FINAL REPORT

PREPARED FOR CITY OF KELOWNA

HOSPITAL AREA ON-STREET PARKING PLAN

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Hospital Area Plan On-Street Parking

Final Report

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1.0 INTRODUCTION

In the spring of 2016, the City of Kelowna embarked on the process of developing a parking management strategy for the area around Kelowna General Hospital (KGH), to address ongoing parking concerns. The main parking concerns that will be addressed by the Hospital Area On-Street Parking Plan relate to on-street parking conflict between area residents and people visiting or working at KGH. It is intended that the findings from this study will support a larger Hospital Area Plan that will include a neighbourhood transportation plan (to be completed by the City at a later date) and on-going work by Interior Health regarding parking at KGH.

The primary drivers behind the growth in parking demand in this area are the simultaneous expansion of KGH and the ongoing densification of surrounding residential areas. Over the last 10 years KGH has undergone several significant expansion projects, including the addition of the UBC Okanagan Faculty of Medicine, the Centennial Building, the Interior Heart and Surgical Centre, and the Walter Anderson Building, expanding its footprint into adjacent residential areas. The expansion of the hospital has also resulted in an increase in the number of staff and students working at the hospital. At the same time the City of Kelowna has successfully worked towards densifying residential areas surrounding the Hospital. An increase in the number secondary suites and carriage homes in the residential area surrounding the hospital has increased the parking needs of residential properties in the area. Demand for on-street parking is also increased substantially during summer months when tourists also use on-street parking in this area to access the waterfront and visit friends.

The first step in developing the Hospital Area Plan was to establish a baseline understanding of parking supply and demand in the area. Starting in May 2016, several parking counts were undertaken to determine the occupancy and turn-over of on-street parking near the hospital. This report provides an overview of the results from these on-street parking counts and feedback received from the public engagement including: a public open house held at the hospital on May 18th, 2016, an online survey, and public information session held at the hospital on November 3, 2016.

2.0 APPROACH

The key objectives of the Hospital Area On-Street Parking Plan are as follows:

- Review the existing on-street public parking conditions;
- Identify on-street parking related issues and challenges, including lack of visitor parking, impacts to residential areas, and bylaw violations;
- Undertake a stakeholder and public engagement process to support the development and implementation of the strategy; and,
- Recommend a comprehensive parking management strategy for the Hospital Area.

2.1 Hospital Parking Management in Other Jurisdictions

The challenges associated with having a hospital located within a residential neighbourhood are not unique to Kelowna. This section provides a brief snapshot of how some other municipalities manage parking in the vicinity of their hospital. A summary is provided in **Table 1**, and further details are provided below the table.

Table 1: Summary of Permit Parking Program Requirements

	City of Penticton	City of Vancouver	City of North Vancouver
Petition Requirement	75% of owners' support permit parking	67% of households' support permit parking	67% of households' support permit parking
Type of Restriction and Allocation	RPO for 100% of block	Combination of RPO and Time Limit Exemptions. Allocated based on survey feedback and neighbourhood needs.	Primarily Time Limit Exemptions, with Resident Parking Only for limited cases of very high external parking pressure. New installations are typically up to 50% of block with remaining parking unrestricted.
Occupancy Requirements	At least 90% occupancy during congested periods and at least 50% of vehicles must belong to non-residents	No criteria readily available	At least 75% occupancy for time limit exemptions or 85% occupancy for RPO and in both cases 50% of vehicles must belong to non-residents
Fees	$150 application fee for new requests. Implementation fee to recover costs (up to $850). Parking permits are $15 (staff indicated the permit fee will be implemented in 2017).	No application or implementation fees. Permits are $36 to $78 depending upon location	No application or implementation fees. Permits are $25 for Time Limit Exemption Zones and $50 for RPO Zones.

2.1.1 City of Penticton

The City of Penticton has created a resident parking permit system near Penticton Regional Hospital. For the establishment of a new resident parking only zone the City of Penticton's policy[1] requires:

- Payment of a $150 non-refundable application fee,
- Residents confirm they have taken measures to mitigate the parking concerns,
- A resident initiated petition showing support for a new RPO from at least 75 percent of the registered owners on the block,
- During the congested periods, the on-street parking occupancy is 90 percent or more and 50 percent or more of the on-street parking spaces are occupied by non-residents,
- At least 85 percent of the block is zoned residential
- No metered parking on the block, and
- If the RPO zone is approved by the City, and the applicant decides to proceed, the block must pay the hard costs of implementing the RPO zone, up to a maximum cost of $850.

2.1.2 City of North Vancouver

The City of North Vancouver manages parking on residential streets near Lion's Gate Hospital in accordance with their Resident and Visitor Parking Policy[2]. In most cases, the City of North Vancouver will implement Resident Exempt parking zones which enable a resident to obtain a permit to be exempt from the time restrictions (typically 2-hour parking 9am-6pm) on their block. In cases where external parking pressure is significant, the City will consider creating Resident Parking Only zones. The criteria for the establishment of a new Resident Exempt or Resident Parking Only zone includes:

- A resident initiated petition showing support from at least 67 percent of the block for a new Resident Exempt or Resident Parking Only Zone,
- A shortfall of parking is deemed to exist. This is defined as 75 percent of on-street parking is occupied during the weekday for a new Resident Exempt parking zone or 85 percent of on-street parking is occupied during the weekday for a new Resident Parking Only zone, and in both cases, 50 percent or more of the parked vehicles belong to non-residents, and
- The block has insufficient off-street parking. This is defined as the total number of off-street parking spaces for all the residences on a block is less than the total number of spaces required by the City's Zoning for the block.

Generally, when a new Resident Exempt or Resident Only Parking Zones are created in North Vancouver only 50 percent of the block is reserved for residents with the rest of the block remaining completely unrestricted. This allocation of space is designed to recognise that on-street parking is a community amenity that should be available for the use of both residents and visitors while assisting residents with insufficient off-street parking meet their parking needs in locations with high external parking pressure. This allocation of space also ensures that after the establishment of a parking zone, the block does not sit completely empty. Locations with more than 50 percent of the block allocated to Resident Exempt or Resident Parking Only and occupancies of 50 percent or less are considered for a reduction in the size of the resident parking zone.

[1] City of Penticton's Resident Parking Only Areas Policy: http://www.penticton.ca/assets/Business/Documents/Res.Parking%20Council%20Res.pdf
[2] City of North Vancouver's Resident and Visitor Parking Policy: http://www.cnv.org/-/media/city-of-north-vancouver/documents/parking/resident-and-visitor-parking-policy.pdf

2.1.3 City of Vancouver

The City of Vancouver has a well established Residential Permit Parking program. In the vicinity of Vancouver General Hospital, a large range of parking restrictions[3] are in effect, including:

- Full time permit parking,
- Resident permit parking -6am to 6pm,
- 2-hour parking 6am to 3pm or 6pm except with permit, and
- 2-hour parking 6am or 9am to 6pm.

The process for a resident to request a new parking zone or changes to an existing zone in the City of Vancouver involves:

- Resident makes a request to the City.
- This request is then placed in a queue and processed in the order received. The current wait time is 10 to 12 months.
- Once the request is at the front of the queue the request is evaluated using a two-survey process:
  - Initial survey asks residents whether they are in favour of installing or changing the permit parking zone and requests any details on the parking challenges members of their household face.
  - If 67 percent of households are in favour of a change, the City will design parking restrictions based on the needs identified by residents in the first survey.
  - A second (final) survey provides details on the design of the proposed parking restrictions and ask residents to indicate whether or not they are in favour of creating or changing the permit parking zone.
  - If 67 percent of households are in favour of the change the City will approve the request and implement the changes.

No information on the criteria used by the City of Vancouver to evaluate resident parking requests and design the restrictions, beyond the feedback provided by residents, is readily available.

2.2 Data Collection

To establish an understanding of the parking supply and current demand for parking in the study area, shown in **Figure 1**, on-street parking areas were inventoried to verify the current number of parking spaces, their current level of utilization (occupancy), the average duration of vehicle parking (turnover), the number of on-street spaces being used by residents (residential or visitor parking passes) and time periods associated with peak utilization. The data was collected and inputted in the field on an ArcGIS tablet application.

Parking data was collected in two areas:

- Area one comprised of the entire study area, shown in **Figure 1,** enclosed by the red dotted line. The data collected from this area included approximate parking capacity (hypothetical maximum number of parked cars), occupancy, and parking pass type (residential, visitor, or none). This overall survey also verified all parking restrictions and accessible parking stalls. The maximum number of vehicles able to park on each block was approximated since most on street parking has undefined stalls and it can be difficult to distinguish driveways in front of residential homes. These approximations aim to represent the maximum capacity based on the amount of space typically left between vehicles and the normal mix of vehicle sizes. However, it is possible to

[3] Vancouver General Residential Parking Zone extent and restrictions: http://vancouver.ca/files/cov/residential_permit_parking_vgh.pdf

occasionally obtain an occupancy over 100 percent, if vehicles are parked very closely together or there is a higher proportion of smaller vehicles.

This survey was conducted over various days and time periods:

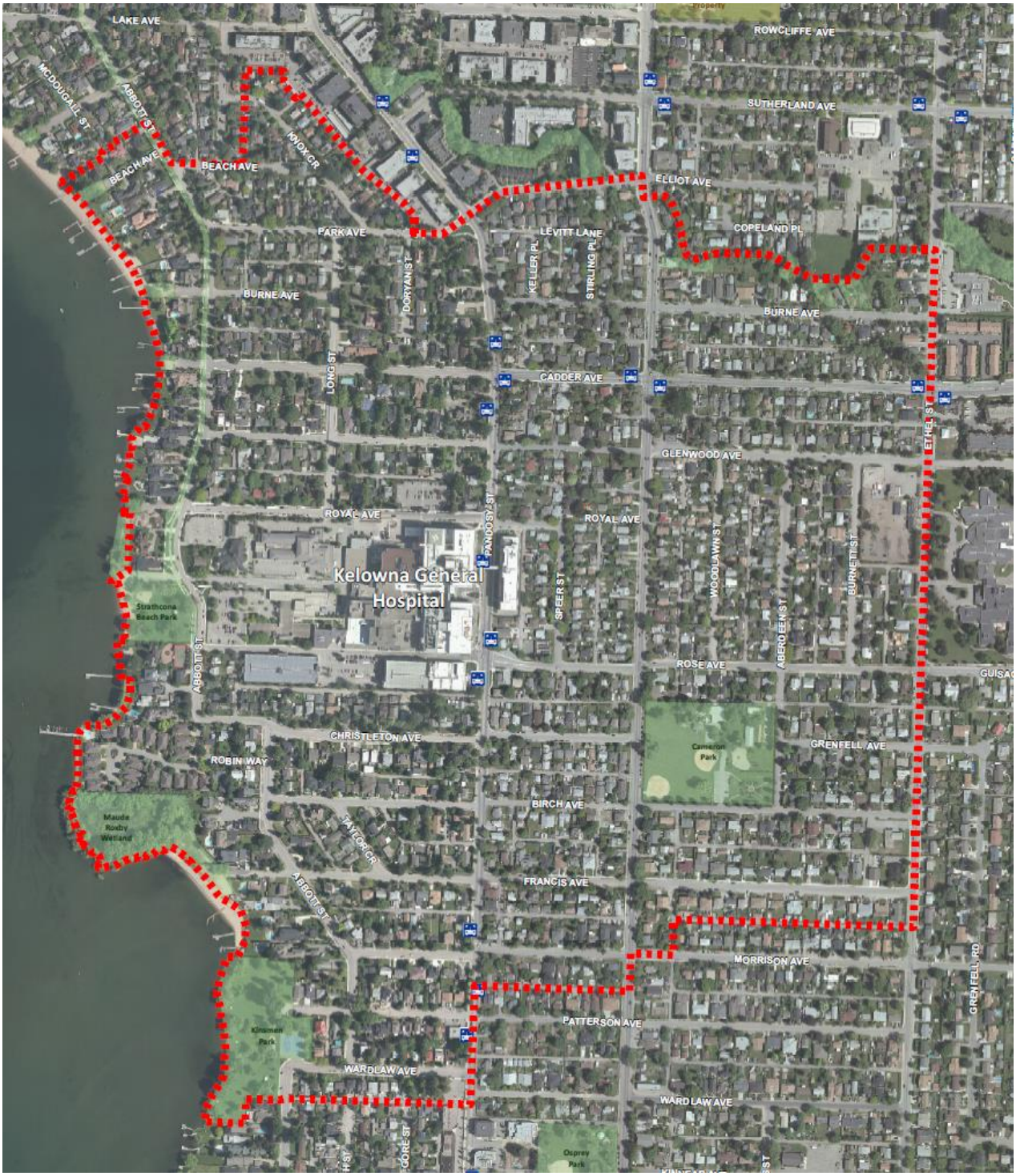
1. May weekday daytime (9:30am-2:30pm)
2. August weekday daytime (12pm-2:30pm, 2:30pm-5:00pm)
3. September weekday morning (7:30am-9:30am)
4. June weekday evening (6:30 pm–8:30pm, and 8:30-10:30pm)
5. August weekday evening (5:30pm-7:30pm)
6. June weekday night (1:30am-3:30 am)

- Area two was a subset of the study area which focuses on streets with the most direct impact of hospital parking. This area primarily consists of a two-block radius around KGH. Within this study, the goal was to collect licence plates over three consecutive passes to determine turnover, and average parking duration.

  This survey was conducted once:

  1. May weekday daytime (9:30 am – 2:30 pm)

Figure 1 – Study Area



2.3 Data Interpretation

The data collected from area one includes the number of cars parked along each block segment, the parking restrictions, and hypothetical maximum parking spaces.

The occupancy for each block was calculated using:

$$Occupancy = \frac{Parked\ Cars}{Maximum\ Parking\ Spaces}$$

Example:

$$Occupancy = \frac{7}{14} = \mathbf{50\%\ occupied}$$

The data collected from area two includes the license plate numbers and record time for each of the three passes. The license plate numbers were compared from pass to pass to determine the number of cars that were the same, and the number of cars that were new.

The total turnover was calculated using:

$$Total\ Turnover = (Pass\ 1\ Parked\ Cars) + (Pass\ 2\ New\ Cars) + (Pass\ 3\ New\ Cars)$$

Example:

$$Total\ Turnover = 8 + 2 + 6 = \mathbf{16\ different\ cars\ parked}$$

The average parking duration was calculated using:

$$Parking\ Duration = \frac{(Pass\ 2\ Parked\ Cars)(Pass\ 2\ Time - Pass\ 1\ Time) + (Pass\ 3\ Parked\ Cars)(Pass\ 3\ Time - Pass\ 2\ Time)}{Total\ Turnover}$$

Example:

$$Parking\ Duration = \frac{12 * (11{:}30AM - 10{:}00AM) + 8 * (12{:}45PM - 11{:}30AM)}{16}$$
$$= 2.0\ hours * \frac{parked\ cars}{different\ cars\ parked} = \mathbf{2.0\ hours}$$

This method for determining parking duration becomes more accurate the more passes that are recorded. Because only 3 passes were performed within a study period of between 3-4 hours, the average parking duration does not account for the duration of vehicles parked for greater than the study period. This could lead to an actual average parking duration that is higher.

The analysis presented in **Section 3.0** (below), contains a breakdown of the number of on-street parking spaces available during these times and a preliminary overview of the changing demand/supply of parking in the study area.

3.0 ANALYSIS

The following analysis evaluates current parking demand and supply in the Hospital Area, including:

- Current parking restrictions
- Existing parking supply
- Current parking demand
  - Mornings, afternoons, evenings and overnight
- Parking turn-over

3.1 Current Parking Restrictions

As shown by **Figure 2**, there are currently four types of parking restrictions in the Study Area, including:

- 1-hour parking;
- 2-hour parking;
- Residential parking only.

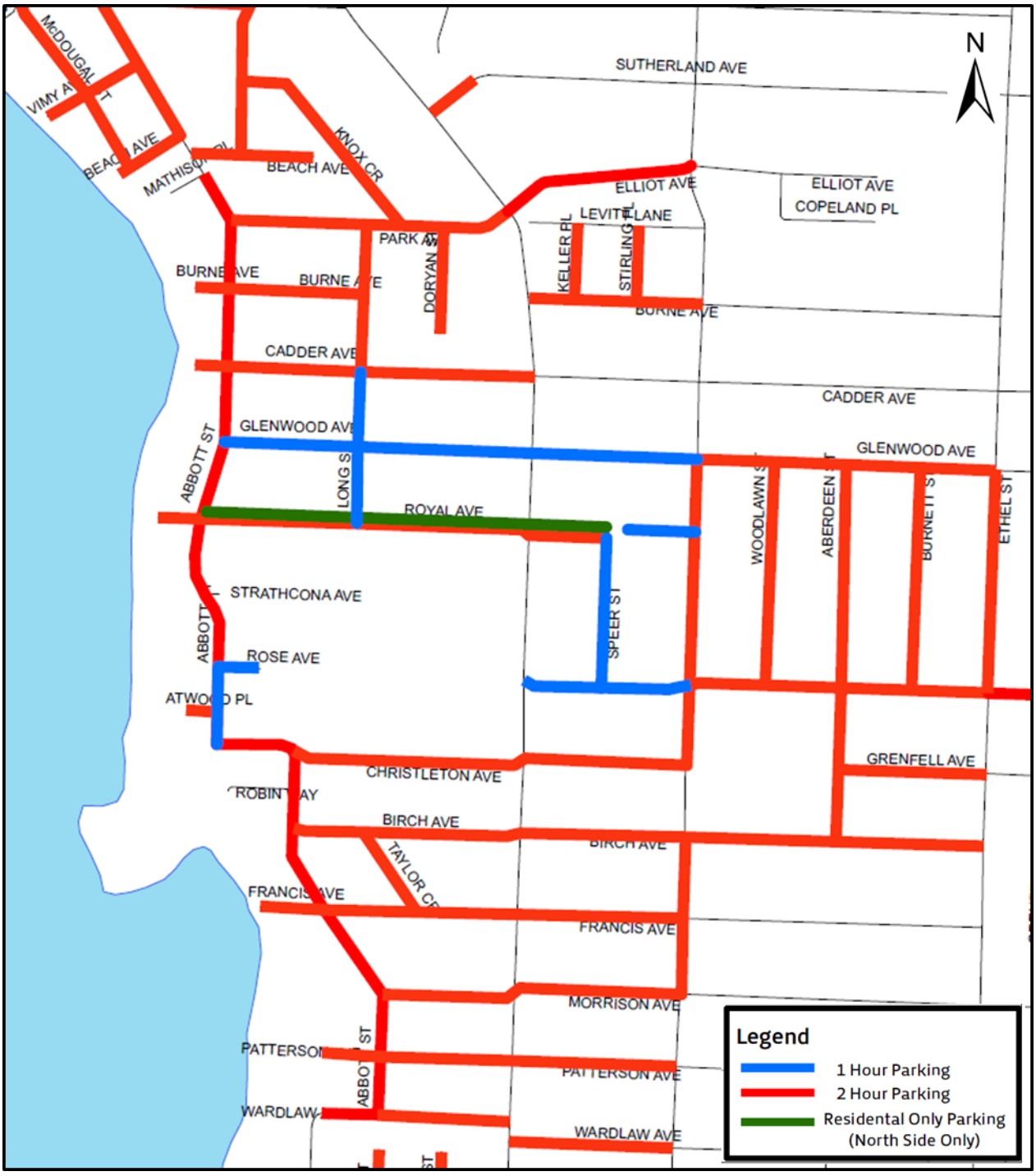
There are some streets or portions that do not currently have parking restrictions however these are limited within the study area.

3.2 Previously Completed Parking Enhancements in the Hospital Area

Since 2010, the City has made several efforts to improve the parking situation in the Hospital area. These include the following changes:

- Early payment discounts for parking offences reduced to ensure tickets are a deterrent and not just a “cost of parking” (2010);
- Changed the time period when time restrictions are in effect from 9 am to 5 pm Monday to Friday to 8am to 8 pm every day (2012);
- Added new 2 hour 8 am to 8 pm daily time restrictions to an additional 13 streets (2012);
- Residential Parking Permit Program policy re-written to ensure the number of permits available closer reflects the available street frontage (2013);
- Reduced the time limit on streets closest/most affected by hospital activity from 2 hours to 1 hour (2014);
- Strathcona Park parking lot changed to pay parking to allow it to be kept open year round. Shared use of the lot offers all-day parking in the off-season and a 4-hour maximum in the summer to give priority to visitors (2015); and,
- Various signage improvements and replacements made throughout the hospital area (ongoing).

Figure 2 – Current Parking Restrictions



3.3 On-Street Parking Inventory Early Morning

An early morning count was completed on Wednesday, September 21st, 2016 between 7:30am and 9:30am. The results of these counts are shown in **Table 2** (below). The existing inventory of on-street parking in the Study Area includes approximately 2266 spaces.

- At 7:30 am 745 stalls were occupied (33%) of the 2266 stalls present. Of those 745 cars parked, 157 of them had residential or visitor parking passes.

Table 2 – Existing on-Street Parking Inventory Daytime

Time	7:30am -9:30am
Total Number of Stalls	2266
Total Number of Cars	745
Percent Occupied	33%
Adjusted Percent Occupied (Pass Holders Excluded)	26%
Total Number of Residential and Visitor Parking Passes	157
Percentage with Residential and Visitor Parking Passes	21%

In general, in the early morning, most streets had ample parking available. However, some streets did have higher occupancy rates, including:

- Rose Avenue between Pandosy Street and Richter Street
- Christleton Avenue between Pandosy Street and Richter Street
- Richter Street between Christleton Avenue and Birch Avenue
- Ethel Street between Grenfell Avenue and Cadder Avenue

A breakdown of occupancy by street and location can be found in **Appendix B**, **Figure B5**

3.4 On-Street Parking Inventory Daytime

Day-time parking counts were conducted Tuesday May 10th, 2016. The count was carried out between 9:30 am and 2:00 pm. The results of these counts are shown in **Table 3** (below). The existing inventory of on-street parking in the Study Area includes approximately 2266 spaces.

- At 9:30 am 794 stalls were occupied (35%) of the 2266 stalls present. Of those 794 cars parked, 51 of them had residential parking passes and 32 had visitor parking passes.

Table 3 – Existing on-Street Parking Inventory Daytime

Time	9:30am -2pm
Total Number of Stalls	2266
Total Number of Cars	794
Percent Occupied	35%
Adjusted Percent Occupied (Pass Holders Excluded)	31%
Total Number of Residential Parking Passes	51
Percentage with Residential Parking Passes	6%
Total Number of Visitor Parking Passes	32
Percentage with Visitor Parking Passes	4%

In general, the study area as a whole was shown to have ample parking on most residential streets during weekday mornings and afternoons. However, some streets did have much higher occupancy rates than others. These areas generally correlate with areas directly adjacent to the hospital, including:

- Royal Avenue
- Christleton Avenue
- Speer Street
- Robin Way
- Abbott between Beach and Christleton Avenue
- Rose Avenue between Pandosy and Richter Street and west end near Abbott Street
- Long Street between Cadder and Royal Avenue
- Cadder Avenue between Long and Pandosy Street
- Ethel Street between Grenfell and Glenwood Avenue
- Cameron Park Parking Lot

A breakdown of occupancy by street and location can be found in **Appendix A**, **Figure A1**

3.5 On-Street Parking Inventory Evening

Three evening parking counts were conducted on Thursday June 9th, 2016. The counts were initiated at 6:30 pm, 8:30 pm and 1:30 am. The results of these counts are shown in **Table 4**, below, the existing inventory of on-street parking in the Study Area includes approximately 2266 spaces.

- At 6:30 pm 733 stalls were occupied (32%) of the 2266 stalls present. Of those 733 cars parked 101 of them had residential parking passes and 42 had visitor parking passes.
- At 8:30 pm 700 stalls were occupied (31%) of the 2266 stalls present. Of those 700 cars parked 110 of them had residential parking passes and 35 had visitor parking passes.
- At 1:30 am 680 stalls were occupied (30%) of the 2266 stalls present. Of those 680 cars parked 113 of them had residential parking passes and 31 had visitor parking passes.

A breakdown of vehicles with permits as percentage of the total parking stalls, by street, can be found in **Appendix A**, **Figure A6 to A9**.

Table 4 – Existing on-Street Parking Inventory 6:30 pm-1:30am

Time	6:30pm	8:30pm	1:30am
Total Number of Stalls	2266	2266	2266
Total Number of Cars	733	700	680
Percent Occupied	32%	31%	30%
Adjusted Percent Occupied (Pass Holders Excluded)	26%	24%	24%
Total Number of Residential Parking Passes	101	110	113
Percentage with Residential Parking Passes	14%	16%	17%
Total Number of Visitor Parking Passes	42	35	31
Percentage with Visitor Parking Passes	6%	5%	5%

In general, the study area as a whole has ample parking on most residential streets during evenings and overnight. However, some streets did have much higher occupancy rates than others. Again, these areas generally correlated with areas directly adjacent to the hospital, including:

- Royal Avenue
- Christleton Avenue

- Speer Street
- Abbott between Royal and Christleton Avenue
- Rose Avenue between Pandosy and Woodlawn Street and west end near Abbott Street
- Long Street between Cadder and Royal Avenue
- Patterson Avenue between Abbott and Pandosy Street
- Cameron Park Parking Lot

A breakdown of occupancy by street and location can be found in **Appendix A, Figures A2 – A4**.

Additional data was collected during a weekday afternoon and early evening in August and a weekday morning in September. This data showed similar trends to the data presented above and can be found in **Appendix B**.

3.6 Relationship between Occupancy, Time Restrictions, and Permits

The follow section highlights the busiest on-street parking areas from an occupancy perspective. The on-street areas with the highest occupancy are then compared with the applicable parking time restrictions to determine what streets are the busiest and how time restrictions may be affecting occupancy in the Hospital area. **Table 5** compares the average occupancy of the top 25 busiest parking street segments for each time period (i.e. Day, Evening, and Night). The segments have been divided into three groupings based on the time restrictions: unrestricted at all times, 1-hour parking (8am-8pm), and 2-hour parking (8am-8pm). While the 1-hour and 2-hour restrictions are not in effect in the evening the data for these segments has been reported for all three time periods to help understand if there is a preference for the locations with the time restrictions at times of the day when the restriction is not in effect. A full breakdown of occupancies by street can be found in **Appendix C.**

Table 5 - Average Parking Occupancy by Restriction Area - Top 25 Parking Segments:

Average Occupancy	Unrestricted Parking	1 Hour Parking (in effect 8am-8pm)	2 Hour Parking (in effect 8am-8pm)
Day	97%	89%	93%
Evening	73%	92%	83%
Night	74%	89%	76%
Average	**81%**	**90%**	**84%**

As shown in **Table 5**, it is apparent that there is a clear preference for unrestricted parking during day time hours. During the day, there is also a preference for 2-hour parking areas over 1-hour parking areas even though they are generally further away from the hospital.

During the day, on-street parking has minimal use by permit holders. When examining the top 25 street segments in terms of daytime occupancies there were only three segments where any permits were observed. At 6:30pm, permit holders were observed using 40 percent of the Top 25 street segments. This increased to about 60 percent for the 8:30pm and 1:30am surveys. On the segments where permit holders were observed, they were generally occupying 15 to 45 percent of the parking spaces. **Appendix A** contains maps showing the percentage of spaces occupied on each segment by permit holders and this information is also summarized in the tables in **Appendix C**.

3.7 Turn-over Rates

Preliminary turn-over data collection was conducted on Thursday May 12th, 2016. The turn-over study focused on a much smaller sub-area of the total study area. Turn-over data was collected between Cadder Avenue (North) to Birch Avenue (South) and between the Abbott Street (West) and Aberdeen Street (East).

The results of these counts are shown in **Table 6** (below), the existing inventory of on-street parking in the turn-over study sub-area includes approximately 918 spaces.

Table 6 - Turnover Data

Passes	Time	Number of Stalls	Number of Cars	Percent Occupied	Average Parking Duration
1	9:00 AM	918	404	44.0%	2 hrs. 12 mins
2	11:30 AM	918	384	41.8%	
3	12:40 PM	918	381	41.5%	
Overall Averages		**918**	**390**	**42.5%**	

The average parking duration, including permit holders, in the daytime study was 2.2 hrs. (2 hrs. 12 mins), and the average parking duration from street to street ranged from 0.9 hrs. (54 mins) to 3.3 hrs (3 hrs. 18 mins). The turn-over data collected on the evening of Thursday June 9th, 2016 had an average parking duration of 1.75 hrs (1 hr 45 mins), which was lower than the average daytime duration. The average evening parking duration from street to street ranged from 0.82 hrs (49 mins) to 3.55 hrs (3 hrs. 33 mins). A breakdown of turnover by street and location can be found in **Appendix A, Figure A5**.

4.0 COMMUNITY ENGAGEMENT

In order to gauge the opinions of residents, hospital workers and other stakeholders the City of Kelowna has utilized several community engagement methods to develop the Hospital Area On-Street Parking Plan. On May 18th, 2016, the City hosted an open house at KGH. A survey was also developed to collect feedback from the public, and was available in paper and online. The survey received approximately 615 responses and a summary of key findings is presented in Section 4.2 (below).

4.1 Public Open House #1

The City of Kelowna Hospital Area On-Street Parking Plan open house was attended by over 80 members of the public, including hospital staff, residents and representatives from Interior Health and the City of Kelowna. During this event, members of the public provided their comments and valuable insights on parking issues in the neighbourhood, as well as made recommendations for potential solutions and ways to mitigate parking conflicts. The open house generated a constructive discussion around parking issues in the Hospital District. These comments and ideas have been broken up into the following categories:

1. Parking Challenges for Residents;
2. Parking Challenges for the Hospital and KGH Staff;
3. Comments and Ideas Supportive of Parking Management;
4. Comments Related to Broader Transportation Planning and Management Issues; and,
5. Other Comments and Suggestions.

Parking Challenges for Residents:

- Hospital staff on night shift park all night on Long, Speer and Glenwood streets, possibly others?
- Residents are awoken during the AM shift change by cars (unlocking-horn), vehicles starting etc. (6-8am).
- Royal Avenue hasn't been fully swept in many years as vehicles are parked there 24/7.
- Hospital staff are disrespectful to residents when they make requests to them (i.e. not to park with tires on the boulevard/lawn, too close to their driveways, etc.).
- Residents find hospital related garbage on their properties, latex gloves, surgical masks, etc.
- The prevalence of new carriage houses in the area are contributing to higher parking demand.
- Too much early morning / loud truck traffic.

Parking Challenges for the Hospital and KGH Staff:

- Increasing the parking restrictions on residential streets pushes hospital visitors into the parkade limiting spaces for less mobile hospital patrons and staff.
- University classes overload the parking on-site and creates shortages during the busiest times.
- Parking lot on the corner of Royal Avenue and Abbott Street is empty after 4 pm. This space should be used for more than just shift parking.
- The hospital parkade should have a sign informing people of the number of spaces available and when it is full.
- Interior health should coordinate hospital shifts to reduce traffic and parking demands.
- Create a reliable shuttle service for hospital employees that comes frequently and consistently.

Comments and Ideas Supportive of Parking Management:

- All residential streets around the hospital should be for resident parking only.
- The change from 2 hours to 1-hour maximum on Glenwood was a big improvement, please don't reverse that change.
- To encourage use, IHA should provide free permits to staff like UBC does?
- Parking needs to be clearly defined – confusion around where angle or parallel parking is appropriate.
- Expand the residential parking pass program.
- Greater enforcement in residential areas (i.e. Rose Ave.).
- Free bus passes for hospital employees who choose not to drive.
- Increase the cost of parking in the area to encourage the use of alternative modes of transportation.
- The parking plan should account for the loss of on-street parking that is expected to occur with the City's plans to create more sidewalks and bike lanes in the area.
- Implement pay parking on all streets around the Hospital.
- Staff parking with shuttle service on Spear St. or further East.

Comments Related to Broader Transportation Planning and Management Issues:

- Does the City need to wait for the developer of the property at the corner of Royal/Pandosy/Speer to move forward before a full traffic signal can be installed?
- Traffic on Pandosy is becoming more congested, how we encourage more use of Abbott Street.
- Transit service must be dramatically improved to encourage use by staff.
- The lack of sidewalks in the area makes it unsafe to park and walk to hospital; this also limits who can use these spaces.
- Internal routing of traffic on-site is inefficient, could be re-routed to lessen traffic impacts on Abbott Street.
- Direct hospital and truck traffic away from Abbott Street – limit traffic and trucks turning right on Abbott off the bridge.
- Place speed bumps on Abbott and around the Hospital – Christleton Ave. and Abbott intersection (3-way stop) is problematic and an accident waiting to happen.
- The hospital needs to invest in a parkade.
- Build parkade away from Abbott - too much traffic.
- Abbott should be designated a recreational street and restricted to local traffic and pedestrians. Many potential conflicts with traffic and pedestrians near the hospital.
- Richter St. between Rose Ave. and Birch Ave. is a high parking demand area. It is also potentially very hazardous for cyclists and people parking their vehicles.
- Original planning was that trucks would access and return Via Rose Ave. -> East and to have traffic physically blocked off at the new parking garage.

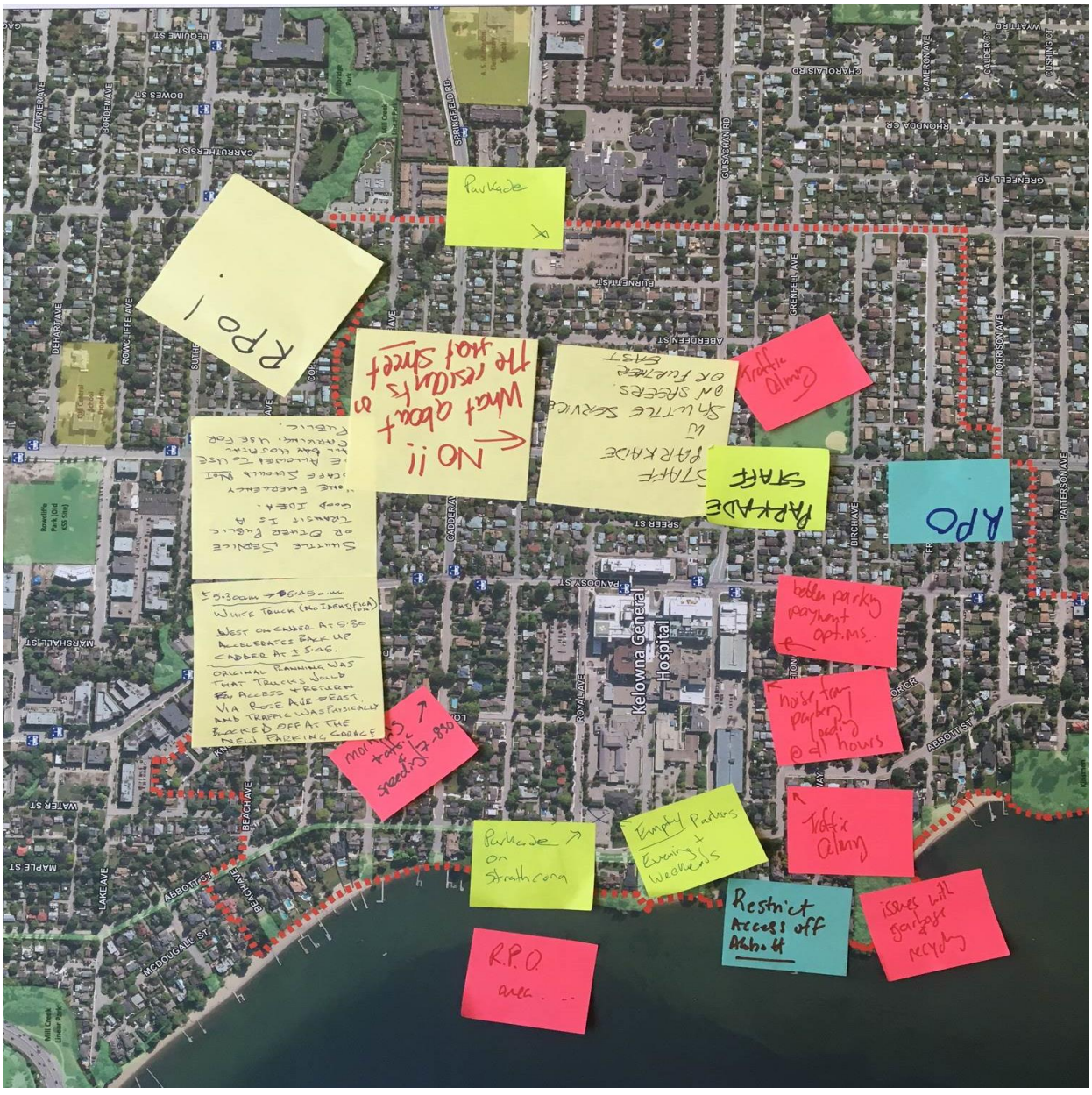
Other Comments and Suggestions:

- The hospital should be relocated to a better location that isn't in the middle of a residential area.
- An additional parkade should be constructed on the KGH site, funded by the City of Kelowna in lieu of the economic benefits provided by KGH and its staff.
- If IHA can't afford to build another parkade, why don't they do another P3 like they did for the last two buildings?
- Some hospital staff are paid very low wages and monthly parking permits at KGH are very expensive with long wait lists.

- Having a shuttle bus / park and ride service for staff commuting to work by car.
- Abbott Street is too busy, too much cars and truck traffic.
- The hospital needs to invest in a parkade.
- Residential parking program should be paid for by all tax-payer because it has a City-wide benefit.
- Shuttle service or other public transit is a good idea. Non-emergency staff should not be allowed to use all day hospital parking – should be for public.

During the open house an aerial map of the study area was provided for residents to make comments and submit feedback. The comments from this exercise were incorporated into these notes and are shown below:

Figure 3 – Public Input



4.2 Spring 2016 Survey Results

The survey received 615 responses from the online platform and open house. Below are key findings from the survey:

- 229 respondents were residents of the hospital area;
- 68% of respondents said they used on-street in the area or have visitors, patients or clients who do;
- 33% used on-street parking once a month or less;
- 72.7% of Hospital Area residents had two or more vehicles and 32.2% of residents cannot accommodate their vehicles on-site;
- 64% of non-residents use on-street parking in the area, 48.2% use on street parking once a week or more;
- Top three actions that would improve on-street parking, included:
    - Enhanced/modified parking restrictions;
    - Improved signage, information, maps or education; and,
    - Improved cycling or walking facilities.
- 35.3% of non-residents use on-street parking for half a day and 25.4% use it for the full day; and,
- 75.5% of non-residents use on-street parking during the daytime on weekdays.

The full results of the survey will be made available on the City of Kelowna parking webpage (www.kelowna.ca/parking).

4.3 Public Information Session #2

A public information session was held on November 3, 2016 at the Clinical Academic Campus on Pandosy Street to inform the public of the new on-street parking recommendations. Feedback was collected on-site through a hard copy exit survey.

Approximately 100 members of the community, including area residents, hospital staff and visitors, attended the November information session and 29 hard copy exit surveys were completed. More than 80 per cent of survey respondents identified themselves as residents in the hospital area and one-third of those that live in the area also identified as working there. Less than half of all survey respondents said they attended the Phase 2 Hospital Area Plan open house in May 2016.

While there was overall support for recommendations being made to help cope with area growth and manage parking concerns, the majority of attendees said they wanted to ensure there was room for adjustment and flexibility moving forward. They also expressed concern about affordability and availability of hospital parkade parking passes for staff, patients and visitors to the hospital. Many residents at the information session wanted to see stronger enforcement of existing and proposed restrictions and expansion of resident parking only areas and timeframes.

5.0 SUMMARY

The results of the data collection, and feedback from open house and survey confirmed there is a localized shortage of parking on some residential streets directly adjacent to KGH; especially locations without parking restrictions (i.e. Richter and Cameron Park). From the analysis and survey data it is apparent hospital employees are using on-street parking in residential areas for parking likely due to limited daytime off-street parking options in the area combined with a desire to utilize free parking options. Further, many non-residents have indicated they park in this area during the day on weekdays and usually for more than four hours. In general, turn-over remains fairly low in most areas studied and many vehicles appear to remain parked longer than time restrictions would allow. However, it should also be noted that high on-street vacancy rates have been observed on many residential streets further away from the hospital; many of these retain ample parking throughout the day, evening and night.

Interior Health is looking at the on-site parking needs at KGH, and any findings from that work will be compared to the analysis presented in this report.

5.1 Recommendations

Public input and parking occupancy data was used to develop recommendations focused on ensuring short-term parking is available for use by residents and visitors to the area and to minimize hospital related impacts on residential areas.

Short-term:

Enhance/modify parking control as described below. A map showing these recommendations is included in **Appendix D.**

- Introduce full-time pay parking on the south side of Royal Avenue along the hospital frontage
  - Improve turn over and increase availability of short term parking near Kelowna General Hospital and the Emergency Department
  - Allow for patient/visitor parking longer than two hours, if/when required.
  - Increase opportunities for street cleaning and maintenance

- Introduce pay parking on the Abbott Street and Rose Avenue hospital frontages, from 8am – 8pm daily
  - Improve turnover and increase availability of short term parking near the hospital during daytime hours
  - Provide unrestricted evening and overnight parking opportunities in an area that does not affect nearby residences

- Change the north side of Royal Avenue between Long and Pandosy Streets from Resident Permit Only Parking to a full-time 1-hour maximum parking zone
  - This block is often near empty as it sees little use by residents with permits. A significant portion of this block is an off-street lot operated by Interior Health.
  - Provide additional short term parking options near KGH and the Emergency Department while maintaining a priority for parking by resident permit holders

- Introduce overnight (8pm – 8am) Resident Permit Only Parking for residential blocks closest to the hospital (Glenwood, Christleton, Speer, Abbott, Rose & Atwood)
    - Ensure area residents with permits have access to parking in close proximity to their residence in the evening and overnight periods.
    - Reduce the impact of 24/7 operations of KGH on the surrounding residential area
    - Encourage use of available off-street parking on the KGH campus in the evening and overnight periods.
    - Re-assess one year following implementation to determine if modifications to the RPO restriction or area are required.

- Introduce full-time Resident Permit Only Parking on both sides of Long Street between Royal and Cadder Avenues (if agreed to by adjacent residents)
    - This block is often near capacity with primarily non-resident permit vehicles.
    - Reduce damage being caused to adjacent properties due to heavy parking traffic on non-urbanized boulevards
    - Create additional opportunities for resident parking to support removal of Resident Permit Only Parking from the north side of Royal Avenue east of Long Street.

- Expand existing 2-hour maximum daily parking restrictions to include Richter Street between Glenwood and Elliot Avenues
    - This currently unrestricted area often experiences high occupancy levels.

- Enhance Resident Parking Program Council Policy to include criteria and provide a method to consider any future requests for implementation of Resident Permit Only Parking restrictions
    - Focus on customer service and fairness in parking practices.

- Add additional enforcement patrols in the evening and overnight periods
    - Ensure compliance with new and existing restrictions.

If more extensive changes to on-street parking regulations to minimize the impact of hospital staff on the residential areas are desired, further restrictions should be developed once the availability of off-street parking at the hospital for both visitors and staff is better understood.

Long-Term:

- Monitor the impact secondary suites and carriage houses are having on on-street parking in the study area, and review minimum parking requirements for suites in this area;
- Continue working with Interior Health to support any initiatives that reduce the impact of hospital employee and visitor parking on the surrounding neighbourhood.

5.2 Next Steps

- Present recommendations to Council;
- Implement recommendations; and
- On-going monitoring of on-street parking.