303	40	5	35	13%
304	6	1	5	17%
305	40	24	16	60%
306	16	10	6	63%
307	40	7	33	18%
308	45	20	25	44%
309	6	1	5	17%
310	3	1	2	33%
311	7	3	4	43%
312	10	1	9	10%
313	6	1	5	17%
314	5	3	2	60%
315	40	40	0	100%
317	8	2	6	25%
318	5	0	5	0%
319	4	3	1	75%
320	2	1	1	50%
321	10	9	1	90%
322	10	2	8	20%
323	3	1	2	33%
324	20	7	13	35%
325	9	4	5	44%
326	20	10	10	50%
327	9	4	5	44%
328	1	1	0	100%
329	16	16	0	100%
330	75	26	49	35%
331	12	8	4	67%
332	3	4	-1	133%
333	10	1	9	10%
334	14	9	5	64%
335	110	8	102	7%
336	5	2	3	60%
337	15	1	14	7%
338	7	3	4	43%
340	10	5	5	50%
341	70	50	20	71%
342	4	1	3	25%
343	4	2	2	50%
344	26	13	13	50%
345	6	4	2	67%
346	2	0	2	0%
347	3	1	2	33%
348	2	2	0	100%
349	2	1	1	50%
350	28	27	1	96%
351	4	5	-1	125%
352	2	0	2	0%
353	4	4	0	100%
354	40	7	33	18%
355	35	20	15	57%
356	4	3	1	75%
357	4	2	2	50%
358	3	2	1	67%
359	5	3	2	60%
360	10	1	9	10%
361	4	3	1	75%
362	17	12	5	71%
363	4	3	1	75%
364	7	4	3	57%
365	15	2	13	13%
407	28	21	7	75%
408	25	4	21	16%
409	150	150	0	100%
410	150	47	103	31%
292	27	27	0	100%
293	19	19	0	100%
294	11	11	0	100%
295	7	7	0	100%
296	285	7	288	0%
297	13	13	0	100%
298	35	35	0	100%
299	43	43	0	100%
300	7	7	0	100%
301	11	11	0	100%
302	12	12	0	100%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%

█ Access not provided/lot closed (# indicates estimate)

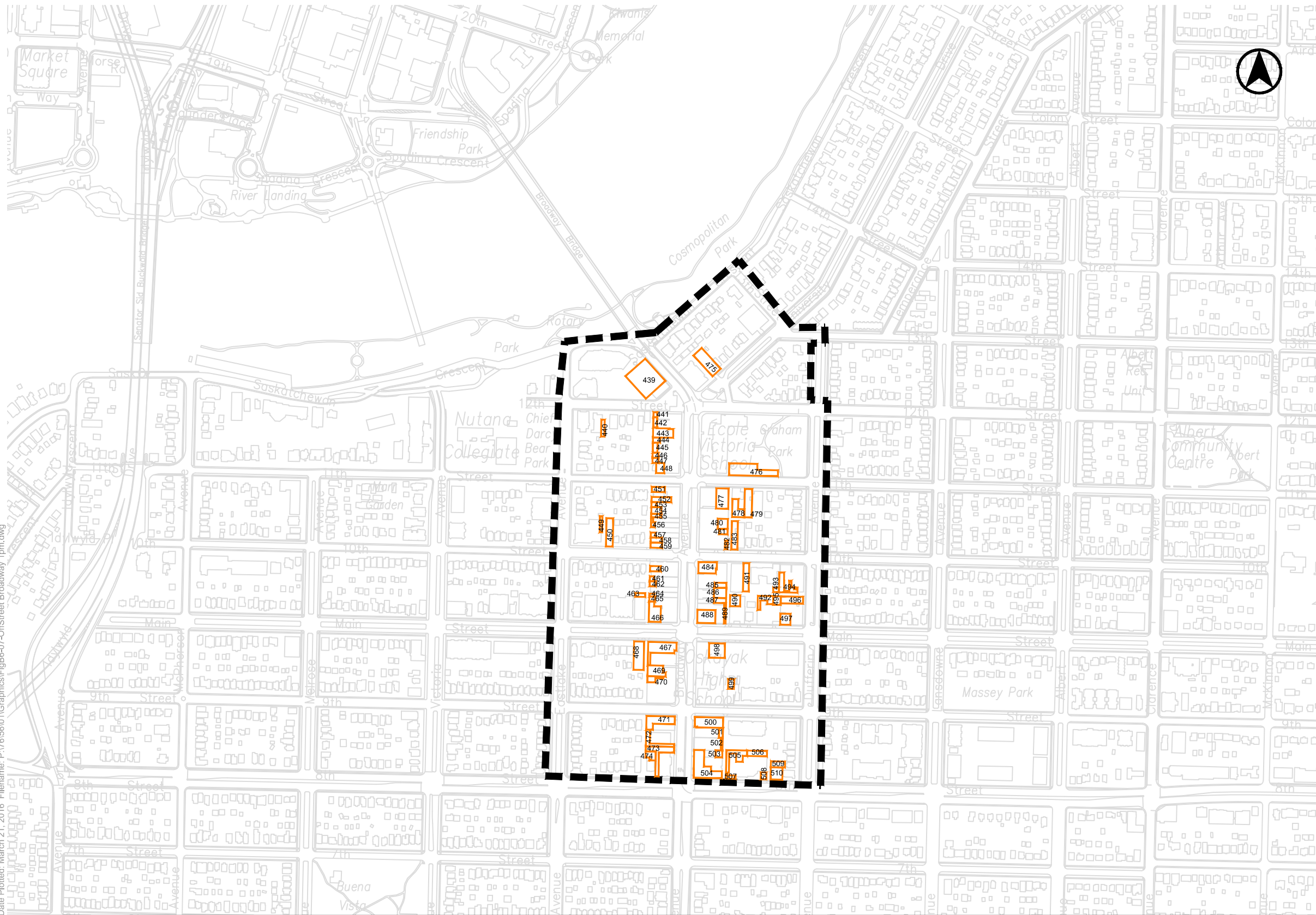
OFF-STREET PARKING - RIVERSDALE 1PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number



Date Plotted: March 21, 2016 File name: P:\7656\01\Graphics\FigB6-07-OffStreetBroadway 1pm.dwg



Lot#	Total Supply	Demand	Vacant *	Occupied
434	8	1	7	13%
439	38	12	26	32%
440	14	10	4	71%
441	9	2	7	22%
442	2	1	1	50%
443	5	3	2	60%
444	8	9	-1	113%
445	3	3	0	100%
446	5	1	4	20%
447	3	2	1	67%
448	2	3	-1	150%
449	4	10	-6	250%
450	4	3	1	75%
451	6	1	5	17%
452	4	0	4	0%
453	5	2	3	40%
454	2	1	1	50%
455	13	1	12	8%
456	5	1	4	20%
457	2	1	1	50%
458	2	2	0	100%
459	3	1	2	33%
460	2	2	0	100%
461	2	1	1	50%
462	2	1	1	50%
463	2	2	0	100%
464	1	1	0	100%
465	5	2	3	40%
466	3	1	2	33%
467	10	1	9	10%
468	20	2	18	10%
469	20	1	19	5%
470	6	1	5	17%
471	2	2	0	100%
472	14	1	13	7%
474	3	2	1	67%
475	1	3	-2	300%
476	32	26	6	81%
476	7	2	5	29%
477	20	1	19	5%
479	14	0	14	0%
480	7	1	6	14%
481	11	1	10	9%
482	2	1	1	50%
483	1	0	1	100%
484	10	2	8	20%
485	1	1	0	100%
486	8	1	7	13%
487	10	2	8	20%
488	15	3	12	20%
489	2	3	-1	150%
490	10	3	7	30%
491	8	3	5	38%
492	4	2	2	50%
493	4	3	1	75%
494	4	2	2	50%
495	4	1	3	25%
496	6	2	4	33%
497	8	2	6	25%
498	24	19	5	79%
499	5	1	4	20%
500	12	1	11	8%
501-502	11	1	10	9%
503	2	1	1	50%
504	23	3	20	13%
505	12	1	11	8%
506	9	4	5	44%
507	2	2	0	100%
508	4	1	3	25%
509	1	4	-3	400%
510	12	1	11	8%

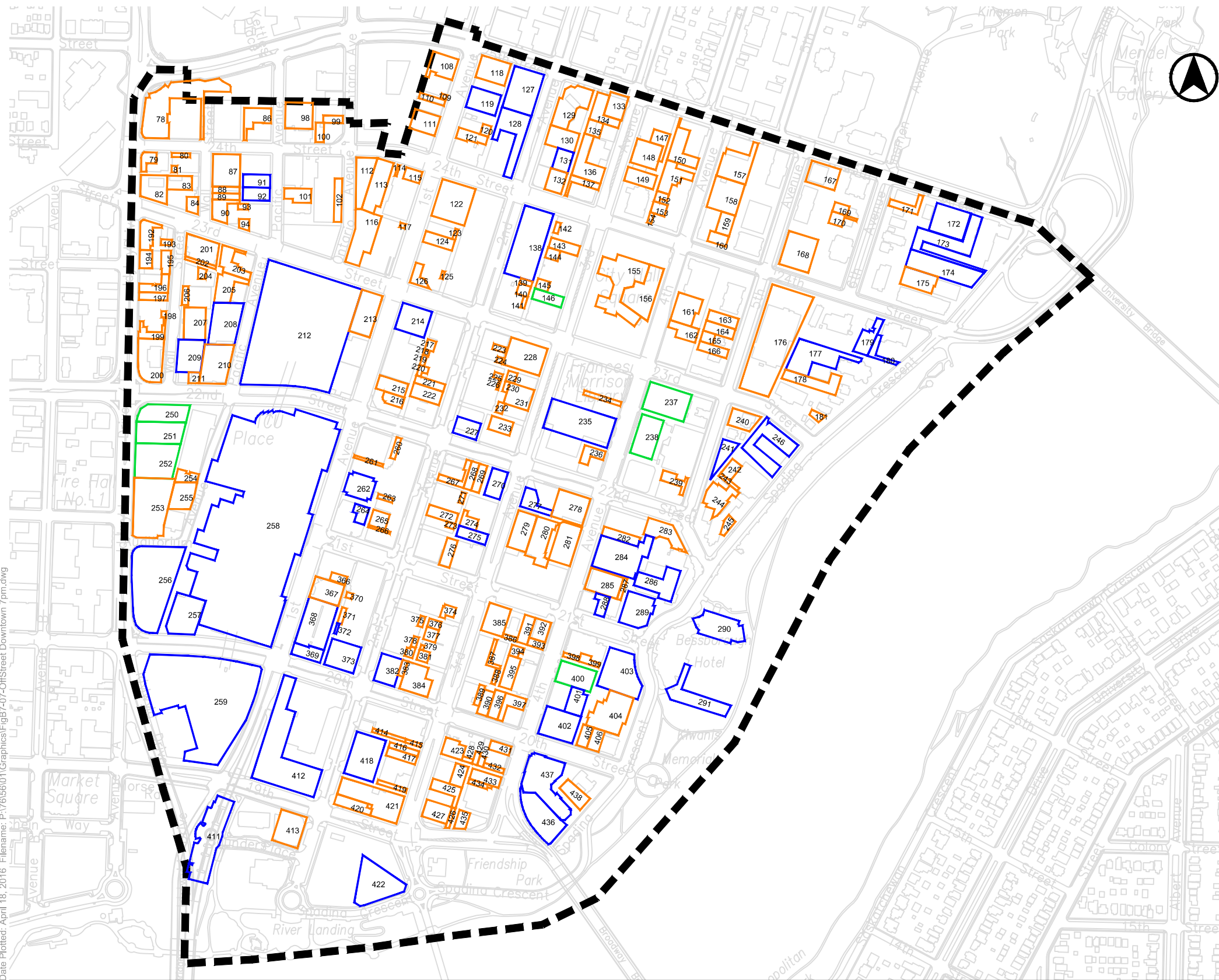
* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%.
 ■ Access not provided/lot closed (# indicates estimate)

OFF-STREET PARKING - BROADWAY 1PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number

Appendix Figure B6



Lot #	Total Supply	Demand	Vacant *	Occupied
78	168	21	147	13%
79	10	4	6	40%
80	7	3	4	43%
81	2	0	2	0%
82	14	2	12	14%
83	5	4	1	80%
84	14	0	14	0%
86	35	1	34	3%
87 a	20	3	17	15%
87 b	42	38	4	10%
88+89+90	20	1	19	5%
91+92	45	5	40	13%
93	3	0	3	0%
94	1	0	1	0%
98	45	13	32	29%
99	10	0	10	0%
100	6	4	2	67%
101	20	1	19	5%
102	15	1	14	7%
108	35	12	23	34%
109	2	3	-1	150%
110	4	1	3	25%
111	27	0	27	0%
112	40	0	40	0%
113	68	2	66	3%
114	5	4	1	80%
115	10	3	7	30%
116	60	0	60	0%
117	2	2	0	100%
118	26	5	21	19%
119	52	1	51	2%
120	4	1	3	25%
121	5	4	1	80%
122	90	2	88	2%
123	3	10	-7	333%
124	26	3	23	12%
125	3	3	0	0%
126	5	0	5	0%
127	150	0	150	0%
128	47	0	47	0%
129	22	6	16	27%
130	10	8	2	80%
131	44	8	36	18%
132	42	0	42	0%
133	44	4	40	9%
134	44	1	43	2%
135	29	1	28	3%
136	27	12	15	44%
137	14	6	8	43%
138	166	14	152	4%
139	2	2	0	100%
140	9	3	6	33%
141	4	1	3	25%
142	4	0	4	0%
143	22	1	21	5%
144	14	0	14	0%
145	18	10	8	56%
146	17	1	16	6%
147	11	1	10	9%
148	96	87	9	9%
149	28	0	28	0%
150	21	3	18	14%
151	45	2	43	4%
152	3	0	3	0%
153	12	0	12	0%
154	6	2	4	33%
155	59	51	8	14%
156	47	4	43	9%
157 a	8	2	6	25%
157 b	45	4	41	9%
158	68	2	66	3%
159	24	2	22	8%
160	16	1	15	6%
161	16	16	0	100%
162	14	7	7	50%
163	20	3	17	15%
164	26	1	25	4%
165	9	2	7	22%
166	14	5	9	36%
167	35	6	29	17%
168	70	4	66	6%
169	6	2	4	33%
170	4	1	3	25%
171	21	1	20	5%
172 a	81	26	55	32%
172 b	51	19	32	37%
173	45	72	-27	160%
174	100	5	95	5%
175	30	0	30	0%
176	133	8	125	6%
177	77	18	59	23%
178	35	15	20	43%
179+180	60	1	59	2%
181	9	0	9	0%
192	13	9	4	69%
193	4	0	4	0%
194	4	1	3	25%
195	8	0	8	0%
196	15	4	11	27%
197	8	0	8	0%
198	3	0	3	0%
199	15	4	11	27%
200	30	15	15	50%
201	44	3	41	9%
202	14	0	14	0%
203	28	8	20	29%
204	5	0	5	0%
205	24	1	23	4%
206	8	0	8	0%
207	42	1	41	2%
208+209	131	4	127	3%
210	180	30	150	17%
211	4	0	4	0%
212	503	48	455	10%
213	145	145	0	0%
214 b	155	139	16	10%
214 a	52	47	5	10%
215	72	30	42	42%
216	13	2	11	15%
217	67	0	67	0%
218	3	0	3	0%
219	4	0	4	0%
220	5	2	3	60%
221	12	3	9	25%
222	24	13	11	54%
223	4	1	3	25%
224	3	4	-1	133%
225	3	0	3	0%
226	3	0	3	0%
227	24	1	23	4%
228	66	0	66	0%
229	4	0	4	0%
230	3	0	3	0%
231	29	26	3	10%
232	3	1	2	33%
233 a	20	0	20	0%
233 b	17	1	16	6%
234	5	3	2	20%
235 b	490	123	367	25%
235 a	39	0	39	0%
236	50	1	49	2%
237	70	3	67	4%
238 a	43	2	41	5%
238 b	45	39	6	13%
239	20	5	15	25%
240	20	0	20	0%
241	49	3	46	6%
242	18	1	17	6%
243	7	0	7	0%
244	33	14	19	42%
245	13	1	12	8%
246	46	4	42	9%
250	43	21	22	49%
251+252	144	24	120	17%
253	56	58	-2	104%
254	8	1	7	13%
255	33	4	29	12%
256	192	42	150	22%
257	56	13	43	23%
258	796	205	591	26%
259	328	57	271	17%
260	9	4	5	44%
261	6	0	6	0%
262	248	229	19	8%
263	3	0	3	0%
264	40	1	39	3%
265	14	6	8	43%
266	11	2	9	18%
267	16	1	15	6%
268	13	2	11	15%
269	6	0	6	0%
270	48	2	46	4%
271	5	1	4	20%
272	4	4	0	100%
273	4	1	3	25%
274	15	2	13	13%
275	24	8	16	33%
276	38	34	4	11%
277	24	3	21	13%
278	13	1	12	0%
279	65	59	6	9%
280	30	7	23	23%
281	476	434	42	9%
282	16	5	11	31%
283	44	6	38	14%
284	77	20	57	26%
285	29	6	23	21%
286	103	58	45	56%
287	10	0	10	0%
288	12	0	12	0%
289	275	0	275	0%
290	68	34	34	50%
291	67	26	41	39%
292	16	2	14	13%
293	16	1	15	6%
294	6	0	6	0%
295	30	3	27	10%
296	3	0	3	0%
297	8	1	7	13%
298	3	1	2	33%
299	8	0	8	0%
300	7	1	6	14%
301	8	0	8	0%
302	22	1	21	5%
303	12	0	12	0%
304	21	0	21	0%
305	33	4	29	12%
306	6	1	5	17%
307	5	0	5	0%
308	7	0	7	0%
309	4	1	3	25%
310	8	0	8	0%
311	20	1	19	5%
312	26	23	3	12%
313	5	1	4	20%
314	5	1	4	20%
315	62	0	62	0%
316	11	4	7	36%
317	14	2	12	14%
318	6	3	3	50%
319	8	4	4	50%
320	56	29	27	52%
321	80	4	76	5%
322	70	2	68	3%
323	100	8	92	8%
324	18	8	10	40%
325	10	1	9	10%
326	10	1	9	10%
327	60	59	1	98%
328	113	12	101	11%
329	4	1	3	10%
330	2	0	2	0%
331	6	0	6	0%
332	10	0	10	0%
333	13	0	13	0%
334	77	15	62	19%
335	30	1	29	3%
336	25	1	24	4%
337	42	38	4	10%
338	97	1	96	1%
339	23	4	19	17%
340	20	0	20	0%
341	28	14	14	50%
342	5	0	5	0%
343	4	0	4	0%
344	10	4	6	40%
345	38	1	37	3%
346	40	2	38	5%
347	178	110	68	62%
348	18	0	18	0%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%
 ■ Access not provided/lot closed (# indicates estimate)

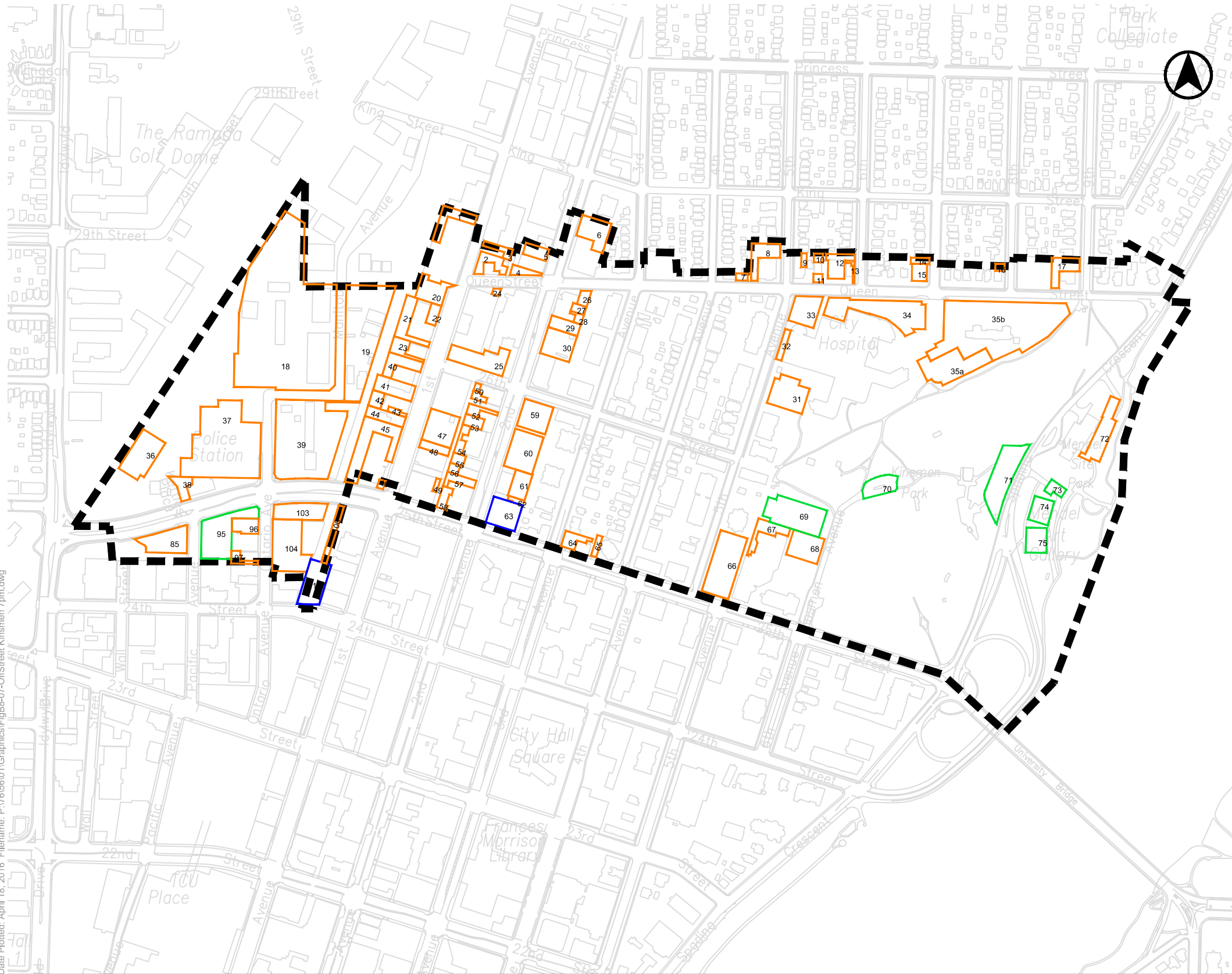
OFF-STREET PARKING - DOWNTOWN 7PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number

Appendix Figure B7

Date Plotted: April 18, 2016 Filename: P:\7656\01\Graphics\FigB8-07-OffStreet Kinsmen 7pm.dwg



Lot#	Total Supply	Demand	Vacant *	Occupied
1	40	30	10	75%
2	24	12	12	50%
3	3	0	3	0%
4	5	1	4	20%
5	12	2	10	17%
6	57	51	6	89%
7	4	0	4	0%
8	35	0	35	0%
9	3	0	3	0%
10	4	0	4	0%
11	3	0	3	0%
12 a	12	0	12	0%
12 b	34	0	34	0%
13	7	0	7	0%
14	16	2	14	13%
15	14	0	14	0%
16	7	0	7	0%
17	24	1	23	4%
18+19	166	33	133	20%
20	49	8	41	16%
21	20	7	13	35%
22	9	1	8	11%
23	31	8	23	26%
24	5	0	5	0%
25	55	22	33	40%
26	15	2	13	13%
27	5	3	2	60%
28	10	1	9	10%
29	79	2	77	3%
30	28	0	28	0%
31	225	17	208	9%
32	8	7	1	8%
33	36	0	36	0%
34	107	20	87	19%
35 a	103	8	95	8%
35 b	260	20	240	8%
36	REMOV	#VALUE!	#VALUE!	#VALUE!
37	REMOV	#VALUE!	#VALUE!	#VALUE!
38	23	3	20	13%
39	32	4	28	13%
40	5	0	5	0%
41	23	2	21	9%
42	28	2	26	7%
43	8	4	4	50%
44	10	1	9	10%
45	76	11	65	14%
46	3	0	3	0%
47	51	10	41	20%
48	7	2	5	29%
49	6	1	5	17%
50	5	0	5	0%
51	5	1	4	20%
52	10	1	9	10%
53	10	2	8	20%
54	11	3	8	27%
55	10	0	10	0%
56	8	1	7	13%
57	12	4	8	33%
58	12	2	10	17%
59	81	8	73	10%
60	89	17	72	19%
61	45	4	41	9%
62	6	0	6	0%
63	54	4	50	7%
64	8	1	7	13%
65	9	0	9	0%
66	127	5	122	4%
67	34	8	26	24%
68	50	34	16	68%
69	114	34	80	30%
70	53	53	0	0%
71	40	40	0	0%
72	30	3	27	10%
73	12	3	9	25%
74	26	3	23	12%
75	26	0	26	0%
85	60	0	60	0%
95	75	0	75	0%
96	6	0	6	0%
97	6	0	6	0%
103	44	3	41	7%
104	53	11	42	21%
105	34	0	34	0%
106	27	2	25	7%
107	36	3	33	8%
339	15	2	13	13%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%.

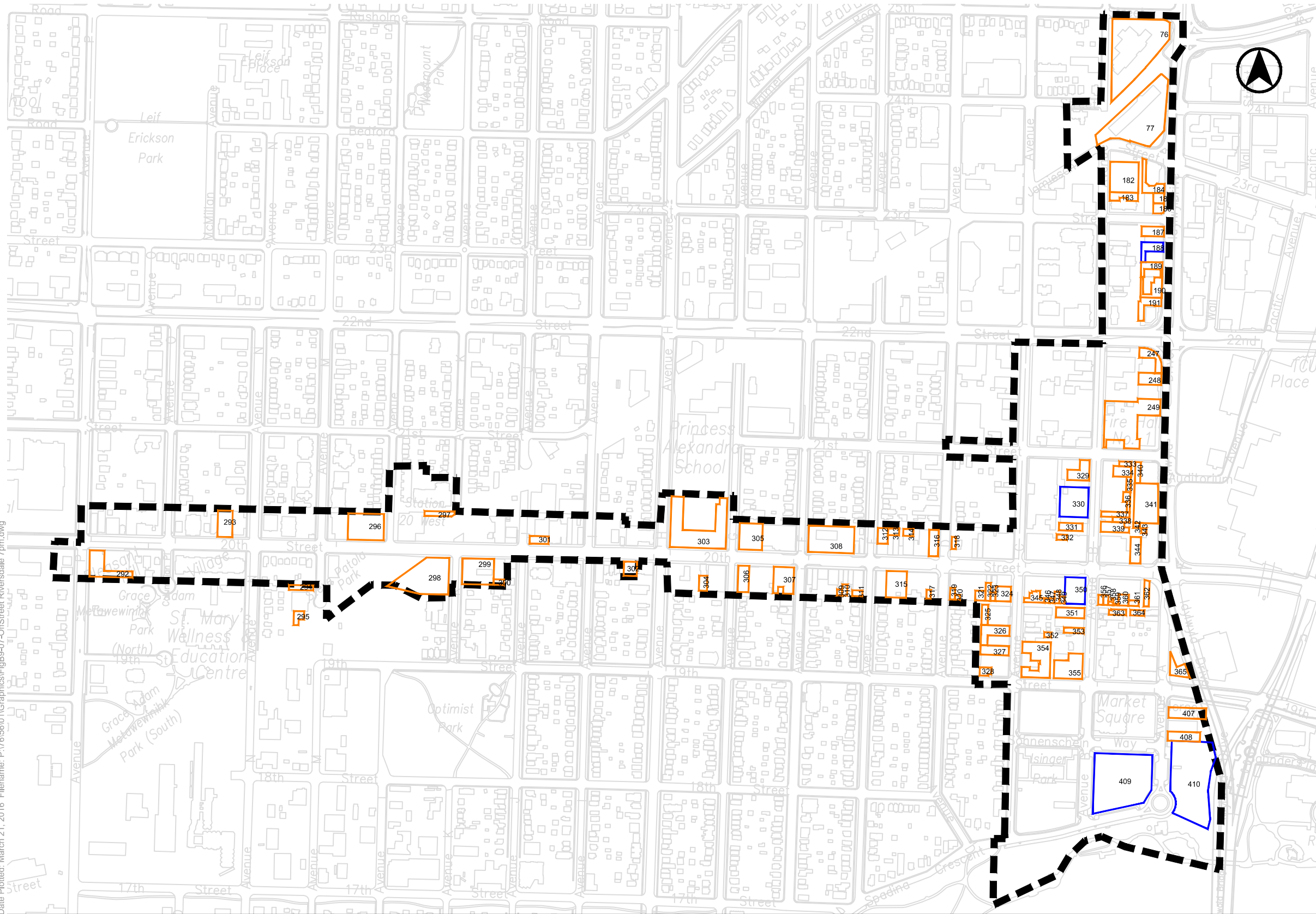
█ Access not provided/lot closed (# indicates estimate)

OFF-STREET PARKING - KINSMEN 7PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number

Date Plotted: March 21, 2016 File name: P:\7656\01\Graphics\FigB9-07-OffStreetRiversdale 7pm.dwg



Lot #	Total Supply	Demand	Vacant *	Occupied
36	20	4	16	20%
76	100	44	56	44%
77	76	30	46	39%
182	90	5	85	6%
183	6	0	6	0%
184	25	4	21	16%
185	6	2	4	33%
186	5	1	4	20%
187	10	1	9	10%
188	12	6	6	50%
189	5	2	3	40%
190	9	2	7	22%
191	14	0	14	0%
247	7	3	4	43%
248	15	3	12	20%
249	24	9	15	38%
303	40	0	40	0%
304	6	0	6	0%
305	40	11	29	28%
306	16	0	16	0%
307	40	7	33	18%
308	45	20	25	44%
309	6	0	6	0%
310	3	0	3	0%
311	7	0	7	0%
312	10	0	10	0%
313	6	0	6	0%
314	5	2	3	40%
315	40	40	0	100%
317	8	2	6	25%
318	5	1	4	20%
319	4	1	3	25%
320	2	1	1	50%
321	10	0	10	0%
322	10	1	9	10%
323	3	0	3	0%
324	20	1	19	5%
325	9	0	9	0%
326	20	6	14	30%
327	9	2	7	22%
328	1	1	0	100%
329	16	16	0	100%
330	75	7	68	9%
331	12	4	8	33%
332	3	3	0	100%
333	10	0	10	0%
334	14	0	14	0%
335	110	0	110	0%
336	5	1	4	20%
337	15	0	15	0%
338	7	1	6	14%
340	10	1	9	10%
341	70	62	8	89%
342	4	2	2	50%
343	4	3	1	75%
344	26	21	5	81%
345	6	8	-2	133%
346	2	0	2	0%
347	3	0	3	0%
348	2	1	1	50%
349	2	2	0	100%
350	28	2	26	7%
351	4	1	3	25%
352	2	0	2	0%
353	4	0	4	0%
354	40	7	33	18%
355	35	20	15	57%
356	4	3	1	75%
357	4	0	4	0%
358	3	0	3	0%
359	5	0	5	0%
360	10	0	10	0%
361	4	2	2	50%
362	17	4	13	24%
363	4	0	4	0%
364	7	3	4	43%
365	15	1	14	7%
407	28	5	23	18%
408	25	2	23	8%
409	150	150	0	100%
410	150	4	146	3%
292	27	27	0	100%
293	19	19	0	100%
294	11	11	0	100%
295	7	7	0	100%
296	295	7	288	0%
297	13	13	0	100%
298	35	35	0	100%
299	43	43	0	100%
300	7	7	0	100%
301	11	11	0	100%
302	12	12	0	100%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%

█ Access not provided/lot closed (# indicates estimate)

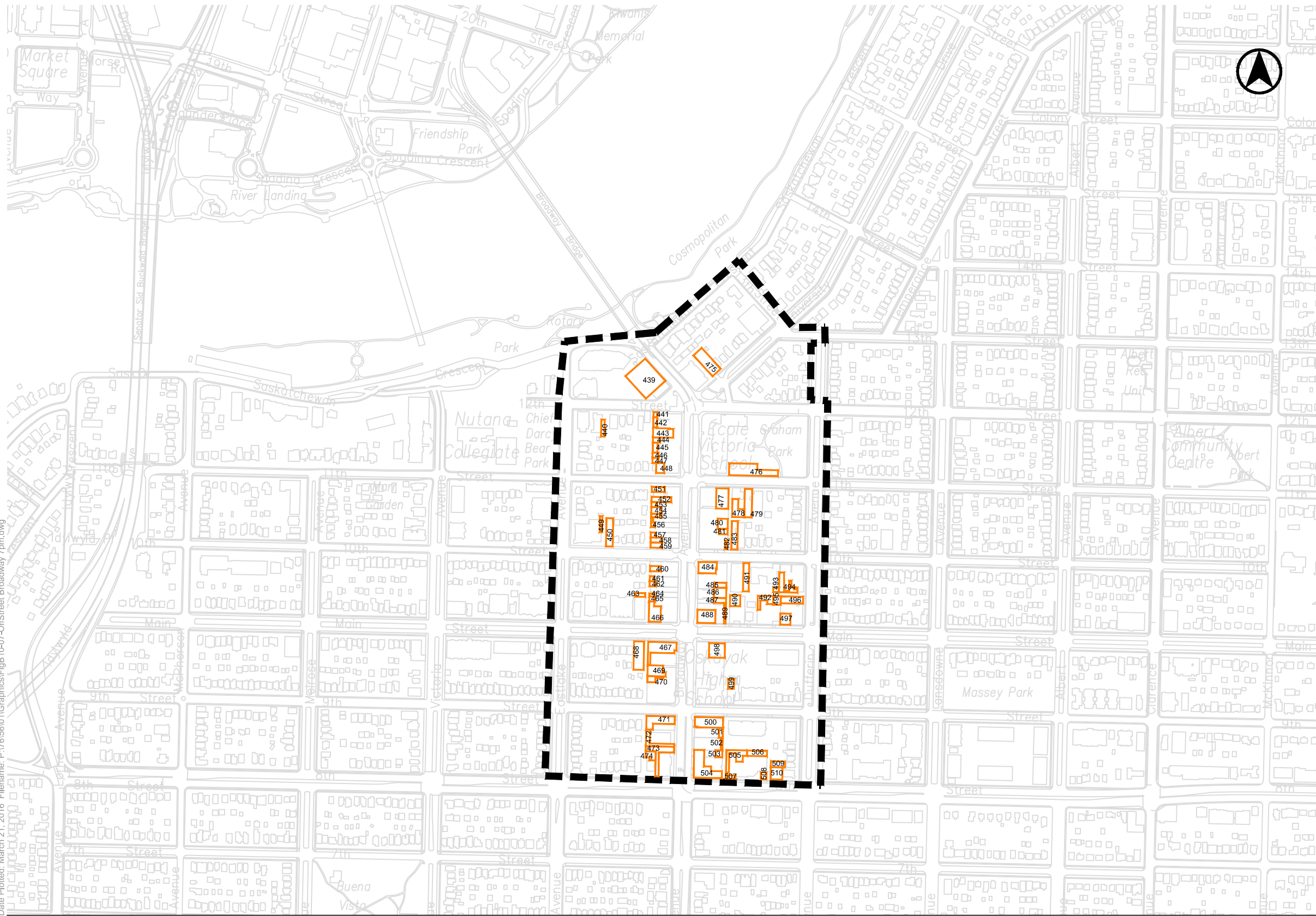
OFF-STREET PARKING - RIVERSDALE 7PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number



Date Plotted: March 21, 2016 File Name: P:\7656\01\Graphics\FigB10-07-OffStreet Broadway 7pm.dwg



Lot #	Total Supply	Demand	Vacant *	Occupied
434	8	1	7	13%
439	38	2	36	5%
440	14	1	13	7%
441	9	0	9	0%
442	2	0	2	0%
443	5	1	4	20%
444	8	1	7	13%
445	3	1	2	33%
446	5	1	4	20%
447	3	2	1	67%
448	2	1	1	50%
449	4	1	3	25%
450	4	0	4	0%
451	6	0	6	0%
452	4	1	3	25%
453	5	1	4	20%
454	2	0	2	0%
455	13	1	12	8%
456	5	2	3	40%
457	2	1	1	50%
458	2	0	2	0%
459	3	2	1	67%
460	2	2	0	100%
461	2	1	1	50%
462	2	1	1	50%
463	2	2	0	100%
464	1	1	0	100%
465	5	1	4	20%
466	3	3	0	100%
467	10	0	10	0%
468	20	2	18	10%
469	20	1	19	5%
470	6	2	4	33%
471	2	1	1	50%
472	14	2	12	14%
474	3	1	2	33%
475	1	2	-1	200%
476	32	0	32	0%
476	7	1	6	14%
477	20	1	19	5%
479	14	0	14	0%
480	7	0	7	0%
481	11	1	10	9%
482	2	0	2	0%
483	1	1	0	100%
484	10	0	10	0%
485	1	1	0	100%
486	8	1	7	13%
487	10	2	8	20%
488	15	1	14	7%
489	2	0	2	0%
490	10	0	10	0%
491	8	0	8	0%
492	4	0	4	0%
493	4	0	4	0%
494	4	1	3	25%
495	4	1	3	25%
496	6	3	3	50%
497	8	2	6	25%
498	24	0	24	0%
499	5	2	3	40%
500	12	5	7	42%
501-502	11	2	9	18%
503	2	1	1	50%
504	23	1	22	4%
505	12	1	11	8%
506	9	4	5	44%
507	2	2	0	100%
508	4	2	2	50%
509	1	1	0	100%
510	12	2	10	17%

* In some cases the reported parking demand exceeds the supply resulting in a negative number of vacant parking spaces or utilization over 100%.
 ■ Access not provided/lot closed (# indicates estimate)

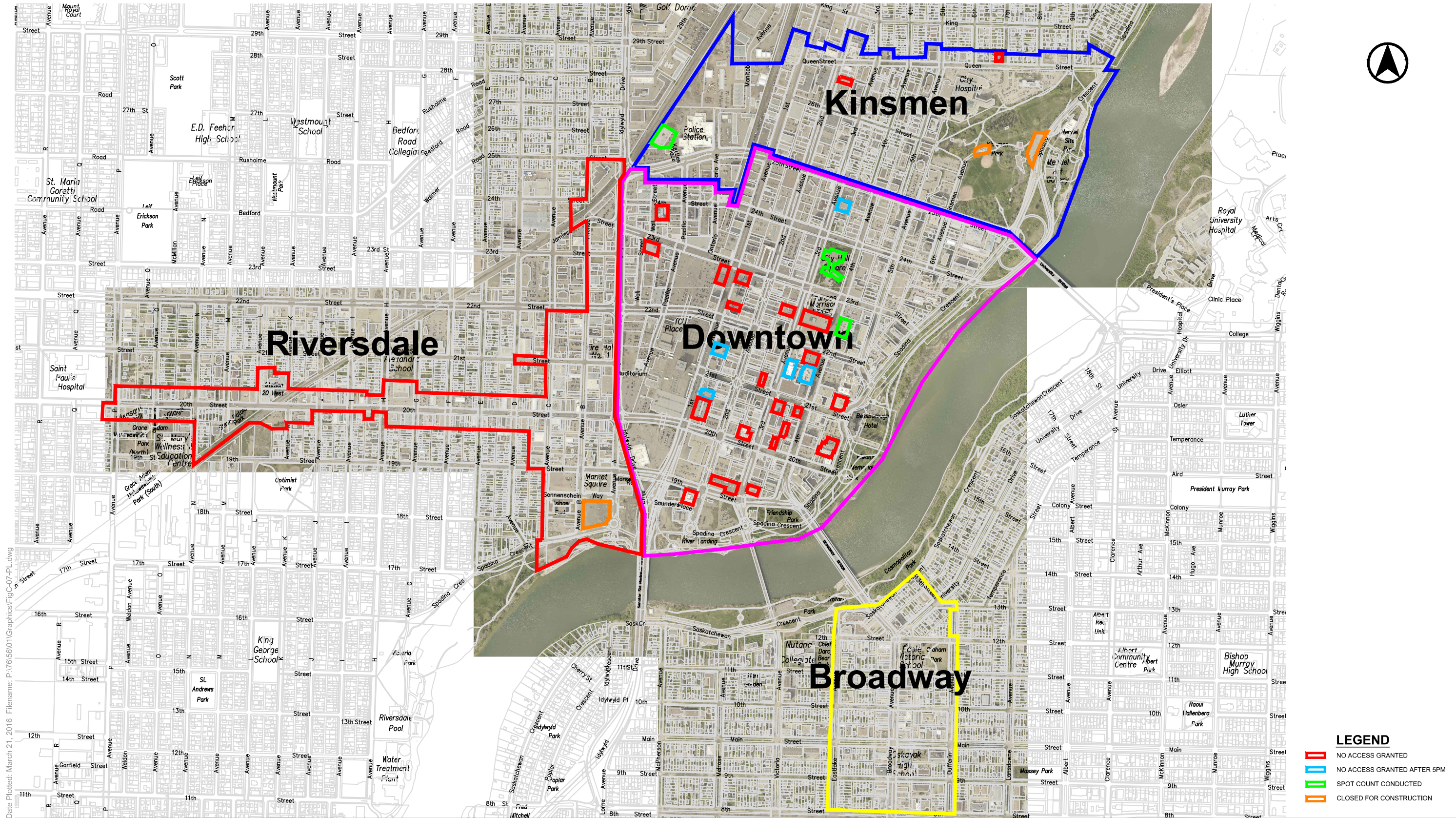
OFF-STREET PARKING - BROADWAY 7PM

- Municipal Parking
- Commercial (Paid) Parking
- Private Parking

258 Lot number

APPENDIX C: Restricted Access to Private Parking Lots





Date Plotted: March 21, 2016. Filename: P:\7656\01\Graphics\FigC-07-PL.dwg

RESTRICTED ACCESS TO PRIVATE LOTS

- LEGEND**
- ▭ NO ACCESS GRANTED
 - ▭ NO ACCESS GRANTED AFTER 5PM
 - ▭ SPOT COUNT CONDUCTED
 - ▭ CLOSED FOR CONSTRUCTION

APPENDIX D: Detailed Parking Demand Analysis



Appendix D: Detailed Parking Demand Analysis

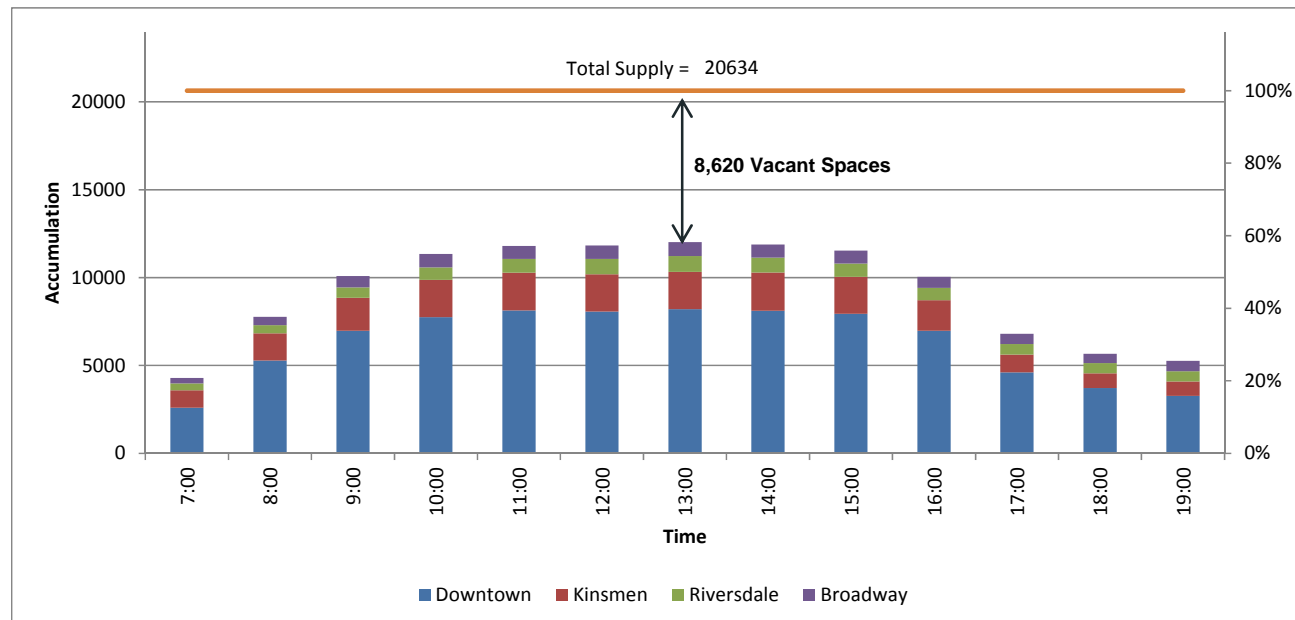
1.0 OVERALL DEMANDS

1.1 EXISTING STUDY AREA PARKING DEMANDS

Parking demand surveys were undertaken by CIMA+ in 2014 and 2015 within the study area's public and private parking facilities. Surveys were undertaken on an hourly basis between 7:00 am and 7:00 pm when general Downtown parking demands are at their greatest (i.e. weekday daytime and evening) to determine the existing parking demands and the availability of parking to meet the needs of future developments that may occur.

Recorded parking survey demand information has been used in determining the typical peak demand levels across the study area through a typical weekday when demands likely peak. Figure 1 provides an overview of the on and off-street parking demands across the entire study area.

FIGURE 1 — ON AND OFF-STREET PARKING DEMANDS – ENTIRE STUDY AREA



Parking utilization levels indicate that approximately 58 percent of the total parking supply within the study area is used during its busiest period (1:00 pm). An additional 8,620 parking spaces are available during this peak period. Of the 8,620 vacant spaces approximately 4,432 spaces are publicly available while the remaining 4,188 spaces are private parking spaces. While a significant portion of the private parking spaces are vacant they are not available for public use because they likely are reserved for a specific building or user group. However these private vacant parking spaces could be used to accommodate some or all of the demand associated with increased employment within the buildings they serve. Occupancy rates of 85% to 90% are typically used to identify areas where the parking supply is operating at or near its practical capacity in terms of allowing people to find a space in a reasonable amount of vacant time

A summary of the parking demand observed across the entire study area at the peak time (1:00 pm) is provided in Table 1.

TABLE 1 STUDY AREA PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	3,926	1:00 pm	2,303	59%	1,623
Municipal Off-Street	457		158	35%	299
Commercial Off-Street	6,241		3,731	60%	2,510
Private Off-Street	10,010		5,822	58%	4,188
Overall Total	20,634		12,014	58%	8,620
Total Publicly Available Parking (excluding private parking)					
	10,624	1:00 pm	6,192	58%	4,432

It should be noted that the peak on-street parking demands have a different demand pattern (peak in the evening - 7:00 pm) compared to the overall area (peak in the mid-afternoon - 1:00 pm). On-street parking is well utilized throughout the study area in the evening, particularly after 7:00 pm when on-street parking is free. The following section provides a more detailed analysis of the on-street parking demands.

1.2 ON-STREET PARKING DEMANDS

On-street parking demand surveys were conducted on November 12th and 13th, 2014. Parking demands observed on November 13th were used in this analysis as parking conditions on this day were more consistent (i.e. fewer on-street closures).

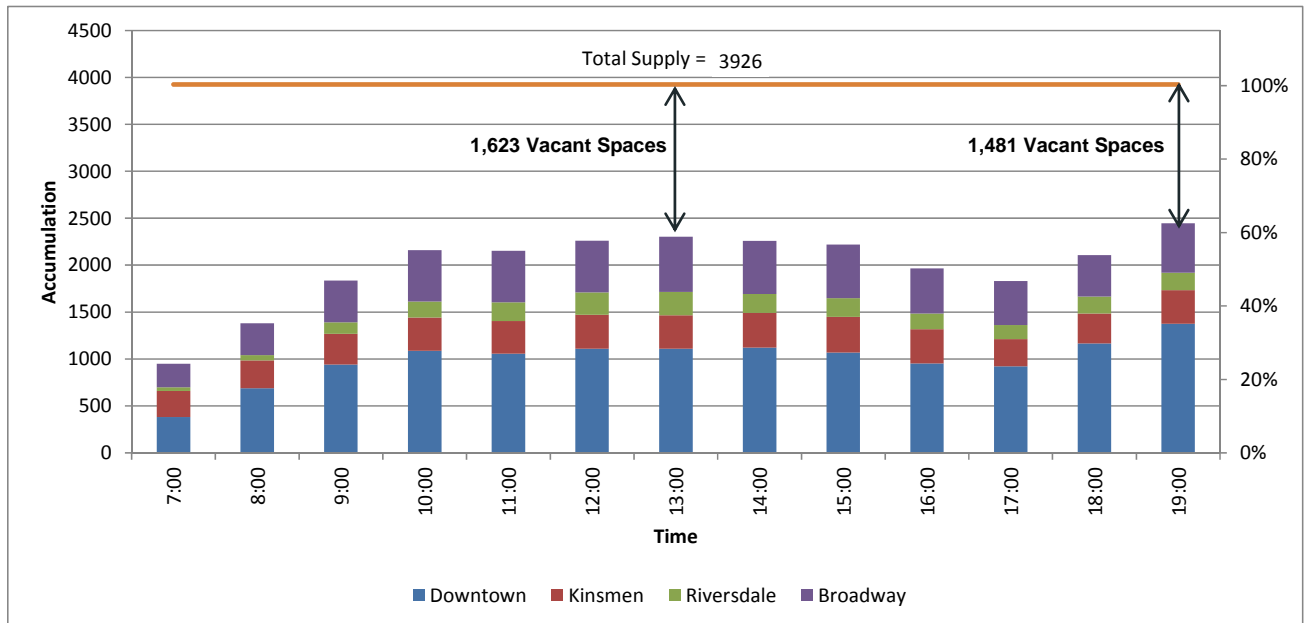
There are a total of 3,926 on-street parking spaces available across the entire study area. On-street parking includes “metered” parking (delineated street parking with meter heads), pay and display and free non-delineated street parking that are available for public use. Approximately 1,421 spaces (36%) of the total on-street supply are free while the remaining 2,505 spaces (64%) have two dollar (\$2.00) hourly rates throughout the day (typically Monday to Saturday).

On-street parking demands across the entire study area are summarized in Figure 2.

It should be noted that based on discussions with the City, parking occupancy surveys were not conducted west of Avenue H within the Riversdale area. This area (west of Avenue H) has an estimated parking supply of 688 spaces, including 208 on-street and 480 off-street spaces, which has been removed from the total parking supply for the purposes of calculating area parking demands.



FIGURE 2 — ON-STREET PARKING DEMANDS – ENTIRE STUDY AREA

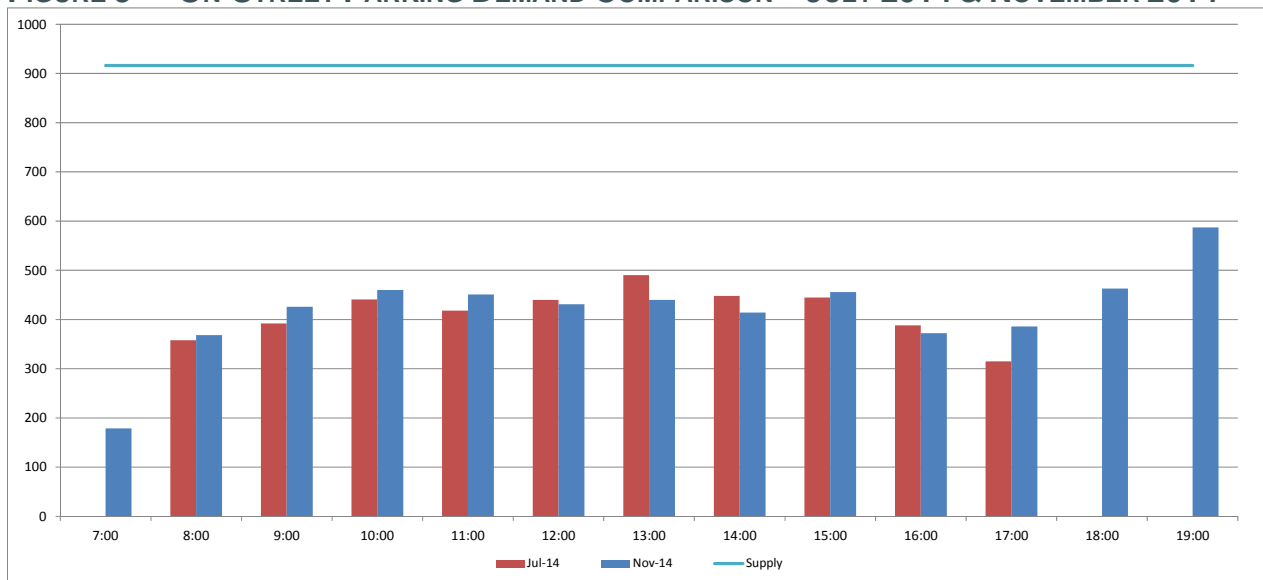


On-street utilization levels indicate that approximately 62 percent of the total parking supply (2,445 spaces) is used during its busiest period (7:00 pm). An additional 1,481 on-street parking spaces are available during this peak period.

The City of Saskatoon conducted on-street parking occupancy counts in July 2014, as part of the 4th Avenue bicycle lane study, within a portion of the Downtown. These demands were compared to those observed in November 2014.

Figure 3 illustrates the on-street parking demand within a portion of the Downtown for both survey periods. Key findings indicate that the overall daytime demand trend and peak parking demand observed in July 2014 are very comparable to those observed in November 2014.

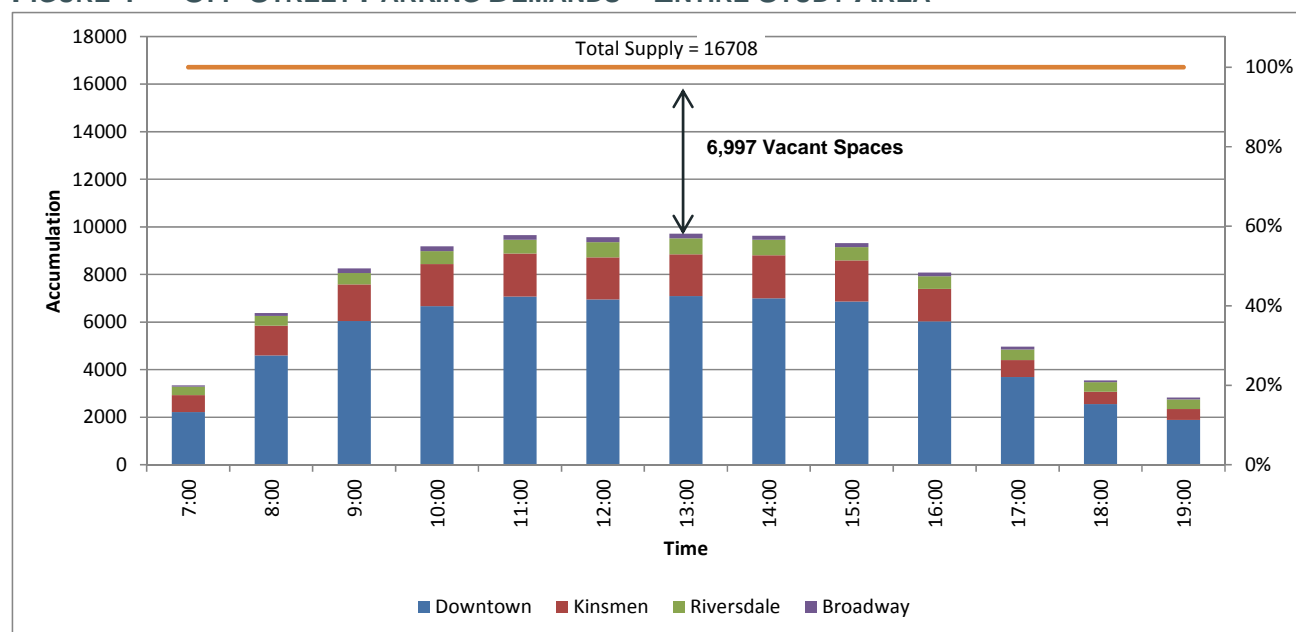
FIGURE 3 — ON-STREET PARKING DEMAND COMPARISON – JULY 2014 & NOVEMBER 2014



1.2.1.1 Off-Street Parking Demands

Off-street parking surveys were conducted on February 18, 2015 across the entire study area. Off-street parking demands are summarized in Figure 4.

FIGURE 4 — OFF-STREET PARKING DEMANDS – ENTIRE STUDY AREA



Off-street parking utilization peaked at 1:00 pm with approximately 58 percent of the total supply (9,711 spaces) being used during this peak period. An additional 6,997 spaces are vacant during the peak period.

There are a number of private parking facilities within the area that provide dedicated reserved spaces to permit holders within a portion or an entire parking lot. This practice of offering large proportions of reserved parking spaces dedicated to a single user results in an underutilization of the overall parking supply that could otherwise be used to meet additional area demands. For example, it is not an unusual practice to oversell parking permits by 15 to 25% or more in Downtown parking facilities in order to reflect the fact that a significant portion of employee parkers are not present every day or all day long due to meetings, business trips, vacation or illness.

Prior to commencing the parking surveys, the project team contacted private land owners in order to obtain permission to access parking structures. In some cases access to certain off-street lots within the Downtown and the Kinsmen areas was limited to certain hours of the survey period or not permitted at all (35 lots of the 511 lots surveyed). More specifically:

- While the majority of private garages were included within the parking demand surveys, access to twenty-four private parking facilities within the Downtown and North of the Downtown areas were not permitted (9% of the study area's total parking supply). As a conservative estimate it was assumed that each of these lots were at or near capacity during the daytime period.



- Access was not granted in five lots within the Downtown in the evening (4% of the study area's total parking supply); parking demands within these lots were estimated based on area occupancy trends.
- Full access was not provided for three lots located within the Downtown or North of the Downtown (3% of the study area's total parking supply); parking demands within these lots were estimated based on area occupancy trends (majority of the lots were assumed to be at or near capacity during the peak daytime period).
- Three lots (two public and one private parking lot) were closed for construction or a special event (1% of the study area's total parking supply). No parking demands were counted within these lots.

A figure illustrating the private lots located within the Downtown and Kinsmen areas where access was limited or restricted during the data collection phase of this study is provided in Appendix C.



2.0 DOWNTOWN

2.1 DOWNTOWN OVERVIEW

The Downtown is generally bounded by 25th Street to the north, Spadina Crescent to the east and south and Idylwyld Drive to the west.

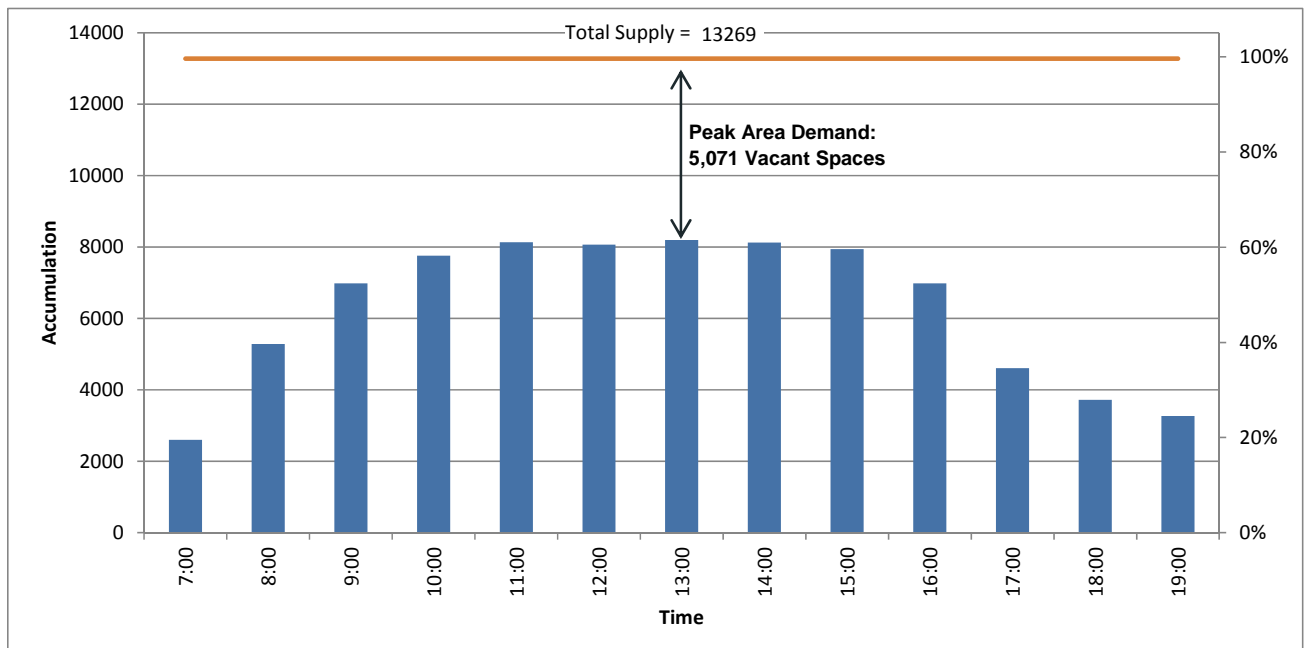
As summarized in Table 2, there are approximately 13,269 spaces located within the Downtown of which 1,860 spaces are on-street, 418 spaces are located within municipal lots, 5,592 spaces are located within commercial lots/structures and 5,399 spaces are located in private off-street facilities. Seventeen percent (17%) of the available parking within the Downtown is municipally owned or controlled.

TABLE 2 DOWNTOWN PARKING SUPPLY BY PARKING TYPE

Parking Type	Supply	
	# spaces	% of total supply
On-Street	1,860	14%
Municipal Off-Street	418	3%
Commercial Off-Street	5,592	42%
Private Off-Street	5,399	41%
Overall Total	13,269	100%

Peak parking demand within the Downtown was observed at 1:00pm (8,198 spaces). An additional 5,071 spaces are vacant (including public and private spaces) during the busiest daytime period.

FIGURE 5 — DOWNTOWN PARKING DEMANDS



Parking demands within the Downtown peaked at 1:00pm. Demands were further analyzed based upon type of parking (i.e. on-street, private, municipal off-street and commercial parking). A summary of the peak demand observed across the Downtown for each type of parking is provided in Table 3.

TABLE 3 DOWNTOWN PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	1,860	1:00 pm	1,109	60%	751
Municipal Off-Street	418		287	69%	131
Commercial Off-Street	5,592		3,351	60%	2,241
Private Off-Street	5,399		3,451	64%	1,948
Overall Total	13,269		8,198	62%	5,071
Total Publicly Available Parking (excluding private parking)					
	7,870	1:00 pm	4,847	62%	3,023

Excluding the area private parking, there are a total of 7,870 parking spaces that are publicly available across the Downtown. This supply represents 59% of the total supply within the Downtown.

The publicly available parking demand (including on-street, municipal off-street and commercial parking) at the peak period (1:00pm) was 4,847 spaces. An additional 3,023 public parking spaces are available across the Downtown during this peak time in publicly available parking facilities.

2.1.1 On-Street Parking Demands

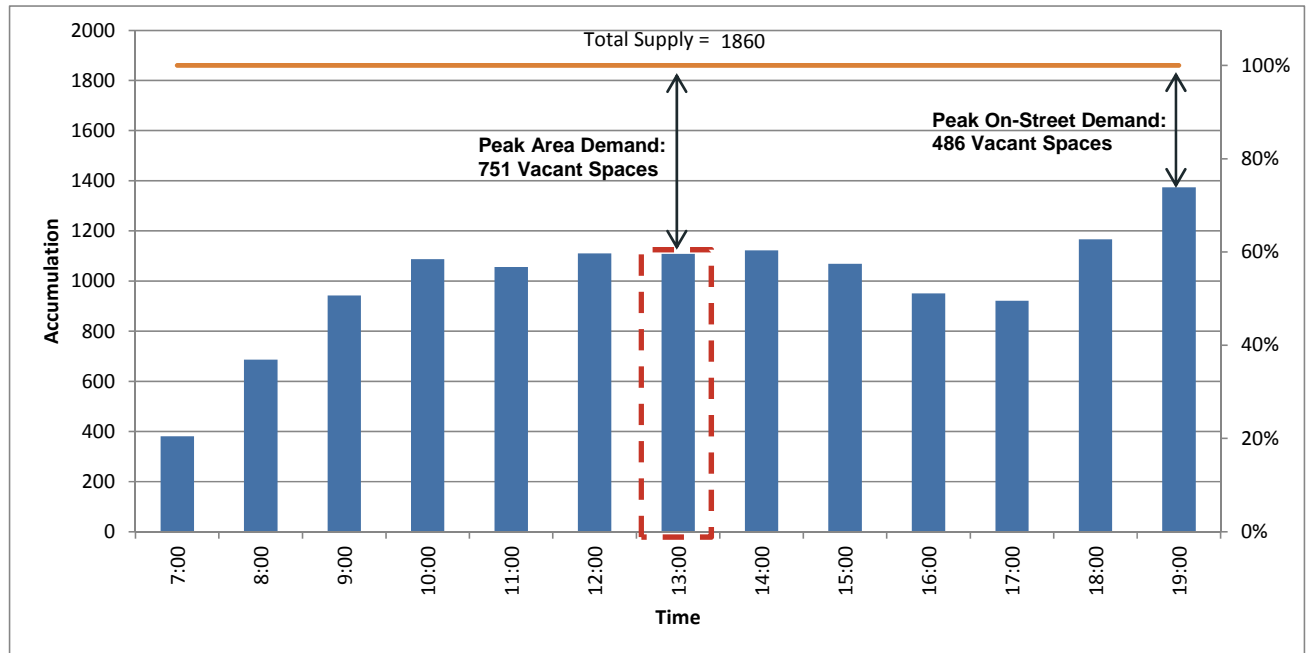
There are a total of 1,860 on-street parking spaces available within the Downtown. As illustrated in Figure 6, there is an additional 751 spaces available at the peak demand period within the study area (1:00pm).

It is noteworthy that peak on-street parking demands have a different demand pattern (peak in the evening - 7:00 pm) compared to the overall area (peak in the mid-afternoon - 1:00 pm). On-street utilization levels indicate that approximately 74 percent (1,374 spaces) of the total parking supply is used during its busiest period (7:00 pm). An additional 486 on-street vacant parking spaces are available during this peak period.

Generally speaking, the on-street parking in the west central part of the Core and South Core sub-areas is very well utilized in the 85% or higher occupancy range while the on-street parking in the north and east parts of the Downtown are less utilized. During the evening period when on-street demand peaks, there are many off-street surface lots that are not well utilized and which provide an opportunity for people who have been unable to locate an on street space to find alternative parking.



FIGURE 6 — ON-STREET PARKING DEMANDS – DOWNTOWN

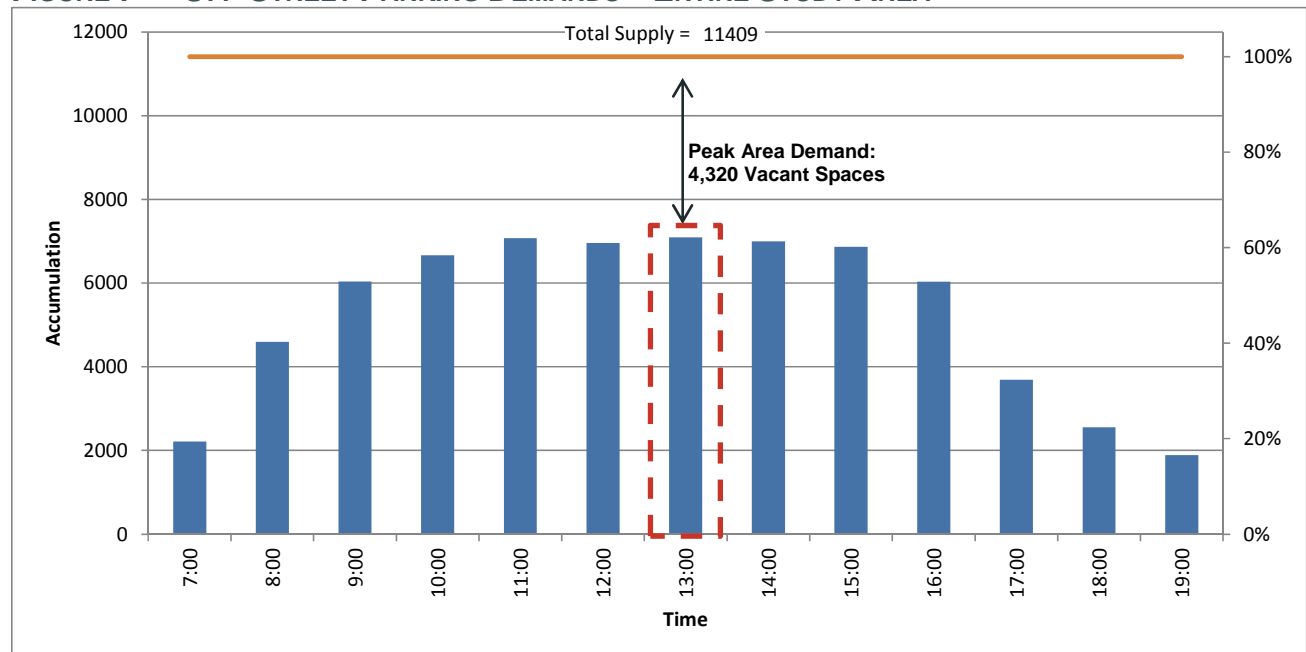


2.1.2 Off-Street Parking Demands

There are a total of 11,409 off-street parking spaces within the Downtown of which 6,010 are available for public use (53% of total supply) and 5,592 are private parking spaces (47% of total supply).

As illustrated in Figure 7, off-street parking utilization peaked at 1:00 pm (consistent with the study area peak demand period) with approximately 62 percent of the total supply (7,089 spaces) being used during this peak period. An additional 4,320 spaces are available for use during the peak period.

FIGURE 7 — OFF-STREET PARKING DEMANDS – ENTIRE STUDY AREA



2.1.3 Downtown – Key Findings

A summary of the key findings within the Downtown area are as follows:

Supply

- There are a total of 13,269 parking spaces located within the Downtown.
- Fifty-eight percent (62%) of the total parking supply (7,870 spaces) within the Downtown is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).
- There is limited municipally controlled off-street parking within the Downtown.

Demand

- Sixty-two percent (62%) of the total parking supply is in use during the busiest period (1:00 pm).
- Sixty-one percent (62%) of the total parking supply available for public use (7,870 spaces) is occupied during the busiest period (1:00 pm – 4,847 spaces). An additional 3,023 spaces are available during this peak period.
- A decrease in Saskatoon’s office vacancy rate, towards the typical rate, could generate a demand for an addition 615 spaces across the Downtown area. If this demand were to be accommodated solely in the publicly available parking supply the occupancy level would increase to 69%. However, as noted earlier it is likely that some of this demand would be accommodated in the vacant private parking supply associated with specific buildings.
- During the peak PM period (7:00 pm), on-street parking is 74% occupied. This peak parking demand occurs in the evening period when on-street parking is free of charge.

In order to better understand localized parking demands, the Downtown was further broken down into five areas: “Midtown”, “Core”, “South Core”, “Warehouse” and “North Core”. The following sections provide detailed analysis of each area’s parking demands and availability.

A summary of the parking supply by type (on-street, municipal, commercial and private) within each area across the Downtown is provided in Table 4.

TABLE 4 DOWNTOWN PARKING SUPPLY – BY AREA

Parking Type	Midtown	Core	South Core	Warehouse	North Core	Total
On-Street	107	496	700	223	334	1,860
Municipal Off-Street	187	158	56	0	17	116
Commercial Off-Street	1,875	1,351	1,317	176	873	5,736
Private Off-Street	242	1,838	782	1,139	1,398	5,557
Total	2,411	3,843	2,855	1,538	2,622	13,269



2.2 MIDTOWN

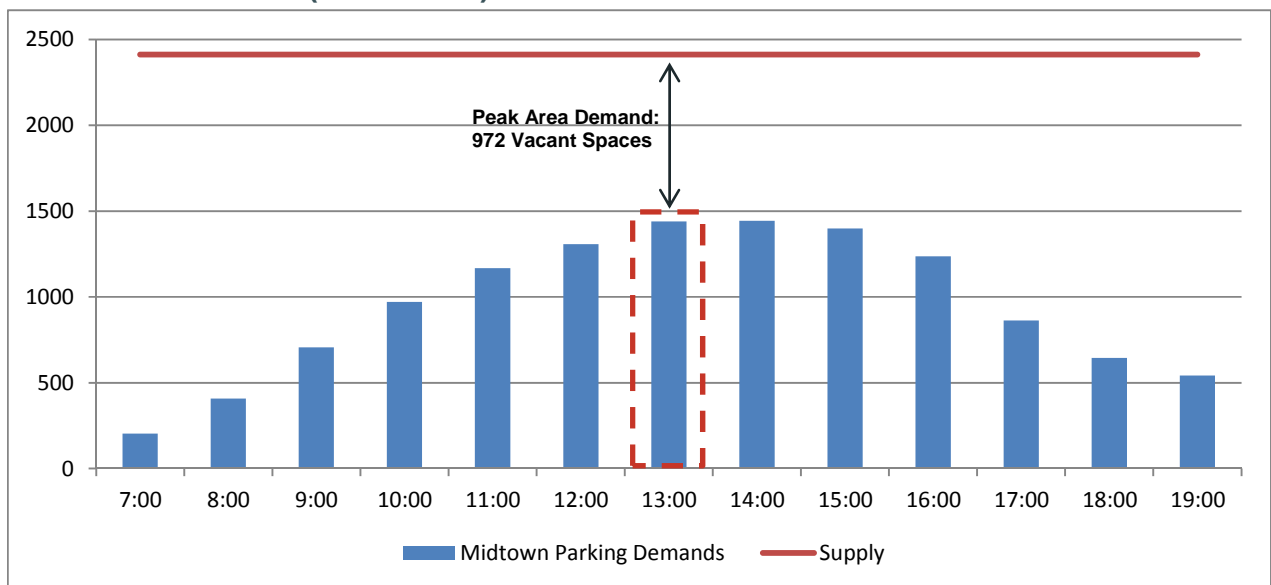
There are a total of 2,411 parking spaces located within the Downtown's Midtown area including 107 on-street spaces, 187 municipal off-street parking spaces, 1,875 commercial off-street spaces and 242 private off-street spaces. Six percent (6%) of the area parking supply is municipally owned and operated. The existing parking supply within the Midtown area is summarized in Table 5.

TABLE 5 MIDTOWN (DOWNTOWN) EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	107	4%
Municipal Off-Street	187	8%
Commercial Off-Street	1,875	78%
Private Off-Street	242	10%
Total	2,411	100%
Total Publicly Available Parking (excluding private parking)	2,169	90%

Peak weekday utilization levels indicate that approximately 60% of the total parking supply is in use during the busiest period (as illustrated in Figure 8). A total of 1,439 spaces were occupied during the Downtown's peak period (1:00 pm). An additional 972 spaces are available during this peak period.

FIGURE 8 —MIDTOWN (DOWNTOWN) PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street, private and commercial parking).

Table 6 summarizes the peak demand observed within the Downtown’s Midtown area for each type of parking available.

The majority of the parking available within the Midtown area is made up of commercial off-street parking. The Midtown Plaza’s parking supply (approximately 1,875 spaces) makes up a significant proportion of this area’s parking supply.

TABLE 6 MIDTOWN (DOWNTOWN) PEAK PARKING DEMAND BY PARKING TYPE

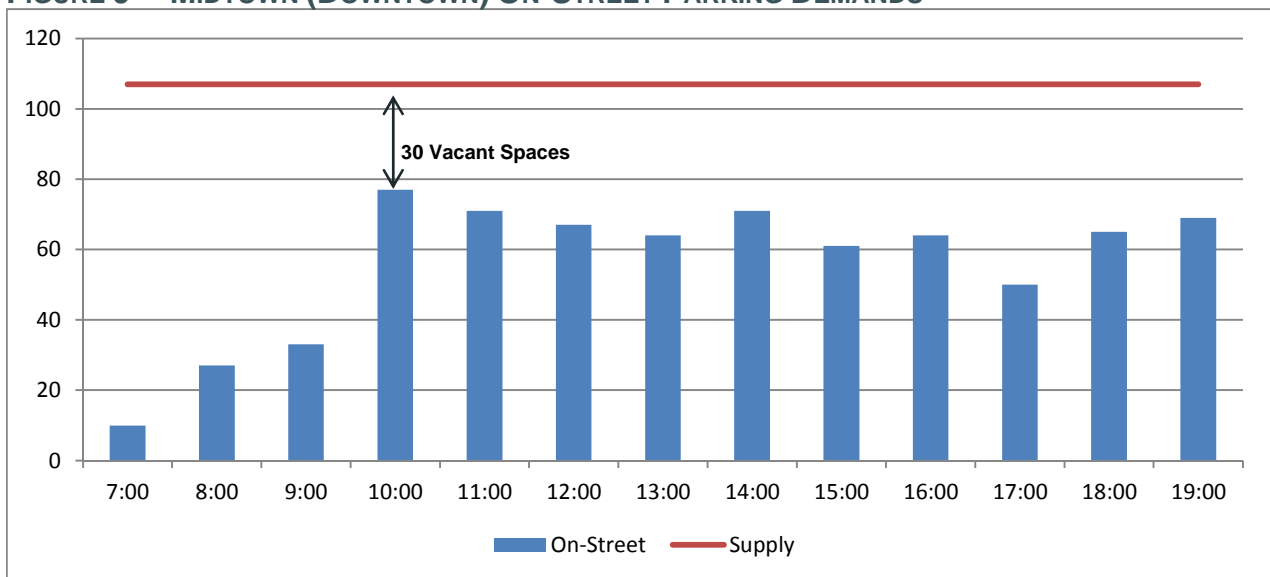
Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	107	1:00 pm	64	60%	43
Municipal Off-Street	187		138	74%	49
Commercial Off-Street	1,875		1,153	61%	722
Private Off-Street	242		84	35%	158
Total	2,411		1,439	60%	972
Total Publicly Available Parking (excluding private parking)	2,169	1:00 pm	1,355	62%	814

The following sections review demand patterns and parking availability for each parking type within the Downtown’s Midtown area.

2.2.1 On-Street Demands

There are a total of 107 on-street parking spaces available within the Downtown’s Midtown area. As illustrated in Figure 9, the peak on-street parking demand was observed at 10:00am (77 spaces) with an occupancy of 72%. An additional 30 spaces are available during this peak demand period.

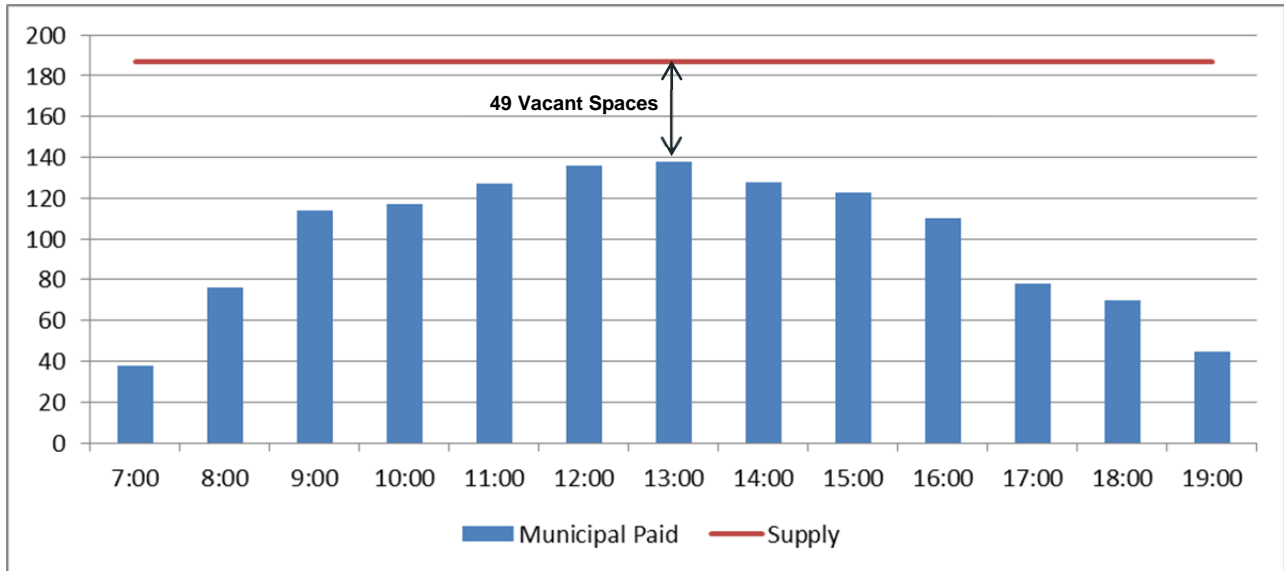
FIGURE 9 —MIDTOWN (DOWNTOWN) ON-STREET PARKING DEMANDS



2.2.2 Municipal Off-Street Parking

There are a total of 187 municipal off-street parking spaces available within the Downtown's Midtown area. These spaces are most well utilized during the daytime period with the peak demand observed at 1:00 pm (138 spaces) with an occupancy of 74%. Parking demands are illustrated in Figure 10.

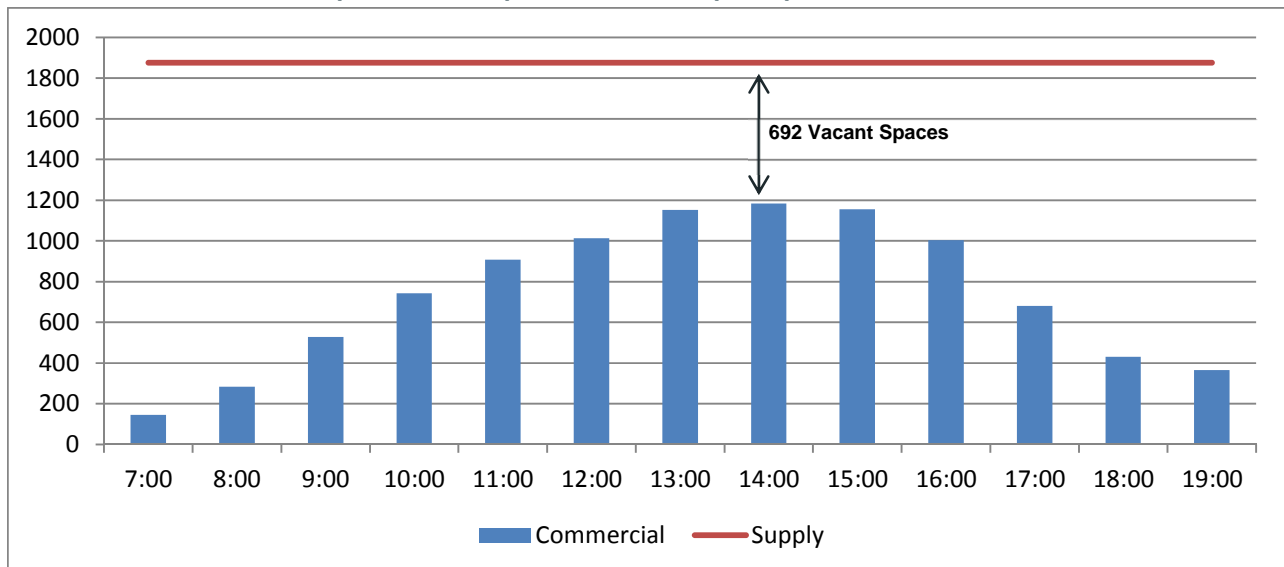
FIGURE 10 — MIDTOWN (DOWNTOWN) MUNICIPAL PARKING DEMANDS



2.2.3 Commercial (Paid) Parking

There are a total of 1,875 commercial (paid) parking spaces available within the Downtown's Midtown area. As illustrated in Figure 11, the peak commercial parking demand was observed at 2:00pm (1,183 spaces) with an occupancy of 63%. An additional 692 spaces are available during the busiest daytime period.

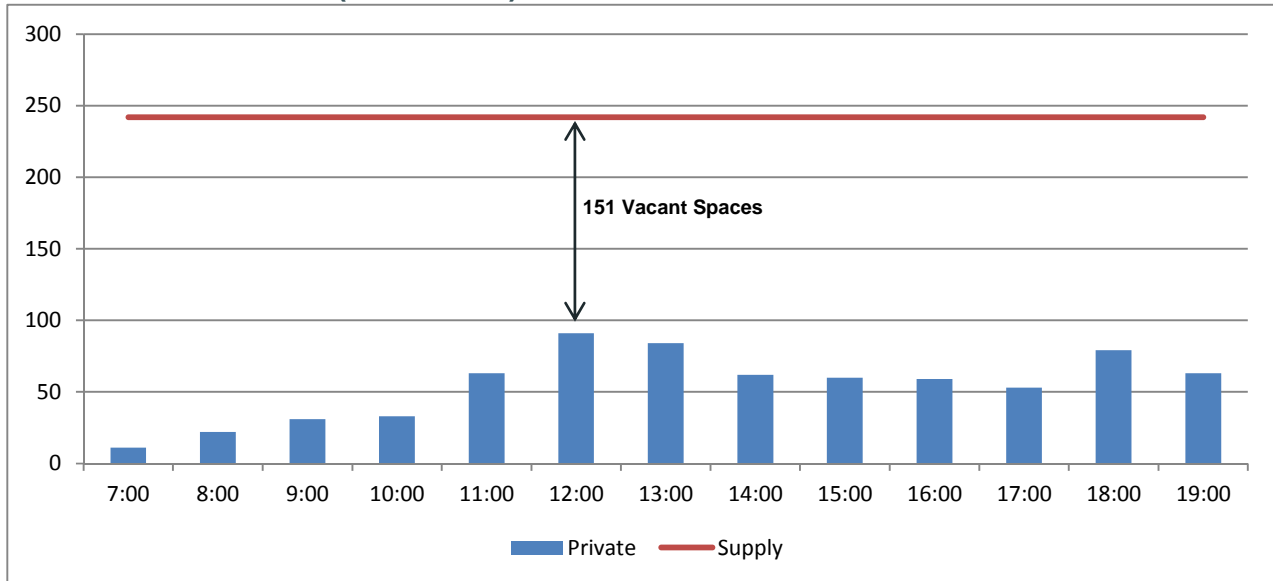
FIGURE 11 — MIDTOWN (DOWNTOWN) COMMERCIAL (PAID) PARKING DEMANDS



2.2.4 Private Parking

There are a total of 242 private parking spaces available within the Downtown's Midtown area. As illustrated in Figure 12, the peak private parking demand was observed at 12:00pm (91 spaces) with an occupancy of 38%. An additional 151 private spaces are available during the busiest daytime period.

FIGURE 12 — MIDTOWN (DOWNTOWN) PRIVATE PARKING DEMANDS



2.2.5 Midtown – Key Findings

A summary of the key findings within the Midtown Downtown area are as follows:

Supply

- There are a total of 2,411 parking spaces located within the Midtown area.
- Ninety percent (90%) of the total parking supply (2,169 spaces) within the Midtown area are available for public use (i.e. on-street, municipal off-street and commercial off-street parking).
- There is limited municipally controlled off-street parking within the Midtown Downtown area (8% of the total supply).

Demand

- Sixty percent (62%) of the total parking supply is in use during the Downtown's busiest period (1:00 pm).
- Sixty-two percent (62%) of the total parking supply available for public use (2,169 spaces) is occupied during the Downtown's busiest period (1:00 pm – 1,355 spaces).
- There was a surplus of publicly available parking within the Midtown (Downtown) area during the peak period (814 spaces available).
- It is our understanding that the TCU Place, a convention and arts centre, was not very busy during the February 18, 2015 off-street survey period (approximately 1,020 people attending events) and there are days where parking demands within this area are higher due to events being held at the TCU Place, which would substantially reduce the parking vacancy in the area.

2.3 CORE

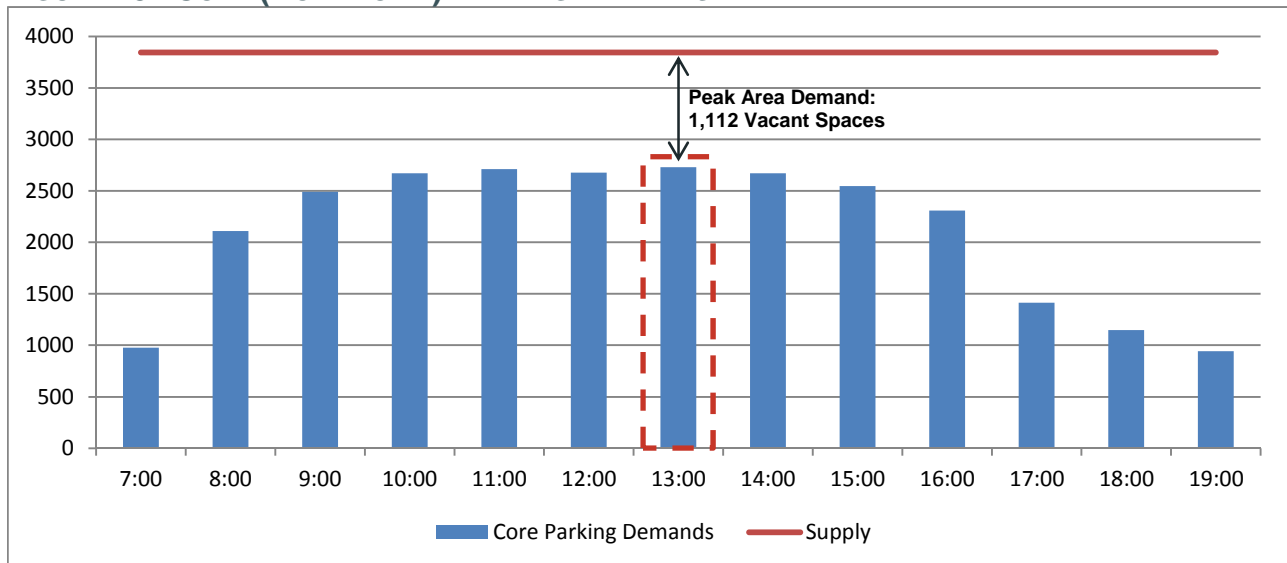
There are a total of 3,843 parking spaces located within the Downtown’s Core including 496 on-street spaces, 158 municipal off-street parking spaces, 1,351 commercial spaces and 1,838 private spaces. Fifty-two percent of the parking supply is available for public use (excluding private parking). Existing parking supply within the Core area is summarized in Table 7.

TABLE 7 CORE (DOWNTOWN) EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	496	13%
Municipal Off-Street	158	4%
Commercial Off-Street	1,351	35%
Private Off-Street	1,838	48%
Total	3,843	100%
Total Publicly Available Parking (excluding private parking)	2,005	52%

Parking throughout the Core is well utilized throughout the daytime period. Peak weekday utilization levels indicate that approximately 71% (2,731 spaces) of the total parking supply is in use during the Downtown’s busiest period (1:00 pm) as illustrated in Figure 13. An additional 1,112 spaces are available during this peak period.

FIGURE 13 –CORE (DOWNTOWN) PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Table 8 summarizes the peak demand observed within the Downtown's Core for each type of parking available.

TABLE 8 CORE (DOWNTOWN) PEAK PARKING DEMAND BY PARKING TYPE

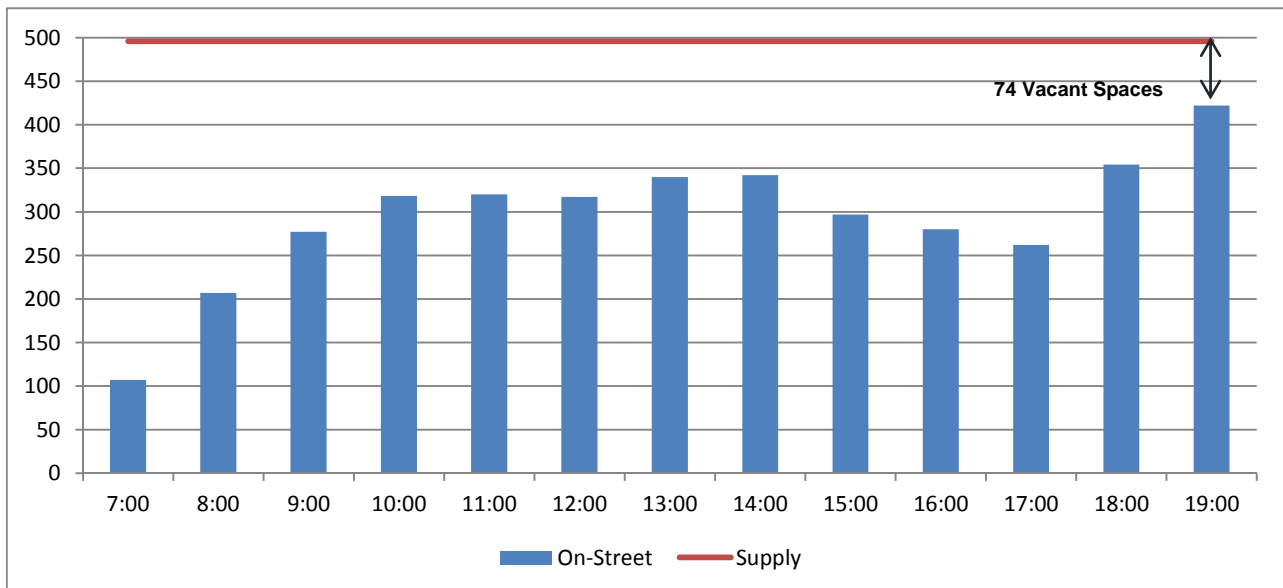
Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	496	1:00 pm	340	69%	156
Municipal Off-Street	158		114	72%	44
Commercial Off-Street	1,351		1,049	78%	302
Private Off-Street	1,838		1,228	67%	610
Total	3,843		2,731	71%	1,112
Total Publicly Available Parking (excluding private parking)	2,005	1:00 pm	1,503	75%	502

The following sections review demand patterns and parking availability for each parking type within the Downtown Core.

2.3.1 On-Street Demands

There are a total of 496 on-street parking spaces available within the Downtown's Core. As illustrated in Figure 14, the peak on-street parking demand was observed at 7:00pm (422 spaces) with an occupancy of 85% (74 spaces available).

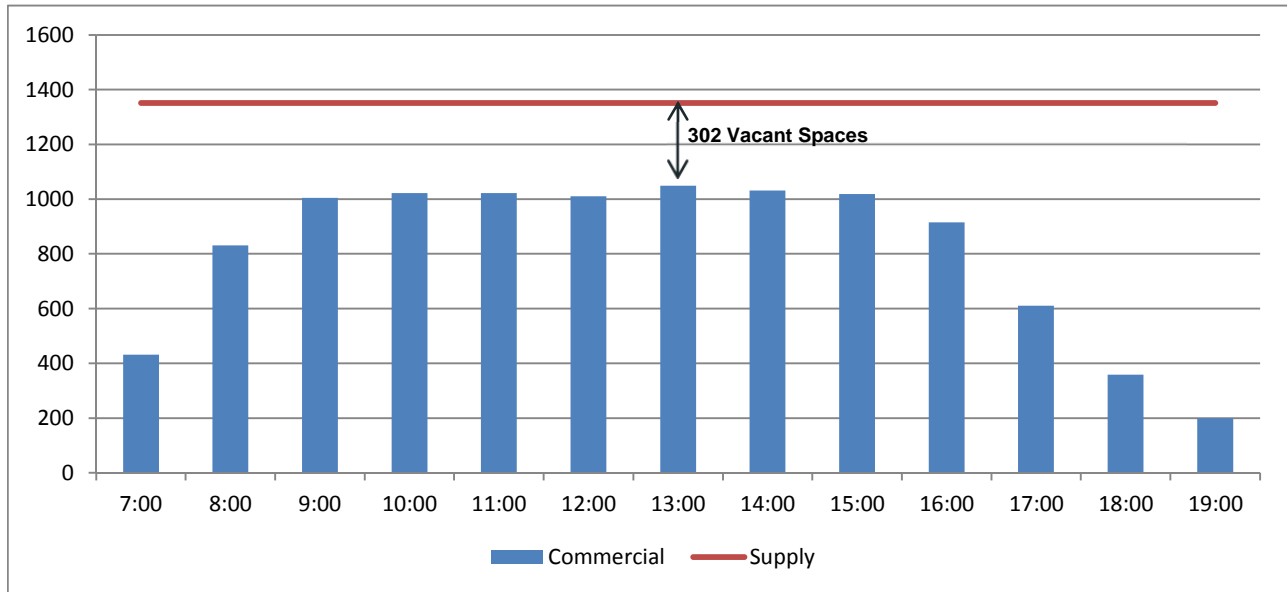
FIGURE 14 — CORE (DOWNTOWN) ON-STREET PARKING DEMANDS



2.3.2 Commercial (Paid) Parking

There are a total of 1,351 commercial (paid) parking spaces available within the Downtown's Core. As illustrated in Figure 15, the peak commercial parking demand was observed at 1:00pm (1,049 spaces) with an occupancy of 78%. An additional 302 commercial spaces are available during the busiest daytime period.

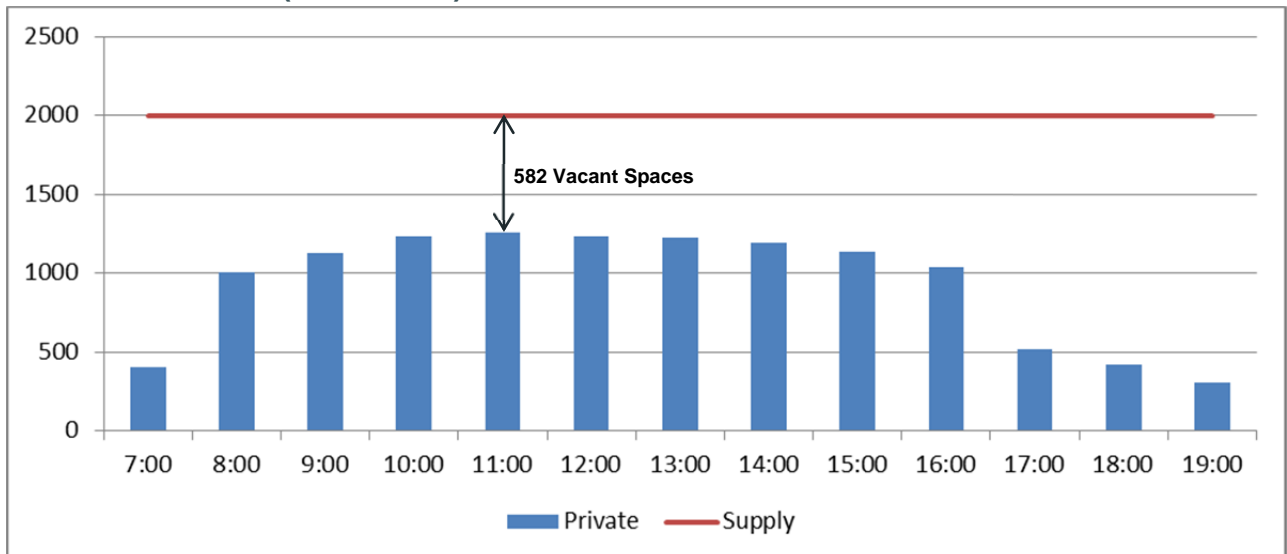
FIGURE 15 — CORE (DOWNTOWN) COMMERCIAL (PAID) PARKING DEMANDS



2.3.3 Private Parking

There are a total of 1,838 private parking spaces available within the Downtown's North Core. As illustrated in Figure 16, the peak private parking demand was observed at 11:00am (1,256 spaces) with an occupancy of 68%. An additional 582 private spaces are available during the busiest daytime period.

FIGURE 16 — CORE (DOWNTOWN) PRIVATE PARKING DEMANDS



2.3.4 Core – Key Findings

A summary of the key findings within the Core (Downtown) area are as follows:

Supply

- There are a total of 3,843 parking spaces located within the Core (Downtown) area.
- Fifty-two percent (52%) of the total parking supply is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).

Demand

- Seventy-one percent (71%) of the total parking supply is in use during the busiest period (1:00 pm).
- Seventy-five percent (75%) of the total publicly available parking (excluding private parking) is in use during the busiest period. An additional 502 spaces are available for public use during the peak period.
- On-street parking demands have a different demand pattern (peak in the evening - 7:00 pm) compared to the overall area (peak in the mid-afternoon - 1:00 pm). On-street parking is well utilized in the evening, particularly after 7:00 pm.
- Public off-street parking demands decrease substantially after 5:00 pm. Approximately 1,300 spaces are available in the evening period (after 7:00 pm) when on-street parking demands are at their peak.
- Over 600 private parking spaces are available during the peak daytime period.

2.4 SOUTH CORE

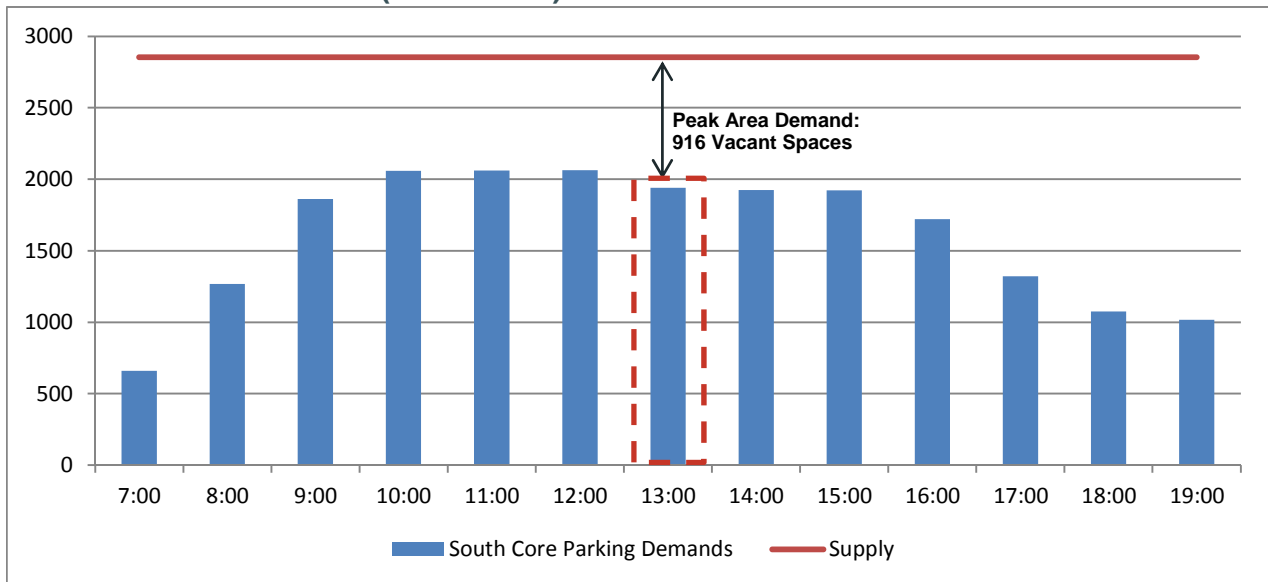
There are a total of 2,855 parking spaces located within the Downtown’s South Core including 700 on-street spaces, 56 municipal off-street spaces, 1,317 commercial spaces and 782 private spaces. Seventy-three percent of the parking supply is available for public use (excluding private parking). Existing parking supply within the South Core is summarized in Table 9.

TABLE 9 SOUTH CORE (DOWNTOWN) EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	700	25%
Municipal Off-Street	56	2%
Commercial Off-Street	1,317	46%
Private Off-Street	782	27%
Total	2,855	100%
Total Publicly Available Parking (excluding private parking)	2,073	73%

Parking throughout the South Core is well utilized throughout the daytime period. Peak weekday utilization levels indicate that approximately 72% of the total parking supply is in use during the busiest period (as illustrated in Figure 17). The peak parking demand during the Downtown peak period (1:00pm) was 1,939 spaces. An additional 916 spaces are available during this peak period.

FIGURE 17 — SOUTH CORE (DOWNTOWN) PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Table 10 summarized the peak demand observed within the Downtown’s South Core for each type of parking available.

TABLE 10 SOUTH CORE (DOWNTOWN) PEAK PARKING DEMAND BY PARKING TYPE

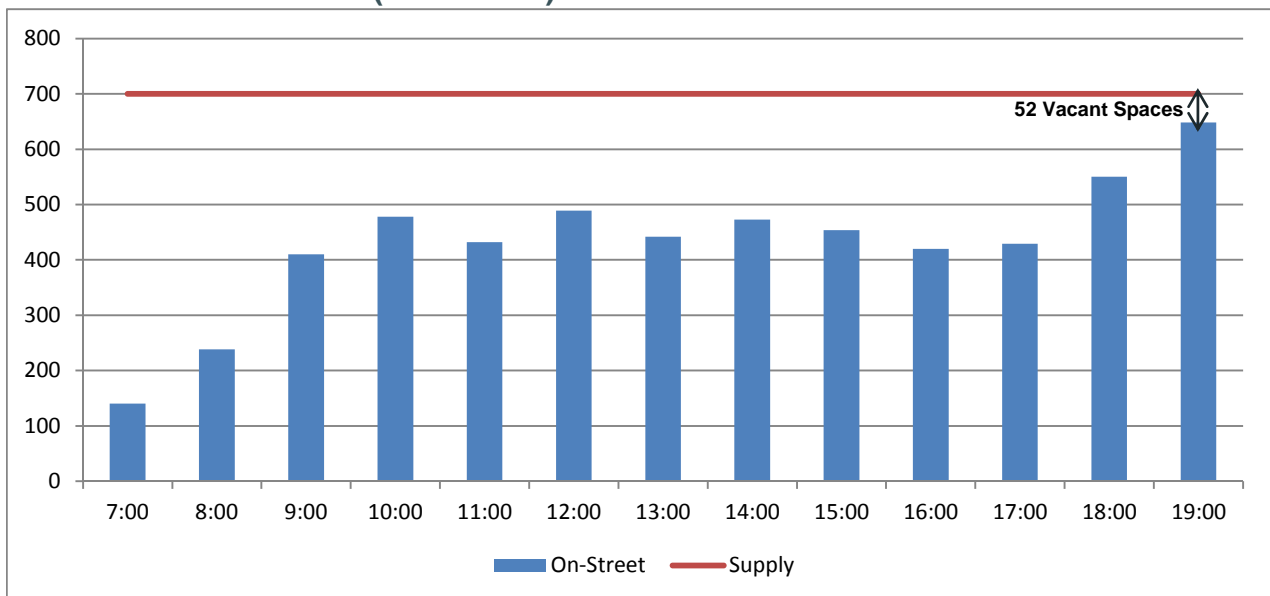
Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	700	1:00pm	442	63%	258
Municipal Off-Street	56		22	39%	34
Commercial Off-Street	1,317		876	67%	441
Private Off-Street	782		599	77%	183
Total	2,855		1,939	68%	916
Total Publicly Available Parking (excluding private parking)	2,073	1:00 pm	1,340	65%	733

The following sections review demand patterns and parking availability for each parking type within the Downtown’s South Core.

2.4.1 On-Street Demands

There are a total of 700 on-street parking spaces available within the Downtown’s South Core. As illustrated in Figure 18, the peak on-street parking demand was observed at 7:00pm (648 spaces) with an occupancy of 93% (52 spaces available).

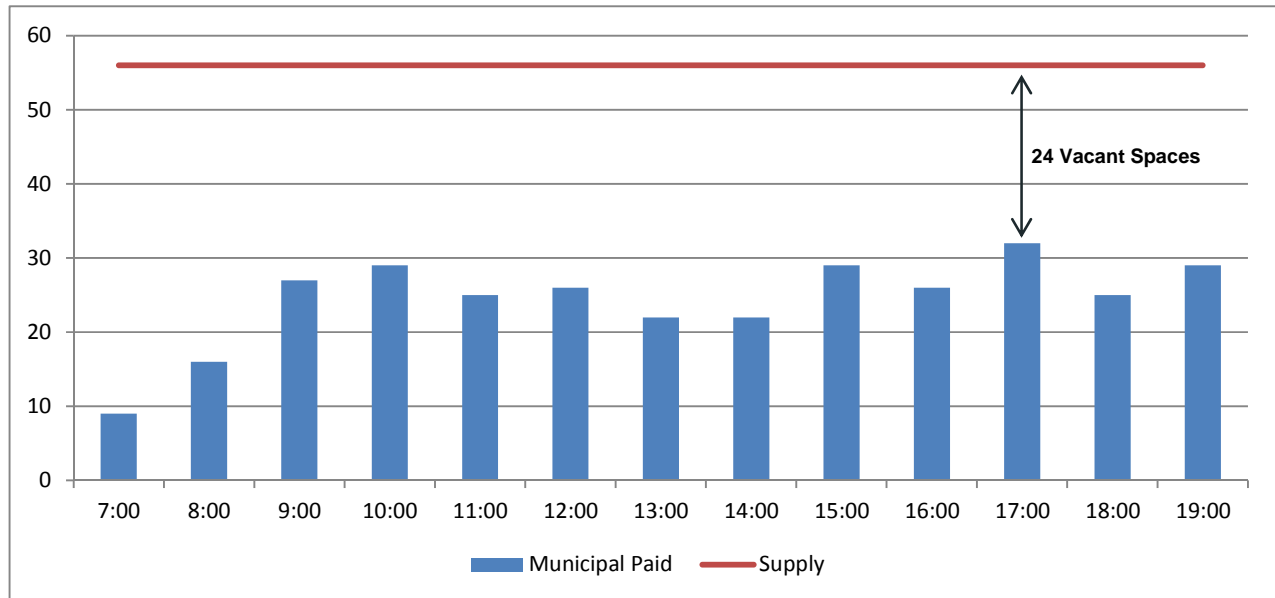
FIGURE 18 —SOUTH CORE (DOWNTOWN) ON-STREET PARKING DEMANDS



2.4.2 Municipal Off-Street Parking

There are a total of 56 municipal off-street parking spaces available within the Downtown's South Core. Demand for these spaces fluctuate throughout the day, the peak demand was observed at 5:00pm (32 spaces) with an occupancy of 57%. Parking demands are illustrated in Figure 19.

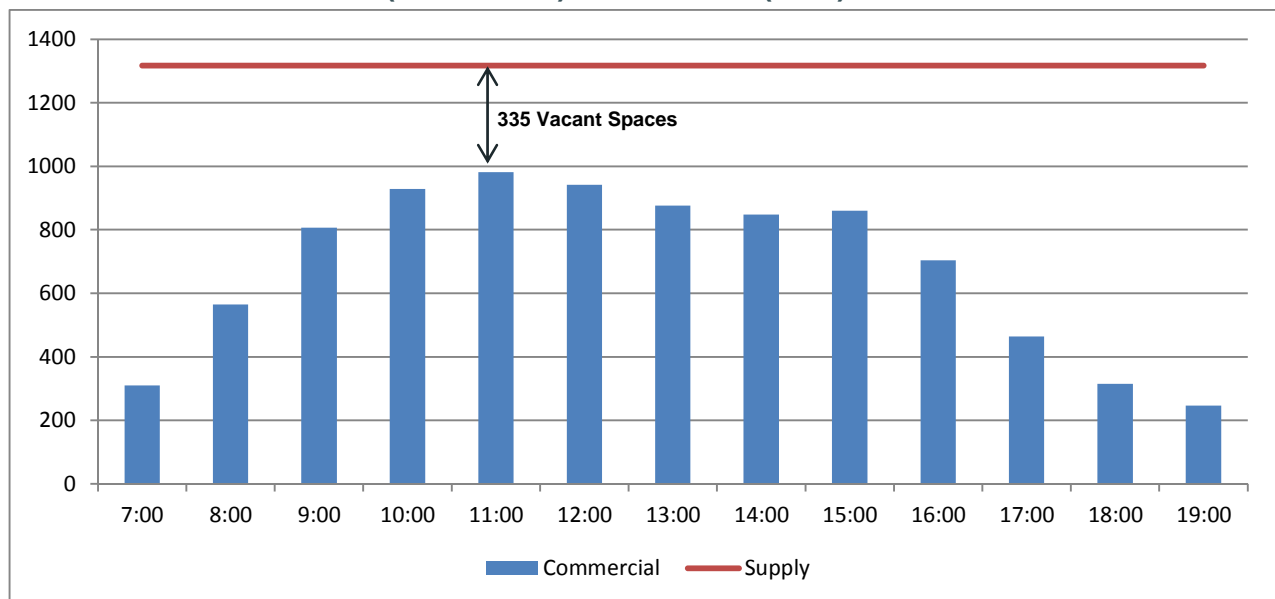
FIGURE 19 — SOUTH CORE (DOWNTOWN) MUNICIPAL OFF-STREET PARKING DEMANDS



2.4.3 Commercial (Paid) Parking

There are a total of 1,317 commercial (paid) parking spaces available within the Downtown's South Core. As illustrated in Figure 20, the peak commercial parking demand was observed at 11:00am (982 spaces) with an occupancy of 75%. An additional 335 commercial spaces are available during the busiest daytime period.

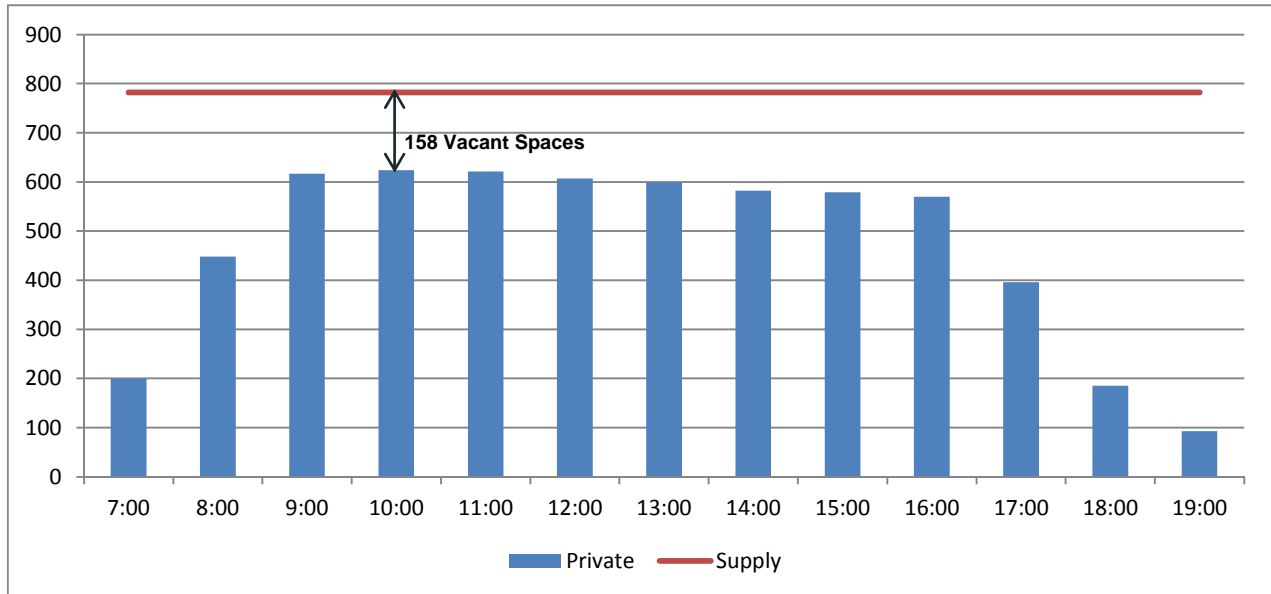
FIGURE 20 — SOUTH CORE (DOWNTOWN) COMMERCIAL (PAID) PARKING DEMANDS



2.4.4 Private Parking

There are a total of 782 private parking spaces available within the Downtown's South Core. As illustrated in Figure 21, the peak private parking demand was observed at 10:00am (624 spaces) with an occupancy of 80%. An additional 158 private spaces are available during the busiest daytime period.

FIGURE 21 — SOUTH CORE (DOWNTOWN) PRIVATE PARKING DEMANDS



2.4.5 South Core – Key Findings

A summary of the key findings within the South Core (Downtown) area are as follows:

Supply

- There are a total of 2,855 parking spaces located within the South Core (Downtown) area.
- Seventy-three percent (73%) of the total parking supply are available for public use (i.e. on-street, municipal off-street and commercial off-street parking).
- There is limited municipally controlled off-street parking within the South Core area.

Demand

- Sixty-eight percent (68%) of the total parking supply is in use during the Downtown's busiest period (1:00 pm).
- Sixty-five percent (65%) of the total publicly available parking (excluding private parking) is in use during the busiest period (1:00 pm – 1,340 spaces). An additional 733 spaces are available for public use during this peak period.
- The peak on-street parking demands have a different demand pattern (peak in the evening - 7:00 pm) compared to the overall area (peak in the mid-afternoon - 1:00 pm). On-street parking is well utilized in the evening (93% occupied at 7:00 pm) when on-street parking is free.

2.5 WAREHOUSE

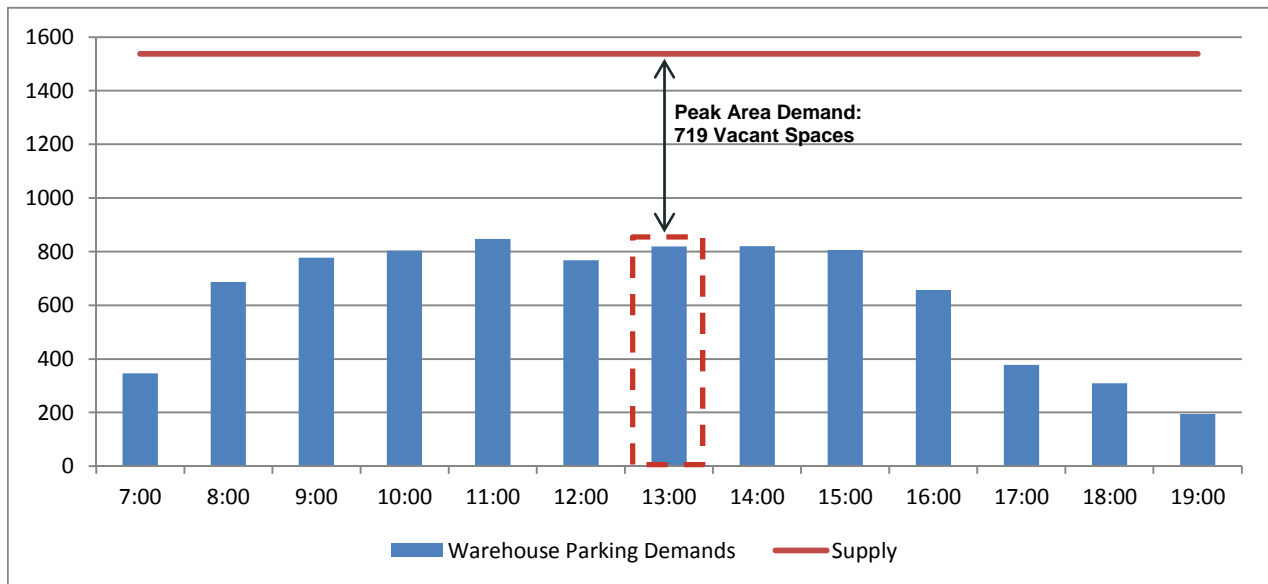
There are a total of 1,538 parking spaces located within the Downtown’s Warehouse area including 223 on-street parking spaces, 176 commercial off-street spaces and 1,139 private parking spaces. Twenty-six percent of the total parking supply is available for public use (excluding private parking). Existing parking supply within the South Core is summarized in Table 11.

TABLE 11 WAREHOUSE (DOWNTOWN) EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	223	15%
Commercial Off-Street	176	11%
Private Off-Street	1,139	74%
Total	1,538	100%
Total Publicly Available Parking (excluding private parking)	399	26%

Peak weekday utilization levels indicate that approximately 55% of the total parking supply is in use during the Warehouse’s busiest period (illustrated in Figure 22). A total of 819 spaces were occupied during the Downtown’s busiest period (1:00pm). An additional 719 spaces are available during this peak period.

FIGURE 22 — WAREHOUSE (DOWNTOWN) PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Table 10 summarized the peak demand observed within the Downtown’s Warehouse area for each type of parking available.

TABLE 12 WAREHOUSE (DOWNTOWN) PEAK PARKING DEMAND BY PARKING TYPE

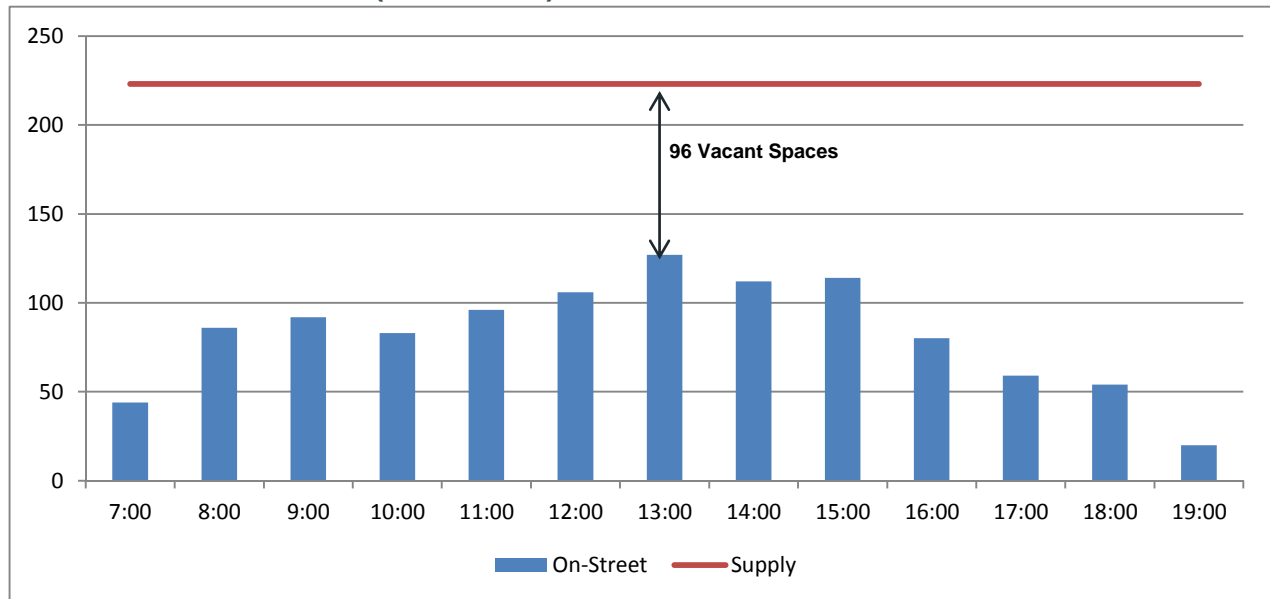
Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	223	1:00 pm	127	57%	96
Commercial Off-Street	176		58	33%	118
Private Off-Street	1,139		634	56%	505
Total	1,538		819	53%	719
Total Publicly Available Parking (excluding private parking)	399	1:00 pm	185	46%	214

The following sections review demand patterns and parking availability for each parking type within the Downtown’s Warehouse area.

2.5.1 On-Street Demands

There are a total of 223 on-street parking spaces available within the Downtown’s Warehouse area. As illustrated in Figure 23, the peak on-street parking demand was observed at 1:00pm (127 spaces) with an occupancy of 57% (96 spaces available).

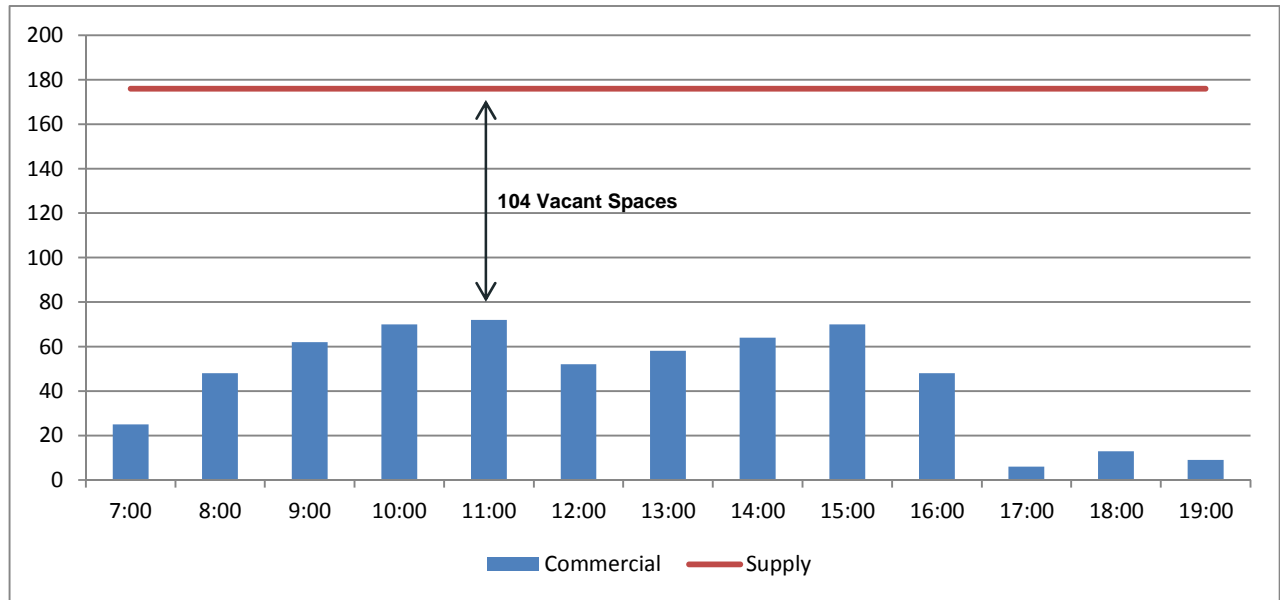
FIGURE 23 —WAREHOUSE (DOWNTOWN) ON-STREET PARKING DEMANDS



2.5.2 Commercial (Paid) Parking

There are a total of 176 commercial (paid) parking spaces available within the Downtown’s Warehouse area. As illustrated in Figure 24, the peak commercial parking demand was observed at 11:00am (72 spaces) with an occupancy of 41%. An additional 104 commercial spaces are available during the busiest daytime period.

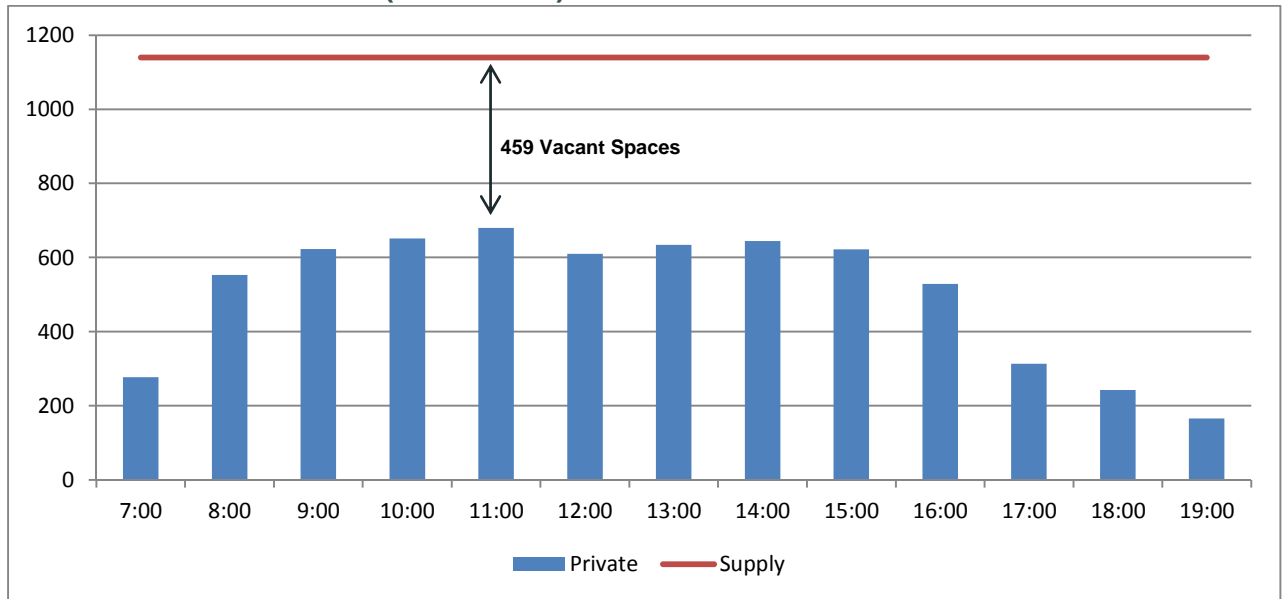
FIGURE 24 — WAREHOUSE (DOWNTOWN) COMMERCIAL (PAID) PARKING DEMANDS



2.5.3 Private Parking

There are a total of 1,139 private parking spaces available within the Downtown’s Warehouse area. As illustrated in Figure 25, the peak private parking demand was observed at 11:00am (680 spaces) with an occupancy of 60%. An additional 459 private spaces are available during the busiest daytime period.

FIGURE 25 — WAREHOUSE (DOWNTOWN) PRIVATE PARKING DEMANDS



2.5.4 Warehouse – Key Findings

A summary of the key findings within the Downtown's Warehouse area are as follows:

Supply

- There are a total of 1,538 parking spaces located within the Warehouse area of the Downtown.
- Twenty-six percent (26%) of the total parking supply (399 spaces) is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).

Demand

- Fifty-three percent (53%) of the total parking supply is in use during the Downtown's busiest period (1:00 pm).
- Forty-six percent (46%) of the total publicly available parking (excluding private parking) is in use during the busiest period (1:00 pm – 185 spaces). An additional 214 spaces are available for public use during the peak period.
- Over 450 private parking spaces are vacant during the peak parking demand period.

2.6 NORTH CORE

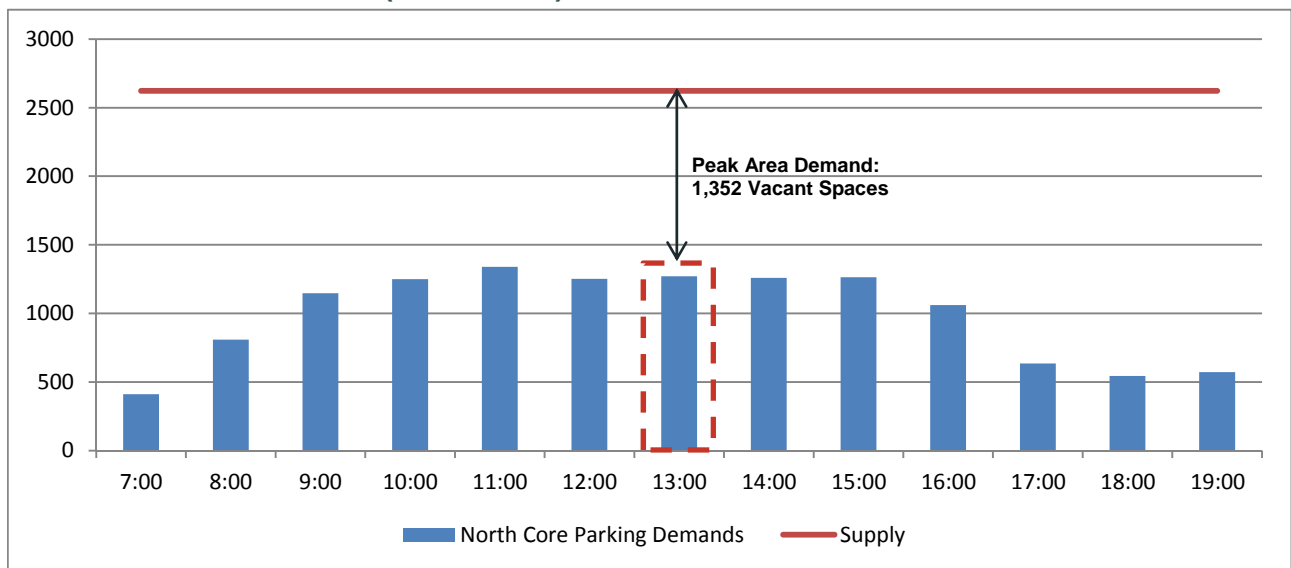
There are a total of 2,622 parking spaces located within the Downtown's North Core area including 334 on-street parking spaces, 17 municipal off-street spaces, 873 commercial off-street spaces and 1,398 private parking spaces. Forty-seven percent of the total parking supply is available for public use (excluding private parking). Existing parking supply within the North Core area is summarized in Table 13.

TABLE 13 NORTH CORE (DOWNTOWN) EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	334	13%
Municipal Paid	17	1%
Commercial Off-Street	873	33%
Private Off-Street	1,398	53%
Total	2,622	100%
Total Publicly Available Parking (excluding private parking)	1,224	47%

Peak weekday utilization levels indicate that approximately 51% of the total parking supply is in use during the Downtown's busiest period (illustrated in Figure 26). A total of 1,270 spaces were occupied during the Downtown's peak period (1:00pm). An additional 1,352 spaces are available during this peak period.

FIGURE 26 — NORTH CORE (DOWNTOWN) PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Figure 8 summarizes the peak demand observed within the Downtown's North Core for each type of parking available.

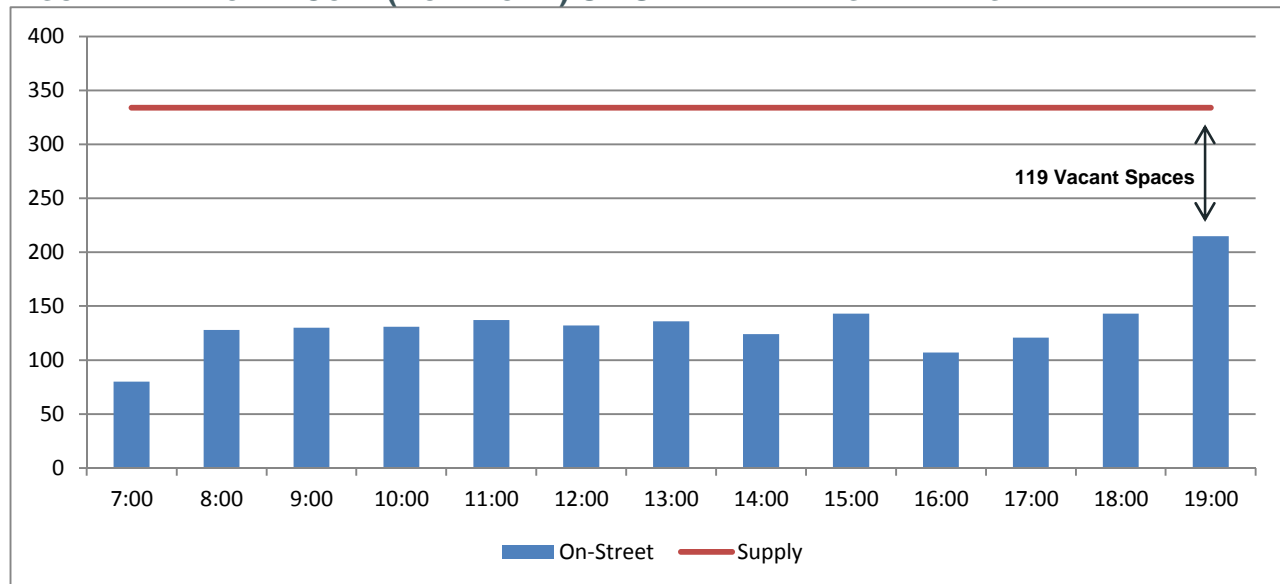
TABLE 14 NORTH CORE (DOWNTOWN) PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	334	1:00 pm	136	41%	198
Municipal Paid	17		13	76%	4
Commercial Off-Street	873		315	36%	558
Private Off-Street	1,398		806	58%	592
Total	2,622		1,270	48%	1,352
Total Publicly Available Parking (excluding private parking)	1,224	1:00 pm	464	38%	760

2.6.1 On-Street Demands

There are a total of 334 on-street parking spaces available within the Downtown's Kinsmen area. As illustrated in Figure 27, the peak on-street parking demand was observed at 7:00pm (215 spaces) with an occupancy of 64% (an additional 119 spaces were available).

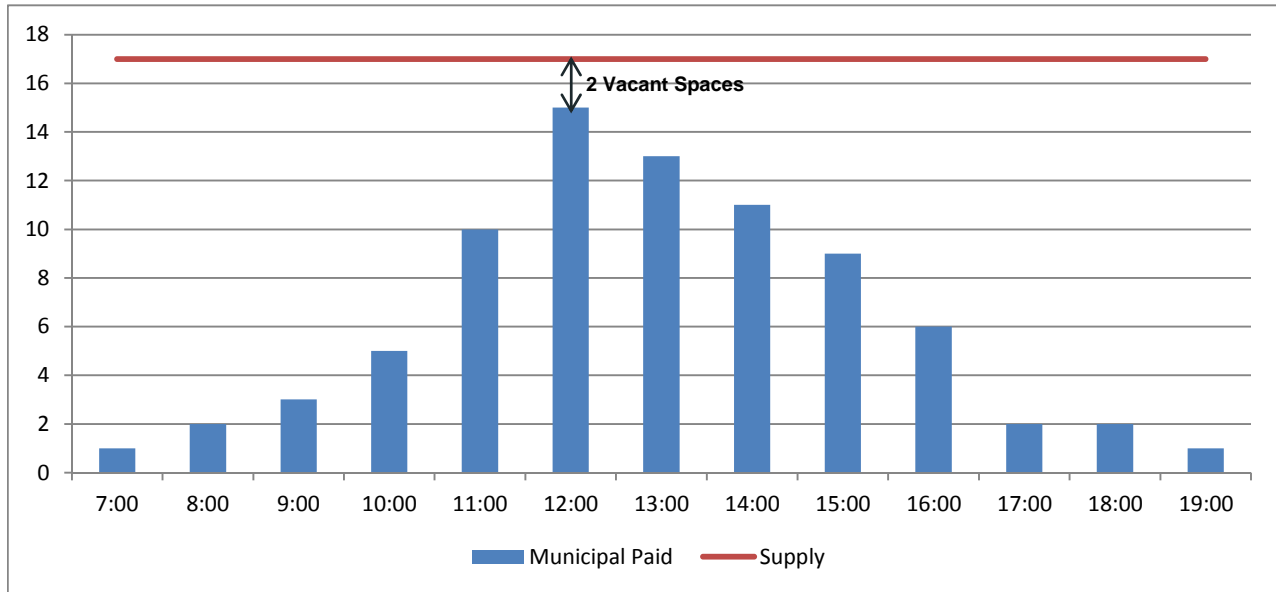
FIGURE 27 — NORTH CORE (DOWNTOWN) ON-STREET PARKING DEMANDS



2.6.2 Municipal Off-Street Parking

There are a total of 17 municipal off-street parking spaces available within the Downtown’s Kinsmen area. Demand for these spaces peaked at 12:00pm (15 spaces) with an occupancy of 88%. Parking demands are illustrated in Figure 28.

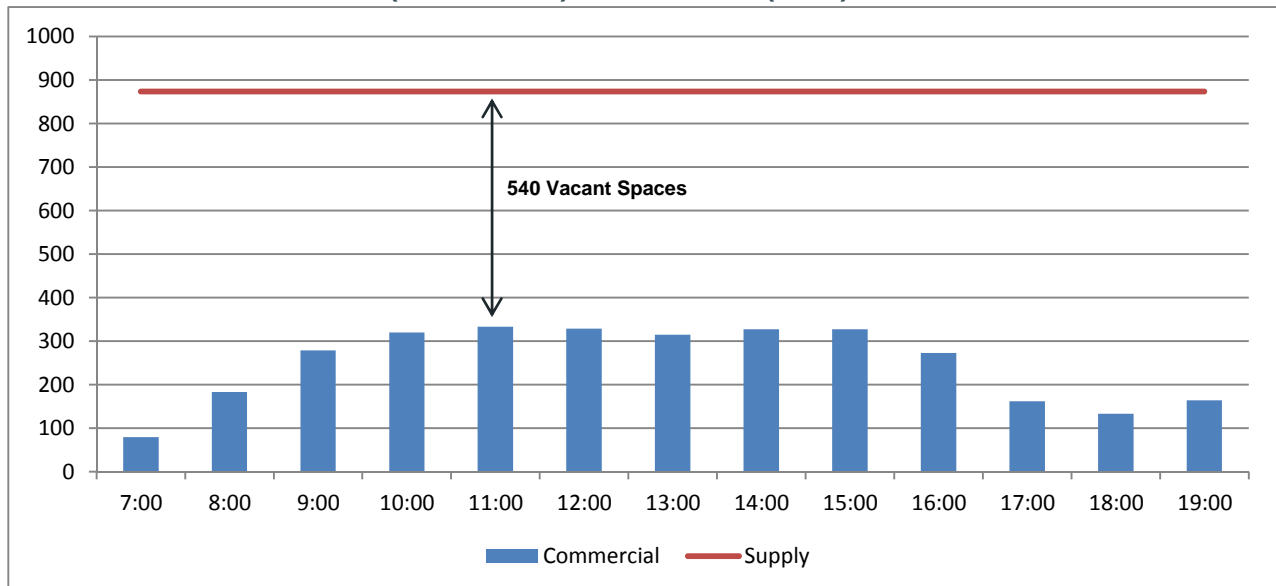
FIGURE 28 — NORTH CORE (DOWNTOWN) MUNICIPAL OFF-STREET PARKING DEMANDS



2.6.3 Commercial (Paid) Parking

There are a total of 873 commercial (paid) parking spaces available within the Downtown’s Kinsmen area. As illustrated in Figure 29, the peak commercial parking demand was observed at 11:00am (333 spaces) with an occupancy of 38%. An additional 540 commercial spaces are available during the busiest daytime period.

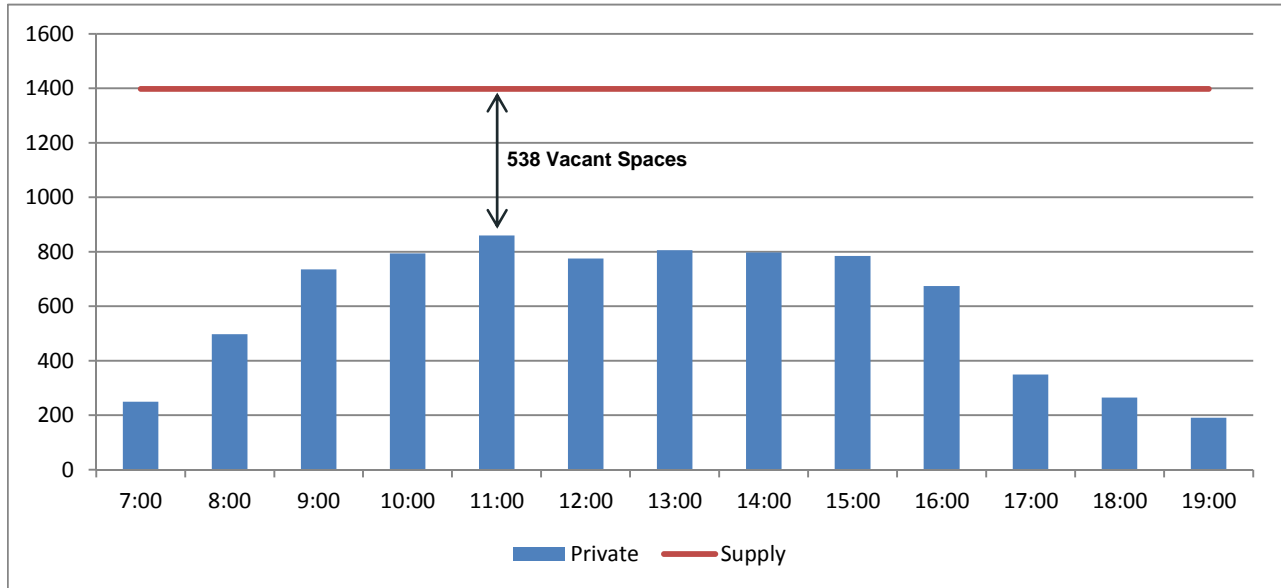
FIGURE 29 — NORTH CORE (DOWNTOWN) COMMERCIAL (PAID) PARKING DEMANDS



2.6.4 Private Parking

There are a total of 1,398 private parking spaces available within the Downtown's Warehouse area. As illustrated in Figure 30, the peak private parking demand was observed at 11:00am (860 spaces) with an occupancy of 62%. An additional 538 private spaces are available during the busiest daytime period.

FIGURE 30 — NORTH CORE (DOWNTOWN) PRIVATE PARKING DEMANDS



2.6.5 North Core – Key Findings

A summary of the key findings within the Downtown's North Core area are as follows:

Supply

- There are a total of 2,622 parking spaces located within the North Core area of the Downtown.
- Forty-seven percent (47%) of the total parking supply (1,224 spaces) is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).
- There is limited municipally controlled off-street parking within the North Core area (1% of the total supply).

Demand

- Forty-eight percent (48%) of the total parking supply is in use during the busiest period (1:00 pm).
- Thirty-eight percent (38%) of the total publicly available parking (excluding private parking) is in use during the Downtown's busiest period (1:00 pm – 464 spaces). An additional 760 spaces are available for public use during the peak period.
- The limited amount of municipal off-street parking is very well utilized within the area (76% occupancy).
- The peak on-street parking demands have a different demand pattern (peak in the evening - 7:00 pm) compared to the overall area (peak in the mid-afternoon - 1:00 pm).
- An additional 592 private spaces are available during the Downtown's busiest period (1:00 pm).

3.0 KINSMEN

The area “Kinsmen” is generally bounded by 25th street to the south, Spadina Crescent to the east, Queen Street to the north and Idylwyld Drive to the west.

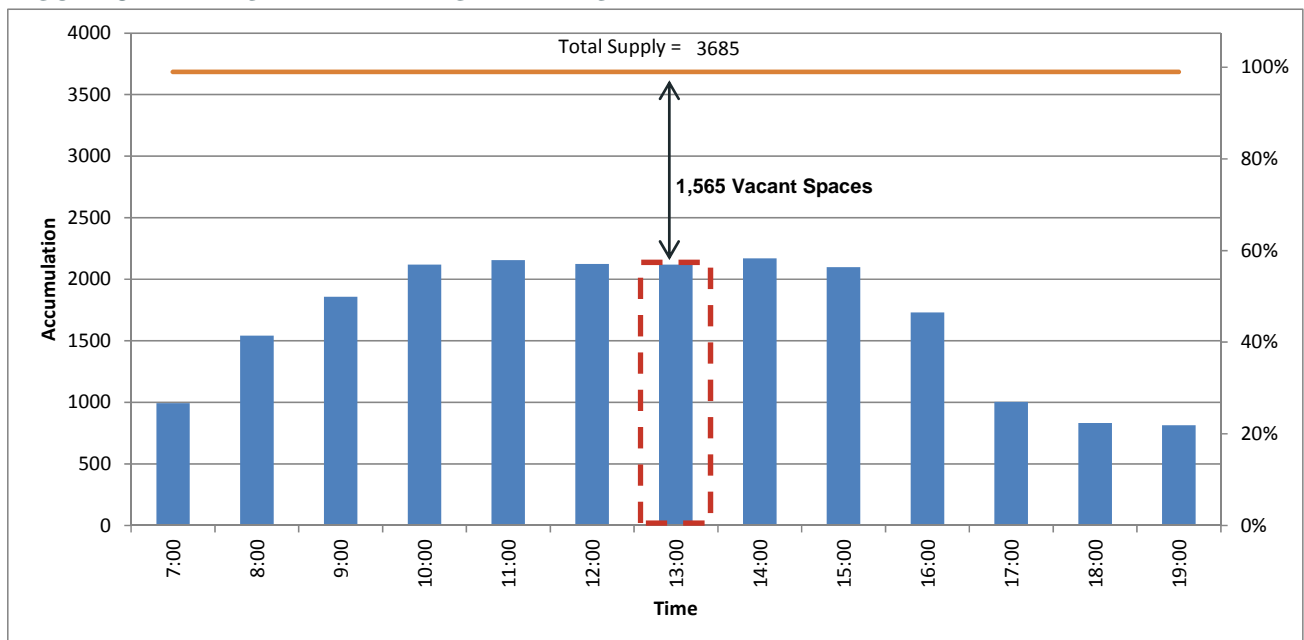
There are a total of 3,685 spaces located within the area “Kinsmen” including 655 on-street parking spaces, 346 municipal off-street parking spaces, 90 commercial (paid) parking spaces and 2,594 private parking spaces. The majority of the area’s parking supply is private off-street parking (70%) which is not available for public use. Existing parking supply by type is summarized in Table 15.

TABLE 15 KINSMEN EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	655	18%
Municipal Off-Street	346	9%
Commercial Off-Street	90	3%
Private Off-Street	2,594	70%
Total	3,685	100%
Total Publicly Available Parking (excluding private parking)	1,091	30%

Peak weekday utilization levels indicate that approximately 58% of the total parking supply is in use during the study area’s busiest period (1:00 pm) (illustrated in Figure 31).

FIGURE 31 — KINSMEN – PARKING DEMANDS



Parking demands within this area were consistent throughout the late morning and early afternoon periods. The study area's peak parking demand is 2,120 spaces. An additional 1,565 spaces are available during this peak period.

Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Table 16 summarized the peak demand observed within the Kinsmen area for each type of parking available.

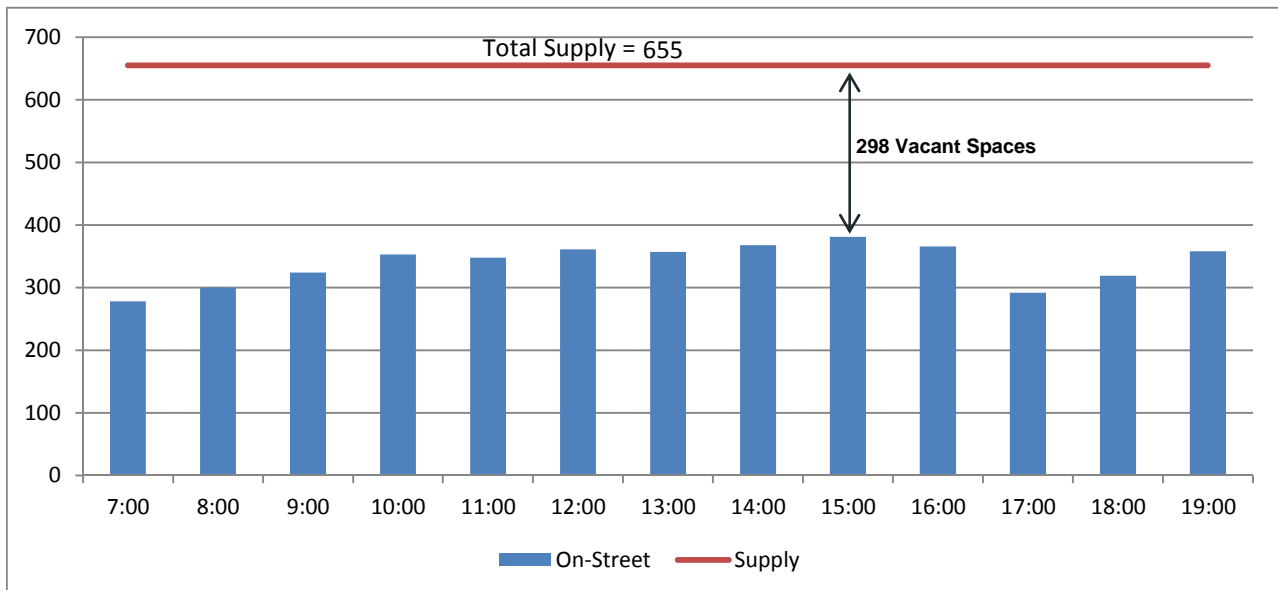
TABLE 16 KINSMEN PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	655	1:00 pm	357	55%	298
Municipal Off-Street	346		78	23%	268
Commercial Off-Street	90		42	47%	48
Private Off-Street	2,594		1,643	63%	951
Total	3,685		2,120	58%	1,565
Total Publicly Available Parking (excluding private parking)	1,091	1:00 pm	477	44%	614

3.1.1 On-Street Parking

There are a total of 655 on-street parking spaces available within the Kinsmen area. As illustrated in Figure 32, on-street parking demands remained relatively consistent throughout the day. The peak commercial parking demand was observed at 3:00pm (381 spaces) with an occupancy of 58%. An additional 274 on-street spaces are available during the busiest daytime period.

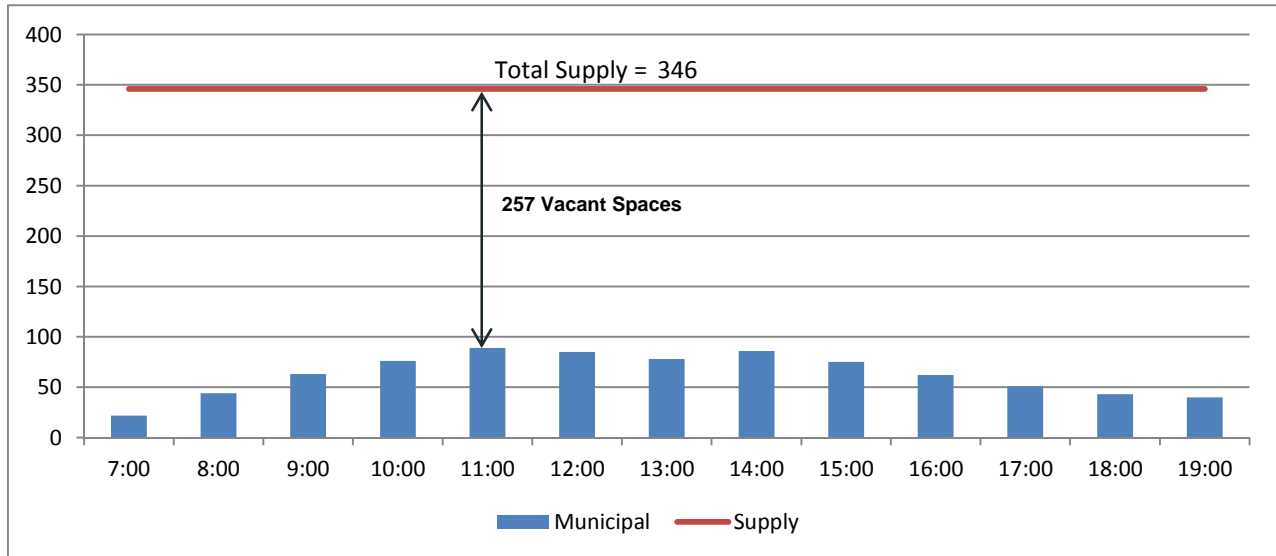
FIGURE 32 — KINSMEN – ON-STREET PARKING DEMANDS



3.1.2 Municipal Parking

There are a total of 346 municipal off-street parking spaces available within the Kinsmen area. Demand for these spaces peaked at 11:00am (89 spaces) with an occupancy of 26%. An additional 257 spaces are available during the busiest daytime period. Parking demands are illustrated in Figure 33.

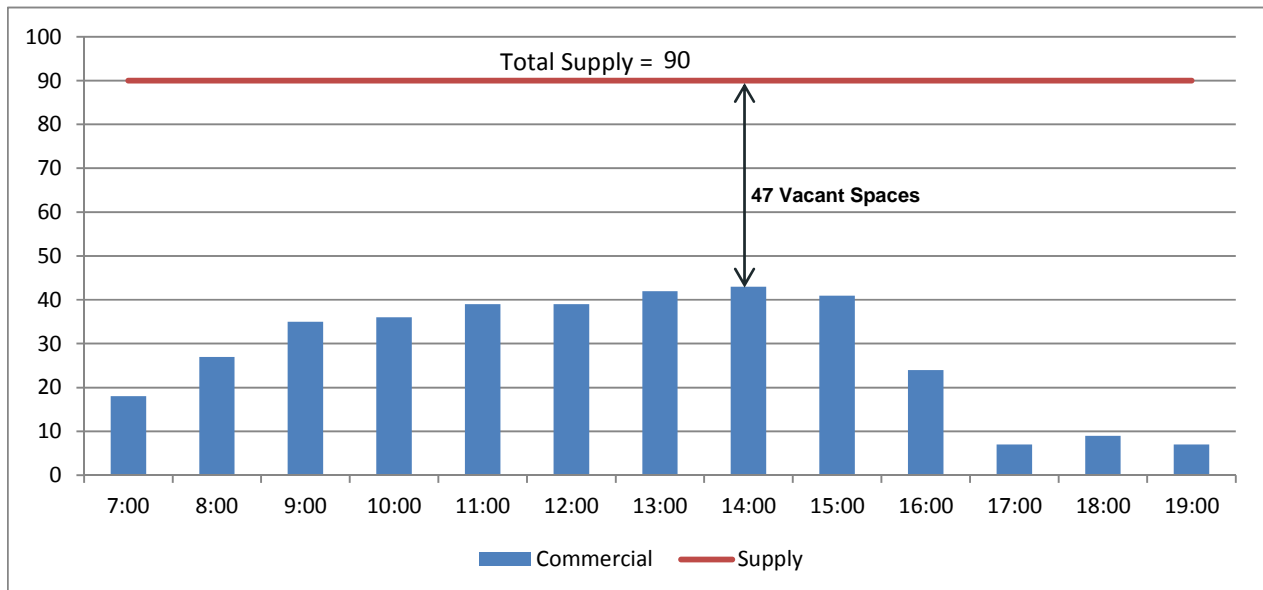
FIGURE 33 — KINSMEN – MUNICIPAL OFF-STREET PARKING DEMANDS



3.1.3 Commercial (Paid) Parking

There are a total of 90 commercial (paid) parking spaces available within the Kinsmen area. As illustrated in Figure 34, the peak commercial parking demand was observed at 2:00pm (43 spaces) with an occupancy of 43%. An additional 47 commercial spaces are available during the busiest daytime period.

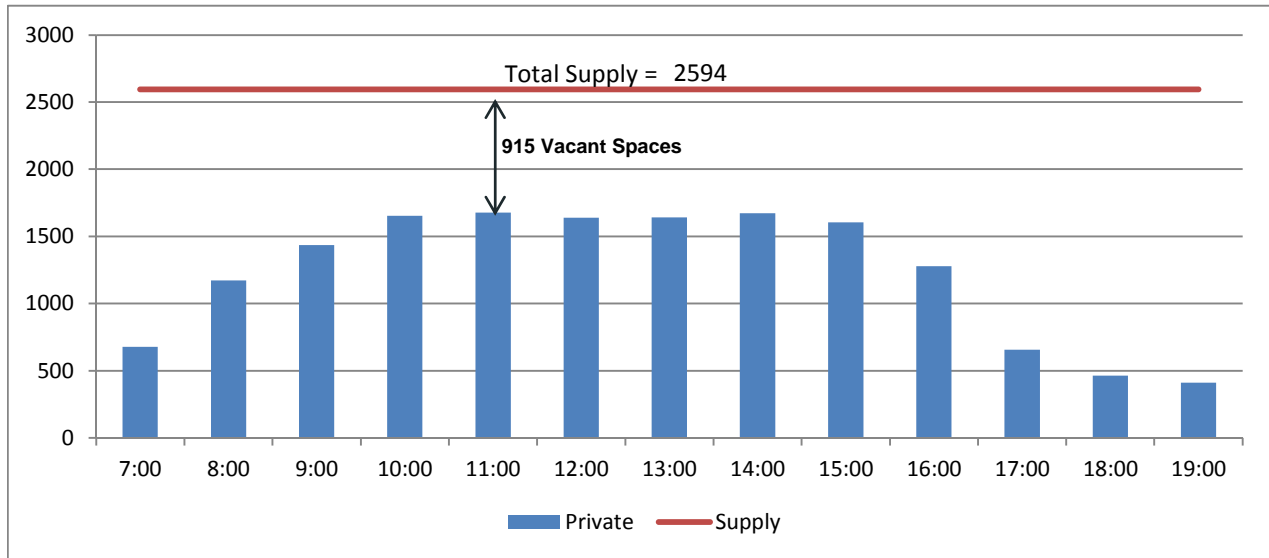
FIGURE 34 — KINSMEN – COMMERCIAL (PAID) PARKING DEMANDS



3.1.4 Private Parking

There are a total of 2,594 private parking spaces available within the Kinsmen area. As illustrated in Figure 35, the peak private parking demand was observed at 11:00am (1,679 spaces) with an occupancy of 65%. An additional 915 private spaces are available during the busiest daytime period.

FIGURE 35 — KINSMEN – PRIVATE PARKING DEMANDS



3.1.5 Kinsmen – Key Findings

A summary of the key findings within the Kinsmen area are as follows:

Supply

- There are a total of 3,685 parking spaces located within the Kinsmen area.
- Thirty percent (30%) of the total parking supply (1,091 spaces) is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).

Demand

- Fifty-eight percent (58%) of the total parking supply is in use during the study area's busiest period
- Forty-four percent (44%) of the total publicly available parking (excluding private parking) is in use during the study area's busiest period. An additional 614 spaces are available for public use during the peak period.
- An additional 951 private spaces are available during the busiest daytime period.

4.0 RIVERSDALE

The Riversdale study area extends from Idylwyld Drive (on the east) along 20th Street West to Avenue P. The Riversdale area also includes the area generally bounded by Spadina Crescent West to the south, Avenue C to the west, Idylwyld Drive to the east and 25th Street West to the north. For the purposes of this study, the area boundaries have been modified to include key corridors within the area rather than exact neighbourhood boundaries.

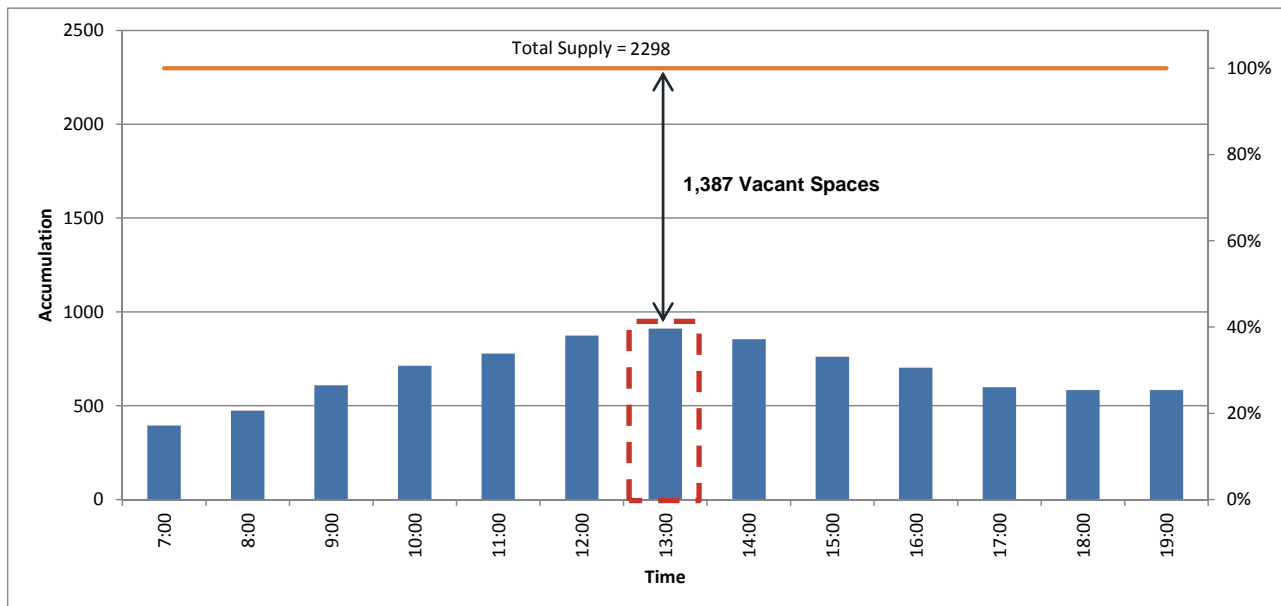
There are a total of 2,298 spaces located within Riversdale including 574 on-street parking spaces, 70 municipal off-street parking spaces, 415 commercial (paid) parking spaces and 1,239 private parking spaces. Riversdale’s existing parking supply is summarized in Table 17.

TABLE 17 RIVERSDALE EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	574	25%
Municipal Off-Street	70	3%
Commercial Off-Street	415	18%
Private Off-Street	1,239	54%
Total	2,298	100%
Total Publicly Available Parking (excluding private parking)	1,059	46%

Peak weekday utilization levels indicate that approximately 40% of the total parking supply is in use during the busiest period (illustrated in Figure 36).

FIGURE 36 — RIVERSDALE – PARKING DEMANDS



The peak demand for this area was observed at 1:00pm (911 spaces). An additional 1,387 spaces are available during the busiest daytime period.

Parking demands were further analyzed based on type of parking (on-street, private and commercial parking). Table 18 summarized the peak demand observed within the Kinsmen area for each type of parking available.

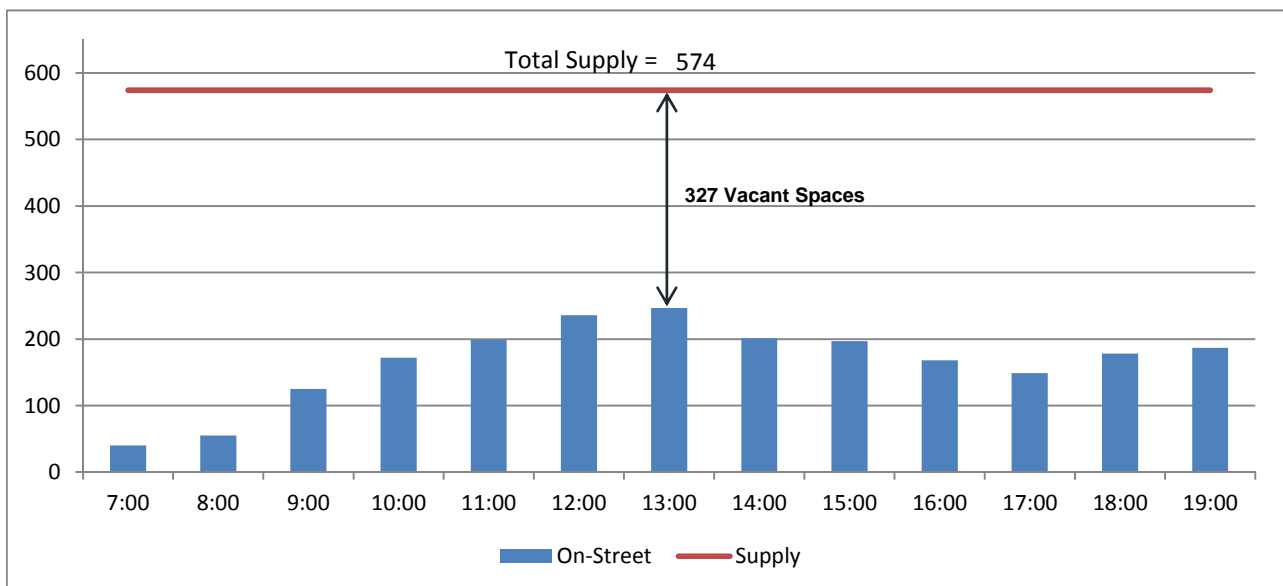
TABLE 18 RIVERSDALE PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# vacant spaces
		Time	# spaces	% occupied	
On-Street	574	1:00 pm	247	43%	327
Municipal Off-Street	70		50	71%	20
Commercial Off-Street	415		105	25%	310
Private Off-Street	1,239		509	41%	730
Total	2,298		911	40%	1,387
Total Publicly Available Parking (excluding private parking)	1,059	1:00 pm	402	38%	657

4.1.1 On-Street Parking

There are a total of 574 on-street parking spaces available within Riversdale. As illustrated in Figure 37, the peak commercial parking demand was observed at 1:00pm (247 spaces) with an occupancy of 43%. An additional 327 on-street spaces are available during the busiest daytime period.

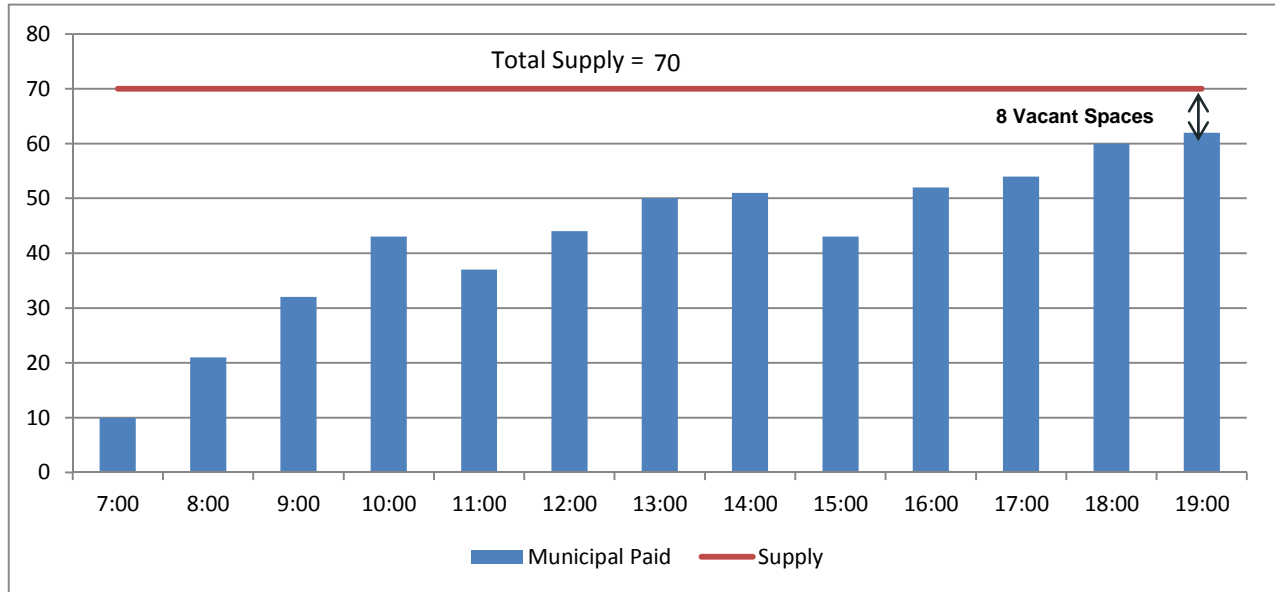
FIGURE 37 — RIVERSDALE – ON-STREET PARKING DEMANDS



4.1.2 Municipal Parking

There are a total of 70 municipal off-street parking spaces available within Riversdale. Demand for these spaces peaked at 7:00pm (62 spaces) with an occupancy of 89%. Parking demands are illustrated in Figure 38.

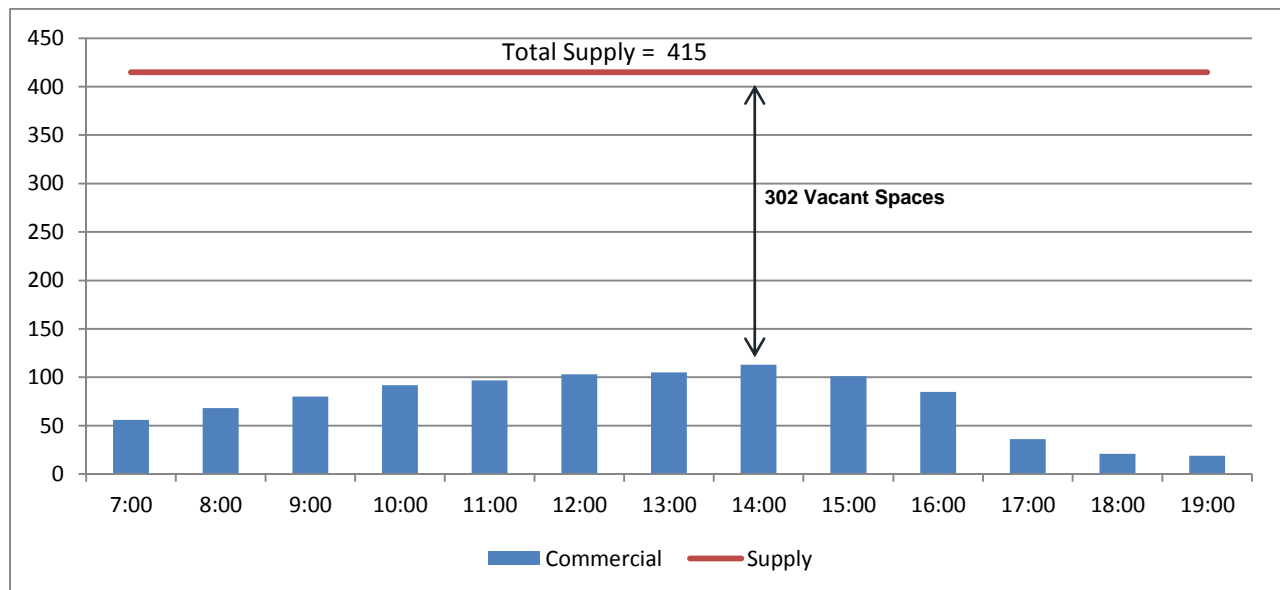
FIGURE 38 — RIVERSDALE – MUNICIPAL OFF-STREET PARKING DEMANDS



4.1.3 Commercial (Paid) Parking

There are a total of 415 commercial (paid) parking spaces available within Riversdale. As illustrated in Figure 39, the peak commercial parking demand was observed at 2:00pm (113 spaces) with an occupancy of 27%. An additional 302 commercial spaces are available during the busiest daytime period.

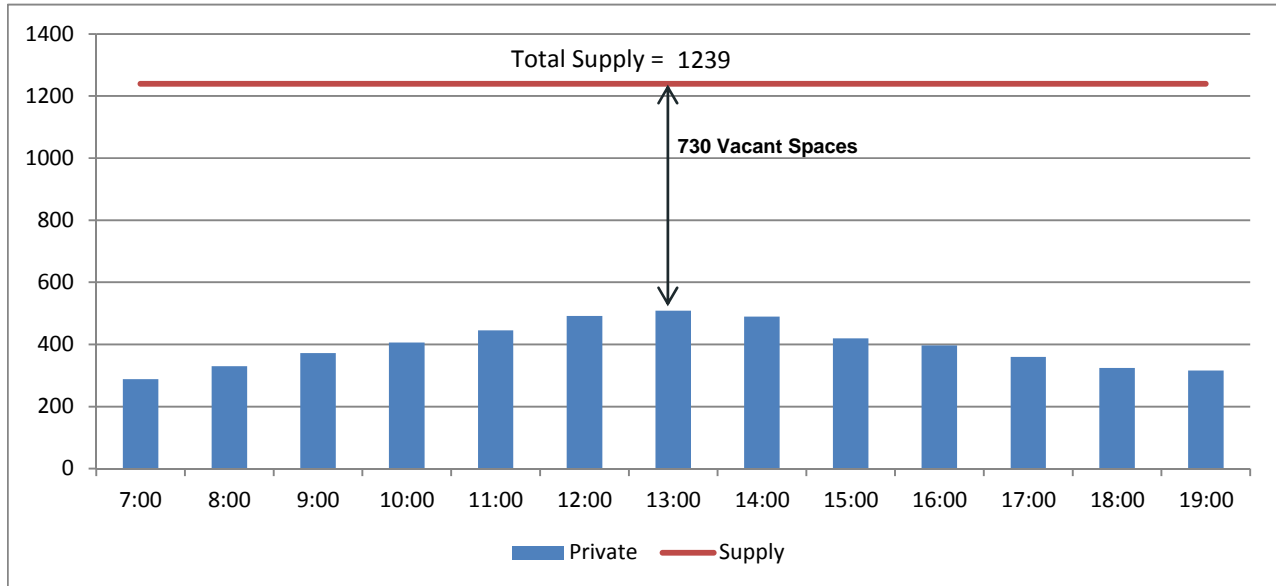
FIGURE 39 — RIVERSDALE – COMMERCIAL (PAID) PARKING DEMANDS



4.1.4 Private Parking

There are a total of 1,239 private parking spaces available within Riversdale. As illustrated in Figure 40, the peak private parking demand was observed at 1:00pm (509 spaces) with an occupancy of 41%. An additional 730 private spaces are available during the busiest daytime period.

FIGURE 40 — RIVERSDALE – PRIVATE PARKING DEMANDS



4.1.5 Riversdale – Key Findings

A summary of the key findings within the Riversdale study area are as follows:

Supply

- There are a total of 2,298 parking spaces located within the Riversdale study area.
- Forty-six percent (46%) of the total parking supply (1,059 spaces) is available for public use (i.e. on-street, municipal off-street and commercial off-street parking).

Demand

- Forty percent (40%) of the total parking supply is in use during the busiest period (1:00 pm).
- Thirty-eight percent (38%) of the total publicly available parking (excluding private parking) is in use during the busiest period (1:00 pm – 402 spaces). An additional 657 spaces are available for public use during the peak period.
- There are an additional 730 private spaces available during the busiest daytime period.
- Municipal off-street parking is well utilized throughout the afternoon and is approaching its practical capacity (i.e. 90-95% occupied) in the evening.

5.0 BROADWAY

The Broadway study area is generally bounded by Saskatchewan Crescent to the north, Eastlake Avenue to the west, 8th Street East to the south and Dufferin Avenue to the east. For the purposes of this study, the study boundaries also include key corridors within the area rather than exact neighbourhood boundaries.

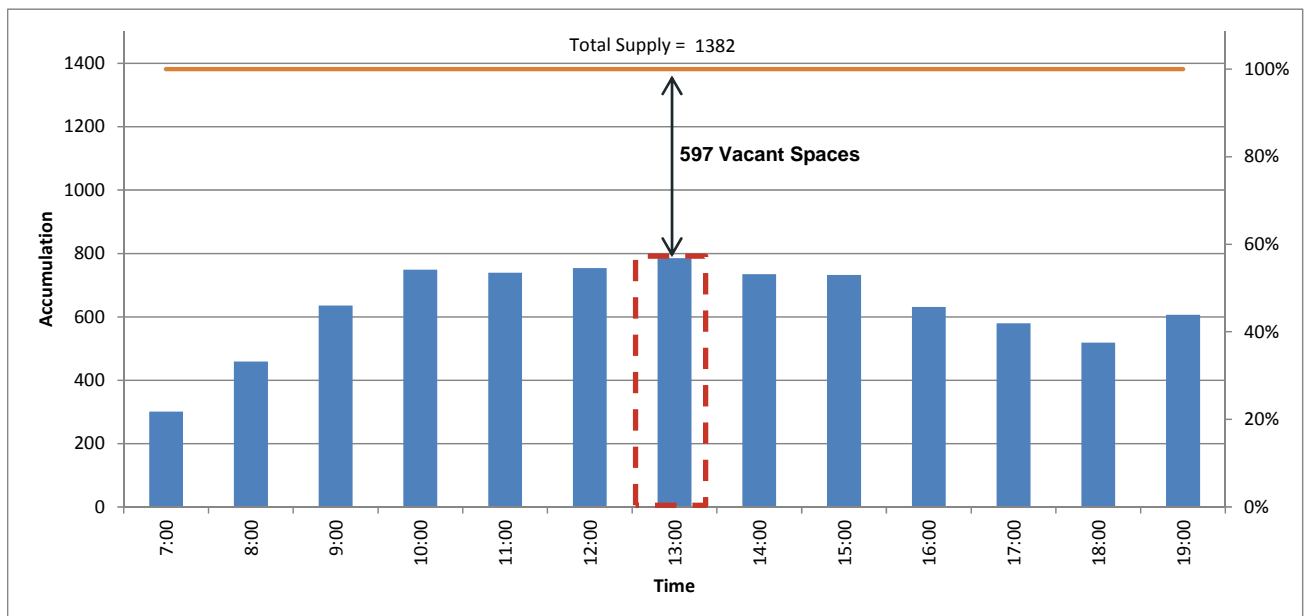
There are a total of 1,382 spaces located within Broadway including 837 on-street parking spaces and 545 private parking spaces. It is notable that this is the one portion of the study area where the municipality plays the predominant role in the supply of parking (i.e. the majority of the area parking supply (70%) is controlled by the City).

TABLE 19 BROADWAY EXISTING PARKING SUPPLY

Parking Type	Supply	
	# spaces	% of total supply
On-Street	837	61%
Private Off-Street	545	39%
Total	1,382	100%
Total Publicly Available Parking (excluding private parking)	837	61%

The peak demand for this area was observed at 1:00pm (785 spaces) with an occupancy of 57%. An additional 597 spaces are available during the busiest daytime period.

FIGURE 41 — BROADWAY — PARKING DEMANDS



Parking demands were further analyzed based on type of parking (on-street and private parking). Table 20 provides an overview of the peak demand observed within the Broadway area for each type of parking available.

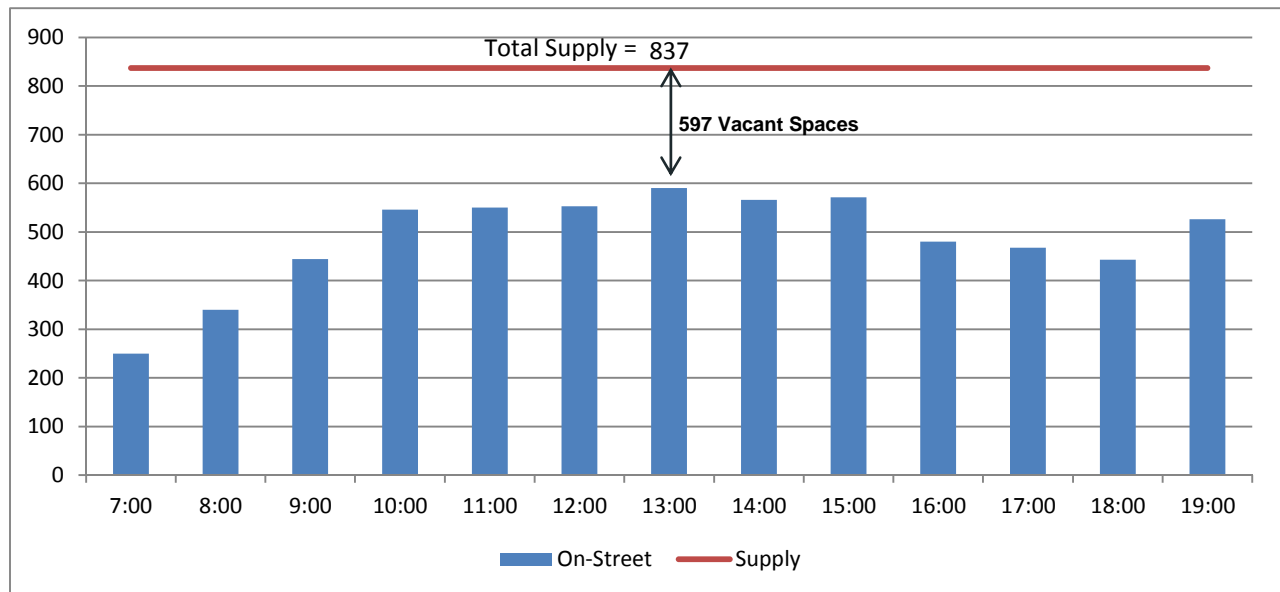
TABLE 20 BROADWAY PEAK PARKING DEMAND BY PARKING TYPE

Parking Type	Supply (# spaces)	Peak Demand			# Vacant Spaces
		Time	# spaces	% occupied	
On-Street	837	1:00 pm	590	70%	247
Private Off-Street	545		195	36%	350
Total	1,382		785	57%	597
<hr/>					
Total Publicly Available Parking (excluding private parking)	837	1:00 pm	590	70%	247

5.1.1 On-Street Parking

There are a total of 837 on-street parking spaces available within Broadway. As illustrated in Figure 42, the peak on-street parking demand was observed at 1:00pm (590 spaces) with an occupancy of 70%. An additional 247 on-street spaces are available during the busiest daytime period.

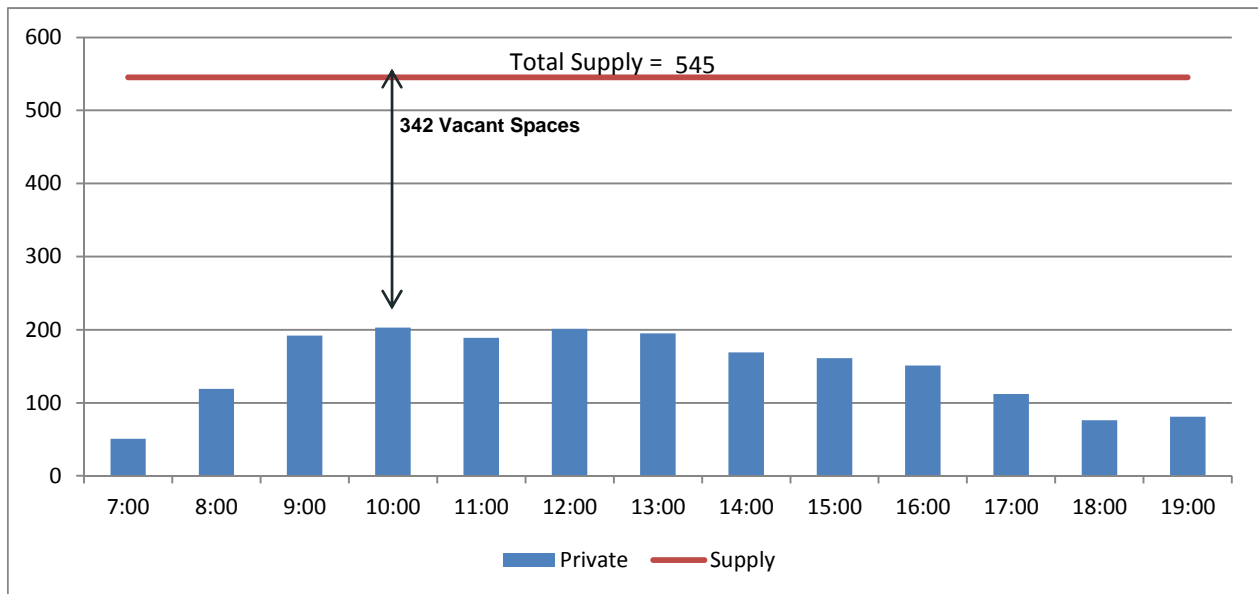
FIGURE 42 — BROADWAY — ON-STREET PARKING DEMANDS



5.1.2 Private Parking

There are a total of 545 private parking spaces available within Broadway. As illustrated in Figure 43, the peak private parking demand was observed at 10:00am (203 spaces) with an occupancy of 37%. An additional 342 private spaces are available during the busiest daytime period.

FIGURE 43 — BROADWAY – PRIVATE PARKING DEMANDS



5.1.3 Broadway – Key Findings

A summary of the key findings within the Broadway study area are as follows:

Supply

- There are a total of 1,382 parking spaces located within the Broadway study area.
- Sixty-one percent (61%) of the total parking supply (837 spaces) is available for public use (i.e. on-street parking).
- It is notable that this is the one segment of the entire study area where the municipality plays the predominant role in the supply of parking (i.e. the majority of the area parking supply (70%) is controlled by the City).

Demand

- Fifty-seven percent (57%) of the total parking supply is in use during the busiest period (1:00 pm).
- Seventy percent (70%) of the total publicly available parking (excluding private parking) is in use during the busiest period (1:00 pm – 590 spaces).
- An additional 247 spaces are available for public use during the peak period.