



Off-Site Parking Strategy

New Campus Development for The Ottawa Hospital Hospital and Central Utility Plant





New Campus Development for The Ottawa Hospital

Hospital and Central Utility Plant Off-Site Parking Strategy

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July 2023

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1.0 INTRODUCTION

The Ottawa Hospital (TOH) has initiated the development approvals process with the City of Ottawa and the federal government to establish a New Campus Development (NCD) to replace the existing Civic Hospital Campus and become the major referral centre for Eastern Ontario, Western Quebec, and parts of Nunavut. It will be the home of the Eastern Ontario Trauma Centre with a range of specialized services, research, and education facilities, along with related ancillary uses such as resident care stay facilities, and retail service uses. The existing Civic Hospital Campus is located at 1053 Carling Avenue and the NCD will be located approximately 1km to the east on lands leased to The Ottawa Hospital from Public Services and Procurement Canada (PSPC) adjacent to the Dow's Lake Pavilion and Central Experimental Farm (CEF). The NCD site is bound by Carling Avenue to the north, Preston Street to the east, Prince of Wales Drive to the south and Maple Drive to the west as shown in Map 1.

An overview of approvals and Council motions to date are provided below:

- Master Site Plan Approval (lifting of the “Holding Zone”) – October 2021
- Parking Garage Site Plan endorsed by Planning Committee - February 2022

The Master Site Plan approved by City Council stipulated the completion of the following supporting transportation studies – in addition to the overarching Transportation Impact Assessment (TIA) that is typically required to accompany a Site Plan Control (SPC) application - before the registration of the Site Plan Agreement for the future Hospital building:

1. Off-Site Parking Strategy (OPS)
2. Neighbourhood Traffic Management Strategy (NTMS)
3. Transportation Demand Management Strategy (TDM)
4. Transportation Monitoring Strategy (TMS)

This document represents the “Off-Site Parking Strategy” (OPS), and its main purpose is to develop a Strategic Plan that identifies potential policies and measures to respond to parking spillover onto neighbourhood community streets should it occur in the future. It is important to highlight that this strategy is strongly linked to the NCD Transportation Demand Management Strategy.

1.1 Overview of TOH Off-Site Parking Strategy

1.1.1 What is the Off-Site Parking Strategy? Why is it Important?

The NCD will be a new world-class healthcare facility that nearly doubles in size of the existing Civic Campus, generating more activity and pressures on the municipal transportation network. The sheer size, scale, and complexity of the NCD makes predicting future off-site parking implications challenging, which is the reason for Council's direction to prepare the OPS.

The OPS is a supporting technical document accompanying Site Plan Control (SPC) and Federal Land Use Approval applications. The OPS represents a comprehensive strategy to address potential off-site parking spillover in the vicinity of the NCD and is intended to be implemented in conjunction with the Transportation Demand Management (TDM) Strategy, which identifies strategies to encourage the use of alternative modes of transportation and reduce single occupant vehicle travel, thereby reducing parking demand at the NCD.

The OPS is intended to be a living document, with the understanding that opening day of the NCD is currently expected in 2028 and local conditions and behaviour may very well change over this time period. The data collected in the OPS represents an existing baseline that must be revisited closer to 2028 to confirm whether certain elements of the strategy are still required, may be deferred, in need of refinement, or if different measures are needed.



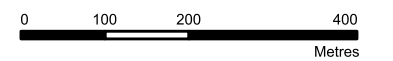
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- Study Boundary
- == Confederation Line / Trillium Line

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Map 1: Area Context

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1.1.2 What are the Objectives of the Off-Site Parking Strategy?

The main objectives of the OPS are as follows:

- To identify existing and potential vulnerabilities in the municipal street network to parking spillover.
- To provide tools and guidance on how to mitigate potential spillover impacts.
- To develop a Strategic Plan that will help guide future decisions on how to mitigate/address these issues leading up to opening day of the NCD and beyond.

1.1.3 Who is involved in the Off-Site Parking Strategy?

The motions to complete the OPS (and other supporting transportation studies) was introduced by the four principal Councillors representing the neighbouring Wards (Somerset – Ward 14; Kitchissippi – Ward 15; River – Ward 16; Capital – Ward 17), which set the requirements for the upcoming Site Plan Control application for the main Hospital building. Also among the motions was the requirement to form a Community Advisory Council that includes various community associations and representatives from the TOH network of hospitals and affiliates. A Community Advisory Council Transportation Subcommittee (CACTS) was created that included one representative from the five neighbouring community associations within the study area, who would directly engage with the project team to inform the supporting transportation studies:

- Carlington Community Association (CCA)
- Civic Hospital Neighbourhood Association (CHNA)
- Dalhousie Community Association (DCA)
- Dow's Lake Residents Association (DLRA)
- Glebe Annex Community Association (GACA)

Finally, City of Ottawa technical staff from various departments were consulted throughout this project to further inform and guide the OPS, including but not limited to:

- Parking Services Branch
- Traffic Investigations & Surveys Branch
- Transportation Data Collection & Analytics
- Parking Enforcement & Logistics

It is important to note that the early stakeholder consultation completed for the OPS (as well as for the other supporting transportation studies) was undertaken in advance of the SPC process, to ensure each study included public/stakeholder input from its inception and that these parties were an integral part of the planning process.

1.1.4 What is not covered in the Off-Site Parking Strategy?

The OPS is just one of four technical supporting studies to the SPC application, as discussed in Section 1.1. Therefore, any issues related to the other studies have not been included in the scope of the OPS. It is important to highlight that the scope of the OPS does not include the planning and management of parking supply and demand on-campus, such as on-campus parking pricing and other programs/measures needed to attain mode share targets. These items will be the primary focus of the TDM Strategy that is also accompanying the SPC application. The focus of the OPS is to develop a strategy to manage/mitigate potential parking spillover on surrounding community streets, in a manner that is synergistic with the TDM Strategy.

1.1.5 What happens after the Off-Site Parking Strategy?

This document will accompany the SPC application submission for the main Hospital building (Phase 4 of the Master Site Plan) for City of Ottawa staff review, which will include additional public consultation as dictated by the City of Ottawa planning approvals process.

The key elements within the OPS are expected to be refined over the SPC process. In the time preceding opening day of the main Hospital building (currently scheduled for 2028) and the ultimate buildout of the new campus development (2048), TOH will work with the City of Ottawa and other relevant agency stakeholders to reach funding agreements which will help to enable implementation of the Strategic Plan.

It is important to note that the OPS presents potential parking implications related to the NCD based on current information, thus providing a long-term perspective. The Strategic Plan presents a selection of interventions, informed by local stakeholder input that may be considered in the future to respond to implications if they were to occur. All potential measures are still subject to council-approved city policies and guidelines prior to implementation, including:

- The Municipal Parking Management Strategy, including the Rate Setting Guidelines;
- The On-Street Parking Regulation Change Policy; and,
- The On-Street Parking Permit Policy.

Different approval process requirements are defined in these documents, such as a resident-led request and petition support, a vetting process by the city, in addition to Councillor support.

There will be additional public consultation opportunities as well as a technical circulation of the OPS among City of Ottawa staff as part of the Site Plan Control process supporting the main Hospital building.

The OPS will define a Strategic Plan to help mitigate potential parking implications on neighbouring streets near the NCD, but each element is still subject to city processes/procedures outlined in the governing policies/guidelines prior to implementation.

1.2 Scope

The proposed scope of work was developed in consultation with City of Ottawa staff and the CACTS. The proposed study area is defined by Holland Avenue and Fisher Avenue to the west, Highway 417 to the north, Bronson Avenue to the east, and Central Experimental Farm (the NCC Scenic Driveway) to the south, as shown in Map 2.

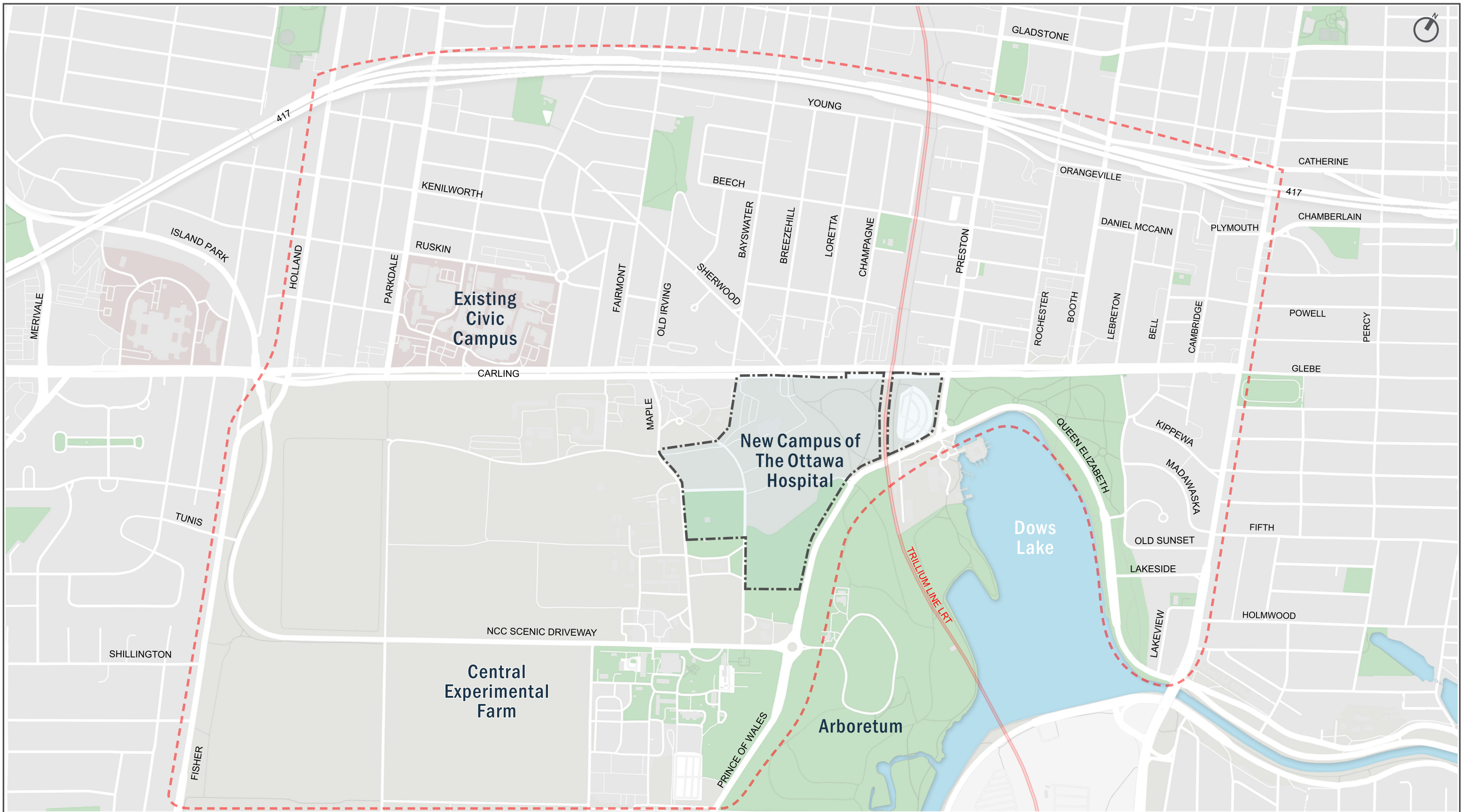
1.2.1 Study Area Characteristics

The NCD is located at the interface of four different City of Ottawa Wards: Somerset, Kitchissippi, Capital and River; and is adjacent to four Community Associations: Carlington, Civic Hospital, Dow's Lake, and Dalhousie, and within 1-km of Glebe Annex, Glebe, and Hintonburg, as illustrated in Map 3. The NCD will be centrally located in the City of Ottawa, contributing to the variety of destinations and amenities in the area, including the Royal Ottawa Mental Health Centre, the Dow's Lake Pavilion, the Central Experimental Farm, the Arboretum, Little Italy, Carleton University, and Tunney's Pasture, among others.

A notable difference in the surroundings of the NCD site, compared to the existing Civic Campus, is the variety of high-quality facilities accommodating alternative modes of transportation, such as the future Dow's Lake LRT station at the corner of the Preston Street/Carling Avenue intersection, the Trillium Pathway, the Rideau Canal Eastern and

Western Pathways, the Central Experimental Farm Pathway, in addition to sidewalks and other cycling supporting facilities provided within the NCD site and on many municipal streets within the study area.

The importance of these active transportation and transit options cannot be understated in reducing long-term single occupant vehicle use at the NCD. It is also noted that although there is an overlap in where visitors to the Royal Ottawa Mental Health Centre and the existing Civic Campus may park on-street, this overlap will have less bearing in the future since the NCD will be located 1-km east of the Royal Ottawa Mental Health Centre. Potential changes to on-street parking regulations noted in the Strategic Plan are not expected to impact streets surrounding the Royal Ottawa Mental Health Centre.

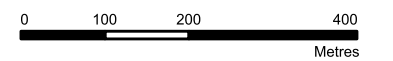


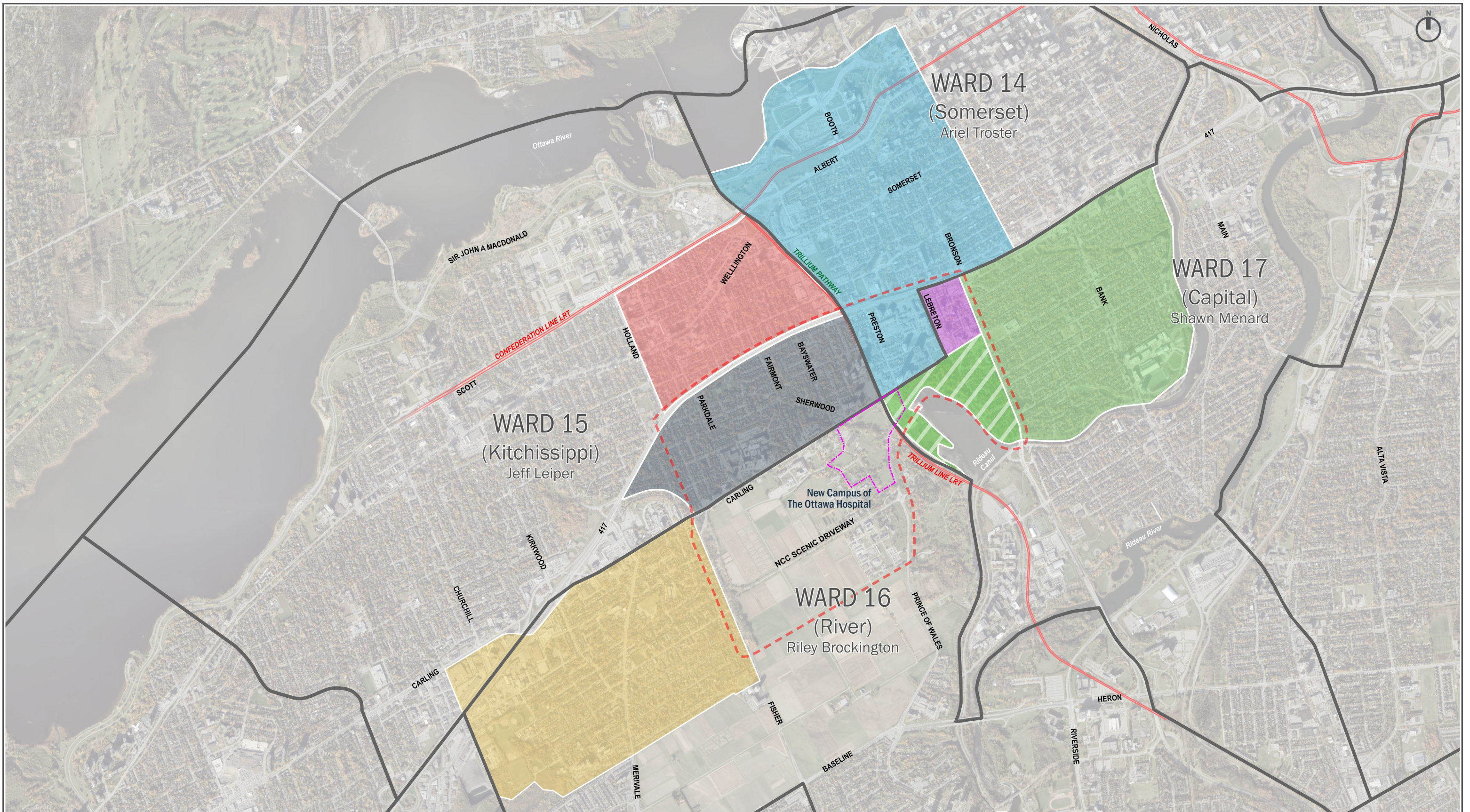
--- Study Boundary

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Map 2: Study Area

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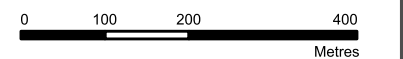
- - - Study Boundary
- Ward Boundaries
- The Glebe Community Association (GCA)
- Dow's Lake Residents Association (DLRA)
- The Glebe Annex Community Association (GACA)
- Carlington Community Association (CCA)
- Civic Hospital Neighbourhood Association (CHNA)
- Dalhousie Community Association (DCA)
- Hintonburg Community Association (HCA)

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Map 3: Adjacent Community Associations

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1.2.2 How was the Off-Site Parking Strategy Developed?

The project team established the following five (5) key stages to accomplish the noted objectives in Section 1.1.2:



Step 1: Identify Parking Goals

Identify goals for the OPS based on engagement with key stakeholders in the surrounding communities, including limiting long-term parking infiltration by NCD visitors and staff, while exempting residents from those restrictions, as appropriate.



Step 2: Data Collection

Collect the following information: Stakeholder Input (Section 1.3); Policies, Procedures and Background Studies (Section 2.0); Existing campus review (Section 3.1); NCD review (Section 3.2); Parking inventory and occupancy surveys (Section 3.3 and Section 3.4); and Planned Area Changes (Section 3.5). This information was used to better understand existing and future conditions, including issues currently occurring within the study area.



Step 3: Analyze Data and Identify Streets in Need of Parking Management

The parking inventory and occupancy data was analyzed to determine the peak hours for parking demand and the average occupancy for both the study area and for particular streets. This data is generally used to identify problem areas and potential solutions. Generally, the City of Ottawa implements parking management when street blocks are consistently at or over 85% occupied. In this study, streets in need of parking management were identified primarily based on their walking distance to the NCD.



Step 4: Develop Parking Management Toolbox and Strategic Plan

A Parking Management Toolbox was developed based on a review of best practices and measures used in similar contexts in Ottawa. Interventions were divided into the following two categories: (1) Mitigating “Price Spillover” (related to drivers avoiding price of parking), and (2) Temporary Response Mitigation of “Overflow Spillover” (in the case of insufficient on-site parking supply).



Stage 5: Develop the Strategic Plan

The Strategic Plan outlines various interventions to help mitigate anticipated vulnerabilities within the study area. Some interventions are to be implemented leading up to and after opening day of the NCD, while others are contingency measures that are only to be implemented if the future monitoring process confirms the need. The Strategic Plan is based on an understanding of the overarching goals expressed by the CACTS, potential solutions used in similar contexts, potential impacts and where changes are most appropriate. It is also important to emphasize that elements within the Strategic Plan are linked to the TDM Strategy recommendations.

1.3 Stakeholder Engagement

The outcome of the OPS had to consider the wants and desires of the public and stakeholders, specifically the local communities as they will be directly impacted by the NCD over the coming decades. Consultation efforts for the OPS focused on two streams: local community associations and technical stakeholders.

1.3.1 Engaging Local Community Associations

Reaching out to the local community associations was essential to the OPS in determining community values, and it helped the project team identify issues and opportunities from varying perspectives, specific to each neighbourhood. As previously discussed in Section 1.1.3, the CACTS was formed to enable a representative from the adjacent community associations to be directly engaged by the project team in the form of “1-on-1” workshops to solicit feedback on behalf of its membership. The key events and milestones in the public consultation process for the OPS are described below.

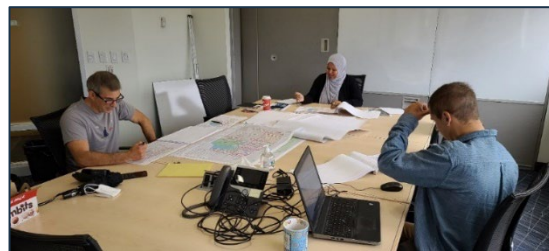
1. Three Community Advisory Council Transportation Sub-Committee Meetings:

- a. **Kick-off Meeting [May 16, 2022]:** This meeting introduced the CACTS, TOH representatives and the project team, who collectively reviewed the terms of reference prepared by the project team for each of the supporting transportation studies for the NCD main Hospital building Site Plan Control and Federal Land Use Approval applications.
- b. **Meeting #2 [June 23, 2022]:** This meeting had TOH and the project team update the CACTS on the status of the supporting transportation studies, including a summary of the first round of 1-on-1 workshops with the Transportation Subcommittee members (discussed below).
- c. **Meeting #3 [October 3, 2022]:** This meeting had TOH and the project team update the CACTS on the status of ongoing work at the NCD, the main Hospital building Site Plan Control and Federal Land Use Approval applications, and a summary of progress to date on the additional transportation studies.

2. Three Rounds of 1-on-1 Workshops were held, where the project team met with individual representatives from the Transportation Subcommittee.

- a. **Round #1 [Week of June 6, 2022]:** This workshop provided the Transportation Subcommittee members the opportunity to express their thoughts on the draft terms of reference for the OPS. The project team also asked the representatives to share any knowledge of past parking management efforts and planned works, as well as their priorities and concerns related to parking in their respective communities.

- b. **Round #2 [Week of August 8, 2022]:**
This workshop had the project team share initial findings of the OPS existing conditions analysis, including on-street parking occupancies within the study area. The Transportation Subcommittee representatives were given the



opportunity to identify potential mitigation measures that would be supported by their membership as well as approaches that may be met with resistance. An information slide deck with preliminary results was provided to all CACTS representatives to review.

- c. **Round #3 [September 2022]:** A follow up workshop was granted to any representatives that had questions or additional comments for the project team regarding the information slide deck distributed during Round #2. The DLRA and CHNA both took this opportunity to provide additional comments.

1.3.2 Engaging Technical Stakeholders

The City of Ottawa will be the ultimate approving authority for the OPS, making it the primary stakeholder. The project team communicated regularly with city technical staff over the course of this study to obtain data and ensure the scope and direction was properly vetted. The project team also acknowledges other stakeholders that will be important voices during the approvals process when the Site Plan Control and Federal Land Use applications are submitted to the City of Ottawa and National Capital Commission (NCC).

A summary of the key events and milestones in the stakeholder consultation process for the OPS is provided below.

1. **City of Ottawa Introduction Meeting [March 10, 2022]:** This meeting allowed the project team to introduce the OPS project and the impetus for the study. The project team asked city staff key questions that would help formulate the terms of reference for the OPS Report, such as what an appropriate study area limit is, what are the key issues and concerns, and what are the ongoing or planned work/studies by the city related to parking within the study area.
2. **City of Ottawa OPS Report Review [January 25, 2023]:** The project team met with City staff in Parking Services to discuss the first draft of the OPS Report. City staff provided comments and suggestions that help shape the document herein.
3. **Email Communication [Throughout]:** The project team had regular email exchanges with key city staff from various departments to collect data, studies and receive input on the approach, methodology, and general direction of the OPS.

1.3.3 What We Heard

Over the course of the study's engagement program, several themes were identified by members of the public and key technical stakeholders, such as:

Carlington Community Association

- Noted overall positive view of the 1-hour (7am-7pm) parking limitations placed near the Royal Ottawa Hospital.
- Questioned whether spillover parking may occur within the Central Experimental Farm.
- Noted that a balanced approach, not too restricted nor too open, is preferred.



Civic Hospital Neighbourhood Association

- Expressed concerns over spillover parking within their community.
- Noted that variation in parking demand during festivals should be considered.
- Noted that measures to encourage travel by non-auto modes are needed.
- Suggested that 'No Parking' restrictions be implemented in the area between the existing Civic Campus and the NCD, as it would be within walking distance of both campuses and will likely have a higher potential for spillover.
- Noted need for stronger enforcement.



Dalhousie Community Association

- Expressed concerns with overflow parking from the NCD spilling onto local streets intended for patrons and negatively impacting local businesses.
- Little Italy has very little parking, especially on weekends and during special events. The Dalhousie Community Association doesn't see the benefit of more restrictions, especially for commercial uses.
- Agreed that planned higher order transit (Stage 2 LRT and Carling BRT) is expected to help alleviate some parking demand.
- Noted that if it is too difficult to find parking, people will ultimately shift to transit, especially during the rush hour.



Dow's Lake Resident's Association

- Expressed concerns with existing vehicles 'hunting' the neighbourhood for parking and that future hospital visitors/staff will exacerbate this issue.
- Expressed belief that neighbourhood streets are attractive parking options despite their distance from the NCD, as Commissioners Park and the pathway system along Queen Elizabeth Drive provide a pleasant walking experience.
- Expressed that having short-term parking available for local tourism (and as a means of traffic calming) is expected and welcomed.
- Expressed concerns with the lack of by-law enforcement.
- Suggested the following changes to existing parking regulations:
 - 'No parking 9-5', 1 hr parking limits outside of those hours.
 - Exception: Dow's Lake Road - permanent 1 hr parking (given its proximity to the Park).
 - Issuing one free 24/7 street-parking permit to each residential household within Dow's Lake Community.
 - Restrictions may be lifted during special events (e.g. Tulip Festival, Winterlude).
- Expressed concern that mode shift targets at the NCD are not achievable within the timeframe, which may lead to significant spillover onto community streets due to lack of sufficient parking supply on campus.
- Expressed their desire to see a clear plan for additional on-site and off-site parking and shuttle service that may be immediately invoked if established parking demand limits are exceeded.



Glebe Annex Community Association

- Enquired how the NCD would guarantee replacement parking for lost spaces at Dow's Lake Parking, particularly during events such as Tulip Festival.
- Noted need for dialogue about parking pressures that may come up as Canada Lands is developed.



2.0 FOUNDATIONAL ELEMENTS

2.1 Existing Policies and Procedures

The OPS has been developed within the context of previous and ongoing transportation planning initiatives governing the study area, undertaken by the City of Ottawa in collaboration with local community associations. The following sections detail the relevant policies and plans that have informed the OPS.

2.1.1 City of Ottawa Official Plan (2021)

The City of Ottawa Official Plan (OP) provides a vision for future growth of the city and a policy framework to guide its physical development through 2046. An updated OP was passed by City Council in Fall 2021 and received Provincial approval in Fall 2022. The OP divides the city into concentric policy areas called “transects”, which help determine broad categories of built form and urban design. The NCD site and its surrounding neighbourhoods fall into the Downtown Core and Inner Urban Transects.



As well as these policy areas, the OP outlines a hierarchy of land use designations based on the intended urban function of lands therein. The Hospital site falls into the Major Transit Station Area (MTSA) of the Dow’s Lake O-Train Station and is adjacent to the Rideau Canal Special District. The surrounding neighbourhoods - outside of the Dow’s Lake Station MTSA and the Preston Corridor - are designated “neighbourhoods” with an “evolving neighbourhood” overlay.

There are several relevant policies within the new OP to the development of the OPS, including using minimum parking requirements to minimize automobile dependency near rapid transit stations and providing safe and convenient pedestrian routes and facilities within walking distance of rapid transit stations. The OP states that minimum parking requirements may be reduced or eliminated and maximum parking limits may be introduced at the following locations:

- a) Hubs and Corridors;
- b) Within 600m radius or 800m walking distance, whichever is greatest, to existing or planned rapid transit stations;
- c) Within 300m radius or 400m walking distance, whichever is greatest, to existing or planned street transit stops along a Transit Priority Corridor or Frequent Street Transit route; and
- d) Other areas determined by Council

As well, specifically regarding “hubs” in the “inner urban area” (which would include the NCD and some of its surroundings), Policy 5.2.2 (3) states that **"No parking shall be required as a condition of development"** and that **"Surface parking within 300 metre radius or 400 metres walking distance, whichever is greatest, of an existing or planned rapid transit station, shall be limited to a very small amount of spaces only for short-term drop-off and pick-up, or delivery vehicles"**. However, it is important to note that this policy only applies to off-street parking and does not specify any limitations to the on-street parking supply.

In addition, the city’s new OP aims to promote an intensification of land uses which supports sustainable transportation options; as per Big Policy Move 2, the **"...overarching mobility goal of the Official Plan is that by [2046], more than half of all trips will be made by sustainable transportation such as walking, cycling, transit or carpooling"**. The OP aims to gradually implement the principles of the “15-minute neighbourhood” and enhance mobility options and street connectivity, and direct significant development to Hubs and Corridors, as planned within the study area.

To further support OP policies and future plans for intensification in the area, transportation demand management strategies and policies will encourage a shift to non-auto modes of transportation and lower parking demand. It is noted that TOH has committed to provide a substantial transportation demand management program that will incentivize the use of transit, bicycling, walking, and shared vehicles, and that will disincentivize driving alone. These recommendations are detailed in the NCD TDM Strategy.

2.1.2 Transportation Master Plan

The City of Ottawa is in the ongoing process of updating its Transportation Master Plan (TMP), which supports the mobility objectives of the Official Plan through a detailed blueprint for the development of the city's transportation network. Part 1 of the updated TMP, containing draft transportation policies, was released in December 2021. The full TMP Update, which will identify the planned transit and road network, is scheduled to be completed/approved by Fall 2024.



Particularly relevant to the development of this OPS is **Policy 10-5 – Develop a Strategy to Modernize How Curbside Space is Allocated and Managed**. The city will develop a new strategy for managing curbside uses to effectively manage curb space. Pricing, permits, and enforcement could be modified as part of the new curbside management strategy. In addition, **Policy 10-6 – Leverage Parking to Support Economic Activity and Encourage Sustainable Transportation**. The supply, cost and restrictions of on-street parking impacts how individuals choose to travel. Managing these factors can help reach the goal of most trips being made by sustainable modes. Other relevant policy themes include **Theme #8 – Expand and Improve Transit City-Wide**, and **Theme #11 – Advance Transportation Demand Management**.

2.1.3 Zoning By-law (2008)

Parking requirements are enforced through the City of Ottawa Zoning By-law. The Ottawa minimum parking requirements support transit-oriented developments and intensification along LRT stations by reducing or eliminating parking requirements in certain areas.

2.1.4 Traffic and Parking By-law (2017)

The City of Ottawa's Traffic and Parking By-law 2017-301 regulates traffic and parking on roadways in Ottawa. It prohibits parking and stopping of vehicles in certain areas and also sets out guidelines for paid parking zones, use of parking payment devices, and method of parking on streets.

2.1.5 The Municipal Parking Management Strategy (2019)

The City of Ottawa's Parking Services Department manages all on-street and municipal off-street public parking in the city. The department also oversees the On-street Parking Permit Program (described further in upcoming section). The objectives of the Municipal Parking Management Strategy are:

1. **Provide an appropriate and optimized supply of general use public parking** that is secure, accessible, convenient, appealing, and fairly and consistently enforced.
2. **Prioritize short-term parking** that is responsively priced to support businesses, institutions, and tourism.
3. **Promote sustainable modes of transportation** by supporting and maintaining programs and facilities that encourage sustainable mobility choices (public transit, cycling, walking) and alternative modes, including electric vehicles, car sharing, and new technologies as they emerge.

4. **Resolve parking-related issues in residential areas** caused by sources of high parking demand.
5. **Ensure financial sustainability** by ensuring that revenues are sufficient to support the objectives of the MPMS, recover all Parking Services operating and capital expenditures, and contribute to the Parking Reserve Fund to finance future parking system development.

The strategy includes Rate Setting Guidelines for on-street and off-street public parking rates, hours, and locations. An overview of the Rate Setting Guidelines process is provided below:

- Maximum rates are set by Council on an annual basis as part of the approval of the Parking Management Program Work Plan and Budget approval, based on the results of local area parking studies. However, rates may be varied by city staff at any time throughout the year, as appropriate, within the Council approved range.
- On-street rate changes should be considered when peak occupancy either exceeds practical capacity (greater than 85%) or demonstrates substantial underutilization (less than 50%).
- New on-street paid parking requires a Local Area Parking Study or Parking Assessment which would:
 - “Indicate peak occupancy levels of greater than 85% over multiple surveys
 - Consider and address impacts of implementing paid parking
 - Include consultation with area stakeholders (including BIAs)”

Where new paid parking is warranted and consistent with the Municipal Parking Management Strategy, staff may establish paid parking zones once the local Councillor, BIA, and community associations concur. If there is no complete concurrence, City Council approval would be required for implementation.

2.1.6 On-Street Parking Regulation Change Policy

This policy defines the process to be followed in order to change on-street parking regulations in response to community requests.

Once a resident request is received; Traffic Services staff review the request to determine if the requested changes can be supported from traffic safety and operational aspects. If the requested changes can be supported, the resident making the request will be asked to complete the petition process to help achieve their objectives. It is noted that requests for the installation of “No Stopping” regulations will not be supported due to the implications to parking availability for those with accessible parking permits.

The petition document consists of a form outlining the requested regulation changes and further outlines potential impacts of the proposed change. A listing of all addresses that must be visited to provide affected residents with the opportunity to indicate whether or not they support the proposal is included on the form. It is the responsibility of the applicant to visit every address listed on the petition form provided by the city.

The petition not only serves to inform city staff of the proportion of residents who support the change in on-street parking regulations, but it also provides notice to the residents along the street that a change may occur and that there may be some signage installed within the city right-of-way adjacent to their property. The rate of support is set at 66% to be consistent with other City of Ottawa Council approved petition processes.

2.1.7 On-Street Parking Permit Program

The On-Street Residential Parking Permit Program is in effect within certain zones in the city. The permit allows the holder to park up to 48 hours in the same legal parking space and to be excluded from Winter Weather Parking Bans between December 1st and March 31st.

To qualify for permit privileges, residents must live in a zone that allows permit parking and prove that they **do not have access to off-street parking**. A new zone can be established through a petition process.

As outlined in the City's Traffic Service Catalogue document¹, the process to request a new parking permit zone is as follows:

“Step 1: Once a request to establish a Residential On-Street Parking Permit zone is received, it will be assigned to a Traffic Assessment Specialist. The Specialist will undertake a site visit to determine if the location meets the required conditions and if there are any safety issues or other constraints associated with the request. If there are no concerns, the resident will be offered to pursue the request through a formal petition process.

Step 2: If the resident wishes to proceed, the Specialist will provide a petition document to the resident, now referred to as the proponent. It is the responsibility of the proponent to visit every address listed on the petition form provided by the City. The petition not only serves to inform City staff of the proportion of residents who support the change in parking regulations, but also provides notice to the residents along the street that a change may occur. Once completed, the petition must be returned to the Specialist.

Step 3: The Specialist will review the petition results. If the appropriate number of residents are in favour, as per City Council's approved On-Street Parking Permit Policy, the Specialist will notify the ward councillor of the desired change to seek support. If the ward councillor is supportive, a work order will be issued and the new parking regulation signs will be installed.”

It is also important to note that once an On-Street Residential Parking Permit zone is established, there is a per vehicle cost to obtain an On-Street Residential Parking Permit (and out-of-town visitor permit). The following residential permit pricing is effective January 1, 2022:

- Summer monthly permit (April – November) \$33.25 plus HST per month
- Winter monthly permit (December – March) \$155 plus HST per month
- Annual permit \$715 plus HST

Visitor Parking Permits may also be purchased by residents to allow out-of-town non-residents to park in residential Parking Permit zones for a maximum of two weeks.

The Guest Parking Permit Program provides special parking privileges for guests in defined areas that allow permit holders to park for a maximum of 3-hr parking. The 2022 permit cost is \$28 per year.

Residents wishing to establish a new Guest Parking Permit zone must submit their request by contacting 3-1-1, and provide evidence that the street or streets have insufficient off-street parking for guests and during what periods, in addition to evidence that there are no reasonable alternatives to provide off-street parking. These zones are usually established on residential streets located close to hospitals or sports venues where parking restrictions, such as 'No Parking' or 1- or 2-hour time-limit zones have been established due to the high demand for on-street parking.

Similar to the Residential Parking Permit program, the process for a new Guest Parking Permit zone can be applied through a resident led petition process, and generally follows the steps outlined for Residential Parking Permits. Further details are provided in the City's Traffic Service Catalogue document.

2.1.8 Accessible On-Street Parking Regulations

Holders of a valid Accessible Parking Permit (APP) are entitled to park for up to 4 hours in municipal parking garages/lots and wherever on-street parking is permitted, regardless of time limit or time of day restrictions. Parking at Pay & Display machines is also free. Vehicles may be parked up to 4 hours in "No Parking" zones. Permit holders

¹ https://documents.ottawa.ca/sites/documents/files/tscatalogue_en.pdf

may be picked up and dropped off in "no stopping" and "loading" zones, as well as in reserved bus lanes and reserved bicycle lanes as long as traffic is not impeded. Drivers are NOT permitted to wait for permit holders to return after they are dropped off in these locations.

In addition, all parking lots in the City of Ottawa with 20 or more public parking spaces are required to reserve at least one parking space for the use of permit holders. These parking privileges do not apply to off-street parking facilities such as those at federal government buildings and Private Institutions (i.e.- Ottawa Macdonald-Cartier International Airport, hospitals, etc.). Permit holders are subject to all other traffic and parking by-law provisions including respecting the winter parking bans and cannot block driveways, park in front of a fire hydrant or park within nine 9 metres of an intersection. Vehicles must not be stopped or parked in a way that blocks traffic.

2.1.9 Parking Enforcement Operations Overview

Based on information from City of Ottawa Parking Enforcement, Parking Control Officers are responsible to patrol their assigned "beat" that may vary in size depending on the area, traffic volume and parking availability. In all areas of the city, enforcement is conducted based on the Council approved enforcement standards. Parking restrictions that ensure safety and mobility, including 'No Stopping', 'No Parking', fire routes, and regulations around fire hydrants, are all proactively enforced. Whenever a resident witnesses a parking violation or has a concern, they must contact 3-1-1 and a service request is created at the time of the violation and an Officer is assigned promptly for response and issuance of tickets should violations be found.

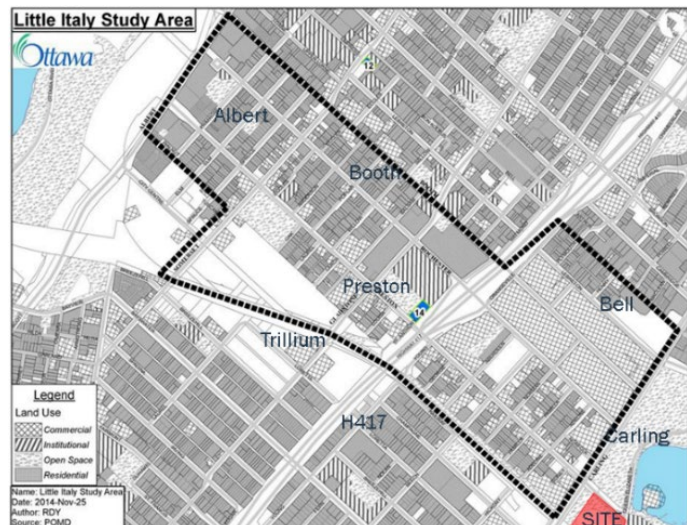
2.2 Background Parking Studies

2.2.1 Little Italy Local Area Parking Study (2015)

The City of Ottawa completed a Local Area Parking Study (LAPS) for the Little Italy Community in February 2015. The study area was bounded by Albert Street in the north, Carling Avenue in the south, Booth Street in the east and the Trillium Line LRT in the west. The purpose of the Little Italy LAPS was to assess the area for parking management related issues, opportunities, and solutions in alignment with the Terms of Reference for Local Area Parking Studies as set out as part of the Municipal Parking Management Strategy..

A summary of the key findings with regards to parking utilization within the area south of Highway 417 is provided below:

- Within the area bounded by Highway 417 to the north, Carling Avenue to the south, the Trillium Line LRT to the east and Bell Street to the east, there are approximately 180 on-street parking spaces and 1,770 off-street parking spaces. The majority of the on-street parking spaces are paid parking with a 1 or 2-hour time limits.



- On-street parking frequently surpassed 85% parking occupancy² and occasionally reached +100% during weekday evenings and weekends, while off-street parking was underutilized during these times.
- Off-street parking lots were observed to approach 85% parking occupancy on weekdays between the morning and mid-afternoon hours.

Finally, key recommendations of this study to influence the availability of parking included: promoting transit, bike parking, car sharing, off-street parking through improved signage, reduction in driveways to make space for more on-street parking, on-street parking permits for residents, priced parking to meet demands, increased parking enforcement, zoning provisions to unbundle the price of parking from the cost of units, and development agreements for public parking in new developments.

3.0 IDENTIFYING ISSUES AND OPPORTUNITIES

3.1 The Existing Civic Campus

3.1.1 Overview of Civic Campus Parking

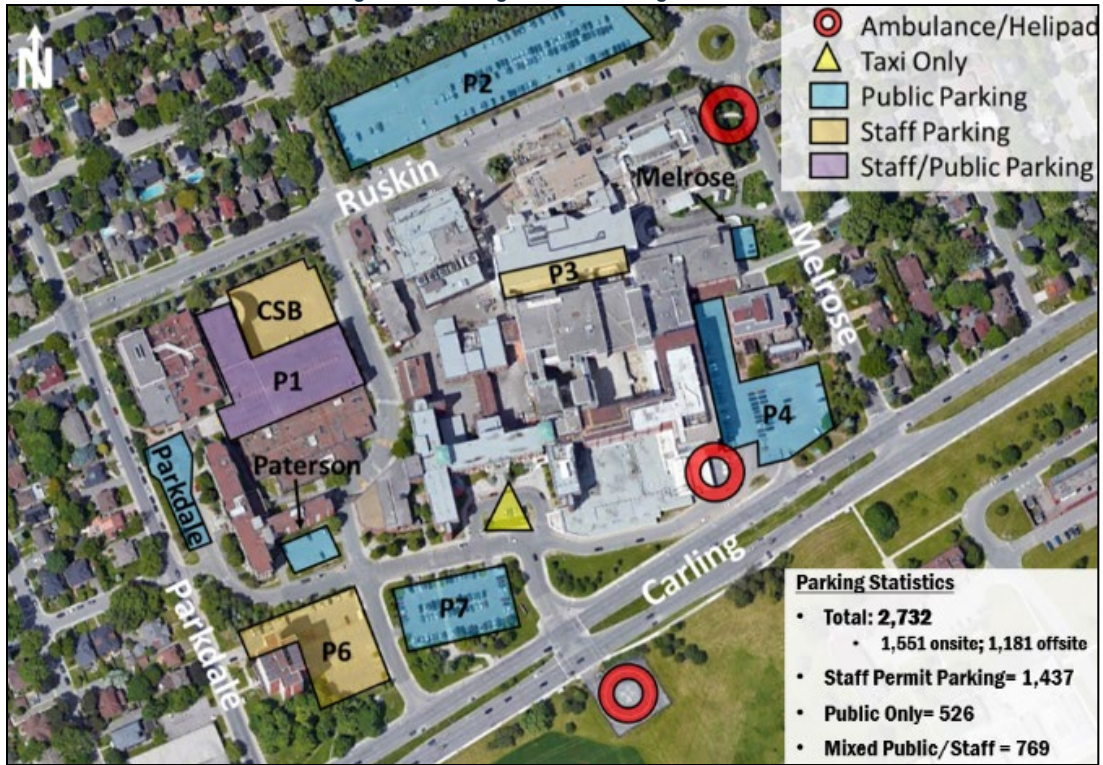
There are approximately 2,500 parking spaces provided for the existing Civic Campus, located both on- and off-site (satellite lots) for staff, visitors, patients, and all hospital related services (Figure 1 and Figure 2). The existing number of employees at the Civic Campus is approximately 3,500.

Satellite parking lots are leased to TOH, who provide shuttle transport to/from the Civic Campus between 5:30am and 9:00pm. There are also intercampus shuttles between the Civic Campus and other TOH campuses that operate at 15- to 20-min headways between 6:00am and 6:00pm daily.

In discussions with TOH staff, it was confirmed that the campus parking demand is generally high. Under normal conditions, typical weekday parking supply is at capacity from Monday through Thursday, meaning that the peak parking demand is typically generated during the traditional business hours. Finally, it was noted that the current staff parking demand is on average 65% of the total pre-pandemic demand, while the current patient/visitor parking demand is on average 35% lower than the total pre-pandemic demand.

² 'Parking occupancy' is a measure of how many vehicles are parked divided by the number of spaces. A ratio between 75% to 85% is considered ideal.

Figure 1: Existing On-Site Parking Locations



Source: NCD TIA and Mobility Study, July 2021

Figure 2: Existing Off-Site (Satellite) Parking Locations



Source: NCD TIA and Mobility Study, July 2021

3.1.2 Parking Tickets Issued

Table 1 below identifies the total number of parking tickets issued by City of Ottawa By-law within the Civic Campus over the last three years. Overall, an approximate 50% drop in the number of tickets issued is observed between 2019 (pre-COVID) and 2021. This is consistent with the decrease in parking demand over this time and is unlikely to be the result of any increase in compliance.

Table 1: Number of City Parking Tickets Issued on Streets within Civic Campus

Year	Number of Tickets
2019	352
2020	116
2021	165

Source: City of Ottawa

Since January 2020 there have been 10,847 parking tickets issued by City of Ottawa By-law within the area bounded by Holland Avenue to the west, Fairmont Avenue to the East, Highway 417 to the north, and Carling Avenue to the south (approximately 300 on-street parking spaces). Based on this data, there is a notable compliance issue on streets surrounding the existing Civic Campus.

3.1.3 Current Strategies and Challenges

Parking Regulations

There is a history of parking management efforts in the communities surrounding the existing Civic Campus, primarily through the implementation of on-street parking restrictions from 09:00-17:00 Monday to Friday. These restrictions are in place along most streets within an approximately 600m radius of the campus (roughly 10min walking time). The current parking regulations on adjacent streets to the Civic Campus are presented in Section 3.3.1.

Free 3-hr on-street parking is available on Parkdale Avenue which is an arterial road with direct frontage to the Civic Campus, as illustrated in Figure 3. As would be expected, these parking spaces are highly utilized during weekdays.

It is also noted that the south side of Ruskin Street, although posted as ‘No Parking’ from 09:00-17:00 Monday to Friday, is highly utilized weekdays during the day, primarily due to the fact that Accessible Parking Permit holders are exempt from these time restrictions and are able to park for up to 4-hours during these hours.



Figure 3: Free On-Street Parking Zone Near Civic Campus

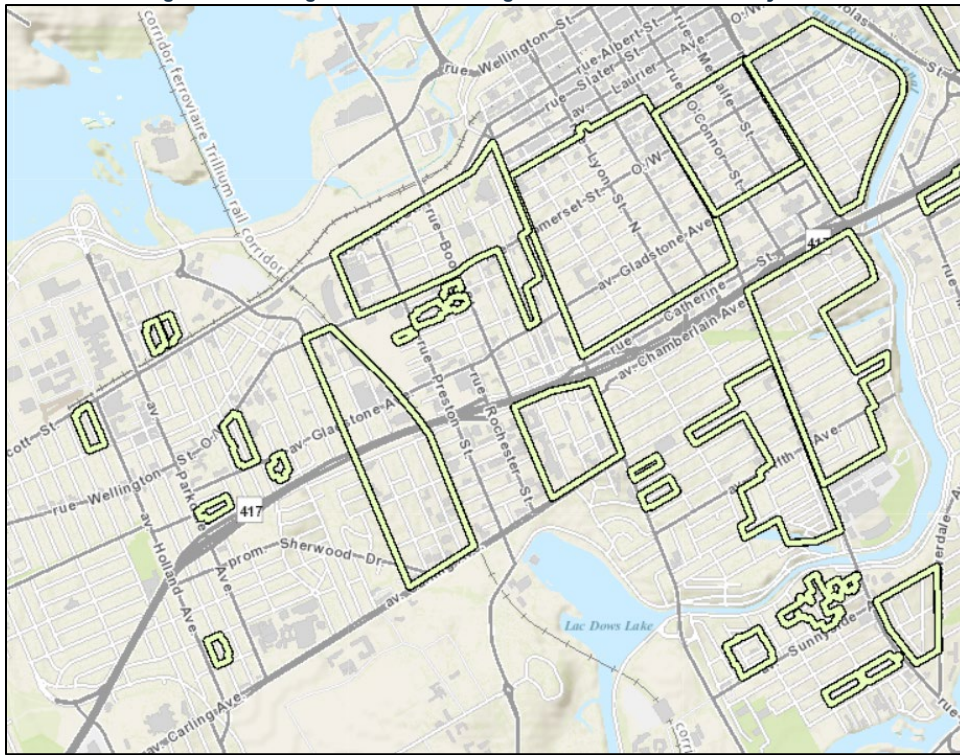


Source: Google ©; Blue shading – Existing Civic Campus; Green shading – Free on-street parking

Residential / Guest Parking Permit

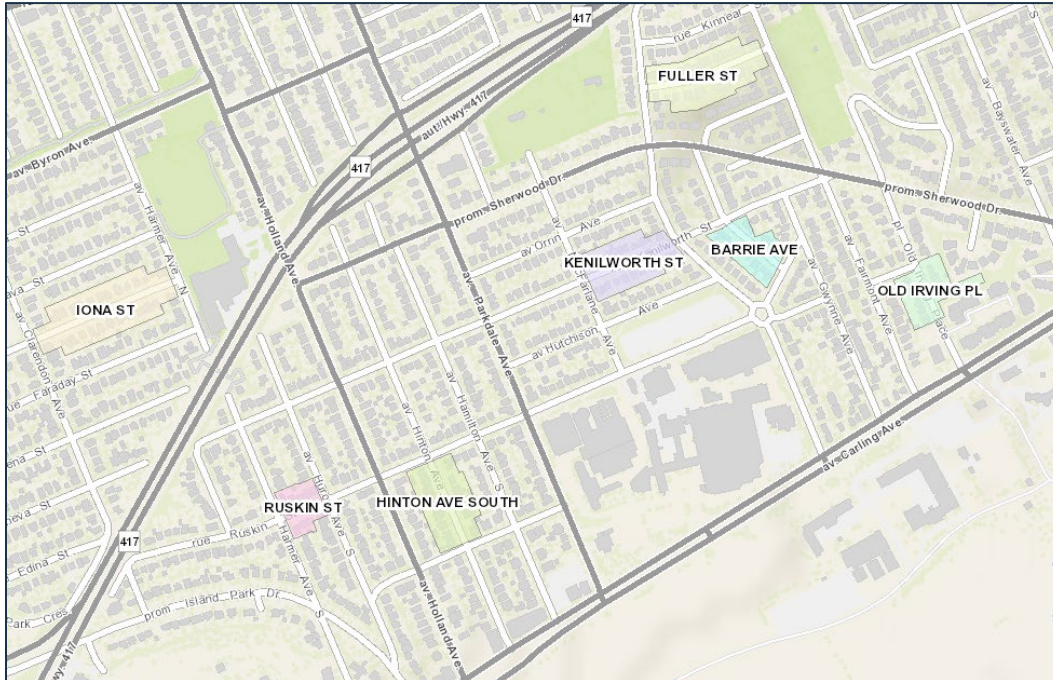
The Residential Parking Permit zones surrounding the existing Civic Campus and NCD are illustrated in Figure 4. It is noted that areas within the Glebe Annex and Civic Hospital Community Association immediately north of the NCD are already designated as Residential Permit zones. In addition, it is noted that a Residential Parking Permit zone exists along one block on Hinton Avenue South between Ruskin Street and Inglewood Place. Within the Residential Parking Permit zones, permit holders are exempt from parking restrictions where Permit Holders Exempt signs exist. There are also multiple Guest Parking Permit zones surrounding the existing Civic Campus, as illustrated in Figure 5. These zones allow guests of residents to park for up to 3 hours where Permit Holders Exempt signs exist.

Figure 4: Existing Residential Parking Permit Zones within Study Area



Source: geoOttawa

Figure 5: Existing Guest Parking Permit Zones within Study Area



Source: City of Ottawa

Resident-led Requests for Parking Regulation Changes

Despite the parking management controls put in place, the Civic Hospital Neighbourhood Association has expressed that residents often need to call enforcement to address cars parked illegally. In addition, since 2015, there have been at least 90 formal requests for parking regulation changes by the community. Examples of requests are provided below:

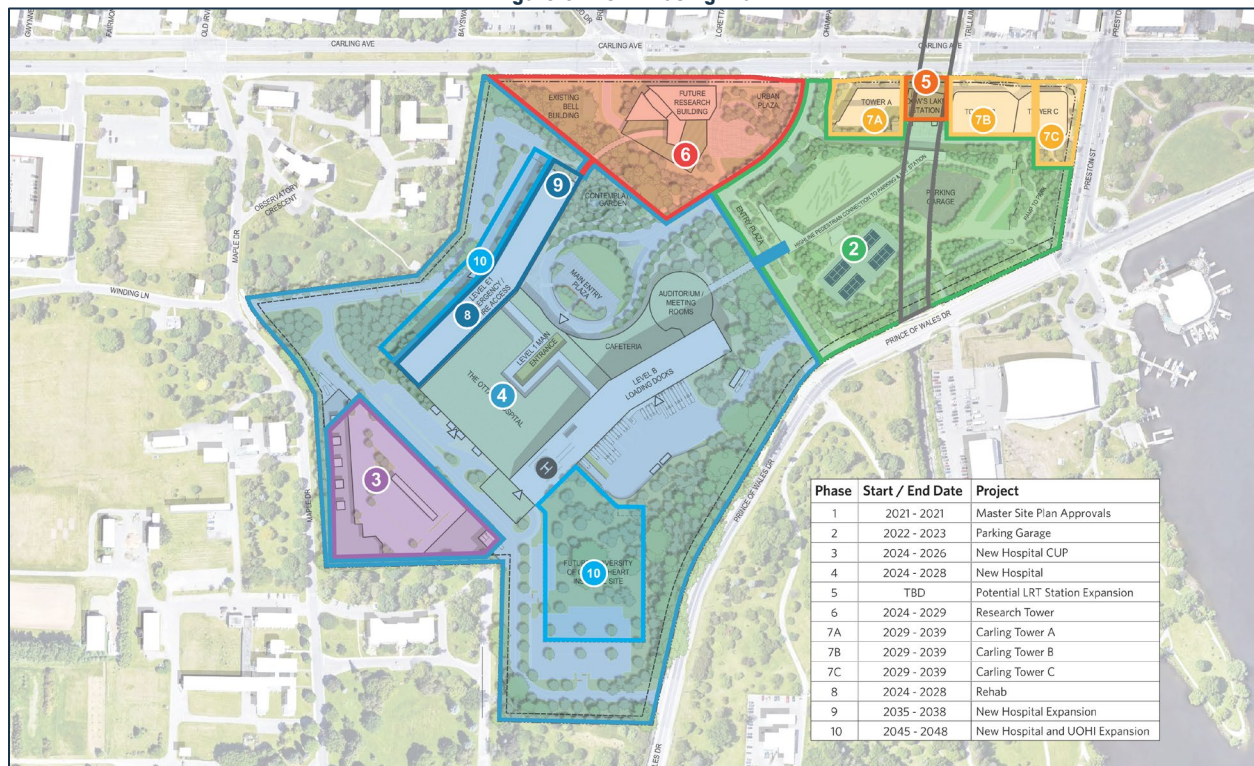
- Additional on-street parking restrictions (e.g. along Hickory Street and Kenilworth Street)
- Looser parking restrictions (e.g. along MacFarlane Avenue and Loretta Avenue)
- Stronger winter parking restrictions (e.g. along Fairmont Avenue and Sherwood Avenue)
- Relocation of signage (e.g. on Preston Street and Adeline Street)
- Corner restrictions (e.g. at Holland Avenue/Ruskin Street and Hamilton Avenue/Sherwood Avenue)
- Request for loading zones (e.g. along Champagne Avenue)

3.2 New Campus Development

3.2.1 Phasing and Impacts

The NCD phasing plan is illustrated in Figure 6. It is understood that the NCD will be constructed gradually over the coming decades.

Figure 6: NCD Phasing Plan



Source: Site Plan Control Drawings Package – Pre-consultation Draft (2021)

Opening day of NCD is expected by 2028, operating with approximately 5,000 (full-time equivalent) staff and approximately 640 patient beds with approximately 3,100 parking spaces, including an approximate 2,500 space parking garage to be constructed prior to opening day. However, it is important to note that the final number of parking spaces to be provided on-site may be refined/adjusted over the course of the site design process.

Full buildout of the NCD is expected by 2048, which will include the expansion of the west ‘arm’ for additional programs, as well as the construction of the University of Ottawa Heart Institute (UOHI) Tower. By this time, staff projections are expected to increase to approximately 9,950 (full time equivalent) with approximately 1,140 beds.

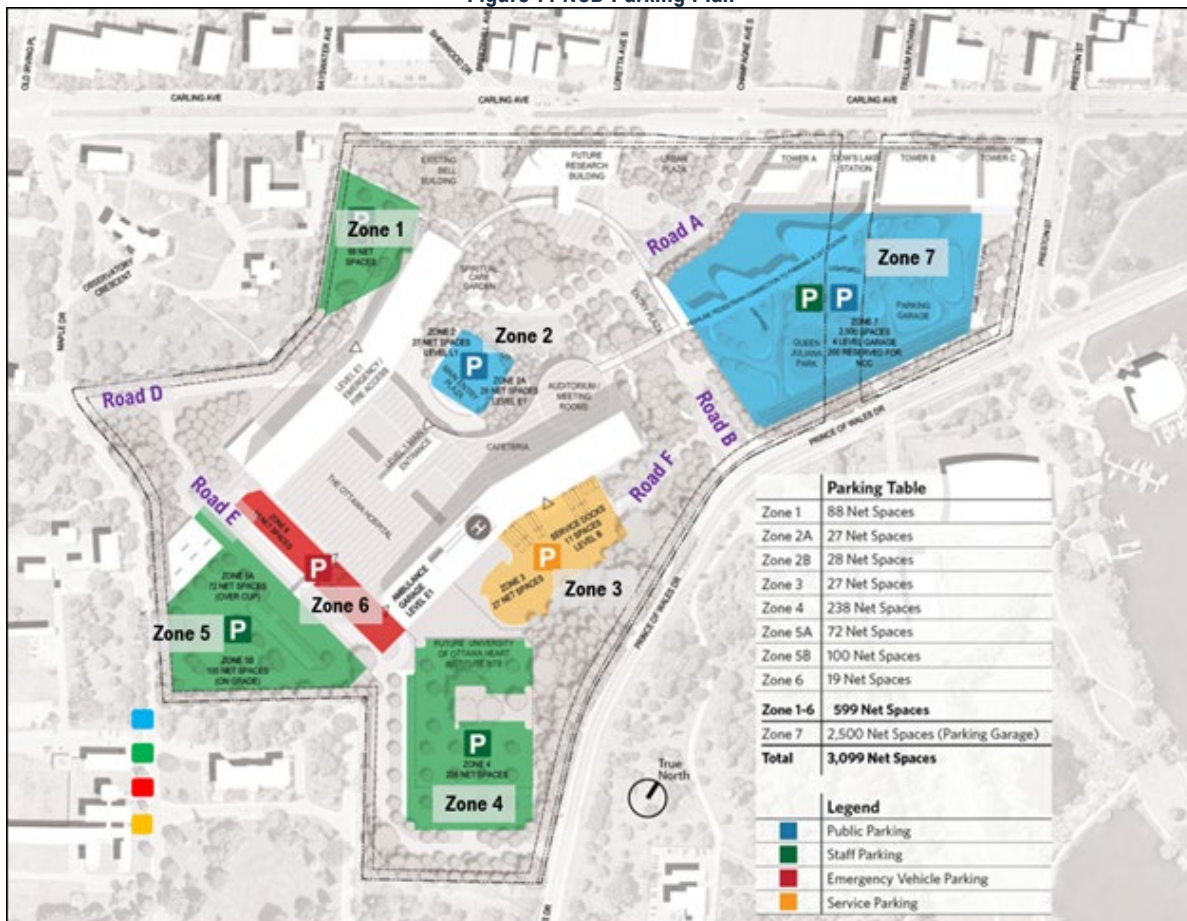
In addition to the main Hospital building, an adjoining development area referred to as the Life Science Park (formerly Carling Village) located at the northeast corner of the development site, will also be completed, serving as the active frontage of the parking garage. The Life Science Park is expected to consist of three towers comprised of ancillary research and development, commercial, and clinical uses, with direct access to Dow’s Lake LRT Station.

3.2.2 On-Campus Parking Plan

The NCD parking plan is illustrated in Figure 7. The parking garage (Zone 7) will be the first structure built between the years 2023-2024. During construction of the parking garage, up to 250 workers will be required to park onsite, for which space will be provided. Once complete, the main hospital building will begin construction, with the completed parking garage functioning as the main parking area for construction workers and 200 public parking spaces replacing the existing Dow’s Lake surface parking lot.

Ongoing discussions between TOH and the NCC continue to formalize the parking strategy for Dow’s Lake parking leading up to opening day. At this time, the parking lot west of Trillium Line off Champagne Avenue is planned to be designated as a short-term parking lot for Dow’s Lake during NCD parking garage construction. In the long-term, 200 spaces will be designated for Dow’s Lake parking in the new parking garage.

Figure 7: NCD Parking Plan



Source: NCD TIA and Mobility Study, July 2021

3.2.3 Opportunities for the NCD

The transportation environment in Ottawa has been changing over the past years. Many new options such as ride-hailing, bike-sharing, electric scooters, and the advent of Light Rail Transit are changing how people travel. In addition, the new OP and the on-going TMP Update are embracing new policies and tools to support a shift to more sustainable modes.

The proposed location of the NCD provides a significant opportunity in terms of transportation demand management. The surrounding area, particularly the Preston Corridor and Booth Street/Canada Lands Complex to the north, is experiencing an ongoing process of mixed-use development and intensification, which will allow even more people to live and work within walking or cycling distance of the NCD. In addition, the currently under-construction Dow's Lake LRT station and planned Carling bus-rapid transit line will add two high-order transit connections adjacent to the NCD. To help leverage these future facilities and services, TOH is preparing a comprehensive TDM Strategy that will define policies, programs, and measures for TOH to undertake to promote alternative modes of transportation and reduce single occupant vehicle travel at the NCD.

Due to these opportunities, the proposed parking supply provided at the NCD is similar to the parking supply at the existing Civic Campus, despite nearly three times the number of employees. The overall framework and long-term strategy describing how future mode share targets needed to match the proposed parking supply can be achieved are provided in the TDM Strategy.

3.2.4 Anticipated Challenges of NCD

TOH is taking a progressive approach to parking management, whereby they are committing to accommodating all parking on-site, without satellite parking, and not significantly increasing the parking supply above what is offered today despite a significant increase in the size of the campus and number of employees.

Although it is recognized that many of those seeking services at the hospital may need to drive or be driven to the NCD; additionally, many staff and other visitors of the existing Civic Campus are accustomed to travelling by car. The TDM Strategy's ultimate goal is to provide TOH with the tools and a plan to achieve the needed culture shift to reduce the reliance on the personal vehicle and generally change cultural expectations about how staff and visitors travel to/from the NCD. However, TOH acknowledges that a cultural shift will take time and may not be completely successful on opening day without early intervention. A robust off-site parking management strategy is essential to support the TDM Strategy, and ensure the surrounding communities are protected in the event that the target mode shares at the NCD take longer to be fully realized.

3.3 Parking Inventory

An inventory of the on-street and off-street parking supply was completed within the study area to develop an understanding of the current parking supply and utilization surrounding the existing Civic Campus, as well as the area surrounding the future NCD. The inventory included field surveys, desktop surveys, and a review of parking inventory data available in the Little Italy Local Area Parking Study (2015). Overall, the parking supply within the study area is comprised of the following:

- On-Street Parking (paid and unpaid)
- Municipally owned off-street parking lots (paid)
- Privately owned parking open to the public (paid)
- Privately owned parking reserved and not open to the public (e.g. employment, commercial or residential parking)

The data collection exercise focused on on-street parking (mostly unpaid), and parking open to the public (both municipally and privately owned). Private parking not open to the public was not surveyed.

3.3.1 On-Street Parking Inventory and Regulations

An inventory of the on-street parking supply and parking regulations within the study area was completed and is illustrated in Map 4. The following data was collected:

- Number and location of legal on-street parking spaces on different street segments.
- Any restrictions or requirements that apply to the on-street parking spaces, such as paid parking or time-limit restrictions, and the hours to which they apply.

To estimate the number of on-street parking spaces, the following formula typically used by the City of Ottawa was applied:

$$\text{Parking Spaces} = (\text{Length of segment} + 2\text{m}) / 6$$

It should be noted that the segment length above refers to the distance between side streets after it has been adjusted to account for 'No Parking' zones (based on the Traffic and Parking By-law) as follows:

- 3m where there is a fire hydrant
- 9m from stop-controlled intersections where parking not signed / 15m from stop-controlled intersections where parking signed
- 30m from signalized intersections

With regards to spacing between driveways, no parking is allowed 1.5m on either side of driveways. However, it was observed that in most cases, if there was enough space for a vehicle to park, they would park up to the edge of the driveways. While we recognize that parking within 1.5m of driveways is not permitted, our field observations showed that this is commonly done. As such, we've chosen to acknowledge that supply for the purposes of this study. We acknowledge that this might result in a slight over-estimation of spaces over the preferred city method.

It is important to highlight that the inventory completed in this study aims to provide a high-level estimate of on-street parking supply only.

Based on the above, the approximate number of available on-street parking spaces within the study area (including evening parking spaces) was estimated to be:

- Approximately 2,600 spaces open between April 1 to November 30th.
- Approximately 2,300 spaces open between December 1 to March 31 (due to winter parking restrictions).

In terms of parking restrictions, a summary of the different types of parking restrictions within the surrounding community associations is provided in Table 2, while associated areas are illustrated in Map 5.

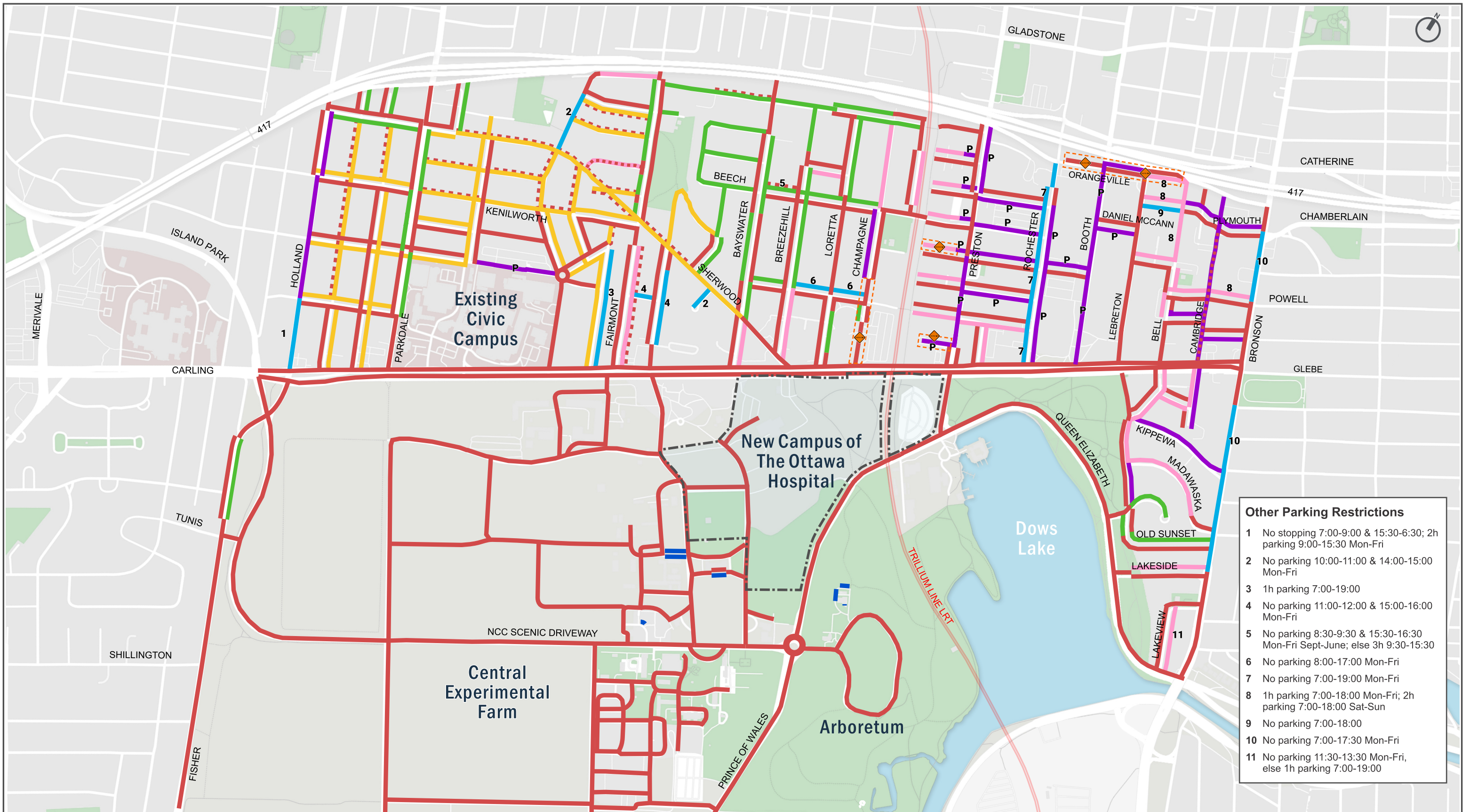
Table 2: On-Street Parking Inventory by Type of Parking (evenings, without winter restrictions)

Zone	1-Hour Parking	2-Hour Parking	3-Hour Parking	Evening Parking Only	Total Evenings
Civic Hospital Neighbourhood Association- West of Fairmont	56	136	133	682	1007
Civic Hospital Neighbourhood Association- East of Fairmont	102	24	389	151	666
Dalhousie Community Association	178	220 ¹	0	0	398
Glebe Annex Community Association	73	113	0	23	209
Dow's Lake Residents Association	145	69	26	57	297
Total	554	562	548	913	2577

¹ Majority of parking is paid.

The following primary observations regarding parking restrictions within the surrounding communities were made:

- The Civic Hospital Neighbourhood Association:
 - The area surrounding the current Civic Campus (generally west of Fairmont Avenue) is highly restricted, with parking prohibited weekdays from 09:00-17:00 on approximately 70% of all on-street parking spaces.
 - The area further east of the existing Civic Campus and directly north of the future NCD site (generally bounded by Fairmont Avenue to the west, the Trillium Line LRT to the east, Highway 417 to the north, and Carling Avenue to the south) has a relatively high availability of free 3-hr parking (mostly default parking regulations, with the exception of Parkdale Avenue which is signed as 3-hr parking). Overall, default parking regulations / free 3-hr parking account for approximately 60% of all on-street parking spaces.
 - Parking in the community is unpaid, except for the segment of Ruskin Street along the existing Civic Campus frontage.
 - A Residential Parking Permit zone exists between Bayswater Avenue and the Trillium Line LRT, in addition to a single block bounded by Holland Avenue, Ruskin Street, Hinton Avenue, and Inglewood Place (refer to Figure 4).
- Dalhousie Community Association (south of Highway 417):
 - There is generally an even mix of 2-hr paid parking and 1-hr free parking within the study area.
 - The area within or immediately surrounding Little Italy is mostly 2-hr paid parking, with 1-hr free parking available (mostly west of Preston Street and south of Adeline Street).
 - There are generally no Residential Parking Permit zones within the area, except for the section east of Booth Street, which is just a block before the start of the Glebe Annex Community (refer to Figure 4).
- Glebe Annex Community Association:
 - Over 50% of on-street parking within the area is 2-hr free parking, followed by 1-hr free parking and some evening only parking.
 - The area is fully covered by a Residential Parking Permit zone (refer to Figure 4).



Other Parking Restrictions

- No stopping 7:00-9:00 & 15:30-6:30; 2h parking 9:00-15:30 Mon-Fri
- No parking 10:00-11:00 & 14:00-15:00 Mon-Fri
- 1h parking 7:00-19:00
- No parking 11:00-12:00 & 15:00-16:00 Mon-Fri
- No parking 8:30-9:30 & 15:30-16:30 Mon-Fri Sept-June; else 3h 9:30-15:30
- No parking 8:00-17:00 Mon-Fri
- No parking 7:00-19:00 Mon-Fri
- 1h parking 7:00-18:00 Mon-Fri; 2h parking 7:00-18:00 Sat-Sun
- No parking 7:00-18:00
- No parking 7:00-17:30 Mon-Fri
- No parking 11:30-13:30 Mon-Fri, else 1h parking 7:00-19:00

Weekday Parking Regulations

- No Parking Allowed Anytime
- 1-Hr Parking
- 1.5-Hr Parking
- 2-Hr Parking
- 3-Hr Parking
- No Parking Allowed Weekday 9 am - 5 pm
- Other Parking Restrictions

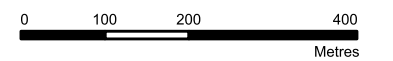
- - - Seasonal Parking Ban
- P Construction Zone (As per existing parking)
- P** Paid Parking
- #** Accompanying Photo Reference Number (see insert table)

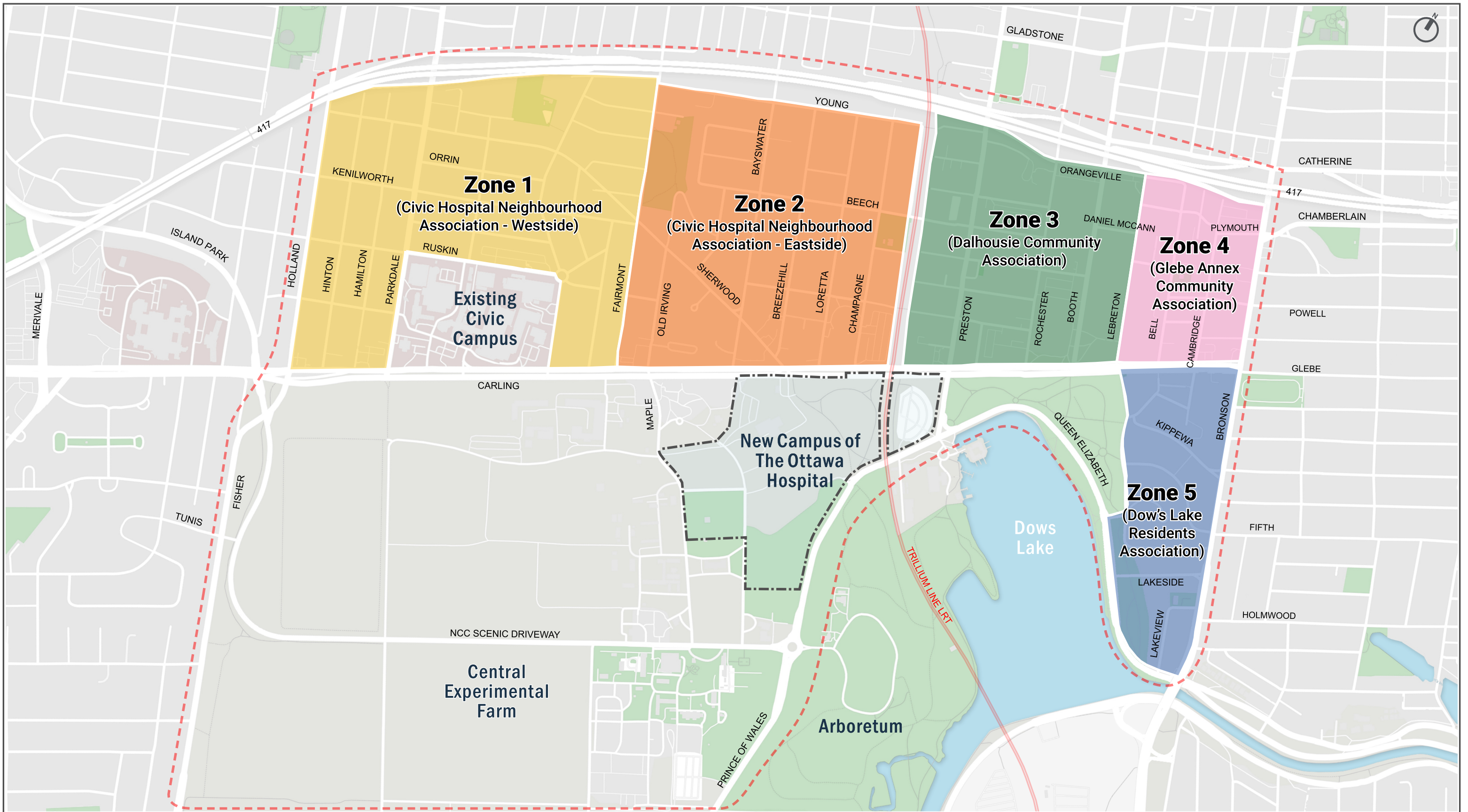
Notes:


- General Parking Regulations - Whether Signs Have Been Erected or Not*
- Cannot exceed three (3) hours, Monday to Friday, between 7:00 a.m. and 7:00 p.m.
 - Cannot exceed six (6) hours on weekends and statutory holidays, between 7:00 a.m. and 7:00 p.m.

New Campus Development for The Ottawa Hospital
Off-Site Parking Strategy

Map 4: Existing On-Street Parking Inventory and Weekday Parking Regulations
Final - July 2023





 Study Boundary	Zone 1	Inclusive to Holland and Fairmont
	Zone 2	Non inclusive of Fairmont
	Zone 3	Inclusive of neighbouring streets
	Zone 4	Non inclusive of Lebreton
	Zone 5	Inclusive of neighbouring streets

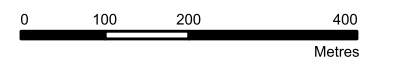
Notes:

- 1) Parking supply totals were estimated using a City of Ottawa formula.
- 2) Parking supply totals are based on parking regulations between 9am to 5pm. Outside these hours the parking supply total increase to approximately 2890, reflecting an additional 1075 parking spaces.

New Campus Development for The Ottawa Hospital
Off-Site Parking Strategy

Map 5: On-Street Parking Inventory by Community Association

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- The Dow's Lake Residents Association:
 - This area provides a combination of 1, 2 and 3-hr free parking, in addition to some evening only parking. Approximately 50% of all on-street parking in the area is restricted to 1-hr free parking.
 - A Residential Parking Permit zone does not exist in the area.

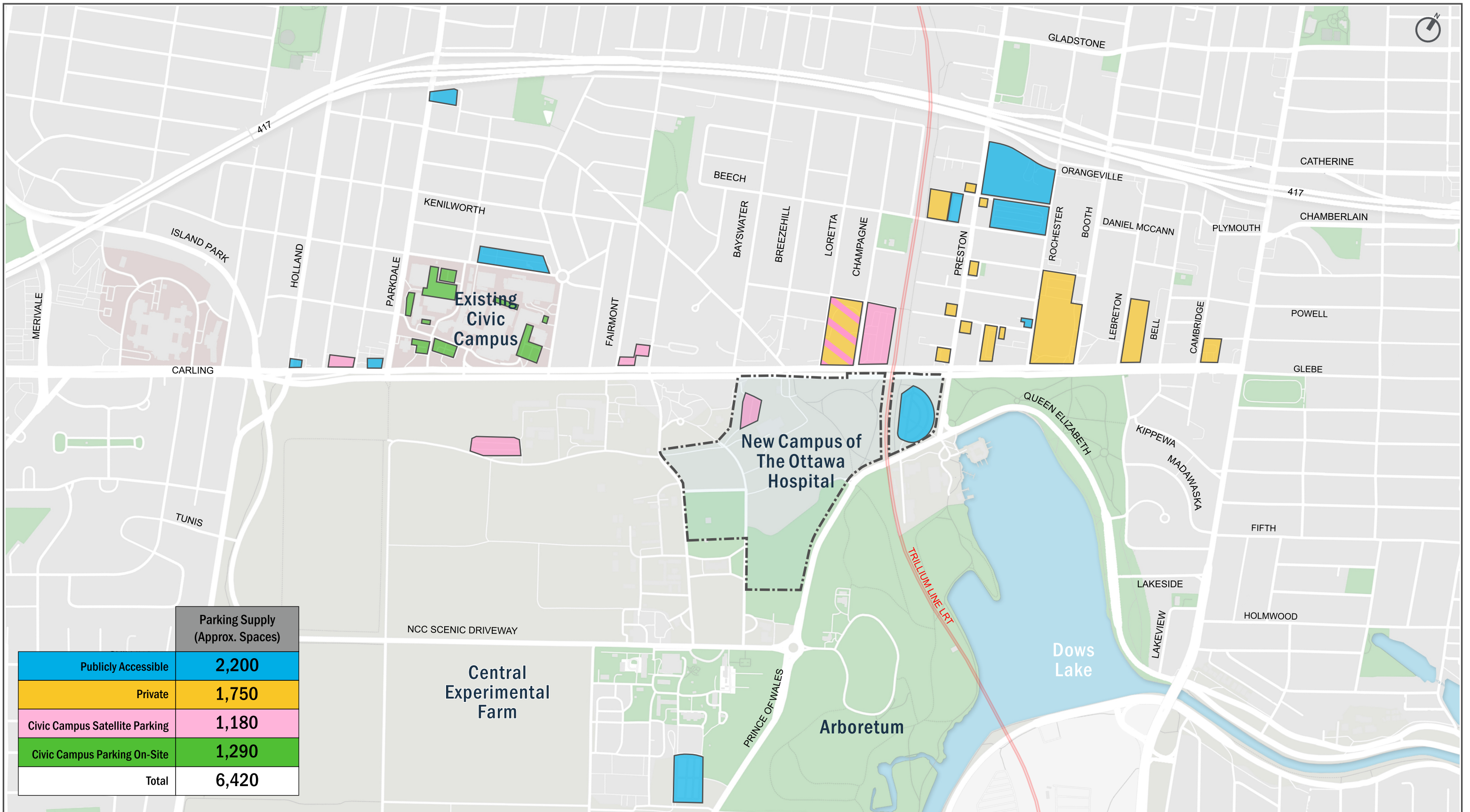
3.3.2 Off-Street Parking Supply

The off-street parking supply was informed by the Little Italy Local Area Parking Study, information requests to private parking operators, site visits, and online searches in the summer of 2022. Off-street residential parking was not included in the inventory. The current off-street parking lots and total number of parking spaces within the study area are illustrated in Map 6. There are currently a total of approximately 6,420 off-street parking spaces available within the study area. These spaces are allocated as follows:

- 2,200 publicly available parking
- 1,750 private parking
- 1,290 Civic campus – onsite
- 1,180 Civic campus – satellite

The following considerations related to the future off-street parking supply are noted:

- As not all programs at the existing Civic Campus will move to the NCD in 2028, there will continue to be parking demand, albeit to a lesser degree, related to these uses.
- Long-term plans for the existing Civic Campus are not known at this time. As such, it is important to note that any redevelopment plans, beyond a medical related facility, at the existing Civic Campus would trigger a Zoning By-law amendment and Site Plan Control application, in which the applicant would be required to assess parking implications related to the proposed development.
- The existing Civic Campus satellite parking lease agreements will not be renewed.
- Several of the existing parking lots in the adjacent communities are expected to be redeveloped, the majority being private parking lots not open to the public.
- Although some parking will likely be replenished, the net total number of off-street parking spaces within the study area will likely decrease in time. Further details regarding known changes to future parking supply in the area are provided in Section 3.5.2.



LEGEND

--- Study Boundary

Notes:

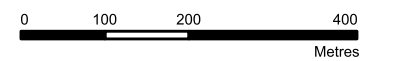
- 1) Parking supply estimates based on information collected in 2022.
- 2) Off-Street parking supply as of August 2022, however the number and location may change in the future as development progress within the study area.
- 3) Based on available information, there will be approximately 200 publicly accessible spaces removed as part of future development in the area.

New Campus Development for The Ottawa Hospital

Off-Site Parking Strategy

Map 6: Existing Off-Street Parking Supply

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3.4 Parking Utilization

3.4.1 On-Street Parking Demand

On-street parking occupancy data were collected within the study area on various weekdays and weekend days in April, May, and August of 2022. We acknowledge that despite the fact that the occupancy survey was completed after COVID-19 mandates were lifted, there is expected to be less activity around the hospital and adjacent land uses due to lingering COVID-19 effects. As such, the data likely under-represents typical summer pre-pandemic conditions.

In general, the occupancy survey aimed to better understand the parking occupancy patterns within the following areas:

- Streets surrounding the existing Civic Campus: to better understand current on-street parking conditions surrounding the existing hospital location.
- Streets surrounding the NCD that are considered most susceptible to spillover: to assess whether “excess capacity” is available. Unrestricted / unpaid streets with excess capacity will be particularly susceptible to parking spillover.

It is noted that the following areas were not surveyed:

- The area bounded by the Trillium Line LRT to the west, Bell Street to the east, Highway 417 to the north and Carling Avenue to the south, as this area is mostly paid parking and was surveyed in the February 2015 Little Italy Local Area Parking Study.
- Streets within the Glebe Annex Community (i.e. between Lebreton Street to the west, Bronson Avenue to the east, Highway 417 to the north and Carling Avenue to the south), as they were not considered at a high risk of spillover due to the relatively long walking distance to the NCD (approximately 15 to 20min walking distance) and the need to cross Carling Avenue.

Despite the fact that the Dow’s Lake community is also an approximate 15 to 20min walking distance to the NCD site, the community was surveyed due to concerns raised by the DLRA, noting that the pleasant walking experience through Commissioners Park may encourage parking spillover by some NCD visitors and staff.

For weekday surveys, observations were made at the following four time-intervals on a typical Tuesday, Wednesday, or Thursday:

- 10:00 – 11:00
- 12:00 – 13:00
- 14:00 – 15:00
- 18:30 – 19:30

For weekend surveys, observations were made at the following three time-intervals on a typical Saturday or Sunday:

- 10:00 – 11:00
- 16:00 – 17:00
- 19:00 – 20:00

It is noted that no major or special events occurred during the survey days, and for all days, the surveys were completed on sunny days or at least days with no precipitation, to best represent typical spring/summer conditions. The only special event observed was church services on Sundays. The occupancy rates were estimated by observing the number of parked vehicles along different street segments and visually estimating the percent of parking

utilization. It is important to highlight that the purpose of this survey was not to obtain precise occupancy ratios, but rather to provide estimates within different ranges of occupancy.

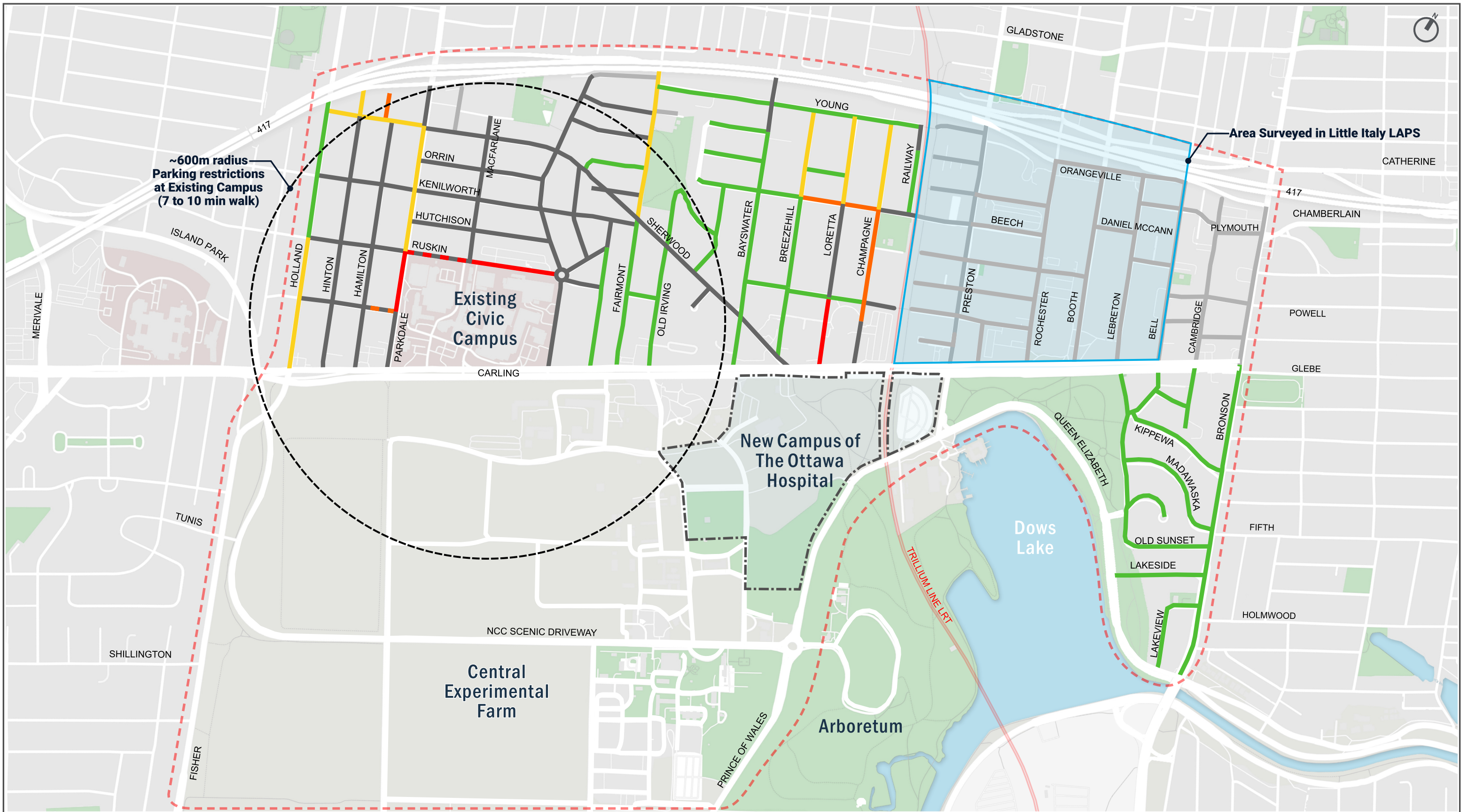
Overall, the highest occupancy rates were observed during weekday mid-mornings and evenings, and weekend late afternoons. Map 7, Map 8 and Map 9 illustrate the on-street occupancy survey results for these time periods, respectively. Detailed on-street parking survey results for these and the remaining time periods surveyed are provided in Appendix A. The parking occupancy maps from the Little Italy Local Area Parking Study (2015) are provided in Appendix B. Key observations from the weekday mid-morning and evening surveys are provided below:

Streets generally surrounding the existing Civic Campus (Holland Avenue to Fairmont Avenue):

- During mid-morning weekday hours, most streets surrounding the existing Civic Campus where parking is permitted (e.g. Holland Avenue, Sherwood Avenue west of Parkdale Avenue and the small dead-end streets north of Sherwood Avenue) were 40% to 60% occupied.
- Segments of Ruskin Street and Parkdale Avenue along the existing Civic Campus frontage were highly utilized, with over 80% occupancy.
- During evenings, the occupancy on most streets surrounding the existing Civic Campus was less than 40%. However, a somewhat higher occupancy was observed on streets closer to the Campus.
- For streets where 'No Parking' restrictions were in effect, illegally parked vehicles were rarely observed. Where illegally parked cars were observed, the surveyor completed an additional walk-through to determine whether these vehicles had Accessible Parking Permits that would permit parking. It was often observed that vehicles without a valid parking permit had received a parking ticket, suggesting that parking enforcement is quite active in this area.

Streets generally surrounding the NCD (Fairmont Avenue to LeBreton Street, and the DLRA):

- Streets between Fairmont Avenue and Preston Street (immediately north of the NCD), which are unpaid parking, were generally observed to be less than 40% occupied; the following streets were noted to have higher occupancy rates:
 - Segments of Champagne Avenue and Beech Street are 60% to 80% occupied during weekday mid-mornings, while Loretta Avenue south of Hickory Street is over 80% occupied.
 - Segments of Champagne Avenue, Beech Street and Hickory Street were observed to have occupancies over 80% during weekday evenings.
- The utilization survey as part of the 2015 Little Italy Local Area Parking Study indicated that on-street parking spaces between Preston Street and Bell Street were highly utilized, especially during evenings. The 1-hr free parking spaces west of Preston Street were also well occupied during evenings and weekends, with occupancy rates over 85% observed. However, these streets were also found to have lower occupancies during weekday mornings, and a mix of high (over 85%) and moderate (between 50% and 85%) occupancies in the early and mid- afternoon.
- Streets within the Dow's Lake community were generally observed to be less than 40% occupied during weekday mid-mornings and evenings, with the exception of 2 and 3-hr free parking streets adjacent to Commissioner's Park (e.g. Old Sunset Boulevard) during weekday evenings.
- It was observed that outside the Little Italy area, 1-hr free parking streets within the study area were under-utilized compared to 2-hr and 3-hr free parking.



~600m radius
Parking restrictions
at Existing Campus
(7 to 10 min walk)

Area Surveyed in Little Italy LAPS

Existing
Civic
Campus

New Campus of
The Ottawa
Hospital

Central
Experimental
Farm

Arboretum

Dows
Lake

LEGEND

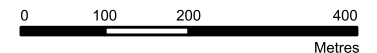
- - - Study Boundary
- Not surveyed
- < 40%
- 40% - 60%
- 61% - 80%
- > 80%
- Parking Restricted
- Parking restricted, however patrons holding a valid disability pass allowed to park for 4 hours

New Campus Development for The Ottawa Hospital

Off-Site Parking Strategy

Map 7: Existing On-Street Parking Utilization (Weekday 10:00am)

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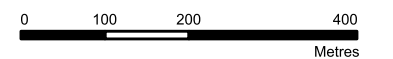
LEGEND

- - - Study Boundary
- Not surveyed
- < 40%
- 61% - 80%
- 40% - 60%
- > 80%
- Parking Restricted

New Campus Development for The Ottawa Hospital
 Off-Site Parking Strategy

Map 8: Existing On-Street Parking Utilization (Weekday 6:30pm)

Final - July 2023





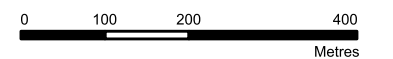
LEGEND

- - - Study Boundary
- Not surveyed
- < 40%
- 40% - 60%
- 61% - 80%
- > 80%
- Parking Restricted

New Campus Development for The Ottawa Hospital
 Off-Site Parking Strategy

Map 9: Existing On-Street Parking Utilization (Weekend 4:00pm)

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- Overall, the results of the survey indicate that there is excess on-street parking capacity on streets surrounding the NCD. It is noted that 3-hr on-street parking spaces represent approximately 15% of the on-street parking supply surrounding the NCD, while 2-hr parking represents approximately 25%, and 1-hr parking represents approximately 15%.

3.4.2 Off-Street Parking Demand

In addition to on-street parking, off-street parking demand was surveyed at key locations. The main off-street parking lots within the study area were surveyed during weekday hours. Although the underground parking garage at Preston Square was not surveyed, the facility was visited in June 2022 and information regarding historical parking demand was obtained from the building’s Parking Manager. The current Civic Campus satellite parking lots used for staff parking were also surveyed.

A summary of off-street parking utilization results for public parking lots and satellite Civic Campus parking are provided in Table 3 and Table 4, respectively. Occupancies that exceed 80% are highlighted in red.

Table 3: Off-Street Parking Lots Surveyed – Paid Public

Municipal Address	Number of Spaces	Approximate Percentage of Occupancy Observed by Time of Day			
		10:00-11:00	12:00-13:00	14:00-15:00	18:30-19:30
45 Ruskin (adjacent to Civic Hospital)	242	95%	95%	95%	75%
80 Aberdeen (Little Italy)	46	50%	50%	50%	-
450 Rochester (Little Italy)	300	50%	50%	40%	5%
520 Preston (Future NCD Site)	200	15%	50%	25%	60%
250 City Centre (near Bayview Station)	400	30%	50%	30%	50%

Table 4: Off-Street Parking Lots Surveyed – Hospital Staff Satellite Lots

Municipal Address	Number of Satellite Spaces	Approximate Percentage of Occupancy Observed by Time of Day			
		10:00-11:00	12:00-13:00	14:00-15:00	18:30-19:30
3533 Carling (near Heli-pad)	40	40%	40%	30%	20%
991 Carling (near Old Irving)	72	95%	80%	60%	5%
Former Sir John Carling Lot	110	10%	10%	5%	0%
855 Carling (near Carling LRT Station)	389	90%	75%	70%	5%
580 Booth (Booth St. Offices)	145	20%	30%	25%	5%
265 Carling (near Bronson)	58	25%	25%	25%	<5%

As shown in Table 3, the majority of off-street public parking lot in the study area generally have excess parking capacity at most time periods. The main exception is the 45 Ruskin Street parking lot directly adjacent to the Civic Campus. The high occupancy at the 45 Ruskin Street parking lot during the 09:00-17:00 time period was noted to decrease during evenings when free on-street parking is available. This is consistent with information provided by TOH staff.

Table 4 shows that the main satellite parking lot at 855 Carling (near the LRT station) is highly utilized, in addition to the 72-space parking lot at 991 Carling. Although the remaining staff satellite parking spaces are observed to be under-utilized, TOH staff had stated that the current hospital employee parking demand is 65% of the total pre-pandemic parking demand.

The Preston Square Parking Garage (333 Preston Street) was not surveyed on an hourly basis as the garage is located underground within a private building. The project team completed a site tour and spoke with the building Parking Manager, who has been overseeing parking activities at this location since its construction. The parking garage has approximately 1,040 parking spaces (approximately 800 for public use), which is anticipated to be reduced to approximately 950 spaces to accommodate a new residential tower being proposed. The timing for this construction is not known at this time. The Parking Manager disclosed that on a regular basis, the lot rarely exceeds 50% of its capacity. It was also noted that monthly parking permits at the facility have been removed, as most office workers are now following a hybrid work schedule (1-3 days per week in the office).

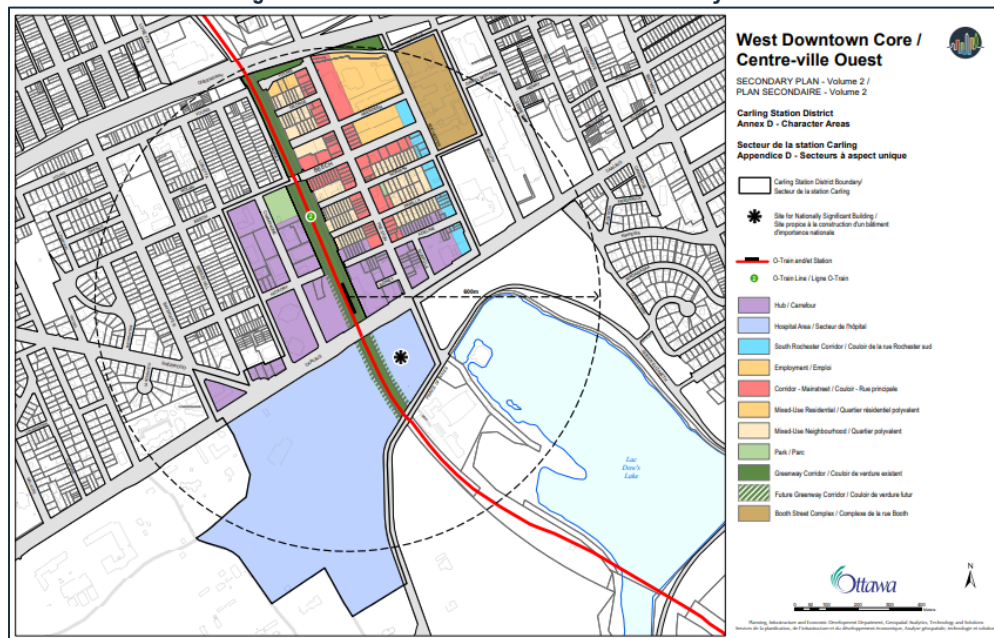
Overall, the underutilized off-street parking supply within the study area, particularly at the Preston Square Parking Garage, may present an opportunity for TOH to leverage temporary/short-term leasing agreements if the future on-site parking supply is insufficient to accommodate parking demands at the NCD.

3.5 Additional Area Changes

3.5.1 West Downtown Core Secondary Plan (2021)

The West Downtown Core District is a place with a unique history, people, and culture, surrounded by federal government facilities, family-friendly neighbourhoods, and an abundant supply of beautiful open spaces. The West Downtown Core Secondary Plan provides policy guidelines for public and private development within the district. The district includes the lands bounded by Beech Street and Highway 417 to the north, Rochester Street to the east, Carling Avenue and Prince of Wales Drive to the south and Loretta Avenue and the Trillium Line LRT to the west, as illustrated in Figure 8. The Secondary Plan outlines a vision for area intensification, centred on Dow's Lake LRT Station, in addition to the significant development already underway.

Figure 8: West Downtown Core District Secondary Plan



Source: City of Ottawa: West Downtown Core Secondary Plan – Volume 2, Annex D (Carling Station District)

The Preston Carling Public Realm and Mobility Study (2014) identifies the potential for 15 new condominiums (ranging from 15 to 40 stories) to be constructed within the study area. There are also seven (7) new condominiums (ranging from 25-30 stories) planned just outside the study area to the west of the O-Train LRT corridor.

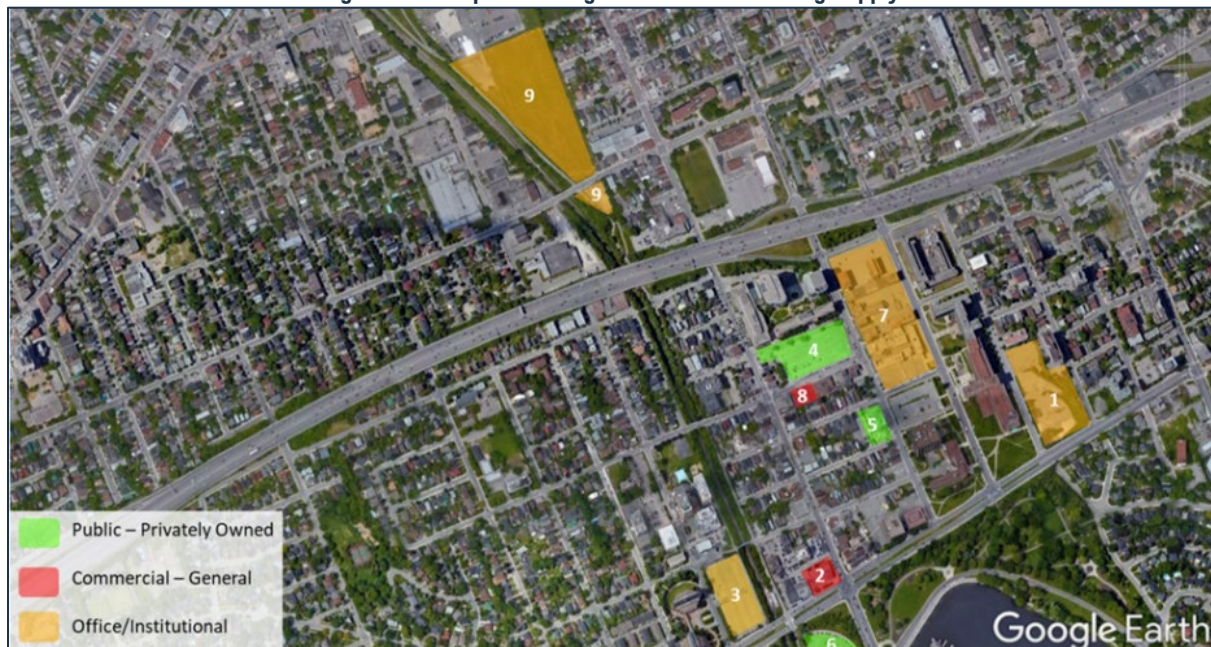
A description of known future developments within a 600m radius from all corners of the future NCD was provided in the TIA Addendum #2. It is noted that the majority of these developments are considered transit-oriented developments where the majority of travel generated by the new developments is anticipated to be by transit and active travel, but some growth in vehicle traffic volumes is still anticipated within the study area.

3.5.2 Known Changes to Future Parking Supply

Several planned development projects within the study area are expected to replace existing surface parking lots. These have been illustrated in

Figure 9 and further summarized below.

Figure 9: Anticipated Changes to Off-Street Parking Supply



1. **299 Carling Avenue (Canada Lands):** Approximately 320 space parking lot, previously used by nearby government buildings, is currently closed for future development. Canada Lands proposes that the new development will have a lower number of parking spaces, with most being located underground. In addition, parking will be allocated to residents, with some parking allocated to visitors of commercial uses on site. (Note: not shown on Existing Off-Street Parking Supply Map).
2. **829 Carling Avenue:** Approximately 20 parking spaces will be removed by proposed Icon Tower.
3. **855 Carling Avenue:** Approximately 390 parking spaces will be removed for future developments at this location.
4. **450 Rochester Street:** Approximately 300 parking spaces will be removed, however 220 public parking spaces will be provided for the new development, resulting in a net loss of approximately 80 spaces.
5. **516 Rochester Street:** Approximately 60 parking spaces were removed by Nuovo Development. (Note: not shown on Existing Off-Street Parking Supply Map).

6. **520 Preston Street (Dow's Lake Parking):** Approximately 200 public parking spaces will be removed and replenished by the NCD within the new Parkade.
7. **552 Booth Street (Booth Street Complex):** Approximately 450 existing parking spaces closed. The future parking supply within the Booth Street Complex is yet to be determined.
8. **70 Beech Street:** Approximately 20 parking spaces will be removed by the construction of a 6-storey building.
9. **933 Gladstone Avenue:** Approximately 130 parking spaces will be removed as part of the Gladstone Village Development.



It is noted that the majority of parking spaces that will be removed within the study area are private parking spaces that were not open to the public. Based on the available information, the net loss to public parking within the study area is estimated to be in the order of 150 parking spaces. Thus, the total parking supply open to the public will decrease from 2,200 spaces to 2,050 spaces.

3.5.3 Future Changes to Transit Service

Notable changes in future transit service within the study area, as defined by Schedule C2 (Transit Network – Ultimate) of the City of Ottawa Official Plan (2021) are summarized below:

- Transit Priority Corridors (specific measures to be confirmed through the ongoing Transportation Master Plan update) on Holland Avenue/Fisher Avenue, and Bronson Avenue.
- O-Train (with at-grade crossings) on Carling Avenue between Dow's Lake LRT Station and the Lincoln Fields LRT Station in the west.

Notable changes in future transit service within the study area, as identified in the 2013 TMP, are summarized below:

- Transit Priority Corridor (continuous lanes) along Carling Avenue between the Dow's Lake LRT Station and the Lincoln Fields LRT Station to the west.
- Transit Priority (isolated measures) along Bronson Avenue from Heron Road to Carling Avenue and along Carling Avenue between Bronson Avenue and Dow's Lake Station.
- Expansion of city's LRT system, termed the Stage 2 LRT project. The Trillium Line is currently undergoing modifications at existing stations (including Carling Station which will be renamed to Dow's Lake Station), construction of new stations, and extension of the line south adding 16 km of rail track. The Trillium Line modifications are expected to be completed by 2023.
- The Confederation Line is also being expanded in both the east and west directions, to include 15 km of additional rail and 11 new stations to the west and 12 km of additional rail and 5 new stations to the east, anticipated to be operational by the year 2025 and 2024 respectively.

As the quality of transit service within the study area improves, the reliance on the personal vehicle is expected to decrease, which in turn should reduce vehicle parking demand in areas surrounding these transit nodes.

3.6 Potentially Impacted Streets

The City of Ottawa Official Plan defines walking distances as follows (see Figure 10):

- 5 minutes to be equivalent to a radius of 300m, or 400m on the pedestrian network;
- 10 minutes to be equivalent to a radius of 600m, or 800m on the pedestrian network; and
- 15 minutes to be equivalent to a radius of 900m or 1,200m on the pedestrian network.

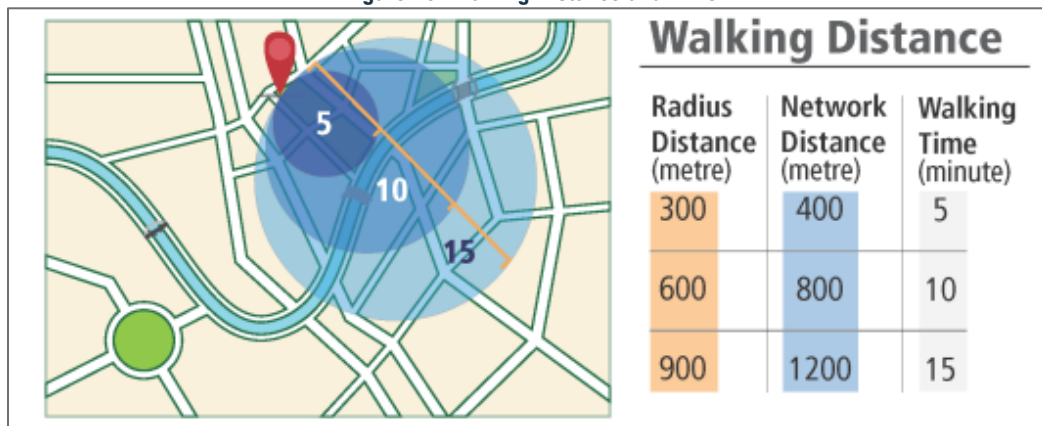
In general, a reasonable walking distance for parkers visiting a commercial area is defined as 5-minutes, or a 400m pedestrian network distance. It is noted that the City of Ottawa aims to have all residential households within a 400m distance of a transit stop. However, employees or visitors to institutional developments may be willing to walk longer distances. This is apparent from a review of current restrictions surrounding similar campuses in Ottawa, which shows that the majority of comparable institutional developments have parking restrictions roughly within a 600m to 800m radius of the development.

Although it is difficult to predict parking patterns at the NCD, hospital visitors and employees were generally considered unlikely to park more than a 15-minute walk distance (approximately 900m radius distance). In comparison, the radius distance from the NCD main entrance to the LRT station platform is approximately 480m.

The general areas within a 15-minute walking distance to the NCD are listed below:

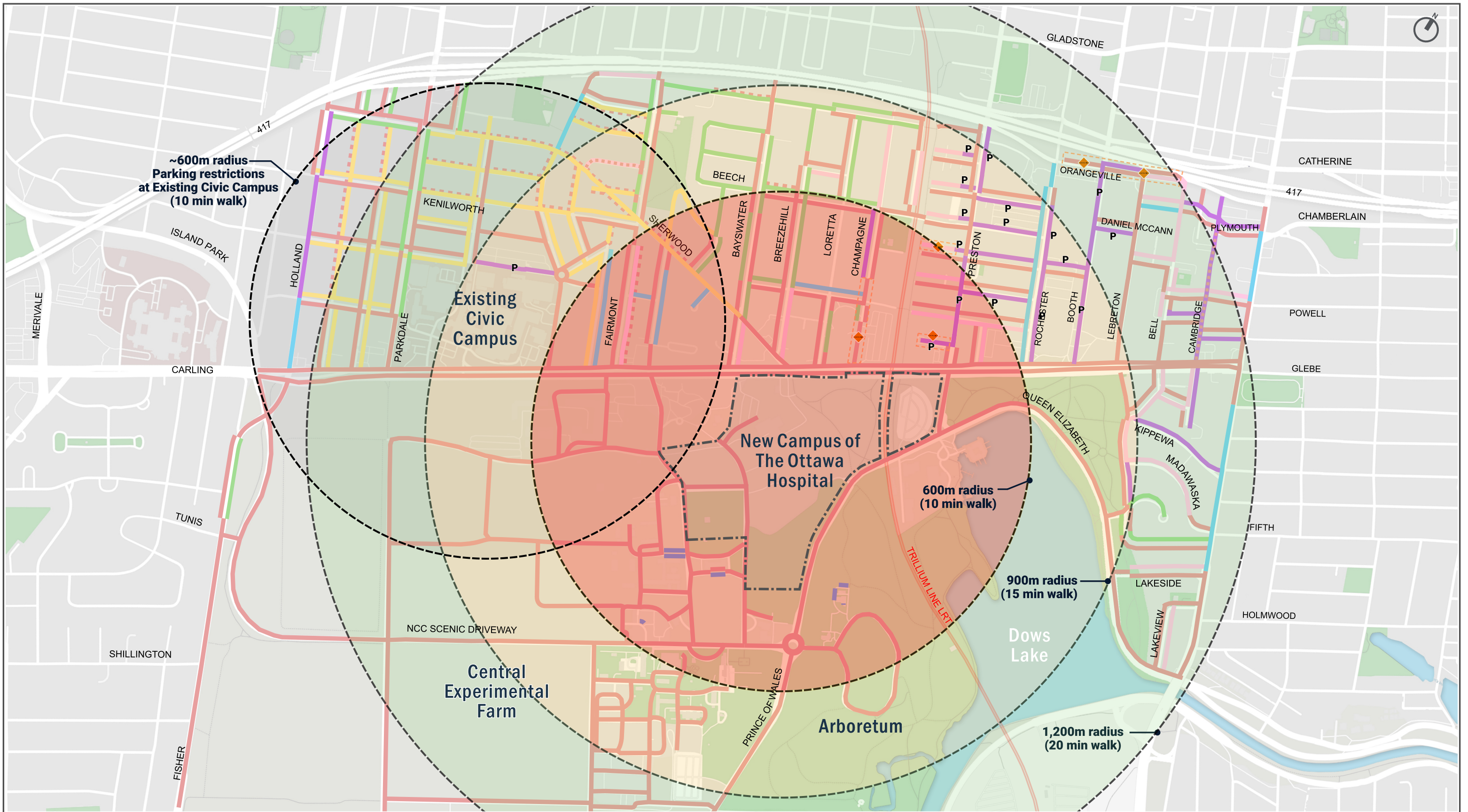
- Civic Hospital Neighbourhood Association streets - area bounded by MacFarlane Avenue to the west, Trillium Line RT to the east, Highway 417 to the north, and Carling Avenue to the south.
- Dalhousie Community Association streets - bounded by Trillium Line LRT to the west, Lebreton Street to the east, Highway 417 to the north, and Carling Avenue to the south.
- Dow's Lake Road within the Down's Lake Community.

Figure 10: Walking Distance and Time



Source: Figure 11 of the Ottawa Official Plan (2021)

Map 10 illustrates the 600m, 900m and 1,200m radius distances from the NCD main entrance, in addition to a 600m radius distance from the existing campus. In general, streets within the 900m radius distance are considered to be most susceptible to spillover, although further streets may also be susceptible.



LEGEND

Weekday Parking Regulations

- No Parking Allowed Anytime
- 1-Hr Parking
- 1.5-Hr Parking
- 2-Hr Parking
- 3-Hr Parking
- No Parking Allowed Weekday 9 am - 5 pm
- Other Parking Restrictions
- P** Paid Parking

Parking Spillover Risk

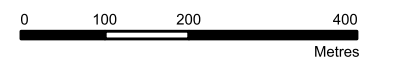
- ■ ■
- High → Low
- *Walking speed range - 1.1m/s to 1.3m/s

New Campus Development for The Ottawa Hospital

Off-Site Parking Strategy

Map 10: Walking Distance Map

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4.0 OFF-SITE PARKING TOOLKIT

4.1 What is Parking Management?

Although increasing the supply of on-site parking generally reduces parking congestion and spillover problems, it can also exacerbate most other transportation challenges. As the study area is attracting significant new development, it is also important that developments in the area balance between parking needs and providing too much parking that promotes auto dependency and hinders sustainability.

According to the Victoria Transport Policy Institute TDM Encyclopedia³, parking management includes “a variety of strategies that encourage more efficient use of existing parking facilities, improve the quality of service provided to parking facility users and improve parking facility design.” On-site parking management strategies are addressed in the NCD TDM Strategy.

The OPS Strategy works in tandem with the TDM Strategy by providing methodologies to mitigate potential impacts to on-street parking surrounding the NCD. The primary goal is to ensure parking demand can be accommodated onsite, and any supply constraints can be addressed with additional or more robust TDM measures.

On-street parking management aims to ensure that on-street parking is used efficiently and is consistent with the wider goals for the street, area, and transportation system. Wider parking management goals supporting a shift to sustainable travel modes are addressed in the TDM Strategy. In general, parking management tools used to address spillover include influencing where parking is permitted, limiting access to certain groups, setting time limits, charging fees, enforcing compliance and monitoring.

4.2 Best Practices

4.2.1 Resources

As part of this study, a review of best practices was completed to identify potential strategies for managing parking spillover near the NCD. Key resources included:

- A review of similar campuses in Ottawa (following section)
- Victoria Transport Policy Institute TDM Encyclopedia – Parking Solutions (Updated 2017)
- Victoria Transport Policy Institute TDM Encyclopedia – Parking Management Comprehensive Implementation Guide (2022)
- San Diego Association of Governments (SANDAG) Regional Parking Management Toolbox (2021)

4.2.2 Similar Campuses in Ottawa

The City of Ottawa deploys various methods to manage parking spillover from large institutions such as full parking restrictions, partial parking restrictions during regular work hours, lower time limits, paid parking, and enforcement.

A review of similar hospital campuses and large institutions across the city showed that in general, most streets within approximately 600 to 800m from the development have some type of parking restriction (e.g. full restrictions, time of day restrictions, and 1-hr time limits). Many locations were also noted to provide some free on-street parking in areas where residential streets would not be impacted. This information was mostly gathered through a desktop review using historical observations from Google Maps/Streetview, in addition to anecdotal observations provided by TOH staff and City of Ottawa staff. Further details are provided in Appendix C.

³ <https://www.vtppi.org/tdm/tdm28.htm>

4.3 The Toolkit

4.3.1 Mitigating Spillover

Parking spillover typically occurs for one of two reasons:

1. Overflow, triggered by a lack of sufficient on-site parking supply; and
2. Price, where drivers search for free or more affordable parking options on-street despite adequate on-site parking supply.

The toolkit will focus primarily on measures to mitigate parking spillover related to price by either discouraging demand or leveraging available parking supply in the study area. TOH is committed to developing a truly sustainable and multi-modal campus, and there are no plans to add parking areas or structures beyond what has been proposed in the Master Site Plan to address concerns with overflow. Instead, TOH will be heavily investing in a TDM Strategy, in which the primary purpose is to help TOH achieve the mode share targets needed to accommodate future parking demand on-site.

4.3.1.1 On-Street Parking Time Restrictions and Residential / Guest Parking Permit Zones

Using on-street parking regulations to support a parking management program is a trusted industry best practice when properly enforced. Key benefits of on-street parking restrictions include:

- Maintaining availability of on-street parking for residents, and
- Reducing traffic congestion on these streets by limiting the number of cars circling for parking during peak periods.



These changes can be an effective and relatively inexpensive response to parking spillover problems. However, the success of this measure is dependent on appropriate By-law enforcement.

Typically, an acceptable walking distance from a parking space to the ultimate destination is approximately 400m. However, this distance may extend farther for destinations that do not offer free parking. Drivers may be incentivized to walk a longer distance to find free and unrestricted parking spaces. In general, a review of local conditions surrounding the existing Civic Campus and other similar campuses in the city showed that parking restrictions were generally placed within a 600m to 800m radius from the development. However, the placement of restrictions should be strategic and only implemented where necessary, being mindful that parking restrictions are not needed in areas where little to no spillover impact is expected.

In addition, as some drivers may elect to “car-jockey” (park in unpaid time-limited spaces and move their cars regularly to avoid tickets), reduced time limits in areas further from the NCD (e.g. the Dow’s Lake community) will minimize such activity, particularly if the distance makes short-term parking unfeasible.



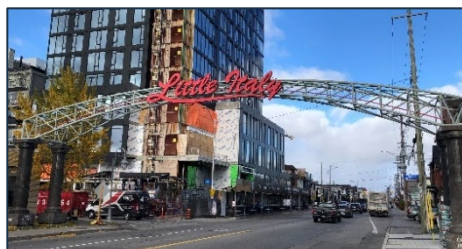
The implementation of these changes must follow the On-Street Parking Regulation Change process (refer to Section 2.1.6), which normally consists of the submission of a resident request, subsequent support by city staff, and consensus among 66% of impacted residents. Councillor concurrence following a successful city-issued petition is also required. It is also noted that any changes to parking regulations within the CEF would require consultation with NCC and Agriculture, Agrifood Canada (AAFC).

In addition, the Residential / Guest Parking Permit program, which exempt area residents and their out-of-town visitors / guests from parking restrictions, may be considered. These changes must also follow the On-Street Parking

Regulation Change Policy process (refer to Section 2.1.7). It is also noted that Councillor concurrence is required and that there is a cost to purchasing a permit, which aims to cover the city cost of establishing the program.

4.3.1.2 Paid Parking

Paid parking is a tool to manage on-street parking demand. In the City of Ottawa, paid parking is generally considered when the occupancy in retail areas consistently exceeds 85%. However, block faces that contain only single-family homes are generally not considered appropriate for paid parking unless they are immediately adjacent to a major traffic generator (which is not the case for on-street parking surrounding the NCD).



Currently, streets within the Little Italy area generally offer paid on-street parking, with free 1-hr parking on some streets. The Little Italy Local Area Parking Study (2015) showed that parking on streets with 1-hr free parking is generally underutilized on weekday mornings, and well-utilized on weekday afternoons and evenings. In terms of NCD spillover, several streets in Little Italy with free 1-hr parking are within a 10-minute walking distance to the NCD, and may attract some spillover parking despite the fact that parking is restricted to a 1-hr time limit.

Any new paid parking must be applied in alignment with the Rate Setting Guidelines of the Municipal Parking Management Strategy. In summary, the introduction of paid parking should be supported by data (refer to Section 2.1.5), in addition to concurrence by the local Councillor, BIA and community association. In the absence of this concurrence, changes would require Council approval.

4.3.1.3 City of Ottawa By-law Enforcement

A common concern about implementing parking reform such as time-limits, paid parking, and/or permits, is enforcement. Most cities do some level of enforcement for residential parking zones, with options including complaint-based enforcement (similar to other code enforcement efforts), using a code compliance officer, dedicating a parking enforcement specialist, using police department officers, or contracting enforcement services from private vendors.



The city's approach to parking enforcement was previously described in Section 2.1.9. The city also has a **Deputization Program**, which authorizes private property owners or their agents to issue parking infraction tickets within their private property.

In addition, based on the Parking Technology Roadmap document prepared for the city by BA Group in September 2020, Parking Services has been reviewing options for advancing the use of overhead sensors and hopes to test some pilot projects shortly.

4.3.1.4 Special Events Parking Programs

Large seasonal festivals or special events, such as Winterlude and the Tulip Festival that take place at nearby Dow's Lake and Commissioners Park, place additional stress on surrounding streets. These events often create surplus parking demand that requires coordination between the City of Ottawa and the NCC.



The current NCD site plan allows for 200 parking spaces in the NCD Parking Garage for public parking at Dow's Lake to compensate for the spaces that will be lost at the existing Dow's Lake parking lot.

4.3.1.5 *Monitoring*

It is very important that lines of communication and collaboration with residents remain open and that periodic surveys be completed to ensure that any necessary changes can be made in a timely fashion. On-going monitoring is an important tool to determine where parking spillover is a problem. Further information regarding the monitoring program proposed for the NCD is provided in the Transportation Monitoring Strategy (TMS).

4.3.2 **Temporary Response Measures**

As previously mentioned, there are two types of parking spillover, overflow (related to lack of parking supply), and price (related to parkers avoiding the price of parking). Both have transportation demand management implications; however, overflow is more challenging to manage since the user has no choice but to park off-site. Overflow requires quick identification when on-site parking supply is exceeded and a quick response for intervention.

Although TOH is committed to accommodating all NCD parking demand on site, it is prudent to have appropriate **temporary** response measures identified if overflow on adjacent neighbourhood streets becomes a systemic issue. It is important to highlight that these options are only to be considered if there is confirmed spillover related to the NCD, in which TOH needs time to respond accordingly. Although the first line of defense will always be adjustments to the TDM Strategy, changes in travel behaviour may take time to occur.

It is expected that smart parking technology, which allows real-time data to be obtained about parking availability, will be adopted by TOH prior to NCD Opening Day. This would include the installation of camera technology that can be relayed to the NCD website site and/or a mobile app to provide real time occupancy data so that hospital visitors can check the availability of parking while planning their trip. Real-time on-site parking utilization information can be monitored and plans for temporary response measures be in place in the event that on-site public parking is consistently full, and the presence of repeated spillover issues are confirmed by the city during the same times that the NCD Parking Garage is at-capacity, despite the implementation of the TDM Strategy and spillover mitigation measures outlined in the Strategic Plan.

4.3.2.1 *Temporary Satellite Parking Lots*

It is our understanding that all existing off-site (satellite) parking leases associated with the existing Civic Campus will not be renewed once the future NCD Parking Garage is constructed. TOH could consider retaining the flexibility to re-open agreements, or alternatively utilize the existing parking supply at the Civic Campus and implement a shuttle service to the NCD that can be used by staff, in addition to offering staff incentives to park off-site. These measures would provide a **temporary** relief until such time that stronger TDM incentives can be put in place to encourage the use of other modes. A plan to gradually remove the temporary parking in conjunction with the new TDM incentives should also be put in place.

Leasing privately owned parking lots is another temporary strategy for mitigating potential parking overflow issues during spillover periods. TOH may wish to consider developing a Memorandum of Understanding for shared use and/or lease agreements with owners of other private parking facilities within the area. It is noted that Carleton University has had similar understandings in place, such that other nearby parking facility operators could be approached to lease parking spaces on a contingency basis, if needed. The use of the temporary over-flow parking facility could be limited to staff, with a focus on freeing up parking availability for visitors at the main garage.



An unconventional approach to increasing parking supply within the area could include renting private residential parking spaces. Several residential buildings in the area provide their own parking garages (e.g. Soho residential building). Although no information regarding the supply and utilization of these spaces is available, TOH could consider agreements with residential garages to manage parking spillover in the area.

Finally, TOH could consider developing a Memorandum of Understanding for shared use and/or lease agreements with institutions/complexes outside of the study area. Potential locations that could be considered include Tunney's Pasture Campus, Confederation Heights Campus, Carleton University, Lansdowne TD Place, and the RA Recreation Center. This option would only be pursued if significant constraints exist with utilizing available off-street parking within the study area.

A summary of the **temporary** satellite parking lot options is provided below:

- Option 1:
 - Use existing Civic Campus parking garage
- Option 2:
 - If constraints exist with Option 1, develop agreements with private lots within the immediate study area, or potentially revisit terminated satellite parking lot agreements, if still available. AAFC would be provided significant notice as Central Experimental Farm parking enforcement may need to be altered in this case.
- Option 3:
 - If there are significant constraints with Option 1 and 2, and additional supply is needed, TOH may consider institutions/complexes outside of the area and use a shuttle service to connect to the NCD.

4.3.2.2 *Temporarily Increase On-Site Parking Supply*

An additional option to temporarily increase parking supply that is not dependent on finding and negotiating with a separate partner, is to leverage supply on campus, either through temporary lots or reprioritization of existing spaces. This option is generally not preferred as it does not align with the overall sustainable and multi-modal vision for the NCD. It is crucial that utilizing this option is limited to a **short time-frame**, with a plan to gradually remove the temporary parking supply, to avoid reversing any positive culture changes made to date towards sustainable modes of travel.

The following potential methods for **temporarily** increasing the on-site parking supply are summarized below:

- Increase the on-site parking supply by re-configuring the proposed parking layouts within the NCD Parkade and/or parking lots (e.g. a higher percentage of small car parking) or regulating parking designations on-site dynamically between staff and the public to reflect true parking demand patterns.
- In the years leading up to 2048, TOH may consider temporary parking overflow areas on future building locations prior to full buildout such as the Research Tower or Life Sciences Park (refer to Figure 6). As these areas would already be defined for future development, they would not expand the environmental implications. However, additional study would be required. It is important to reiterate that this option should only be implemented if necessary and should not impact lands not already slated for development (i.e. greenspace).

5.0 STRATEGIC PLAN

Parking demand management is a broad term used to describe management methods that support a healthy parking environment, ensure parking availability, reduce single occupancy trips, and promote alternative and sustainable modes of transportation such as walking, cycling, transit, and carpooling. Research and best practice indicate that key parking management measures surrounding hospitals in residential areas include time limits, paid parking, residential permit areas, and shared parking agreements. Combined with enforcement, these strategies help reduce negative parking experiences for area residents.

This document reviewed the existing on-street and off-street parking supply and demand within the study area and identified a Parking Management Toolbox. The ensuing Strategic Plan represents the most appropriate components of the parking management plan in the context of the NCD, and includes temporary contingency-based options that would only be considered if excessive on-site parking demand and/or spillover problems are confirmed.

As previously mentioned, the measures identified in the OPS are subject to the processes of the following City of Ottawa policies/guidelines, where applicable:

- The Municipal Parking Management Strategy, including the Rate Setting Guidelines;
- The On-Street Parking Regulation Change Policy; and,
- The On-Street Parking Permit Policy.

5.1 Staging

5.1.1 By Opening Day (2028)

Parking Restrictions

A summary of potential parking restriction changes for residents to consider applying for prior to opening day of the NCD is illustrated in Map 11 and summarized herein:

- Within a general radius of 600m from the NCD main entrance (approximately 10min walking):
 - Residents should consider submitting requests to the city to change streets to 'No Parking Allowed' during peak Hospital times (Monday to Friday, 09:00-17:00) on all streets, with the exception of streets within Little Italy. It is also noted that streets east of Bayswater Avenue are already included within a city Residential Parking Permit zone. It is noted that any changes are subjecting to vetting by city staff and require Councillor concurrence. Accessible Parking Permit holders would still be permitted to park in any potentially new 'No Parking' zones.
 - The City should consider implementing the Rate Setting Guidelines process to confirm the appropriateness of paid parking on existing 1-hr free parking streets within Little Italy.
- Within the general area between 600m to 900m radius from the NCD main entrance (approximately 10 to 15min walking):
 - Residents should consider submitting requests to the city to reduce time limits to 1-hour during peak hospital times (Monday to Friday, 09:00-17:00), with the exception of streets with paid parking within Little Italy. It is noted that any changes are subjecting to vetting by city staff and require Councillor concurrence.
- Within the Dow's Lake Community:
 - Residents should consider submitting requests to the city to reduce time limits to 1-hour during peak Hospital times (Monday to Friday, 09:00-17:00). Although the radius distance to the Dow's

Lake community is generally between 900m to 1.2km (approximately 15 to 20min walking distance), the availability of a direct multi-use pathway connection through Commissioners Park may encourage some drivers to park at the 2- and 3-hr free parking spaces available within the community. It is noted that any changes are subjecting to vetting by city staff and require Councillor concurrence.

- Central Experimental Farm (CEF) parking:
 - AAFC should consider implementing signage emphasizing that parking spaces are for use by staff and visitors to the Central Experimental Farm only and that spaces are under video surveillance.
 - It is noted that on-street parking is currently prohibited along most streets within the CEF. However, it is recommended that new 'No Parking' signage be installed, particularly along Maple Drive which directly borders the NCD. Any changes within the CEF would require consultation with NCC and AAPC.

Residential or Guest Parking Permits

The Residential or Guest Parking Permit Program may be expanded in conjunction with changes to road restrictions, subject to a resident led request. Currently, areas that may be impacted by parking regulation changes and are not included within a Residential Parking Permit zone, are as follows:

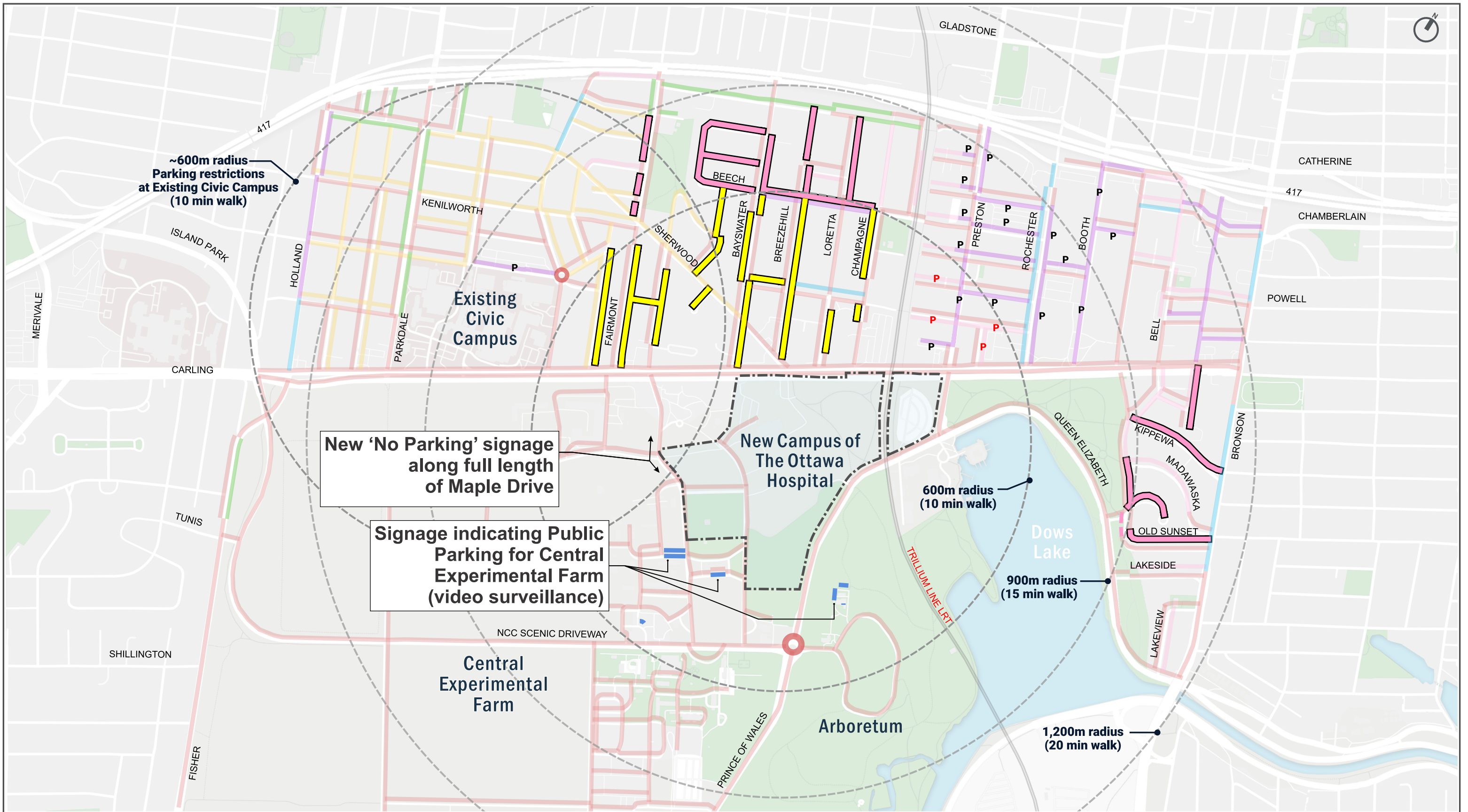
- The Dow's Lake community.
- The area within the Civic Hospital Neighbourhood Association bounded by Fairmont Avenue to the west, Bayswater Avenue to the east, Highway 417 to the north, and Carling Avenue to the south.

These communities may wish to consider requesting a Residential or Guest Parking Permit zone (in accordance with the city's On-Street Parking Permit process) so that permit holders are exempt from potential new restricted parking during peak Hospital hours. However, there may not be a need for parking permit zones if most properties have access to sufficient off-street parking.

In addition, community associations should consider engaging with the city to request any parking permit zones 6-months to 1-year prior to requests for any changes to on-street parking regulations, where appropriate, to ensure that the ability of residents and their visitors / guests to park on-street is not impacted. It is also noted that permits must be purchased by residents at a cost.

Enforcement

City of Ottawa By-law enforcement should consider appropriate allocation of resources to any areas where parking regulations change in the future, to prepare for a potential influx of complaints after opening day. Notable areas include streets north of the NCD (within the Civic Hospital Neighbourhood Association), in addition to parking within the Dow's Lake Residence Association and the Central Experimental Farm. It is noted that the NCC regulates its own parking and Federal tickets are generally issued.



LEGEND

Proposed Changes

— 1-Hr Parking (Mon-Fri, 9 am - 5 pm)	— Restricted Parking (Mon-Fri, 9am-5pm)	P New Paid Parking
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Existing Weekday Parking Regulations

— No Parking Allowed Anytime	— 2-Hr Parking	— Other Parking Restrictions
— 1-Hr Parking	— 3-Hr Parking	P Paid Parking
— 1.5-Hr Parking	— No Parking Allowed Weekday 9 am - 5 pm	

Notes:

General Parking Regulations -

- 1) Cannot exceed three (3) hours, Monday to Friday, between 7:00 a.m. and 7:00 p.m.
- 2) Cannot exceed six (6) hours on weekends and statutory holidays, between 7:00 a.m. and 7:00 p.m.
- 3) Streets with Seasonal Parking Bans are illustrated in Map 4.

New Campus Development for The Ottawa Hospital
Off-Site Parking Strategy

Map 11: Recommended Changes to Parking Regulations
 Final - July 2023

The Ottawa Hospital | L'Hôpital d'Ottawa

PARSONS

0 100 200 400 Metres

Temporary Satellite Parking Lots - Memorandum of Understanding

Develop a Memorandum of Understanding with one or two of the temporary satellite parking options identified in this study (see Section 4.3.2.1). This would be a contingency agreement that would only be deployed if parking spillover problems related to the lack of on-site parking supply are confirmed, and would only be implemented as a temporary measure while the long-term transportation demand management measures are revisited and new measures implemented.

5.1.2 Phase 2 – Opening Day and Beyond

Monitoring

To support the OPS, a monitoring strategy will need to be developed. This will be addressed in the NCD Transportation Monitoring Strategy. The Monitoring Strategy is a key study component that provides an approach to monitoring and reporting potential spillover parking resulting from the NCD. Parking spillover in surrounding neighbourhoods may be monitored as follows:

- Identify any complaints or observations regarding parking issues provided by residents through 3-1-1 requests for enforcement. It is noted that many of these requests may also be routed to Traffic Investigations.
- Open lines of communication should be maintained between the community associations and TOH.
- Complete post-construction (2028) occupancy counts on potentially impacted streets within the study area at 6 months, and again at 12 months. Monitoring may continue yearly after that at the discretion of the city for no more than 5 years after occupancy.
- Identify any land use, development and transportation changes that have occurred since the previous parking occupancy counts were completed.
- Report results to the City of Ottawa Parking Services Branch.
- Identify any necessary changes to the Off-Site Parking Management Strategy and re-initiate petition process, as appropriate.

The monitoring program may be integrated with the needs outlined for the Neighbourhood Traffic Management Strategy and Transportation Demand Management Strategy to achieve cost efficiencies.

It is noted that construction worker parking for the parking garage and main hospital building are expected to be accommodated on-site (see The New Campus Development: TIA Addendum #1). It is also important to note that parking management and access requirements during construction will follow the standard city traffic management process prior to the commencement of construction.

Special Events Plan

Implement special events plan in collaboration with the city and NCC to accommodate the Winterlude and Tulip Festival events. TOH may continue to collaborate with the city and the NCC, and update the parking management programs for special events if needed, as it could become necessary to expand the reach of these programs or to identify additional alternative lots and provide shuttle services in the future.

Continuous Strategy Reviews/ Updates

As parking needs are dynamic and highly responsive to local conditions and may change over time, TOH should remain active partners with the city and local communities in responding to future parking implications related to the

NCD, and update the parking strategy and seek new innovative ways to improve off-site parking management as future needs/opportunities arise.

Parking Restrictions Review

It is noted that by 2048, it is expected that the entirety of the existing Civic Campus including the University of Ottawa Heart Institute will be relocated to the NCD. Residents may consider petitioning for removing or relaxing parking restrictions near the existing Civic Campus if deemed appropriate at the time, and following consultation with area residents.

5.1.3 Contingency Actions

The OPS is meant to synergize with the TDM Strategy to tackle a common issue, parking management. However, the first option to address parking supply issues is always to revisit and adjust TDM measures to reduce demand. That said, the implementation of some TDM policies and the needed culture changes often take time. The OPS offers contingency actions to stem community impacts until such time TDM is able to affect change. The measures below aim to identify **temporary** contingency-based overflow parking locations that may be used if NCD on-site parking facilities are full and repeated spillover problems occur as a result. These measures are to be implemented exclusively while refinements to the TDM Strategy are made, and should include a plan for gradual removal of temporary parking as stronger TDM incentives are implemented.

Temporary Satellite Parking with Shuttle Service

TOH may utilize the existing parking supply at the Civic Campus and implement a parking shuttle service connecting to the NCD for staff on a temporary basis. TOH may also consider offering staff incentives to park off-site. If use of the existing Civic Campus parking garage is not feasible or additional parking is needed, TOH should be prepared to respond quickly and enter into an agreement with any nearby private parking facility with spare capacity at the time.

For example, the Preston Square Parking Garage, which is approximately 900m walking distance from the NCD, is understood to have approximately 500 available parking spaces currently during peak times. An on-demand shuttle connecting the Preston Square Parking Garage to the NCD would be required.

Temporary On-site Overflow Parking

As an alternative to providing satellite parking with a shuttle service, TOH may temporarily increase on-site parking supply by re-configuring the proposed parking layouts within the NCD Parkade and/or parking lots, or providing temporary parking overflow areas on future building locations prior to buildout. The future University of Ottawa Heart Institute building already is already designated as an overflow parking lot on the Site Plan. TOH could expand and/or identify other potential locations on campus (e.g. the Research Tower or Life Sciences Park), however this would require additional study.

GLOSSARY

On-Street Parking - Curb paid and unpaid parking used by the general public.

Off-Street Parking - Parking located in dedicated parking lots or structures (above, at or below ground), located off the roadway. Can be available by general use by the public (public parking) or unavailable for general use by the public (private parking), or a combination of both (public and private).

Public Parking - Surface parking lots or garage spaces available for use by the general public on a cash basis (including hourly, daily, and monthly spaces).

Private Parking - Surface parking lots or garages reserved for exclusive use.

“Off-Site” Parking – This term refers to all on-street and off-street parking available outside of the NCD site.

Parking Occupancy - The ratio of the number of vehicles parked divided by the number of spaces provided. A ratio between 75% to 85% is considered ideal.

Spillover – Overuse of on-street parking in residential neighbourhoods by drivers seeking to access a nearby amenity, such as a hospital. There are two types of spillover: Overflow spillover – demand exceeds supply, and Pricing spillover – a choice by user to avoid on-site parking to reduce costs.

APPENDIX A

On-Street Parking Occupancy Survey Data

On-Street Parking Occupancy

Street	From	To	Zone	Hrs Parking	# Anytime Parking	# Evening Parking	Seasonal Reduction	Max Parking Summer	Max Parking Winter	Weekday Occupancy %				Weekend Occupancy %			
										10:00	12:00	14:00	18:30	10:00	16:00	19:00	
Holland	Hwy 417	Ruskin	1	2	40	0	0	40	40	30%		20%	30%				
Holland	Ruskin	Carlin	1	2	40			40	40	50%		35%	25%				
Hinton S	Hwy 417	Sherwood	1	3	5	0	0	5	5	40%		40%	20%				
Hinton S	Sherwood	Carling	1	3	0	124	42	124	82	5%		5%	5%				
Hamilton S	Hwy 417	Sherwood	1	3	6	0	0	6	6	80%		30%	50%				
Hamilton S	Sherwood	Carling	1	3	0	78	15	78	63	10%		5%	10%				
Parkdale	Hwy 417	Ruskin	1	3	12	0	0	12	12	50%		25%	15%	20%	10%		
Parkdale	Ruskin	Inglewood	1	3	14			14	14	95%		95%	65%				
Reid	Young	Sherwood	1	3	0	24	0	24	24	0%	0%	0%	0%	10%	5%		
Fairmont	Young	Sherwood	1	3	30	0	0	30	30	40%	40%	30%	15%	5%		5%	
MacFarlane	Sherwood	Ruskin	1	3	0	15	0	15	15	0%	15%	10%	35%	50%	50%		
Reid	Sherwood	Ruskin	1	3	0	30	7	30	23	0%	0%	0%	0%	5%	20%		
Melrose	Ruskin	Carling	1	0	0	0	0	0	0								
Barrie	Sherwood	Ruskin	1	3	0	34	11	34	23	0%	5%	0%	0%	5%	40%		
Gwynne	Kenilworth	Carling	1	3	0	20	3	20	17	0%	0%	0%	0%	5%	10%		
Fairmont	Sherwood	Carling	1	3	20	0	3	20	17	5%	15%	15%	5%	5%		5%	
Old Irving	Sherwood	Carling	2	3	18	0	0	18	18	5%	0%	0%	10%	0%		10%	
Bayswater	Sherwood	Carling	2	1	8	0	0	8	8	0%	0%	0%	0%	0%			
Old Irving	Civic Place	Sherwood	2	3	0	81	0	81	81	5%	5%	5%	5%	0%		10%	
Civic Place	Beech	Sherwood	2	3	25	0	0	25	25	20%	5%	25%	10%	5%		5%	
Bayswater	Young	Beech	2	3	16	0	0	16	16	10%	10%	10%	0%	5%	10%	10%	
Breezehill	Young	Beech	2	3	38	0	0	38	38	5%	40%	20%	15%	5%	15%	5%	
Loretta	Young	Beech	2	3	16	0	0	16	16	50%	50%	50%	20%	20%	35%	25%	
Champagne	Young	Beech	2	1	40	0	0	40	40	30%	50%	30%	20%	50%	50%	70%	
Railway	Young	Beech	2	1	31	0	0	31	31	10%	15%	5%	5%	5%	5%	25%	
Bayswater	Beech	Sherwood	2	3	24	0	0	24	24	5%	10%	10%	5%	5%	5%	15%	
Breezehill	Beech	Hickory	2	3	18	0	0	18	18	10%	20%	15%	10%	5%	5%	15%	
Breezehill	Hickory	Carling	2	1	17	0	0	17	17	5%	15%	10%	5%	15%	5%	10%	
Loretta	Beech	Carling	2	3	23	0	0	23	23	80%	70%	70%	80%	80%	80%	80%	
Champagne	Beech	Carling	2	2	24	0	0	24	24	60%	70%	80%	80%	80%	100%	100%	
Dow's Lake	Carling	Madawaska	5	1	12	0	0	12	12	0%	10%	10%	5%				
Dow's Lake	Madawaska	Old Sunset	5	2	6	0	0	6	6	15%	50%	30%	90%				
Charles Jackson	Carling	Dow's Lake	5	1	10	0	0	10	10	5%	20%	5%	0%				
Cambridge	Carling	-	5	2	15	0	0	15	15	20%	15%	15%	10%				
Lakeview Terrace	Bronson	Queen Elizabeth	5	1	13	0	0	13	13	5%	5%	5%	5%				
Bronson	Carling	Queen Elizabeth	5	3	0	57	0	57	57	0%	0%	0%	0%				
Sherwood	Holland	Parkdale	1	3	17	0	0	17	17	40%		40%	10%				
Kenilworth	Holland	Parkdale	1	3	0	12	0	12	12	0%	0%	0%	5%				
Ruskin	Holland	Parkdale	1	3	0	12	0	12	12	0%		0%	10%				
Inglewood	Holland	Hamilton	1	3	0	7	0	7	7	5%		5%	5%				
Inglewood	Hamilton	Parkdale	1	3		5		5	5	80%		40%	100%				
Kinnear	Reid	Fairmont	1	3	0	15	15	15	0	0%	0%	0%	5%	10%	5%		
Fuller	Reid	Fairmont	1	3	0	40	20	40	20	5%	0%	0%	0%	5%	15%	5%	5%
Hereford	Reid	Fairmont	1	1	25	0	25	25	0	5%	0%	0%	10%	15%	10%	15%	
Woodstock	Sherwood	Fairmont	1	3	0	11	5	11	6	0%	0%	0%	0%	5%	5%	0%	
Sherwood	Parkdale	Fairmont	1	3	0	108	12	108	96	0%	0%	0%	15%	5%	5%	5%	
Orrin	Parkdale	Reid	1	3	0	40	20	40	20	0%	0%	0%	0%	5%	10%		5%
Kenilworth	Parkdale	Sherwood	1	3	0	60	20	60	40	0%	5%	0%	5%	10%	20%	50%	

Street	From	To	Zone	Hrs Parking	# Anytime Parking	# Evening Parking	Seasonal Reduction	Max Parking Summer	Max Parking Winter	Weekday Occupancy %				Weekend Occupancy %		
										10:00	12:00	14:00	18:30	10:00	16:00	19:00
Hutchison	Parkdale	MacFarlane	1	3	0	10	0	10	10	0%	5%	0%	50%	5%	10%	
Ruskin Evenings	see notes		1	3	0	21	0	21	21	80%	85%	80%	100%	95%	100%	
Ruskin 2h Paid	see notes		1	2	56	0	0	56	56	95%	95%	95%	20%	20%	10%	
Ruskin	Roundabout	Gwynn	1	3	0	6	0	6	6	5%	5%	5%	20%	20%		5%
Young	Fairmont	Trillium	2	3	113	0	13	113	100	15%	10%	15%	40%	20%		
Fern	Lynwood	Bayswater	2	3	21	0	0	21	21	5%	5%	5%	5%	5%	5%	
Oakvale	Lynwood	Bayswater	2	3	21	0	0	21	21	10%	10%	5%	5%	5%	10%	
Nolan	Breezehill	Loretta	2	1	6	0	0	6	6	5%	5%	25%	5%	5%	5%	5%
Beech	Lynwood	Breezehill	2	3	19	0	3	19	16	5%	10%	20%	10%	15%	5%	5%
Beech	Breezehill	Champagne	2	3	12	0	2	12	10	80%	80%	80%	60%	60%	50%	30%
Sherwood	Fairmont	Carling*	2	3	0	59	30	59	29	0%	0%	0%	0%	0%	0%	0%
Laurentian E	Fairmont	Old Irving	1	3	15	0	0	15	15	0%	0%	0%	0%	0%	5%	0%
Hickory	Bayswater	Breezehill	2	3	7	0	0	7	7	10%	20%	5%	5%	30%	50%	25%
Hickory	Breezehill	Trillium	2	3	0	11	0	11	11	5%	5%	5%	80%	75%	80%	
Frederick	Charles Jackson	Cambridge	5	1	4	0	0	4	4	5%	5%	5%	0%			
Kippewa	Dow's Lake	Bronson	5	2	54	0	15	54	39	15%	5%	10%	5%			
Madawaska	Dow's Lake	Bronson	5	1	65	0	0	65	65	5%	5%	10%	5%			
Crescent Heights	Dow's Lake	-	5	3	26	0	0	26	26	10%	5%	15%	40%			
Old Sunset	Dow's Lake	Bronson	5	1	18	0	0	18	18	10%	5%	5%	40%			
Lakeside	Queen Elizabeth	Bronson	5	1	17	0	0	17	17	5%	5%	5%	5%			

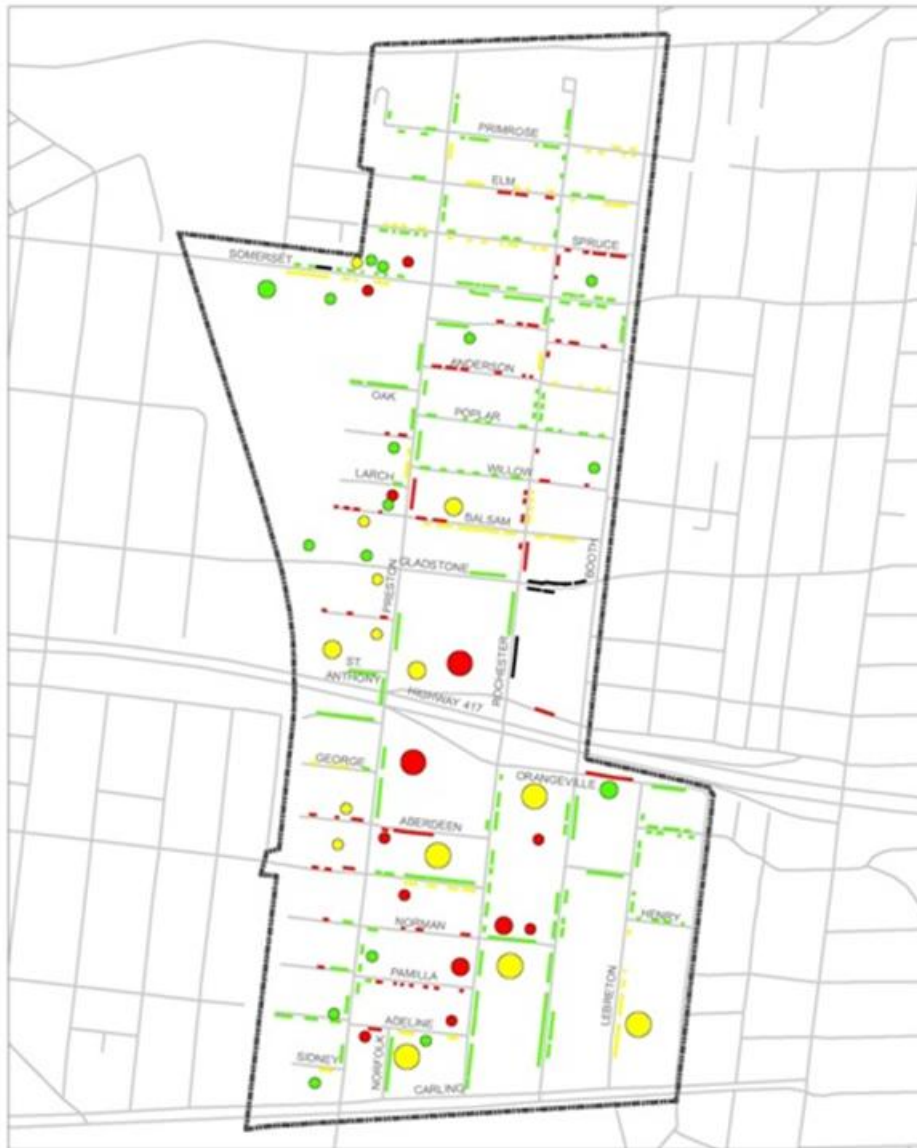
Note: Methodology for estimating on-street parking supply described in Section 3.3.1 of the report.

APPENDIX B

Little Italy Local Area Parking Study (2015) Parking Occupancy Maps

Appendix 5: Parking Occupancy Maps

Thursday, May 29th, 2014 - 10:00am



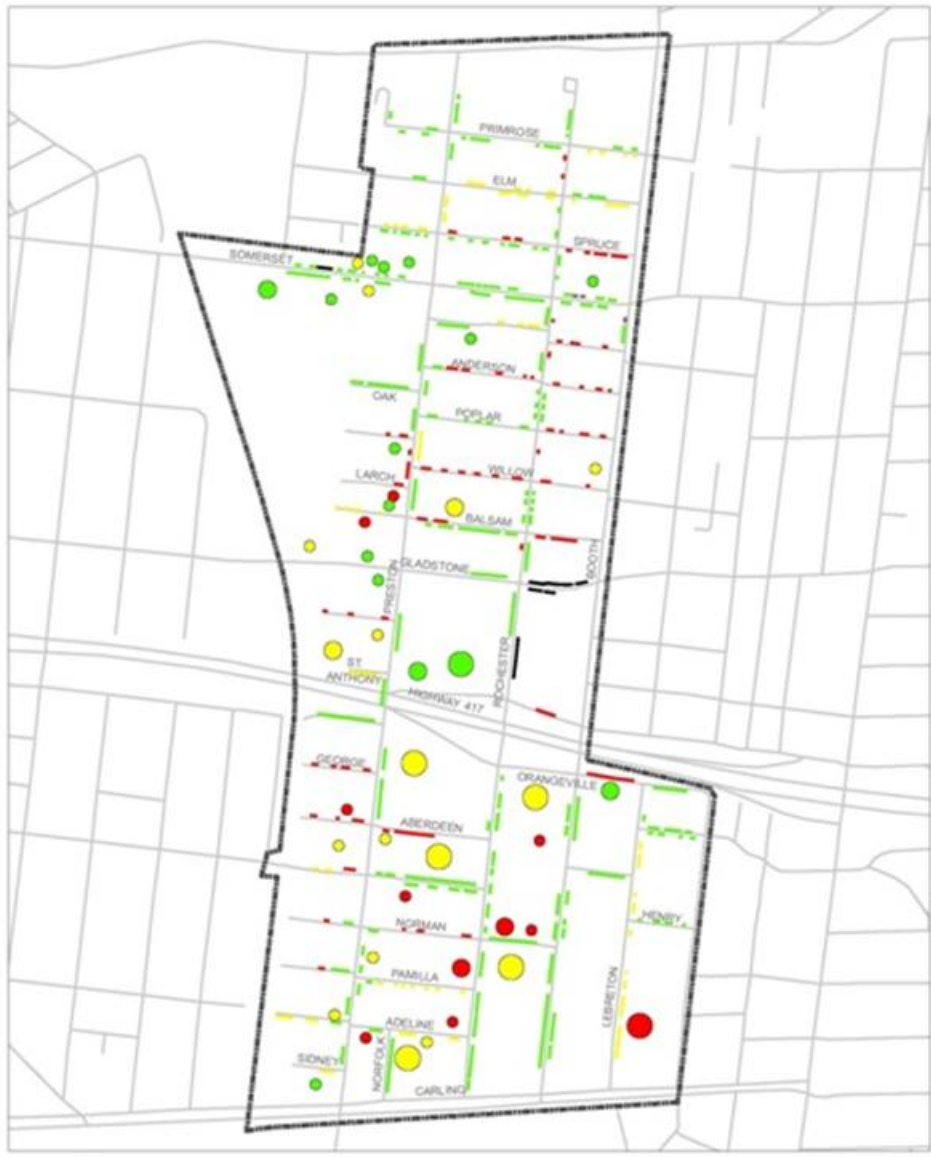
 <p>Little Italy Parking Study Thursday, May 29th, 2014 10:00 AM</p> <p>Project: 2140259.00 Status: FINAL Date: September 3, 2014</p>  	<p>OFF-STREET</p> <ul style="list-style-type: none"> ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED <p>OFF-STREET LOT SIZE</p> <ul style="list-style-type: none"> ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES 	<p>ON-STREET</p> <ul style="list-style-type: none"> — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED — PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD
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Thursday, May 29th, 2014 - 12:00pm



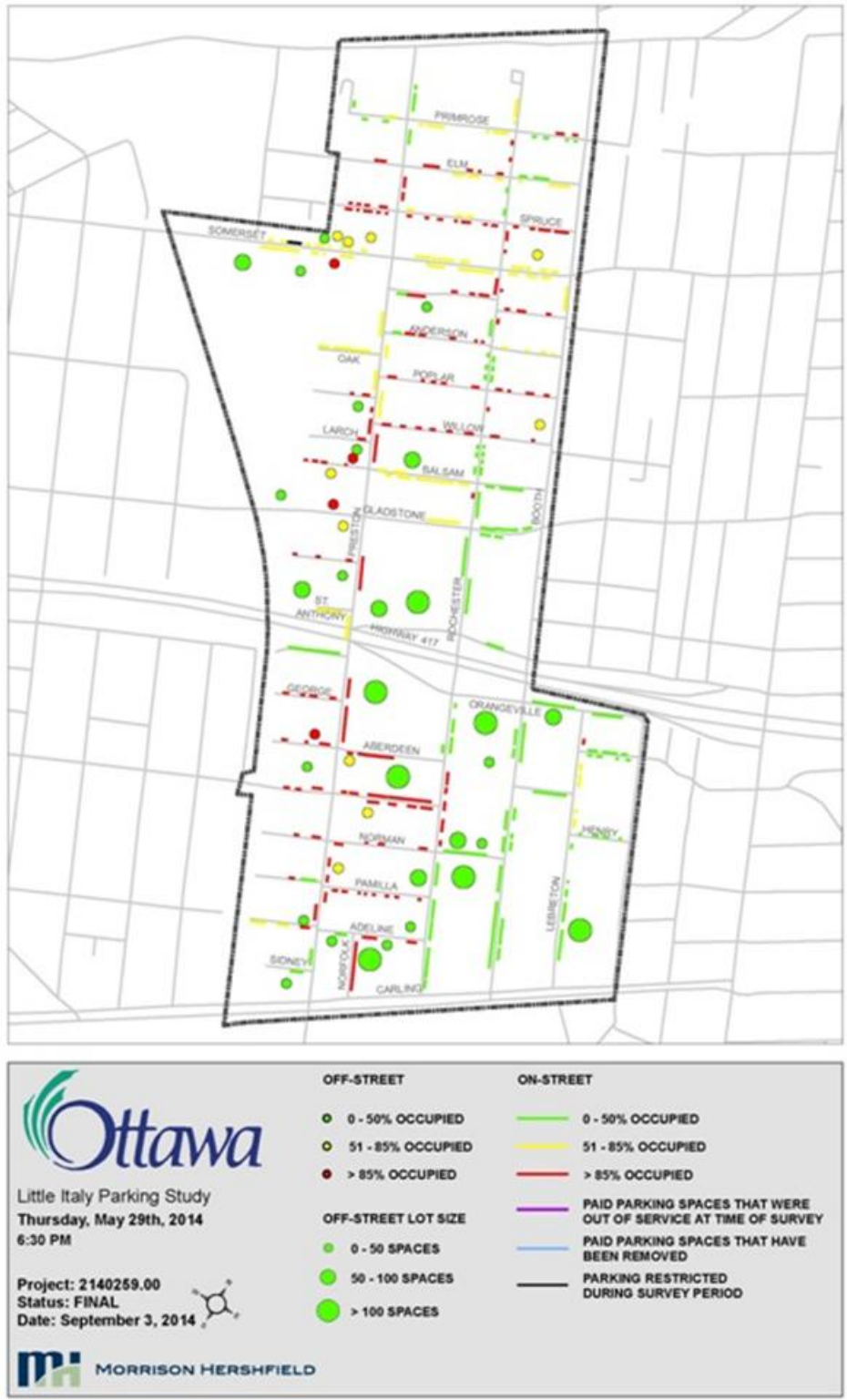
 Little Italy Parking Study Thursday, May 29th, 2014 12:00 PM Project: 2140259.00 Status: FINAL Date: September 3, 2014	OFF-STREET ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED	ON-STREET — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED	
	OFF-STREET LOT SIZE ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES	— PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD	
			
			

Thursday, May 29th, 2014 - 2:00pm



 <p>Little Italy Parking Study Thursday, May 29th, 2014 2:00 PM</p> <p>Project: 2140259.00 Status: FINAL Date: September 3, 2014</p>  	<p>OFF-STREET</p> <ul style="list-style-type: none"> ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED <p>OFF-STREET LOT SIZE</p> <ul style="list-style-type: none"> ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES 	<p>ON-STREET</p> <ul style="list-style-type: none"> — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED — PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD
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Thursday, May 29th, 2014 - 6:30pm



Saturday, May 31st, 2014 -10:00am



Saturday, May 31st, 2014 - 12:00pm



 <p>Little Italy Parking Study Saturday, May 31st, 2014 12:00 PM</p> <p>Project: 2140259.00 Status: FINAL Date: September 3, 2014</p>  <p> MORRISON HERSHFIELD</p>	<p>OFF-STREET</p> <ul style="list-style-type: none"> ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED <p>OFF-STREET LOT SIZE</p> <ul style="list-style-type: none"> ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES 	<p>ON-STREET</p> <ul style="list-style-type: none"> — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED — PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD
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Saturday, May 31st, 2014 – 2:00pm



 <p>Little Italy Parking Study Saturday, May 31st, 2014 2:00 PM</p> <p>Project: 2140259.00 Status: FINAL Date: September 3, 2014</p>  	<p>OFF-STREET</p> <ul style="list-style-type: none"> ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED <p>OFF-STREET LOT SIZE</p> <ul style="list-style-type: none"> ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES 	<p>ON-STREET</p> <ul style="list-style-type: none"> — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED — PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD
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Saturday, May 31st, 2014 – 6:30pm



 <p>Little Italy Parking Study Saturday, May 31st, 2014 6:30 PM</p> <p>Project: 2140259.00 Status: FINAL Date: September 3, 2014</p> 	<p>OFF-STREET</p> <ul style="list-style-type: none"> ● 0 - 50% OCCUPIED ● 51 - 85% OCCUPIED ● > 85% OCCUPIED <p>OFF-STREET LOT SIZE</p> <ul style="list-style-type: none"> ● 0 - 50 SPACES ● 50 - 100 SPACES ● > 100 SPACES 	<p>ON-STREET</p> <ul style="list-style-type: none"> — 0 - 50% OCCUPIED — 51 - 85% OCCUPIED — > 85% OCCUPIED — PAID PARKING SPACES THAT WERE OUT OF SERVICE AT TIME OF SURVEY — PAID PARKING SPACES THAT HAVE BEEN REMOVED — PARKING RESTRICTED DURING SURVEY PERIOD
		

Sunday, June 1st, 2014 – 10:00am



Sunday, June 1st, 2014 – 12:00pm



Sunday, June 1st, 2014 – 2:00pm



Sunday, June 1st, 2014 – 6:30pm



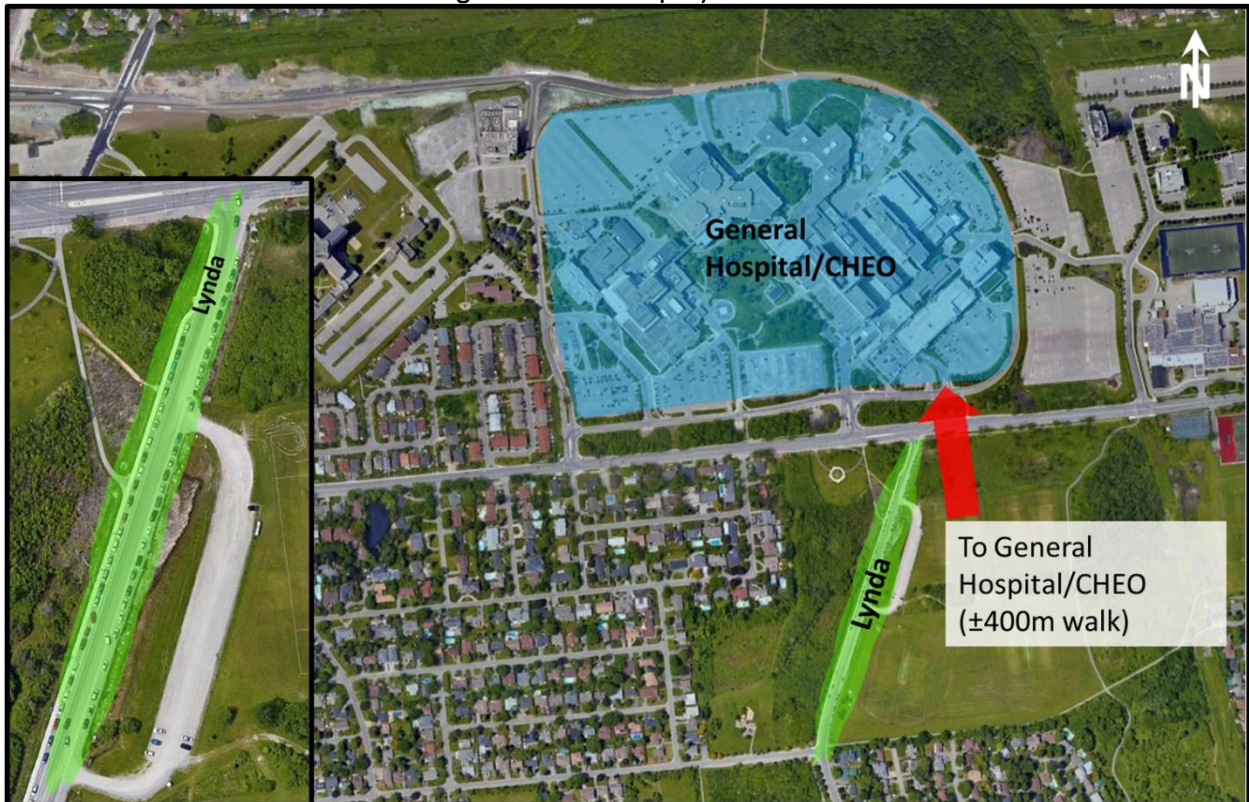
APPENDIX C

Review of Similar Institutions in Ottawa

The Ottawa Hospital General Campus

Streets near the site are generally regulated by full parking restrictions. Further from the site, 1-hour short-term free parking is available. Permit holders are exempt from parking regulations. Lynda Lane is noted to have 2-hour free parking near the site on a long stretch of road surrounded by parks and non-residential uses. Lynda Lane was observed to be well utilized. Parking along Lynda Lane has been previously assessed by the City and is well-documented.

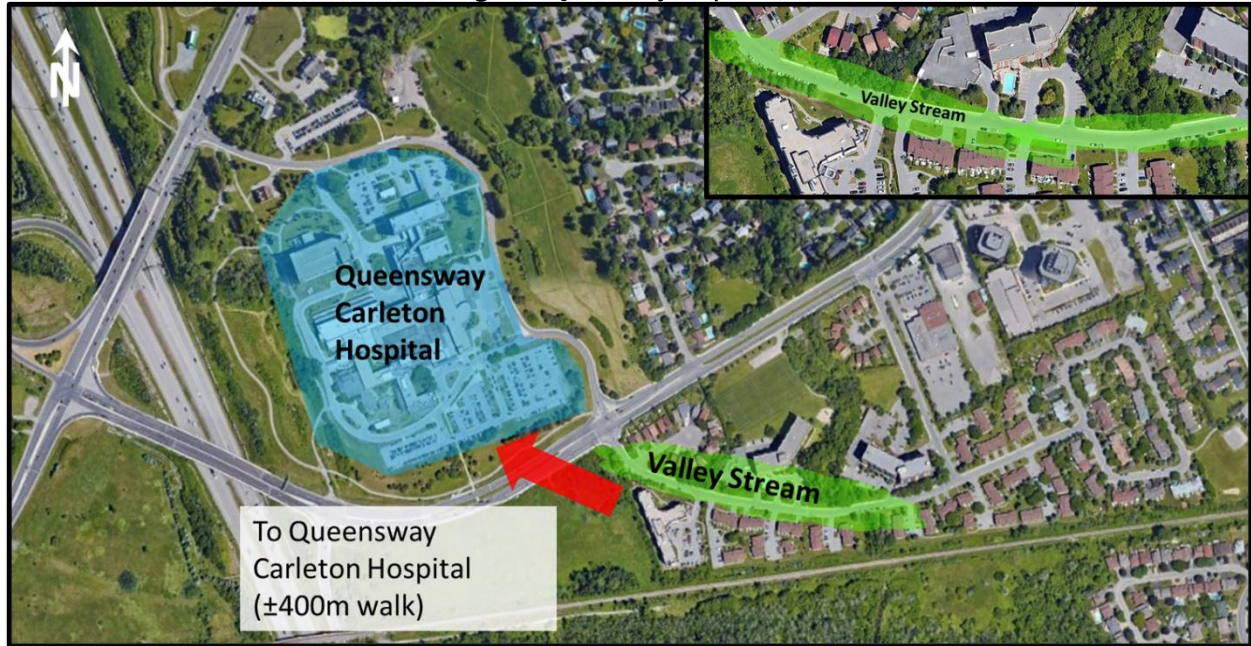
Figure 1: General Hospital/CHEO Site



Queensway Carleton Hospital

Streets near the site are generally regulated by full parking restrictions or parking restrictions during the hours of 07:00-19:00. Further away from the site, 1-hour short-term parking becomes available. No permit holder exempt signs were observed in the area. Valley Stream Drive is noted to have 3-hour free parking near the site along a long and wide stretch of road with limited driveway accesses. Valley Stream Drive appears to be well utilized based on a desktop review using Google Maps/Streetview.

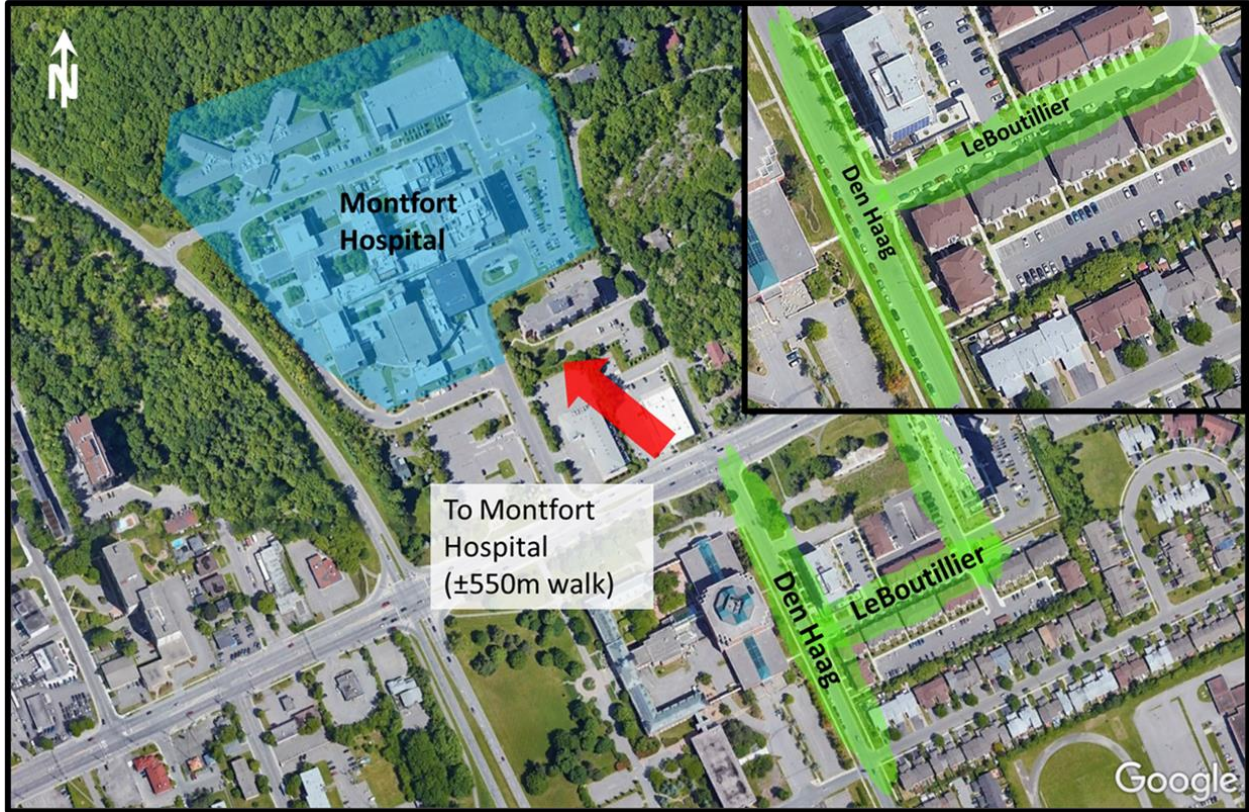
Figure 2: Queensway Hospital Site



Montfort Hospital

Parking is predominantly restricted north of Montreal Road; however, free 3-hour parking was noted on Den Haag Drive and LeBoutillier Avenue. Both streets have ample pavement width with limited driveway connections and are adjacent to both office use and parks. Both Den Haag Drive and LeBoutillier Avenue appears to be well utilized based on a desktop review using Google Maps/Streetview.

Figure 3: Montfort Hospital Site



The Royal Hospital

Streets near the site have parking restrictions during the hours of 09:00-17:00 to the north. To the south, 1-hour and 2-hour short-term free parking is available. Paid parking is available on the streets adjacent to the site. Permit holders are exempt from parking regulations along Hinton Avenue.

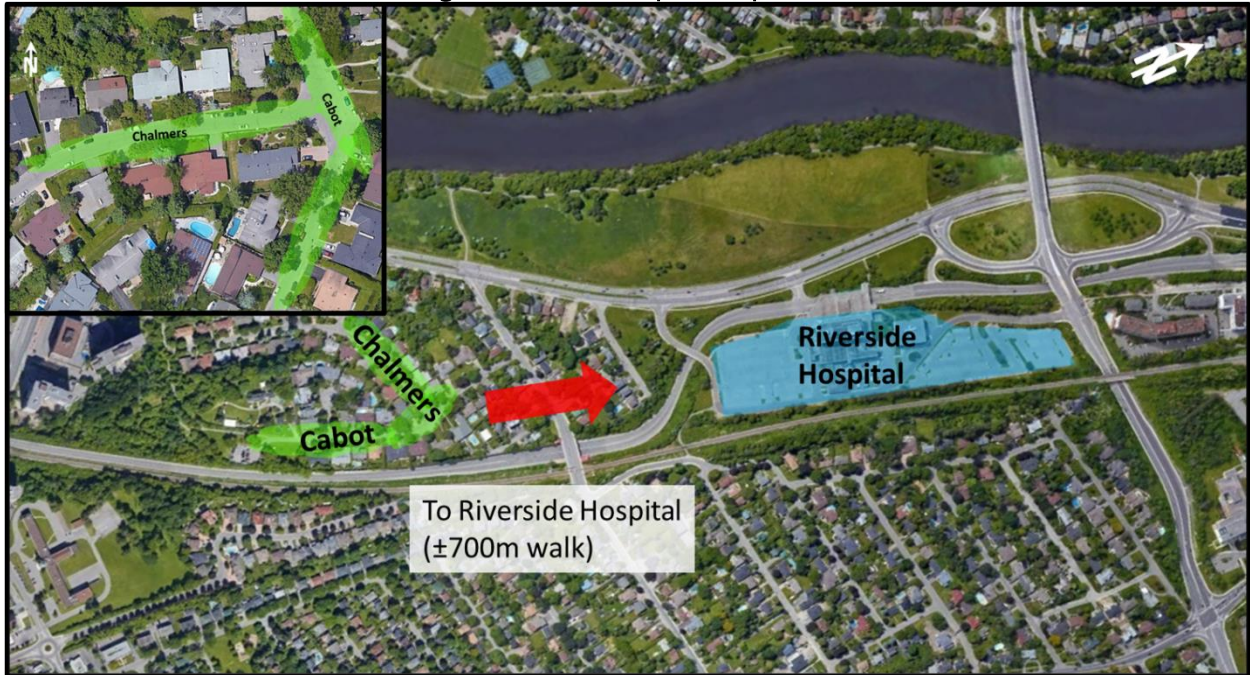
Figure 4: The Royal Hospital Site



Riverside Hospital Campus

Nearby streets have full parking restrictions or parking restrictions between the hours of 07:00-19:00. Further from the campus, 1-hour short-term parking becomes available. Free 3-hour parking is available on Cabot Street and Chalmers Road, both have ample pavement width and limited driveway connections. Permit holders are exempt from parking regulations.

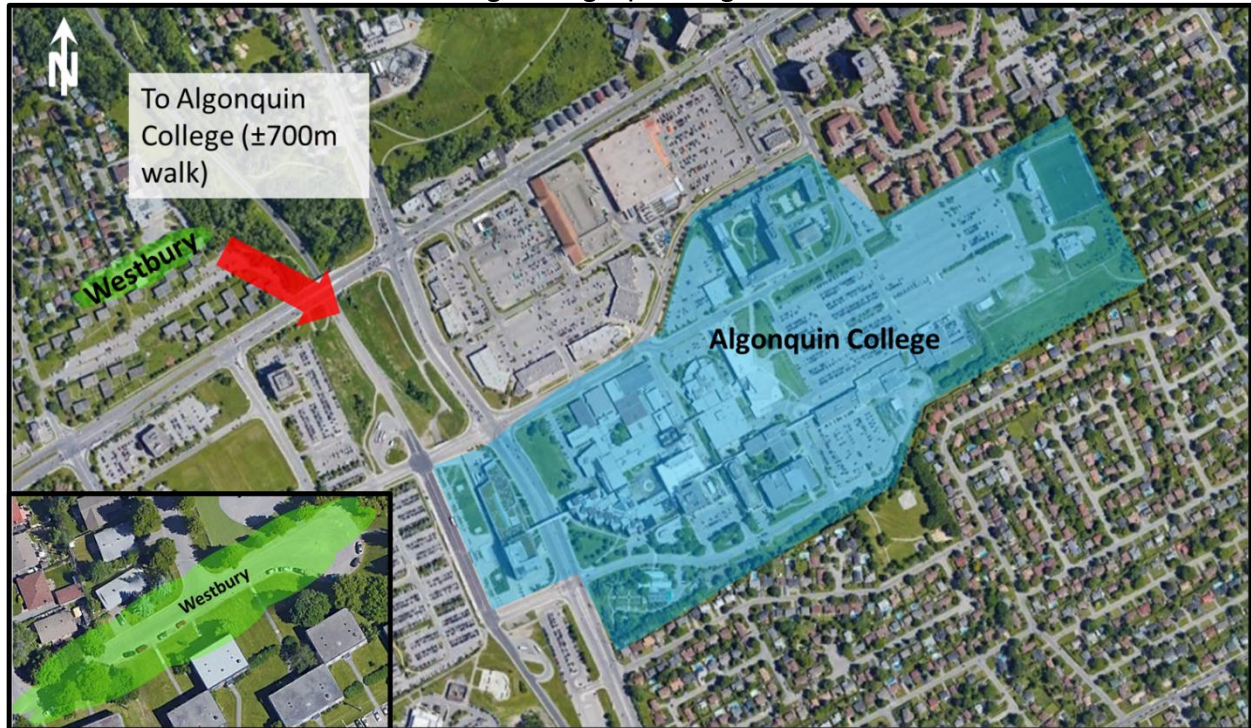
Figure 5: Riverside Hospital Campus Site



Algonquin College

Streets near the site are generally regulated by full parking restriction or parking restrictions between the hours of 07:00-19:00. Further from the site, 1-hour short-term free parking is available. Westbury Road has 3-hour free parking on a wide dead-end street adjacent to a school, forest, and the back of residential developments (without driveway access). Westbury Road appears to be well utilized based on a desktop review using Google Maps/Streetview. No permit holder exempt signs were found at this location.

Figure 6: Algonquin College Site



Carleton University

Predominantly 3-hour free parking on streets outside of Carleton Campus. Within the Campus, there is only 15-minute free parking available or paid parking. The most popular free parking locations outside of the Campus are Sloan Avenue and Canal Woods Terrace, both located closest to the Campus limits, and both having either limited driveway access or located adjacent to parks and landscaped boulevard separations. Permit holders are exempt from parking regulations.

Figure 7: Carleton University Site

