TRANSPORTATION PLANNERS AND ENGINEERS

Sapperton Parking Study

Final

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EXECUTIVE SUMMARY

The Sapperton Parking Study will develop a plan for the Sapperton Community which will allow it to continue to grow in a compact and sustainable manner over the next 20 years, whilst encouraging more sustainable and active forms of transportation. This report outlines existing conditions and recommends short-term changes related to enforcement, whilst setting the context for subsequent studies.

1. Introduction

Bunt & Associates has been retained by the City of New Westminster to undertake a parking study of the Sapperton neighbourhood in north-east New Westminster. The objective is to understand existing parking conditions and concerns, and make recommendations to improve parking management in the future. The overall vision is to develop a plan that allows Sapperton to continue to grow in a sustainable and compact manner supporting a rich mix of land uses and employment opportunities. Overall, it should enhance the community's quality of life.

This report serves to review background conditions, and recommend some short term changes that could be implemented. On completion of this report, an Open House will be held to review findings before considering next steps, which will look at longer term options and involve working closely with the Fraser Health Authority, who have announced expansion plans for Royal Columbian Hospital (RCH), which has potential to impact the Sapperton neighbourhood. As well as RCH, the development of a parking strategy is pertinent at this time due to the continuing development of the Brewery District.

The study area centres on East Columbia Street and Sherbrooke Street, including RCH and the Brewery District. It also extends north to include lands within the future Sapperton Green. To the east it extends to Brunette Avenue and Cumberland Street to the west.

A great deal of data was collected as part of this project. This included: a survey to understand the current parking supply and demand; an online questionnaire survey filled out by over 600 people; two stakeholder workshops to connect with key community groups; and, a commercial and residential real estate assessment to consider future development potential within the area.

2. Policy Context

The policies and strategies developed must be aligned with existing strategies that have been approved by Council.

The 2011 OCP advocates that the cost of transportation facilities to tax payers should be minimised through more direct costs to users. A visioning exercise for an updated OCP is underway. This describes East Columbia Street as a 'great street', as does the Mater Transportation Plan, with an emphasis on making it more walkable.

Envision 2032 is the City's sustainability strategy. The document considers transportation specifically, and paints a future vision where policies and strategies have created a level playing field between different travel modes with motor vehicles paying for their true cost on society.

Policy 8B in the Master Transportation Plan (MTP) refers to parking management. This includes demand management measures, supply based strategies, pricing, and support strategies.

3. Existing Neighbourhood Characteristics

The main street through the study area is East Columbia Street which is a 'high street' for the community. Two rapid transit stations are within a short walk of a majority of the study area, offering frequent and convenient connections to the rest of the Region. Feeder bus services in the area connect to the SkyTrain stations.

The study area is mainly residential with commercial along East Columbia Street. Major employment centres are the Brewery District, where TransLink and the Health Services Society of British Columbia are located, and Royal Columbia Hospital.

Based on the questionnaire survey, approximately two-thirds of work trips to Sapperton are by car whilst about 50% of non-work trips by residents are walking trips.

4. Existing Parking Supply and Management

There are over 3,600 publically accessible parking stalls within the study area. There are a large number of different parking restrictions for the on-street parking. Along East Columbia Street, parking meters are mainly in effect, with time restricted and resident permit parking on adjacent streets. On the outskirts of the study area there are generally no restrictions in place.

The current resident permit parking system allows each household up to five permits to park on the street for a $10 initial fee at registration, then $5 per permit thereafter

The commercial businesses on East Columbia Street do have some off-street parking, accessed mainly via the rear lanes. The supply is a close match to the city's parking bylaw requirements, based on the estimated GFA of the businesses on the street.

5. Current Parking Demand

Overall peak parking demand for the study area occurs between 8pm and 9pm on a weekday. However, the peak demand represents less than half the available supply. The most concentrated areas for parking demand during this time are the paid parking areas around East Columbia Street and Sherbrooke Street in

the centre of the study area. It should be noted that parking meters charge until 8pm. RCH employees park on East Columbia Street in the evening, hence the spike in demand at this time. Secondly, there is a spike in both parking demand, and parking meter usage during the late morning, indicating a popular time for short duration parking typical of a 'High Street'.

The number of permits issued to residents on the streets surrounding the hospital is typically between 50% and 80% of the number of the available capacity on the street. These streets offer a mix of 'resident permit parking only' and 'two hour time limited parking, unless you have a permit'. Overall, weekday demands vary on these streets but there is significant spare supply available most of the time when considering each block as a whole. However, resident feedback indicates that the ends of these streets closest to East Columbia do fill up quickly, creating issues for some residents.

Parking demand for the two off-street lots in the Brewery District is limited, with peak weekday demand approximately half the capacity.

Over three quarters of people who drive to work in Sapperton pay for on-site employee parking. For those that park off-site, many look for spaces on residential streets within the study area, mainly outside of the current RPP zone.

6. Current Parking Attitudes

Just over 30% of residents are satisfied with the cost of parking in the neighbourhood, although they are split on their views on the general availability of parking. More non-residents are dissatisfied with the availability and location of parking, with attitudes the same as residents over costs.

On the other hand, concerns over cost and availability of parking were the two most common comments made on the questionnaire, raised by one in six respondents each.

7. Parking Management Best Practice

A number of other municipalities operate resident permit systems and charge for them. Vancouver typically charges around $37/ year outside of their core area. Some other municipalities such as Coquitlam do not charge at all. Vancouver allows a maximum of two permits per household where as some others have no limit.

In general, the existence of the permit system and the extent of it around the hospital is fairly consistent with other similar neighbourhoods in Metro Vancouver. Vancouver does operate some 'resident only' zones around major institutions, which rely on a complaints system and no resident licence plates are recorded.

New Westminster is close to implementing changes to how the permit system is administered. This includes an online permit application system, including for visitor and temporary permits. This will be complemented with new enforcement technologies utilizing automatic licence plate recognition technology to increase efficiency.

8. Short Term Recommendations

The following summarises the recommendations made in the report:

1. That the City consider a modest increase in cost of the resident permit parking scheme in conjunction with the new online permit application system and new licence plate reading enforcement technology. A measureable increase in enforcement should be able to be demonstrated in order to help justify any cost increases.

2. That the City petition residents of Hospital, Keary, Simpson and Alberta Streets (between East Columbia Street and Richmond Street), to determine the level of support for converting the entire length of each street to RPP (except where meters currently exist), removing the ability for non-permit holders to park for up to two hours.

3. That if residents vote in favour of No.3, that changes be implemented incrementally and that monitoring take place to measure any potential negative impacts on retail on East Columbia Street.

4. The City should partner with Fraser Health Authority to develop a parking strategy, both for the long term scenario when the hospital is fully redeveloped, and also for the near to medium term to ensure that construction related activity, and commissioning of the earliest phases of the project, do not negatively impact on-street parking in adjacent neighbourhoods.

5. The City should complete a Neighbourhood Transportation Study in the Sapperton neighbourhood as soon as possible to complement the outcomes of this study and to address traffic concerns expressed by some residents.

6. The City should partner with Fraser Health Authority, Translink and other businesses in the neighbourhood to encourage them to actively promote and support transportation demand management measures to minimize the volume of traffic and on-street parking in the neighbourhood.

9. Future Direction and Next Steps

Significant new development is expected in the future at RCH, the Brewery District, Sapperton Green and even along East Columbia Street itself. Parking pressures could conceivably increase in the neighbourhood if proper management is not in place.

The next steps for this project are to present the findings of this report at an Open House before embarking on a further study which will consider longer term options and involve working closely with Fraser Health as they develop plans for the RCH expansion.

1. INTRODUCTION

1.1 Background

Bunt & Associates has been retained by the City of New Westminster to undertake a parking study for the Sapperton Neighbourhood. The study will help to better understand existing parking patterns and pressures, and make recommendations for potential changes to parking management practices. This will assist in the planning of future development in the area. This will be the second parking study commissioned by the City; the first being for the downtown area of New Westminster, completed in 2013.

Future development in the area includes the Brewery District, Sapperton Green and the redevelopment of the Royal Columbian Hospital (RCH), as well as more minor infill development within the neighbourhood.

Effective parking management has a role to play in furthering the city's vision for sustainable and healthy communities.

This report summarizes existing conditions within the study area, in terms of parking supply and demand as well as resident's and employees' opinions. The report recommends some short term parking management changes whilst setting the ground work for subsequent studies, which will focus on longer term strategies and management options with reference to future developments in the area, notably the expansion of RCH. Subsequent studies will need to consider the community's parking and transportation requirements within the context of this expansion.

1.2 Project Vision

The following vision was established at the beginning of the project to help guide the work, as well as the objectives and ultimately the outcomes of the complete study (i.e. this, and subsequent studies):

> *Develop a parking management plan for the Sapperton Community that allows it to continue to grow in a compact and sustainable manner over the next 20 years to support the rich mix of land uses in the community; employment opportunities; local amenities (including sport facilities and parks); and, different forms of residential buildings. It should provide a flexible and innovative way to manage parking demands, coupled with strategies to lower vehicle use, and encourage more sustainable and active forms of transportation. All in all, the plan will contribute towards enhancing the quality of life in the community so that it continues to prosper.*

1.3 Project Objectives

The following objectives were also established at the beginning of the project and support the implementation of the vision:

i. Address local concerns through the consultation process and develop a plan that allows the community to continue to grow and prosper in a sustainable way;

ii. Clearly identify existing parking pressures and the reasons for them;

iii. Consider what can be learned from relevant best practice parking management practices within the region;

iv. Consider the merits of extending and enhancing the resident-only parking program to maintain quality of life for people living in the community;

v. Consider the merits of expansion of paid parking along the East Columbia Street corridor to manage demands and ensure the turnover of spaces is maximized for supporting local businesses;

vi. Create a template of innovative measures to lower parking demands such as on-street parking regulations; subsidized transit passes; car-share vehicles; shared parking opportunities; best practice bicycle parking design; and others.

vii. Advise on parking bylaw rates for the community, reflective of the accessibility of the area and that are flexible to preserve the quality of new urban form along with continued diversity of uses within the community;

viii. Look to opportunities in creating communal parking facilities that can be shared within the community to create more efficient use of space; and,

ix. Ensure parking supply and demand is balanced now and into the future to discourage unnecessary new vehicle movements to the community as well as maximize the use of provided stalls.

This Study considers existing conditions and short term options for improving parking management. As such, this report is focused on Objectives 1 – 5. Subsequent studies will address 6 – 9.

It is important to remember that a parking management plan fits into the wider context of transportation planning, which itself is closely connected to land use planning and creating complete communities.

1.4 Study Area

The study area was defined by the City. It stretches from Cumberland Street in the south to Brunette Avenue in the east, the Brunette River to the north, and Richmond Street and East 8th Street to the west. **Exhibit 1.1** visually outlines the study area for reference.

Exhibit 1.1 also illustrates the study's core focus area around the central portion of East Columbia Street and the adjacent residential streets. This area is the focus of the majority of existing parking pressures, and includes the community's 'High Street' as well as RCH.

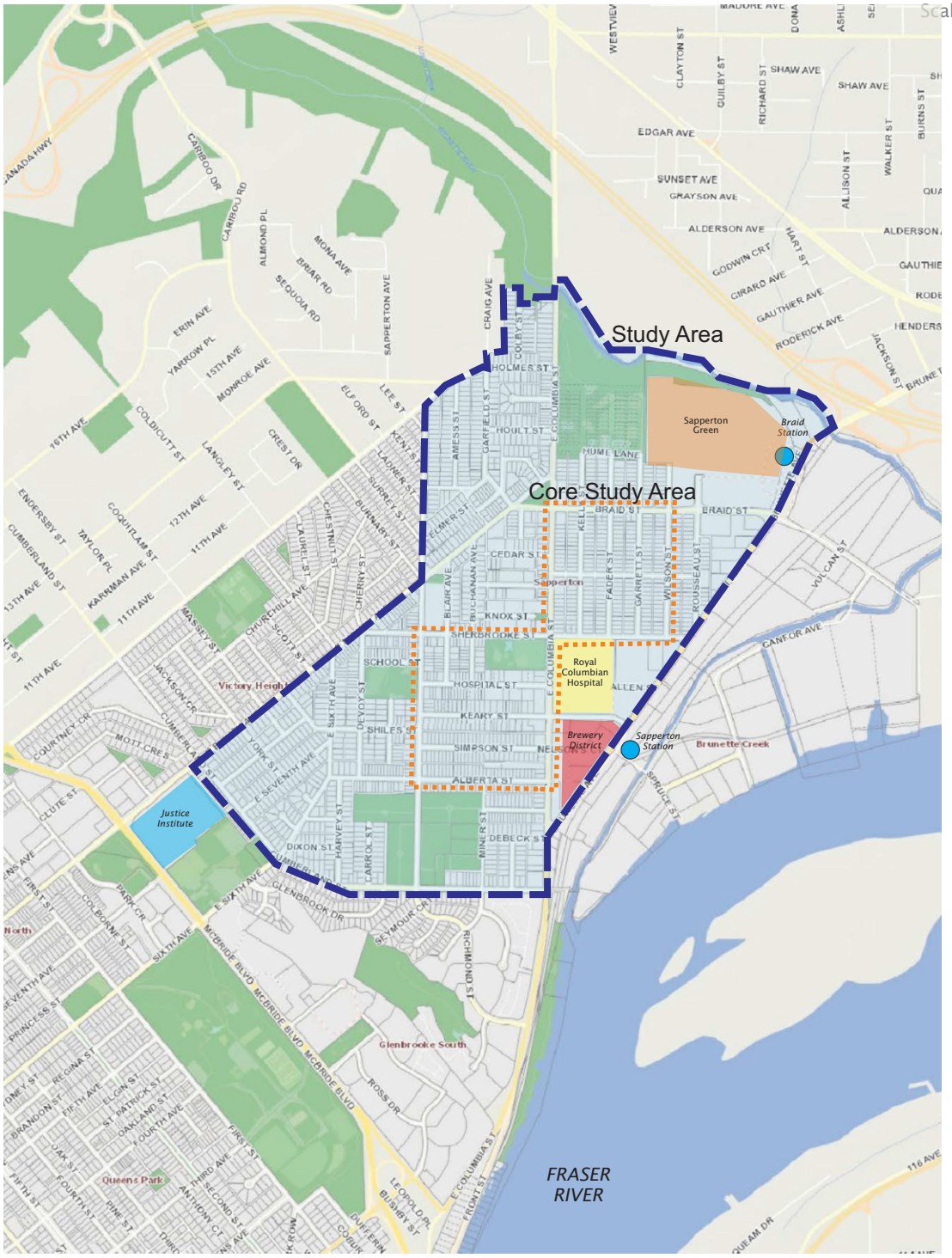

Exhibit 1.1
Study Area

4259.22

Sapperton Parking Study
January 2016

bunt & associates

1.5 Data Collection

In support of the study, the following data was collected.

1.5.1 Parking Supply and Demand Surveys

A baseline of parking supply and demand was undertaken for public off-street parking facilities and on-street parking. Supporting this was previously collected data that was undertaken as part of work that Bunt & Associates carried out for Fraser Health, associated with RCH. This parking data covered a large proportion of the study area and was collected on the week of November 25th 2013. The time period covered was 6am until 8pm. This on-street survey covered a large central part of the study area, including East Columbia Street.

Further parking surveys were undertaken on:

- Thursday, February 26th, 2015 to supplement the data previously collected; locations were mainly on the periphery of the study area, focusing on residential streets. This count covered between 4pm and 9pm as this was previously established as the busiest parking time across the study area; and,
- Saturday, February 28th, 2015 covering the entire study area as weekend data was not originally collected. This count started at 11am and finished at 7pm.

Sixty (60) minute intervals were used for all the on-street parking surveys. The two parkades in the Brewery District (the 'Save-on-Foods lot' and the 'TransLink lot') as well as the surface lot north of the TransLink building were also counted on the more recent survey dates, from 9am until 6pm on Thursday and 11am until 7pm on Saturday, both utilizing 30 minute intervals. Minor survey additions were undertaken a week later to fill in gaps in the data.

Results were imported into GIS software in order to undertake detailed analysis.

1.5.2 City Parking Meter Data

Supplementing the manually collected parking data, the City was able to provide automated data from their pay parking stations along East Columbia Street. This is presented on a block by block format showing how long someone pays for parking. Parking that occurs outside of paid hours, or if someone simply does not pay, is not recorded.

1.5.3 Online Questionnaire

An online questionnaire was undertaken to gain an understanding of the community's use of and view on parking in the Sapperton neighbourhood. The questionnaire was available between April 1st and April 24th 2015 and a prize offered as an incentive to answer the questions. Both residents and non-residents were able to complete the questionnaire, which asked them questions such as whether they worked or lived in Sapperton, which mode of travel they used to access services, where they parked, and whether they were satisfied with their parking experience.

Over 600 responses to the questionnaire were received. Creation of a project twitter account has been useful in building awareness of the project and promotion of the parking questionnaire. Full results of the questionnaire are provided in **Appendix A**.

1.5.4 Stakeholder Workshops

Two stakeholder workshops were held, on Tuesday 31st March 2015 and Thursday 4th June 2015 to better understand stakeholder's views of parking in the neighbourhood. **Appendix B** has the full list of those invited to the meetings, although not all were able to attend. Key stakeholders present in the meetings included the McBride/ Sapperton Residents Association, the Sapperton Business Association, the McBride PAC, Fraser Health, TransLink, WesGroup, Bentall Kennedy and various City representatives.

The first workshop had a brief presentation of the project and its context, before breaking into groups to identify key parking related challenges currently facing the neighbourhood. Groups then considered what they would like to see in the future in terms of parking and how this related to broader environmental, economic and social aims. The second meeting focused on the future, identifying priorities and reviewing residents opinions expressed in the Open House.

1.5.5 Commercial and Residential Real Estate Assessment

Colliers International formed part of the project team to provide background real estate information relating to current and future estimates for residential and commercial development within the neighbourhood. The report outlines key developments occurring in the next few years and in particular how much infill development may be seen during this period. It also identifies what may be appropriate future parking ratios for new projects based on information from leasing agents in the local area.

Collier's full report is contained in **Appendix C**.

1.6 Report Outline

The rest of the report is laid out in the following manner:

- Policy Context: The policy context is important because this plan must be consistent with the policies and plans which have come before it. The Master Transportation Plan, Official Community Plan and other relevant documents are reviewed in terms of their relevance for this study.

- Existing Neighbourhood Characteristics: This section describes the Sapperton neighbourhood in terms of existing transportation infrastructure and land uses. It summarizes the key streets in the area and key centres of activity such as the hospital and Brewery District. It also describes how people who live in and visit Sapperton currently travel around in terms of the travel mode split.

- Existing Parking Supply and Management: Outlines the parking supply in the study area, breaking it down by location and parking type, including a review of the various on-street parking restrictions currently in force. It also includes residential street parking permit regulations and a review of the public parking supply available for commercial units around East Columbia Street.

- Current Parking Demand: Summarizes key results from our parking survey into public parking demand within Sapperton. Results are summarized by time of day, as well as location and parking type. Explanation is offered as to the observed patterns. Questionnaire survey results are also included in terms of where people currently park for work and other uses. This section also includes a review of resident parking permit demand on specific streets and parking demand associated specifically with RCH.

- Current Parking Attitudes: This section includes results from the questionnaire survey and stakeholder workshops regarding people's perceptions of parking in Sapperton.

- Parking Management Best Practice: This provides a summary of other municipality's experiences with both residential on-street parking permits and managing parking demand around major public institutions. It also summarizes upcoming changes to New Westminster's resident permit parking system.

- Short Term Recommendations: This section outlines short term measures to address specific issues.

- Future Developments: This section reviews future known developments within the study area, including proposed changes at Royal Columbian Hospital.

- Summary and Next Steps: Summarizes the Phase 1 Report, including recommendations and also outlines Phase 2 of the study.

1.7 Next Steps

As mentioned, this report outlines the existing parking conditions in Sapperton as well as recommending some quick wins. Future steps for this project as part of subsequent studies are:

- Assessing all issues identified in this report;

- Working with Fraser Health to develop a Transportation Demand Management Plan/ Travel Plan, for the expanded Royal Columbian Hospital, with the aim of minimising parking requirements and promoting more sustainable travel options;

- Examine the feasibility of a public parking facility within the community

- Additional community consultation;

- Final report to the City.

2. POLICY CONTEXT

2.1 Introduction

This section outlines the various policies, plans and strategies that frame and influence this study.

2.2 Official Community Plan

The current Official Community Plan (OCP) is from 2011. It advocates greater choice among transportation modes. One of the transportation goals is to:

> *Minimize the costs of transportation facilities and services borne by City taxpayers through increasing the direct costs to users of transportation facilities and services.*

One application of this would be that the cost to park a vehicle should better reflect the full cost of providing that space.

'Sapperton (Columbia Street East)' is identified as a specific area within the OCP. The objective of this area designation is to:

- Provide opportunities for a range of pedestrian oriented commercial uses.
- Encourage residential use on the upper floors.
- Explore using the ends of residential streets abutting Columbia Street as public plazas and/ or additional parking (e.g., maintain or enhance public open space, ensure adequate sidewalk, retain or replace on-street parking).
- Mitigate the impacts of the transportation corridor on adjacent uses.

The third bullet point offers the opportunity to provide either additional parking adjacent to East Columbia Street, or mini plazas.

A visioning exercise is underway to update the OCP to ensure its relevance to 2041. There is a focus on creating a 'Great City'. For Sapperton, a 'unique village in Lower Sapperton' is identified along with the desire to develop East Columbia Street as a 'great street' with an emphasis on making it more walkable. This process is still underway.

2.3 Envision 2032

Envision 2032 is the City's sustainability strategy. It is described as the lens which guides the City in the development and application of its plans and policies. It defines sustainability as:

> *Meeting the needs of the present generation in terms of social and cultural systems, the economy and the environment while promoting quality of life but without compromising the ability of future generations to meet their own needs.*

This is based on a well established and widely accepted definition of sustainability first drafted in the Brundtland Report (1987).

Envision 2032 includes 10 guiding sustainability principals which should be applied to proposed plans in order to test whether they are compatible with the sustainability strategy. Of these ten principals, the following six are considered potentially relevant to this plan:

> *1. Apply long term thinking to all decision making.*
>
> *4. Minimise our ecological footprint, which is the total impact of our production and consumption activities on the earth, whether this takes place within or outside the city.*
>
> *6. Recognize and build on New Westminster's distinctive characteristics, including our history, human and cultural values, and built and natural heritage.*
>
> *7. Support people with the resources they need to live more sustainable lifestyles and foster active participation in achieving the community's future vision together.*
>
> *8. Engage and enable community partners, including organizations, business, institutions and other levels of government, to work towards a common, sustainable future.*
>
> *9. Strive towards continuous measurable improvement in meeting sustainability objectives.*

The first four of these principals are concerned with the outcomes of policies and plans, number 8 is concerned with the process, whilst the last principal is focused on monitoring.

11 policy areas are identified as part of the plan. 'Transportation and Accessibility' is one of them. 'Descriptions of Success' are listed under each policy area. Under transportation, relevant descriptions for this study are:

> *1. Land use and transportation planning are closely coordinated;*
>
> *2. A hierarchy of prioritized modes, with walking cycling and transit use at the top;*
>
> *4. Most New Westminster residents support active sustainable transportation;*
>
> *12. Through pricing and regulation, combined with the provision of attractive low-impact transportation options, Transportation Demand Management practices have created a level playing field between modes, with motor vehicles paying for all of their true costs on society and priority modes being affordable and convenient travel options.*

19. Transportation impacts on health and the environment have been minimized by switching to low-impact modes, creating attractive walking and cycling routes and reducing the physical and environmental footprint of vehicles and infrastructure.

Point 12 is perhaps the most relevant, speaking of creating a level playing field between travel modes, with motor vehicles paying for their true costs.

2.4 Master Transportation Plan

The City's Master Transportation Plan (MTP) was completed in 2014. It sets out how transportation in the City will meet the aims and objectives of the OCP, helping to increase the quality of life of New Westminster residents, employees and visitors. A 2013 survey found more than half of New West residents said transportation was 'top of mind' in a list of community issues. The overall vision for the MTP is as follows:

New Westminster's multi-modal transportation system will support the development of a compact, sustainable and resilient community, maintaining the city's role as an important historic centre and economic hub within the region, while ensuring that New Westminster's diverse neighbourhoods are healthy, active, livable and vibrant.

The MTP highlights various city wide trends as follows:

- City population is expected to grow from 67,000 to 100,000 by 2041.
- Jobs will grow from 31,000 to 47,000 in same time period.

The MTP also highlights how City residents get around:

- 35% of all work trips in the city are by bike, walking or transit (2011 National Household Survey). With a fine grained street network, high densities and good transit, this can increase.
- The City has the lowest number of vehicles registered per household in Metro Vancouver. It was 1.2 in 2006.

Policy 8B in the MTP is 'Manage Parking'. A number of strategies are recommended for use throughout the City:

- Demand Management Strategies: these involve improving walking and cycling facilities, car sharing, transit improvements, parking strategies and wayfinding.
- Supply Based Strategies: these involve influencing the amount of off-street parking and using techniques such as shared parking between different land uses that have differing peak parking demands.

- Pricing Strategies: Includes metered on-street parking to encourage turn over in commercial areas, which in turn promotes economic vibrancy and encourages people to use more sustainable travel modes.
- Support strategies: these refer to strategies such as providing preferential parking for car share vehicles, loading zones and parking permit districts.

The MTP identifies East Columbia Street as a primary cycle route and a potential 'Great Street', which it defines as possibly including:

- Street definition;
- Physical comfort;
- Places for people to walk with leisure;
- Qualities that engage the eyes; and
- Transparency.

2.5 Sapperton Green Master Plan

The Draft Sapperton Green Neighbourhood Plan was produced in June 2014 and is currently progressing its way through the Council approval processes. It outlines how development may occur in this new neighbourhood located to the north-east of the rest of Sapperton. It is bordered by Hume Park to the west and Braid SkyTrain station to the east. It is envisaged as a, 'vibrant urban neighbourhood that integrates a complementary mix of residential, retail, office and community uses to create a compact, complete neighbourhood'. Like other master planned communities, it would be designed to accommodate its own parking demand. However, new residents would likely travel to Sapperton to shop and use the neighbourhood's services. Projected future development statistics are outlined in Section 9.

2.6 Downtown Parking Strategy

This document was finalised in December 2013 and outlines a parking strategy for the downtown. Its scope is larger than the Sapperton Parking Study and different issues predominate. However, it does cover many of the same topics in terms of supply and demand, and future projections and strategies. This document will be further reviewed for strategies and policies that may be of relevance when developing Sapperton's future parking strategy.

2.7 Village at Historic Sapperton Design Guidelines

These were developed in 2007 and refer to what is now known as the Brewery District. Section 3.13 refers to 'Streets and Parking'. It states that most parking will (has) be provided underground, with limited street parking. Shared parking will be used as a concept to reduce parking requirements where possible. Parking charges will also be in place to ensure that those that arrive by more sustainable modes are not

subsidising those that don't. Employee parking will be charged for and residential parking stalls will be unbundled, ensuring that new residents are not forced to pay for a parking stall that they may not use.

2.8 Proposed Sapperton District Energy System

The City is exploring the possibility of locating a District Energy System in the Sapperton neighbourhood. This would occur in conjunction with the redevelopment of the Royal Columbian Hospital. This would provide clean, renewable and low cost energy. If constructed it would be on a City owned site in the Braid Industrial Area, at 435 Canfor Avenue.

2.9 Summary

A common theme of these documents is that parking charges should better reflect the real costs of providing that stall. With reference to Sapperton, there is a desire to make East Columbia Street a 'great street' and encourage economic vibrancy through parking management.

Of the principals contained within Envision 2032, #8, concerned with process, is of particular relevance at this stage of the project. The online questionnaire and engagement, as well as the stakeholder group are evidence of addressing this principal.

Other points will be relevant moving forward into the option development stage.

3. NEIGHBOURHOOD CHARACTERISTICS

3.1 Introduction

This section outlines the existing transportation characteristics of the neighbourhood, summarising key land uses, travel mode split data for the community, and vehicle volumes. Parking supply, management and demand are summarised in subsequent sections.

Exhibit 3.1 outlines the study area and includes streets, transit routes, SkyTrain stations, public off-street parking facilities, parks and major land uses.

Sapperton is located at the eastern edge of New Westminster, and shares a border with Coquitlam. Downtown New Westminster is a five minute drive to the south, and the Victory Heights neighbourhood is to the west. East Columbia Street and Sherbrooke Street provides a focal point of community activity with commercial, the emerging Brewery District and Royal Columbian Hospital to the south-east and single family housing dominating the other three quadrants.

3.2 Transportation Infrastructure

3.2.1 Streets

Exhibit 3.1 shows the main streets in the study area, which are summarised in **Table 3.1**.

N

Scale: NTS

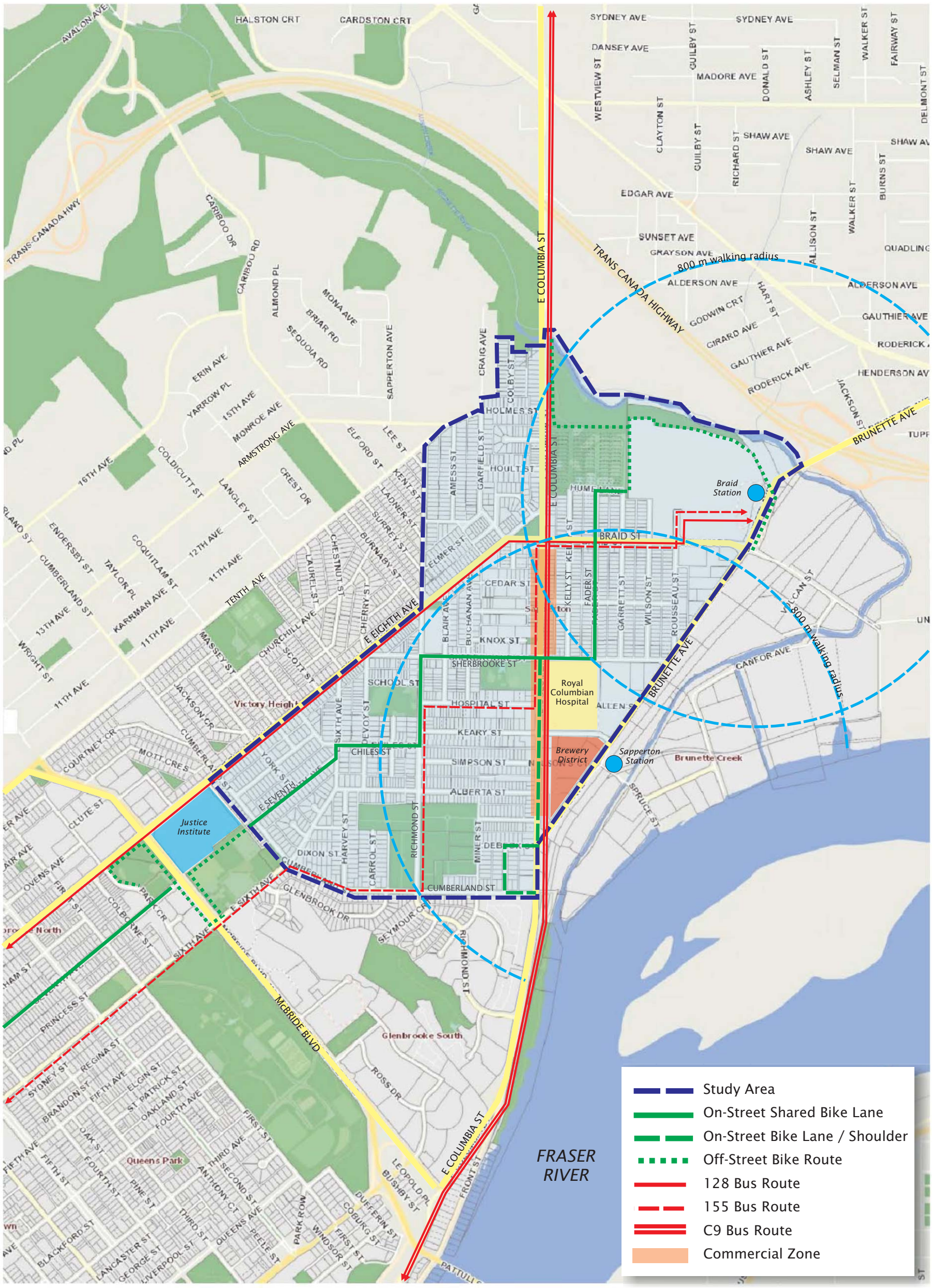

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Exhibit 3.1

Study Area and Key Transportation Features

Sapperton Parking Study
4259.22 January 2016

bunt & associates

Table 3.1: Main Street Characteristics

Street Name/ Segment	Number of Lanes	Classification	Parking	Other Characteristics
East Columbia Street (Brunette Avenue to Braid Street)	Two lanes	City Collector	Paid, by metered	Described in MTP as a 'great street'. Bike lanes are present south of Sherbrooke St. Commercial focus for community.
East Columbia Street (north of Braid Street)	Four lanes	City Collector	No parking	Becomes North Road once in Coquitlam
Richmond Street	Two lanes	Local Road	Mixture of 2 hour limit and resident permit only	Runs north-south one block west of East Columbia Street
Sherbrooke Street	Two lanes	Local Road	East of E. Columbia St. – paid meters; West of E. Columbia St. – Mainly 2 hour limit and resident permit	runs east – west through the centre of the neighbourhood
Braid Street	Two lanes	City Collector	No parking	Connects to 8th Avenue in the west and Brunette Avenue in the east
8th Avenue	Two lanes	City Collector	No parking or stopping	Forms part of the western edge of the study area

3.2.2 Bicycle Routes

Exhibit 3.1 highlights a number of important bicycle routes in the community. These are also summarised in **Table 3.2**.

Table 3.2: Bicycle Routes

Name	Type	Description
Central Valley Greenway	On-street route, shared, with signs and markings	Main east-west route through the community. A regional greenway linking New Westminster with Vancouver, Primarily utilizes Sherbrooke Street and Fader Street.
East Columbia Street	On-street marked bike lanes	Runs from Sherbrooke Street to Brunette Avenue.
The Brunette – Fraser Regional Greenway	Greenway, off-street	Runs along the top portion of the study area, running through Hume Park

3.2.3 Transit

Two rapid transit stations are within walking distance of most of the study area. Sapperton and Braid SkyTrain Stations are within 800m walking distance of the vast majority of the community, including the activity centres along East Columbia Street, Sherbrooke Street, RCH and the Brewery District. These stations offer convenient and efficient travel to much of Metro Vancouver, including Burnaby, Coquitlam, Surrey and Port Moody within 30 minutes and downtown Vancouver in just over 30 minutes.

Exhibit 3.1 also illustrates bus transit services in the area. The transit routes are summarised in **Table 3.3**.

Table 3.3: Bus Transit Routes

Route Number	Route Description	Peak Hour Frequency
C9	North-south along East Columbia Street, connecting to Lougheed SkyTrain Station	30 minutes
128	Runs along 8th Avenue and Braid Street. Connects to Braid SkyTrain Station.	20 minutes
155	Runs along Braid Street, East Columbia Street, Hospital Street and Richmond Street. Connects to Braid SkyTrain Station.	20 minutes

3.3 Key Land Uses

The area is predominantly single family residential. These areas include streets with parking on both sides and laneways. There are a number of secondary suites. Street fronting retail occurs along much of East Columbia Street as far north as Braid Street. Key land uses are outlined in Table 3.4.

Table 3.4: Key Land Uses

Name	Size	Location	Description
Brewery District	include over 350,000 sq ft of office and over 75,000 sq ft of retail.	East of East Columbia Street, and south of Keary Street.	Emerging mixed use neighbourhood adjacent to Sapperton SkyTrain Station. Further development to occur in the near future.
Royal Columbian Hospital	570,000 sq ft. Employees 3,500 FTEs.	East of East Columbia Street and south of Sherbrooke Street.	Services are currently pressured for space and significant redevelopment and expansion is planned for the future. Includes a doubling of the floor space and 75% more employees.

3.4 Outside the Study Area

The Justice Institute of BC is located just outside of the study area, south west of Cumberland Street. Although not part of this study, it is noted that the Justice Institute currently has significant amounts of free surface parking which they may charge for in the future. This could potentially impact parking demand at the adjacent Canada Games Pool as well as lead to parking pressures on nearby residential streets which are within the study area boundaries. The Canada Games Pool is currently being considered for redevelopment which may impact parking demand in the future.

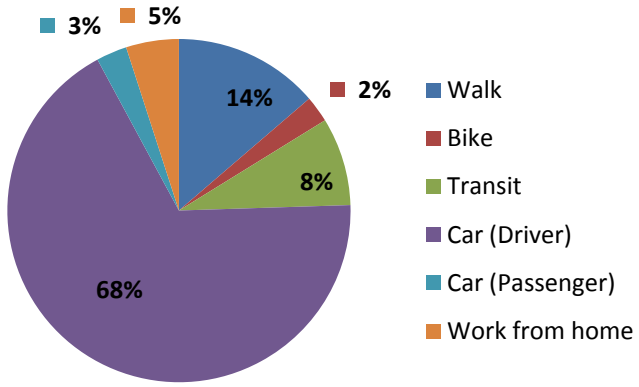
3.5 Existing Travel Mode Splits

The MTP reports that, for the City as a whole:

- 35% of all work trips in the city are by bike, walking or transit (2011 National Household Survey).
- The City has the lowest number of vehicles registered per household in Metro Vancouver. (It was 1.2 in 2006).

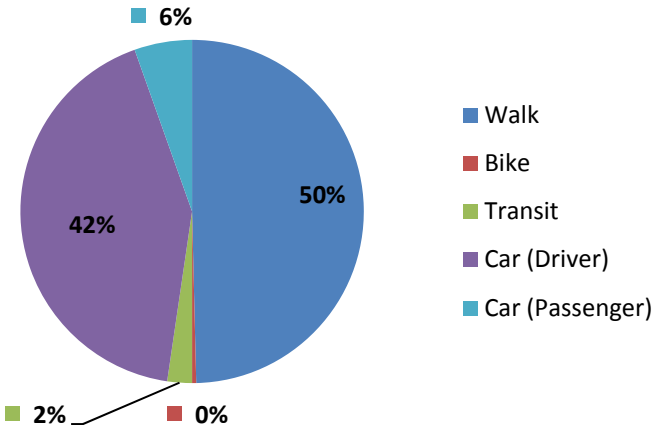
The National Household Survey does not provide information on the neighbourhood level. However, an online questionnaire survey was undertaken as part of this project. The questionnaire specifically asked what mode of transportation people used for work and leisure trips within Sapperton. Although this is a much smaller sample size than the National Household Survey, with less statistical validity, it does relate specifically to Sapperton. The online survey garnered 603 responses in total, 315 of whom lived within Sapperton. The results are presented below for work trips to Sapperton, non-work trips by Sapperton residents and non-work trips by non Sapperton residents.

Exhibit 3.2: Modal Split for Work Trips to Sapperton (241 responses)



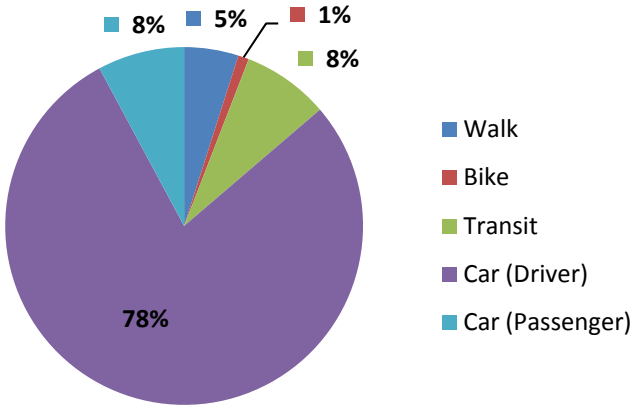
As indicated, two-thirds of questionnaire responders who work in Sapperton drive. 14% walk and 8% take transit. 5% report working at home while only 2% cycle. 241 responses make up this chart, of which only 55 live within Sapperton. Of those 55 respondents, over half walk to work. This partially explains the two-thirds split to driving. The existence of major employers such as RCH will draw people from a wide geographical region and also helps explain the split.

Exhibit 3.3: Modal Split for Non-Work Trips within Sapperton, By Residents (259 responses)



For non-work trips within Sapperton by people who live in Sapperton, half the trips are reported to be by walking, with just over 40% by car. Other modes are reported to be minor in terms of the number of people using them. 259 responses make up this chart. This is encouraging and implies a large number of Sapperton residents regularly make use of local shops and services.

Exhibit 3.4: Modal Split for Non-Work Trips within Sapperton, By Non Residents (103 responses)



For non-work trips to or from Sapperton by non-residents (i.e. visitors to Sapperton) the modal split is, as you would expect, very different from those that live in the area. The question was asked in terms of the most recent trip made to a destination within Sapperton. Over three-quarters of trips are by car as a driver, with a further 8% of trips as a car passenger and 8% by transit. 103 responses make up this chart. The purpose of the trip is unknown in this instance, apart from that it is a non-work related trip. Shopping or

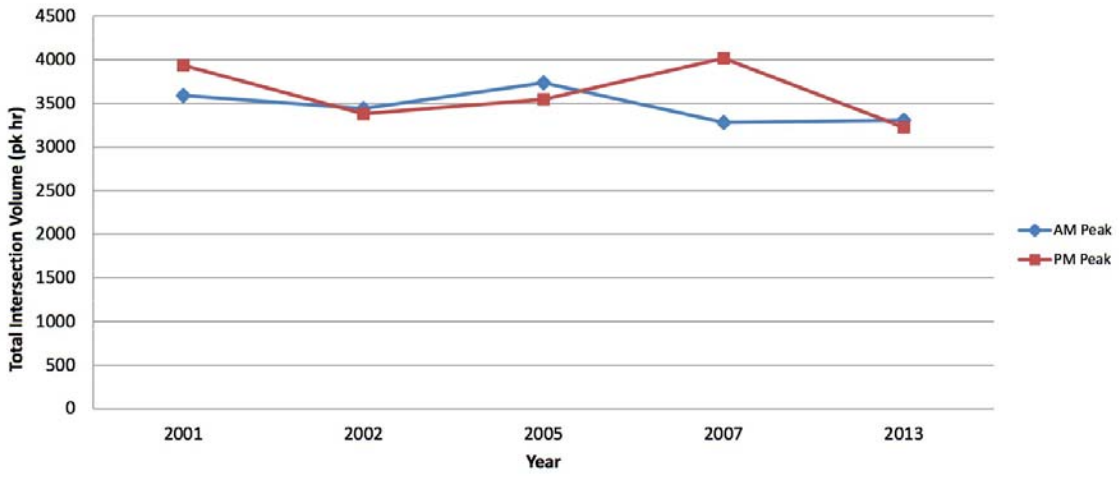
visits to the hospital are examples of possible trip purposes. Without knowing exactly where people are coming from, which was not asked, it is difficult to read too much into this.

The overall percentage of people driving to and from work is in line with the City's results from the 2011 National Household Survey. For non-work trips, a critical factor in determining which travel mode is used is distance, with 50% or half of Sapperton residents walking for non-work related trips. This drops to 5% for non-Sapperton residents visiting Sapperton.

3.6 Vehicle Volumes

Past traffic volume data helps to set context in terms of driving trends in the neighbourhood and wider area. **Exhibit 3.5** presents historical vehicle volume data for the East Columbia Street and Brunette Avenue intersection.

Exhibit 3.5: Historical Peak Hour Traffic Volumes at Brunette Avenue and East Columbia Street Intersection



Evidently, peak hour vehicle volumes have remained fairly steady over the last decade. Part of the reduction can be explained by the City's policy to not increase capacity and encourage more sustainable forms of transportation. Indeed, over the same period, total TransLink boardings across the network have increased by approximately 50%.

4. PARKING SUPPLY AND MANAGEMENT

4.1 Introduction

This section reviews the existing parking supply and restrictions. The majority of this data is from surveys undertaken by Bunt & Associates, supplemented by available GIS parking management data provided by the City, which was further verified by Bunt during field observations.

The current eligibility criteria for the on-street residential parking permit system is also reviewed, as well as the effective parking supply for the businesses on East Columbia Street.

4.2 On-Street Parking Supply & Management

Within the study area on-street parking is estimated at 3,600 spaces and **Exhibit 4.1** illustrates this by different zones.

Of note, East Columbia Street has approximately 170 on-street parking spaces, with the majority metered. Some retailers do not have their own private parking and rely upon the street supply, especially older buildings.

Exhibit 4.2 (split into four pages for ease of viewing) shows the current on-street parking restrictions within the neighbourhood and as evident, there are a large number of different forms.

Exhibit 4.2 shows two hour parking meters are located along the majority of East Columbia Street, with some 10 hour meters at the southern end. 10 hour meters are also present on the eastern portion of Sherbrooke Street. There is a considerable amount of free two-hour parking in the study area (most of which can be used for an unlimited amount of time by residents with permits), mixed in with resident permit parking only. Where no symbols are shown, there are no parking restrictions.

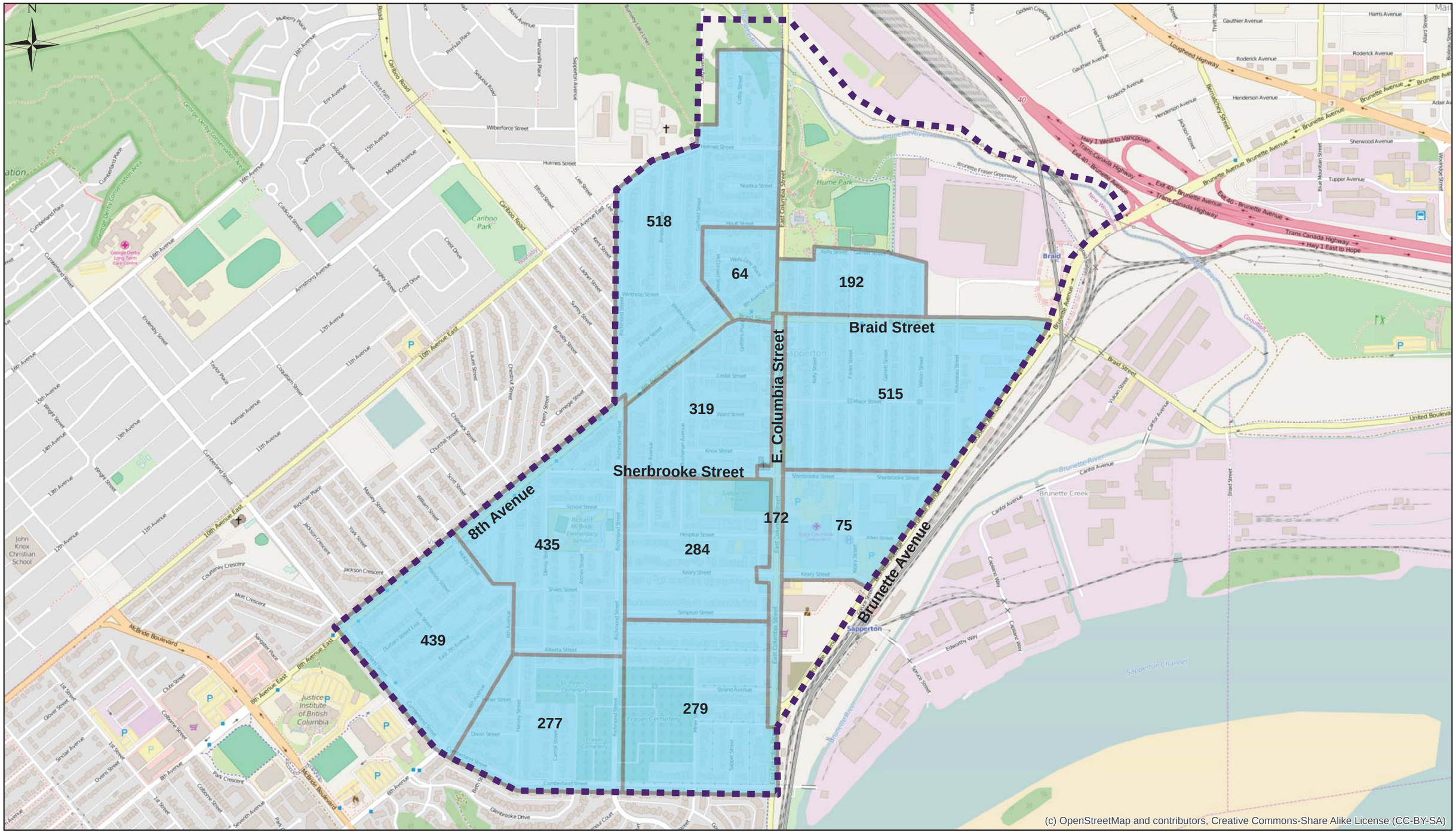


Exhibit 4.1

On-Street Parking Supply by Zone

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

Parking Restrictions

PARKING_METERS

- 10 HOUR METER
- 15 MINUTE METER
- 2 HOUR METER
- 30 MINUTE METER
- 1 Hour Parking
- 2 Hour Parking
- 3 Hour Parking
- No Stopping Signs
- No Parking Misc
- No Parking between hours
- No Parking Loading Zone
- No Parking Anytime
- No Parking except with Permits
- Handicap Parking
- Parking
- 15 Minutes
- 30 Minutes

* majority of 2hr parking spaces are resident permit (resident exempt)

E. Columbia Street

Braid Street

8th Avenue

Brunette Avenue

Sherbrooke Street

(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

Exhibit 4.2a

On-Street Parking Restrictions (north)

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

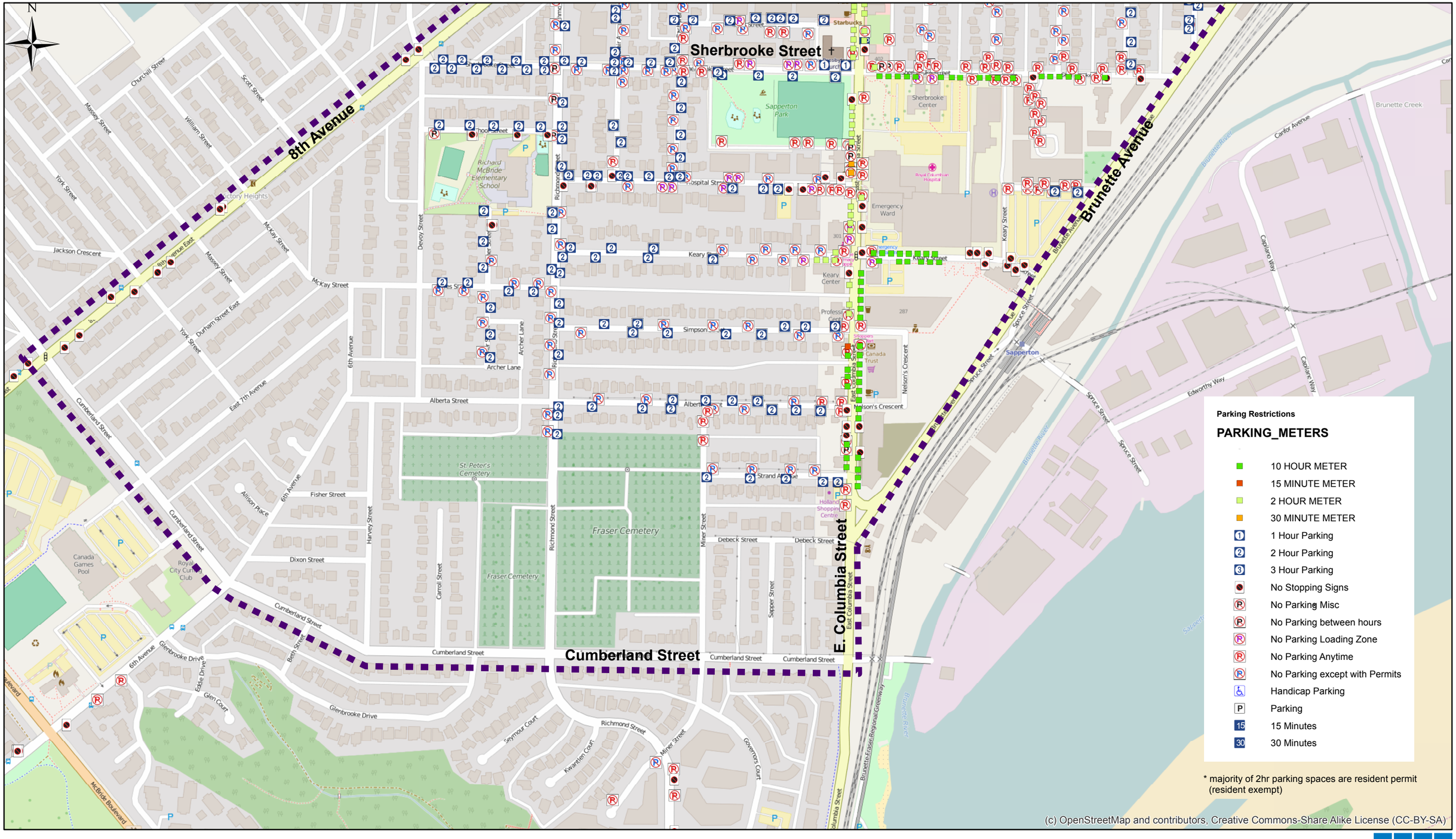


Exhibit 4.2b

On-Street Parking Restrictions (south)

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

In order to simplify the multiple types of parking restrictions, five categories have been considered. These are summarised in **Table 4.1**.

Table 4.1: Parking Categories for Analysis

Parking Type	Estimated Supply Within Study Area
Free Parking, No Restrictions	1,595
Pay Parking	250
Residential Parking Permit Only (RPP)	895
Free Time Restricted Parking	175
Time Restricted Parking Except for Permits (Resident Exempt, RE)	695

Note: The estimated supply is based on an assumption of 7m of curb required per parking space, accounting for driveways, fire hydrants and other obstacles.

Nearly half of spaces within the study area are unrestricted. These are mainly in the residential areas away from the main employment and shopping areas. The second most common with nearly 900 estimated spaces are residential parking permit zones, which require a resident's permit to use. Residential permits are explained in more detail in the next section. There are an additional nearly 700 time restricted spaces, mainly two hours, which can be used for an unlimited amount of time with a resident's permit (known as resident exempt). There are also 250 paid parking spaces, mainly on East Columbia Street and Sherbrooke Street, as well as 175 time restricted spaces.

The metered parking on East Columbia Street generally has a rate of $1.75 per hour to a maximum of 2 hours. Some 10hr stalls are available in limited quantities. Charges are in effect until 8pm. Resident permit parking is in affect on a large number of streets close to East Columbia Street and Royal Columbia Hospital. This is so shoppers and employees do not park on residential streets for long periods of time.

4.3 Resident Permit Parking Management

Exhibit 4.2 illustrates the extent of the resident permit parking scheme in operation within Sapperton. Parking restrictions extend approximately 500m north of the hospital to Hume Park and nearly 600m to the west, to Devoy Street. This is relatively large area for such a scheme. However, in addition to RCH, the SkyTrain, other major employers and a retail street are all competing for street space for their customers.

Table 4.2 summarise the current eligibility criteria and cost for the resident parking permit scheme.

Table 4.2: City Resident Parking Permit Cost and Eligibility

Criteria	Value
Number of Residential Permits allowed Per Household	4
Cost of Residential Permits	For the first two, $10 initial year followed by $5 per permit annual renewal fee thereafter. For the second two, $50/ year.
Number of Visitor Permits per Household	1
Cost of Visitor Permit	$10 initial year followed by $5 annual renewal fee thereafter.

Up to five permits are permitted per household, including one visitor pass. Costs are low with only a $5/ year renewal fee for the first three permits (including visitor). The fourth and fifth permits have a higher cost, presumably to dissuade households from an excessive number of permits. Licence plates are required to be registered with the City and permits are valid only for the block on which the permit holder lives.

Section 5 considers the demand for these permits in relation to several key streets in the core study area. Section 7 compares these regulations with others within the region, as well as its geographical scope.

4.4 Publically Accessible Parkades

Within the study area there are currently two publically available parkades, the 'TransLink lot' and the 'Save-On-Foods lot'. Both parkades are located in the recently completed Brewery District development, just north of where East Columbia Street meets Brunette Avenue. Details of each parkade are summarized in **Table 4.3**. Other, smaller, private surface lots exist in the study area. However they are not 'public parking' in so far as they are for customers of specific retail stores.

Table 4.3: Off-Street Parking Summary

Location	Publically Available Parking	Restricted Parking	Total Supply	Parking Rates
TransLink Lot	48	222	270	$2.00 each 30 min; $3.00 evening flat rate (6pm-1am); monthly parking available (cost not stated)
Save-On-Foods Lot	94	142	236	$2.00 each 30 min; $12.50 all day (6am-6pm); $3.00 evening flat rate (until 6am); 2 hours free if shopping at retail stores in the building
TOTAL	**142**	**364**	**506**	

These off-street lots have a total of 142 publically available stalls, with a further 364 restricted stalls (reserved). Parking rates are considerably higher than on-street parking on Columbia Street, at $2.00 per 30 minutes.

Overall therefore, including both on-street and off-street stalls, there is space to park approximately 4,116 vehicles within the study area.

4.5 Estimated Parking Supply for East Columbia Businesses

There are approximately 170 on-street parking stalls along East Columbia Street, and more time restricted stalls on side streets. Some businesses have off-street parking available to them but some also rely on the on-street parking to serve their customers.

In order to estimate whether the businesses have a theoretical parking supply shortfall, the estimated parking supply per 1,000 sq ft has been estimated and related to the City's bylaw for comparison. **Table 4.4** summarizes the findings.

Table 4.4: Estimated Parking Supply for East Columbia Street Businesses

Criteria	Value
Estimated Gross Floor Area (sq. ft.) *	210,000
Estimated Off-Street Parking Stalls in Vicinity	415
Estimated On-Street Parking Stalls in Vicinity	260
Estimated Total Parking Stalls in Vicinity	*675*
Actual Off-Street Parking Supply Ratio (per 1,000 sq. ft.)	2.0
Actual Total Parking Supply Ratio (per 1,000 sq. ft.)	3.2
City's Off-Street Parking Bylaw Suggested Supply **	440
Difference (Estimated Off-Street Supply vs Bylaw Supply)	-25

** Information extracted from the Colliers "Sapperton Parking Study"*

*** 150.19.4 - For retail stores and personal service establishments, one parking space shall be provided for each 50 square metres (538.21 square feet) of floor area, or portion thereof, up to 10,000 square metres (107,642.62 square feet); and one parking space shall be provided for each 40 square metres (430.57 square feet) of floor area*

The findings confirm that the current off-street supply is very similar to the City's suggested bylaw rate for commercial retail, a shortfall of approximately 25 stalls. Taking the on-street supply into consideration increases the available parking supply by roughly 260 stalls to a total of 675, a rate of 3.2 stalls per 1,000 square feet of gross floor area.

4.6 Royal Columbian Hospital Parking

Parking associated with the hospital is not part of this study as it is not public parking. However, it is relevant in terms of building up a picture of parking in the area and potentially understanding demand issues elsewhere. RCH has approximately 1,010 parking stalls, intended for either staff or visitors. Some parking areas are dedicated for visitors and patients only, whilst others are dedicated for staff, including some pass holders. Many areas however are mixed, allowing both staff and visitors to park in the same area.

5. CURRENT PARKING DEMAND

5.1 Introduction

Parking demand surveys were undertaken in order to provide a baseline condition for the neighbourhood. This review summarizes parking demands at the peak times of a weekday and Saturday as well as reviewing their daily profiles by parking restriction type. There is also a focus on the 'core study area' of specific residential streets closest to RCH. These streets experience higher parking utilization. These streets' daily profiles are compared to the number of permits issued for these streets to try to better understand where the demand is coming from.

This section also reviews the City's metered parking stalls on East Columbia Street and questionnaire survey data regarding where employees tend to park.

5.2 Overall Parking Demand

The following exhibits present the weekday and Saturday demand profile for on-street parking and the two parkades in the Brewery District.

Exhibit 5.1: Overall Weekday Parking Demand Profile

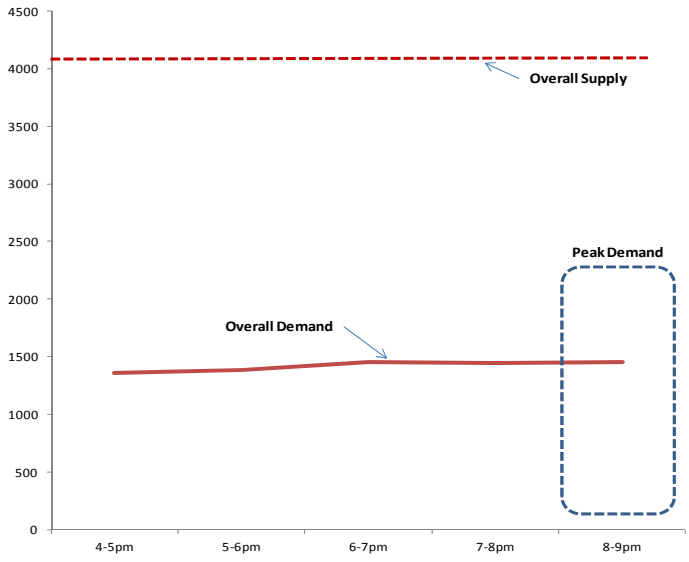


Exhibit 5.2: Saturday Parking Demand Profile

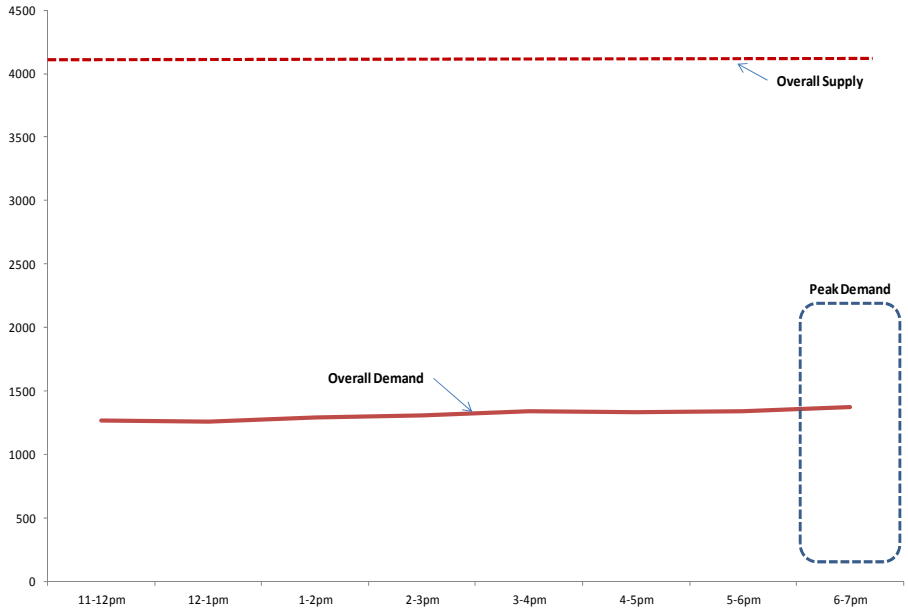


Exhibit 5.1 shows that parking demand on the weekday tends to flatten out after 6pm with a slight peak between 8pm-9pm. Likewise, Saturday's parking demand (**Exhibit 5.2**) is relatively constant through the day with a peak at 6pm-7pm. It may be that demand continued to increase past 7pm, after the end of the survey. Note that the exhibit's have differing time scales along the x axis.

The profile data also confirms that parking demand for the study area is far from approaching the supply available for the neighbourhood. However, this overall picture disguises significant local fluctuations and changes. Some areas have ample parking available at all times whilst others experience demand reaching supply at some times.

Exhibit 5.3 and **5.4** present the demand data summarized by utilization dots for different blocks and demand/supply charts for each zone within the study area boundary but does not include off-street parking data.

As indicated, during the peak weekday demand (8pm – 9pm) some of the heaviest usage occurred around the central area of the study zone on East Columbia Street and Sherbrooke Street. Hospital Street and School Street close to Richard McBride Elementary School was also well used. Most residential streets away from the core were 0% to 40% occupied, although some streets were up to 60% occupied.



Exhibit 5.3

Peak Weekday On-Street Parking Demand (8pm-9pm)

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

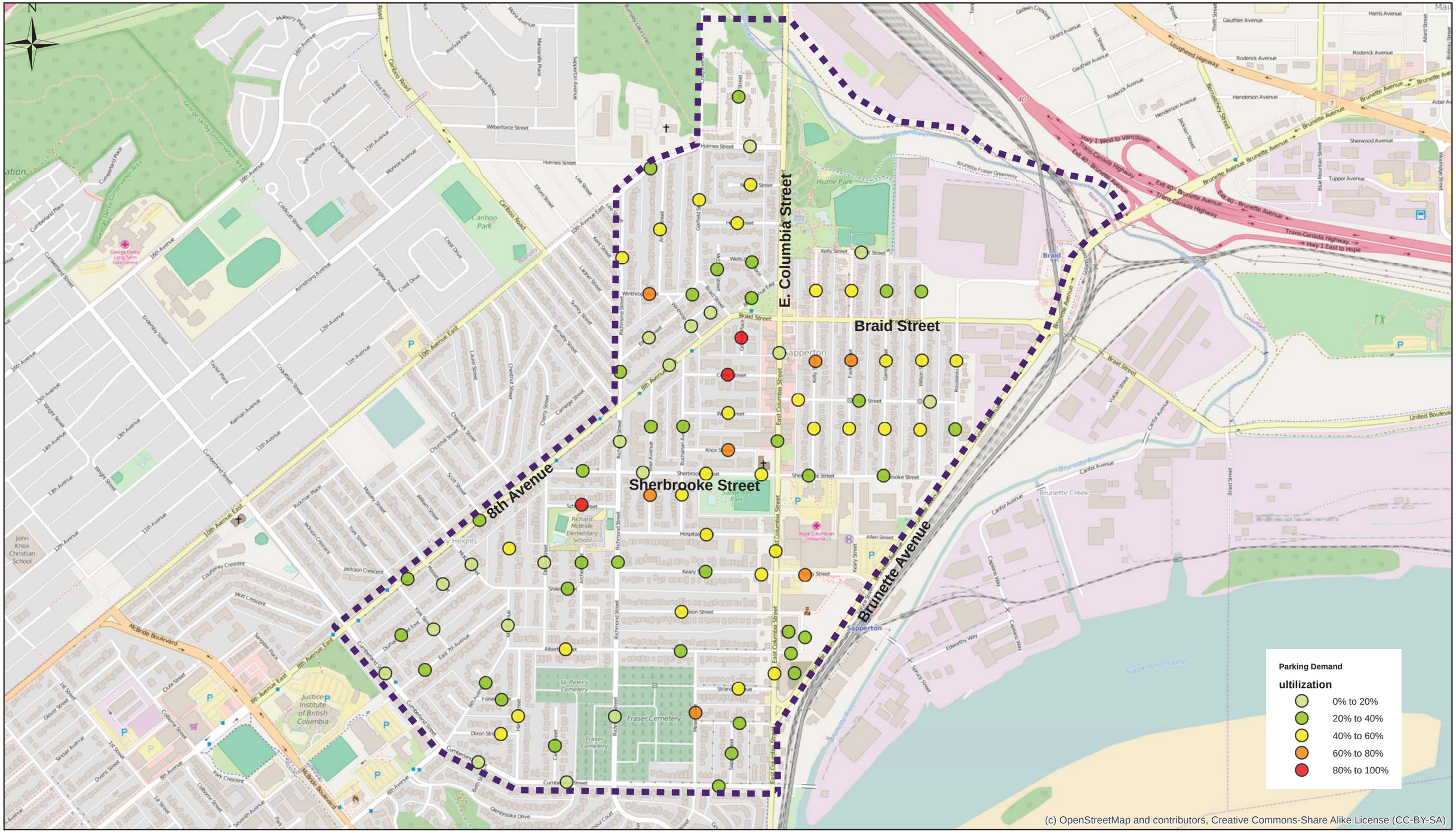


Exhibit 5.4

Peak Saturday On-Street Parking Demand (6pm-7pm)

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

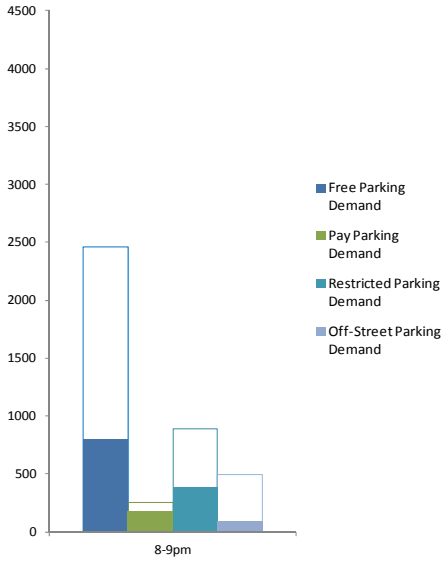
At the weekend, the parking demand is more dispersed and less focused on East Columbia Street and Sherbrooke Street. Although residential streets are still generally less than 60% utilized, there are certain streets over 80% full. Such streets are Griffiths Place, Cedar Street and School Street.

It should be noted that this data is for the overall study area's peak hour and does not necessarily represent the peak hour of each individual street. This is considered later in this section. It also considers street blocks in total, many of which are up to 400m in length.

5.2.1 Demand by Parking Type

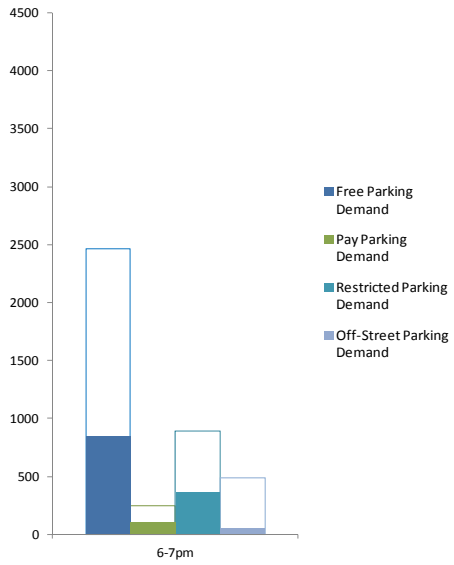
Exhibit's 5.5 and **5.6** show the demand by parking type for the whole study area on the weekday and Saturday peak hours, respectively.

Exhibit 5.5: Weekday Peak Parking Demand by Parking Type



During the overall peak parking demand on a weekday (8pm – 9pm), the most in demand type of parking, by percentage used, is the 'paid parking' which has just become free from 8pm onwards. It is our understanding that RCH employees make use of this parking from this time onwards through the night due to its proximity to the hospital as well as its security, being well lit and having pedestrian activity. The restricted parking, which is mainly resident permit areas is less than half full, at a time when residential parking demand is approaching its peak. The off-street lots are unsurprisingly not well used at this time as paid parking is in effect at all times, when free parking is available on the street.

Exhibit 5.6: Saturday Peak Parking Demand by Parking Type



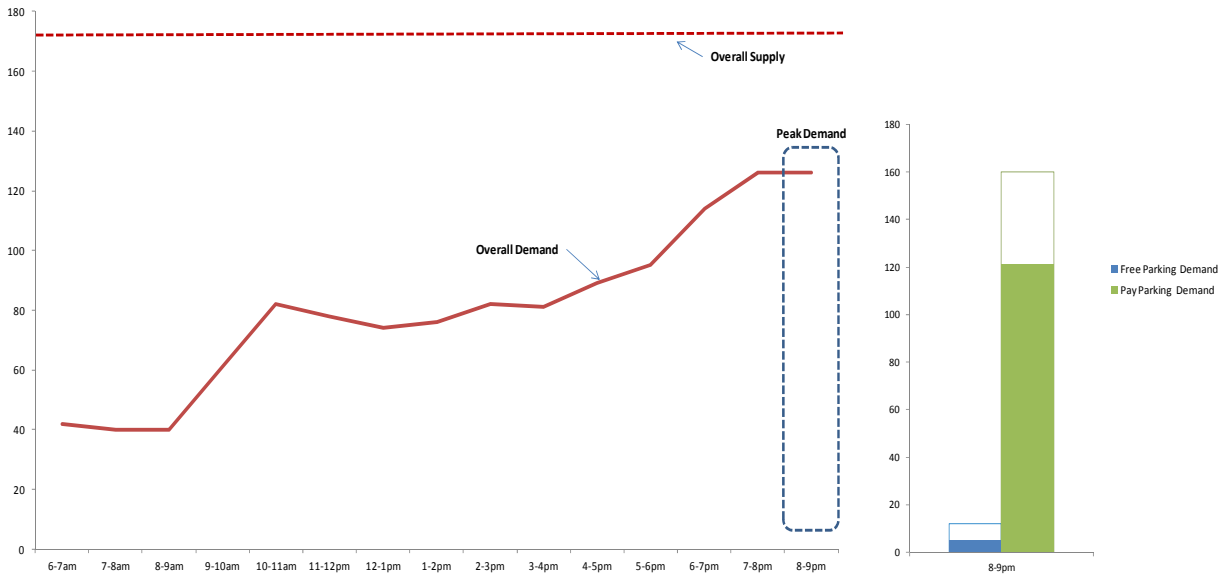
On a Saturday, all parking types exhibit a similar pattern in being far from fully utilized. The paid parking is close to half utilized, reflecting a similar pattern to the weekday.

5.3 Core Area Parking - East Columbia Street

One of the critical parking areas in the study area is East Columbia Street. It is critical in that it experiences heavier usage than others areas, as well as that effective parking management in this area is important to the economic viability of the businesses along the street, and thus important to the whole neighbourhood. The previous section confirmed that the off-street parking supply for the area is close to the City's general retail parking bylaw rate.

Exhibit 5.7 outlines the parking demand on East Columbia Street for a weekday. For the extent of the East Columbia Street 'zone' please see Exhibit 5.3 or 5.4. It should be noted that this survey data was collected in November 2013, when paid parking was in affect until 6pm. Paid parking is currently in effect until 8pm.

Exhibit 5.7: Weekday Parking Demand Profile on East Columbia Street



The exhibit shows that there is a mid morning peak, as you would expect in a commercial shopping area. Demand stays roughly constant until 4pm when it begins to rise, peaking at 9pm when the survey ended. This pattern occurs due to the parking management in effect. Employees at RCH start to park vehicles on East Columbia from 4pm onwards, only being required to pay for 2 hours of parking which will then see them through their entire shift. The two-hour limit stops them parking any earlier than this. Now that paid parking has been extended until 8pm, a similar pattern still occurs, with demand increasing from 6pm instead of 4pm. The reason that the demand does not get closer to the supply is the geography of the East Columbia parking zone, which extends considerably north and south of the hospital. Stalls further from the RCH are obviously less attractive. It may also be that as patient and visitor demand at RCH starts to fall, additional capacity is available on-site for staff undertaking evening and night shifts.

Exhibit 5.8 outlines a Saturday daily profile, showing lower overall demand. The peak occurs between 2pm and 3pm at approximately 100 stalls, and falls to approximately 75 stalls by 7pm. RCH staff parking demand may be responsible for this reduction in demand, with less staff typically working weekends than during the week. However, demand could rise after 7pm when the survey ended.

Exhibit 5.9 illustrates 24hrs of weekday data obtained from the City's parking meters along East Columbia Street. It shows the number of transactions (people paying to park) within any given time period. This data is from 23rd to 27th March 2015 when paid parking was in affect until 8pm. The data shows a mid morning peak in transactions that is consistent with Exhibit 5.7 which showed a parking demand peak at the same time. Transactions taper off until 5pm before rising to 7pm, after which there is a dramatic drop off to

Exhibit 5.8: Saturday Parking Demand Profile on East Columbia Street

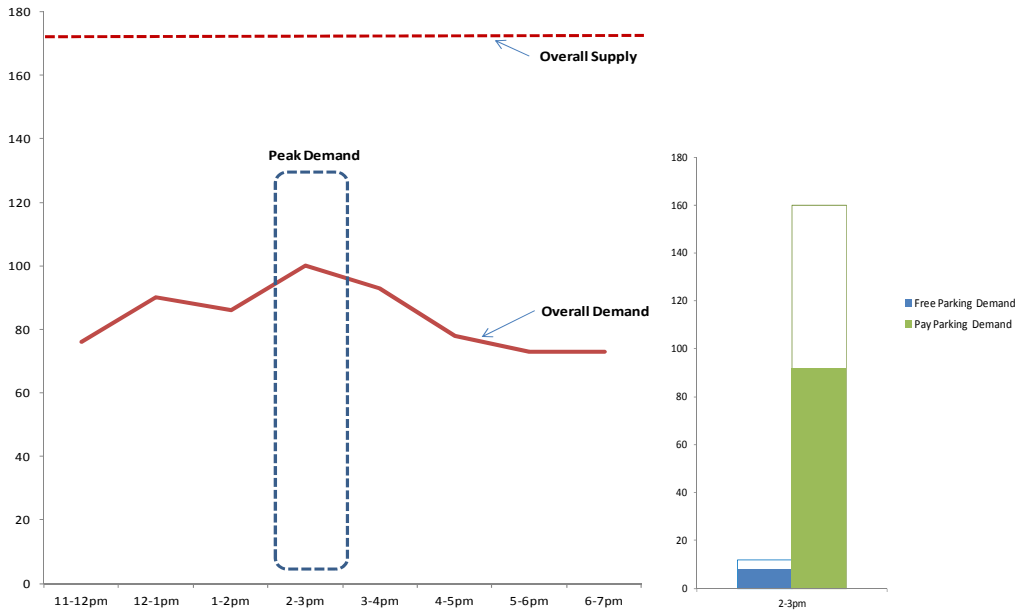
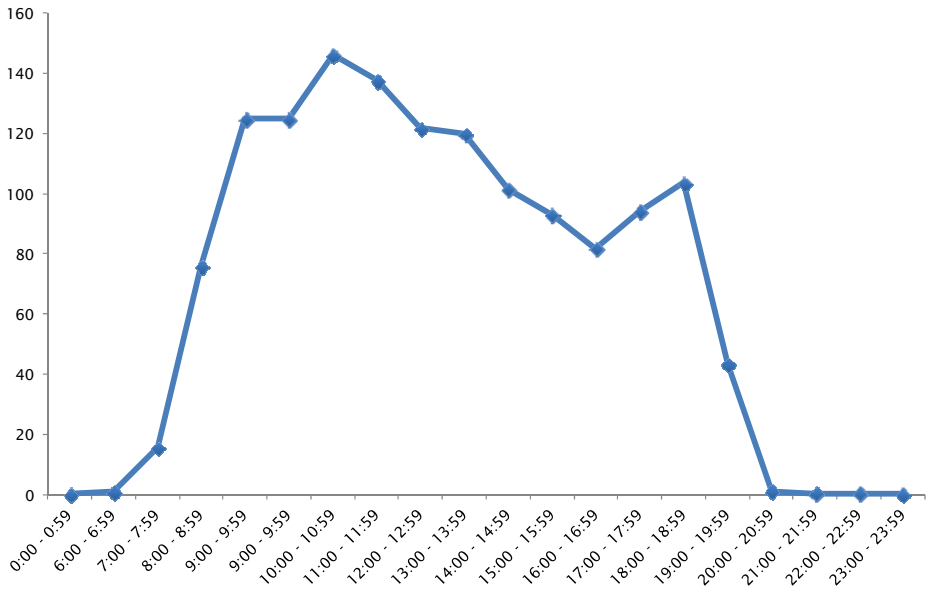


Exhibit 5.9: Weekday Parking Metre Usage Profile on East Columbia Street



zero by 8pm. This is because parking is only charged until 8pm. It should be noted that this graph is not showing parking demand, but rather the number of transactions within a given period of time. For example, the hour with the most transactions is between 10am and 11am. Although there is a peak in demand at this time, it is also likely that turnover is high during this time with low duration of stay. During this hour the number of transactions is getting close to the total number of stalls, suggesting that, on average, nearly every stall turned over once during this hour. This would seem to indicate that the commercial parking operation in this area is in a 'healthy' state.

5.4 Core Area Parking – Residential Streets

Exhibit 5.10 indicates the daily parking demand in the core parking area relating to residential streets. These streets are:

- Alberta Street, Simpson Street, Keary Street and Hospital Street between East Columbia Street and Richmond Street;
- Wilson Street, Garett Street, Fader Street and Kelly Street between Sherbrooke Street and Braid Street; and
- Major Street between East Columbia Street and Rousseau Street.

These streets are closest to the hospital and major employers, and also close to East Columbia Street. As such, it could be expected that these streets would see the heaviest usage if there were no parking restrictions. Each street is approximately 400m long and thus an approximate five minute walk from end to end. Apart from Major Street, each of these streets has a mixture of resident only parking and two hour time limited parking. Permit holders however are permitted to park for an unlimited amount of time in the two hour zones. See Exhibit 4.2 for details of the restrictions on each street.

Exhibit 5.10 also shows the number of resident and visitor parking permits that have been issued for the block. Key observations from this data are:

- No street appears to approach its supply during the weekday daytime. The maximum occupancy was approximately 2/3 of the supply;
- Parking demand for streets north of the hospital generally increases in the evening, suggesting that peak demand occurs when residents return from work;
- The parking demand profile for streets west of the hospital is flatter, indicating use by visitors (people working in the neighbourhood) during the day;
- Minor mid-day 'peaks' on Alberta Street and Keary Street support the notion that people park here whilst shopping on East Columbia Street and is consistent with peak parking demand on East Columbia Street itself.

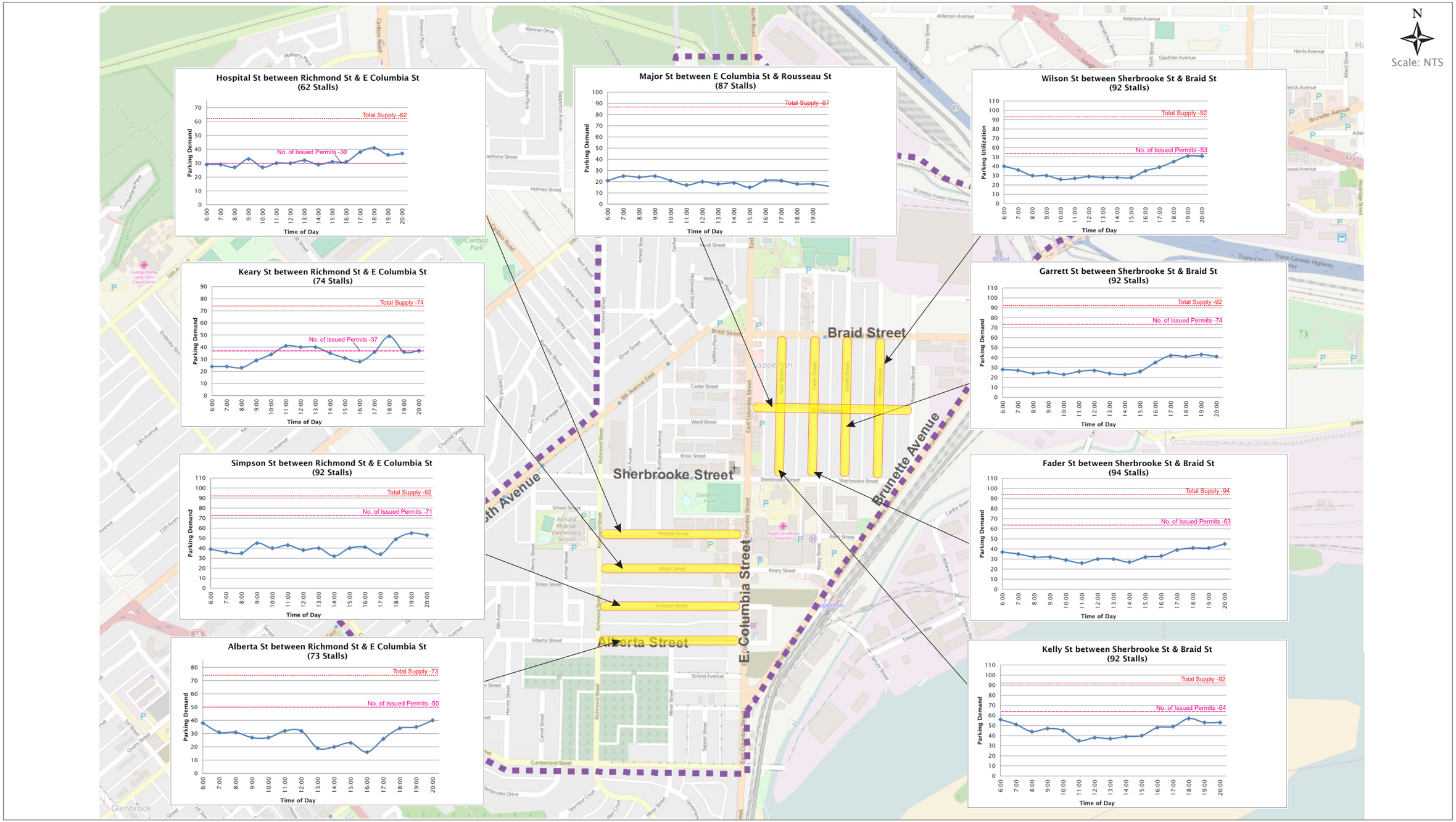


Exhibit 5.10
Residential Core Area On-Street Daytime Parking Demands

Sapperton Parking Study
bunt & associates | Project No. 4259.22 January 2016

- The number of permits issued per street vary between 50% and 80% of the on-street supply of the block.

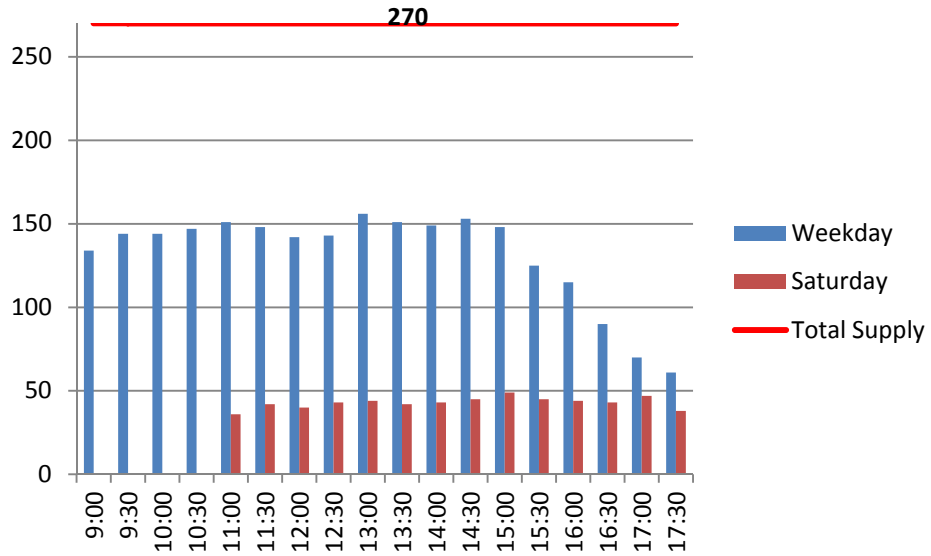
Feedback from the Open House suggested that some residents were concerned that they could not easily park on their street, specifically Alberta Street, and that it was 'full' from very early in the morning. Our survey data does not support this, in that there appears to be an adequate available supply of parking on the street as a whole. However, exactly where on the street the vehicles were parked was not recorded. Alberta Street, from East Columbia Street to Richmond Street, is approximately 400m metres long and is increasingly steep towards its western end. Residents closest to East Columbia Street likely experience the busiest on-street parking demand, despite the mix of two hour and permit only parking all along the street. This may result in those residents having to, at times, travel further along the street, and up the hill, in order to find parking. This may be of more significance to those residents with mobility challenges such as seniors or families with small children.

Given this, consideration could be given to providing more opportunities for residents to park exclusively on these streets, and encourage retail shoppers to park more on East Columbia Street.

5.5 Parking Demand in Off-Street Lots

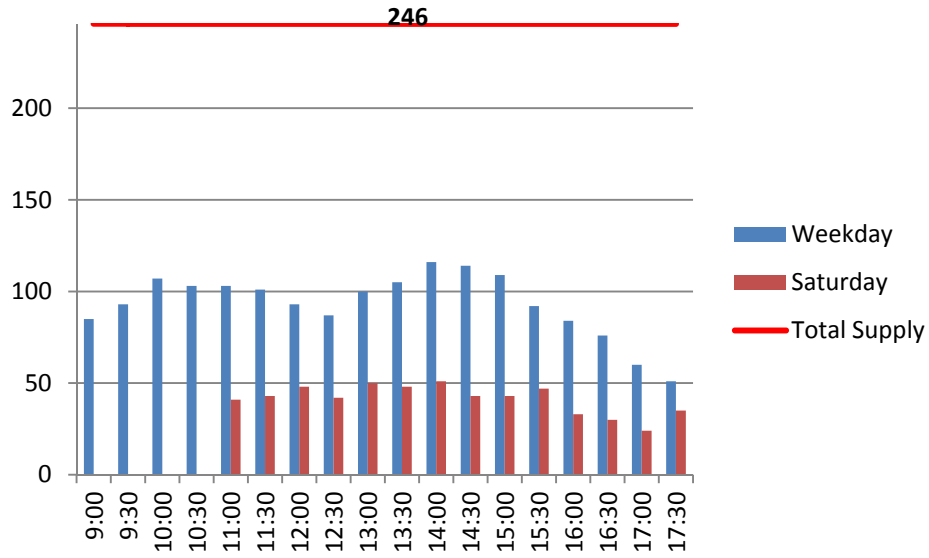
Exhibit 5.11 and **5.12** indicate the parking demand profiles for the two parkades in the Brewery District on a weekday and Saturday. For ease of reference, they are referred to as the 'TransLink' lot and the 'Save on Foods' lot.

Exhibit 5.11: TransLink Parking Lot Parking Demand



The capacity of the TransLink lot is 270 stalls. Demand peaks at just over 150 stalls on a weekday during the early afternoon. Saturday demand is significantly lower, peaking at less than 50 stalls at 3pm.

Exhibit 5.12: Save On Foods Parking Lot Parking Demand



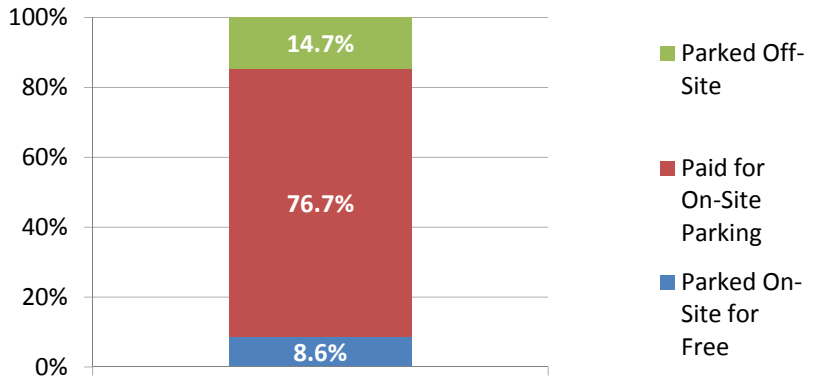
The capacity of the Save on Foods parkade is 246 stalls. Peak demand occurs during the early afternoon at just over 115 stalls. Saturday demand, like the TransLink parkade is considerably less, as approximately 50 stalls during the middle part of the day.

Both parkades appear to have significant spare capacity, both in terms of reserved and publically available parking.

5.6 Employee Parking Patterns

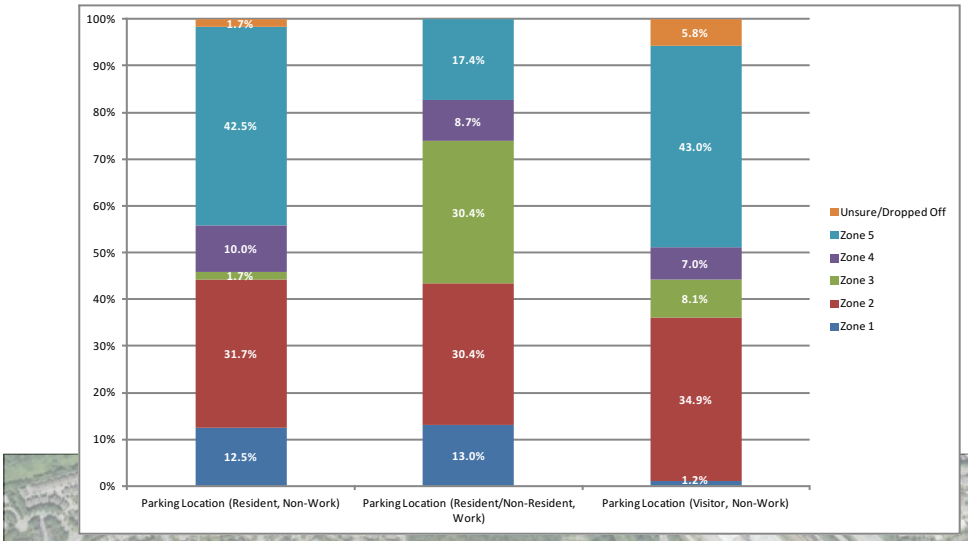
Exhibit 5.13 indicates what type of parking is available to Sapperton employees who drive to work.

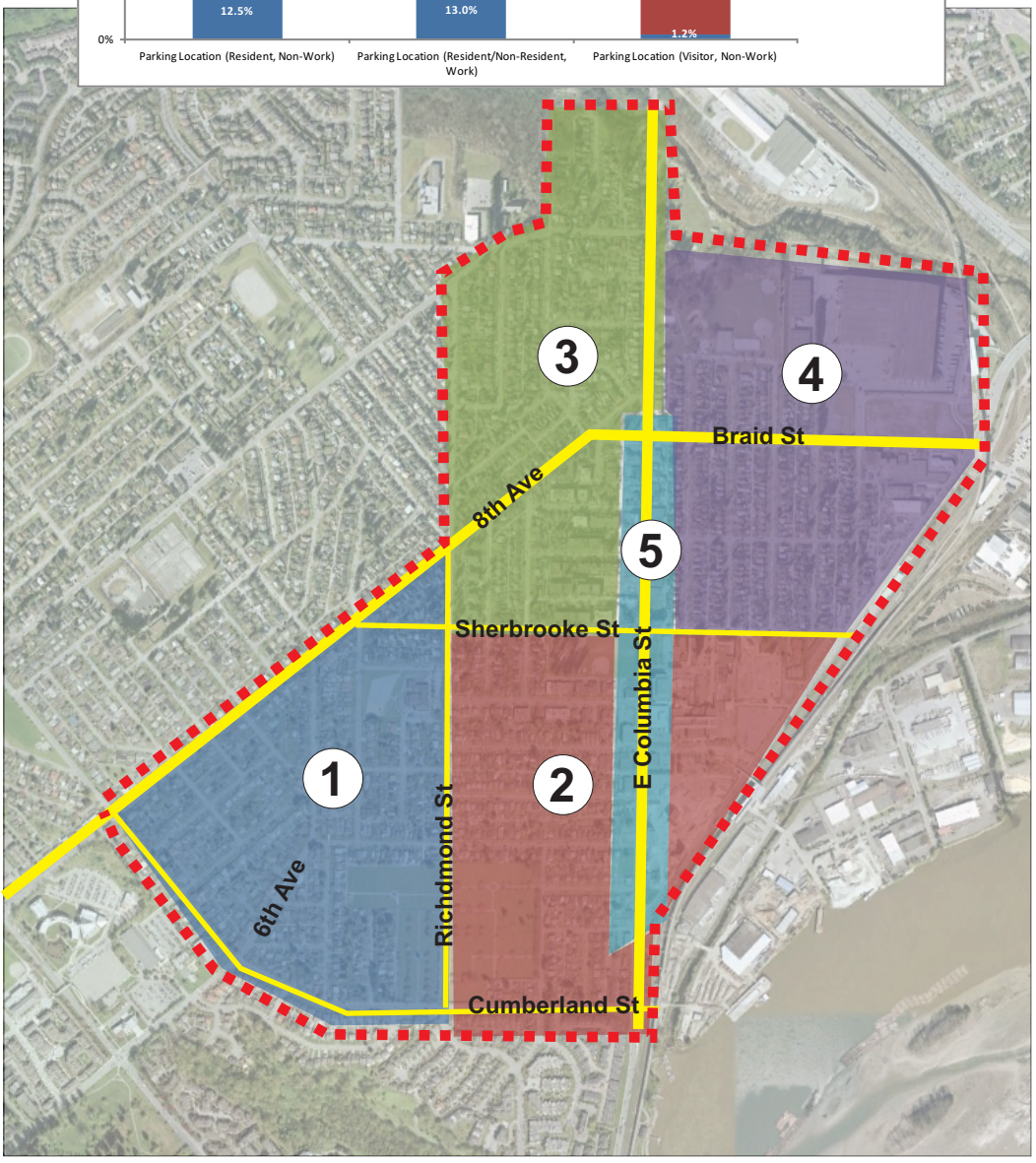
Exhibit 5.13: Parking Type for Employees



Of 163 responses to this question, over three-quarters paid for on-site parking. The main employers in the area are TransLink and RCH, both of which offer paid parking to their employees. Less than 9% of Sapperton workers had parking paid for by their employers, and nearly 15% parked off-site.

Exhibit 5.14 indicates where people stated they parked, either for work or non-work trips. For work related trips, 60% of people parked either in the residential areas south of Sherbrooke Street, or in the residential areas north-east of East Columbia and Sherbrooke Street. 17% reported they parked on East Columbia Street, which may refer to evening parkers. For non-work trips, over 40% of people parked on East Columbia Street itself. A further 30% parked south of Sherbrooke Street away from East Columbia Street.





N

Scale: NTS

Exhibit 5.14

Parking Location by Trip Type Category

4259.22

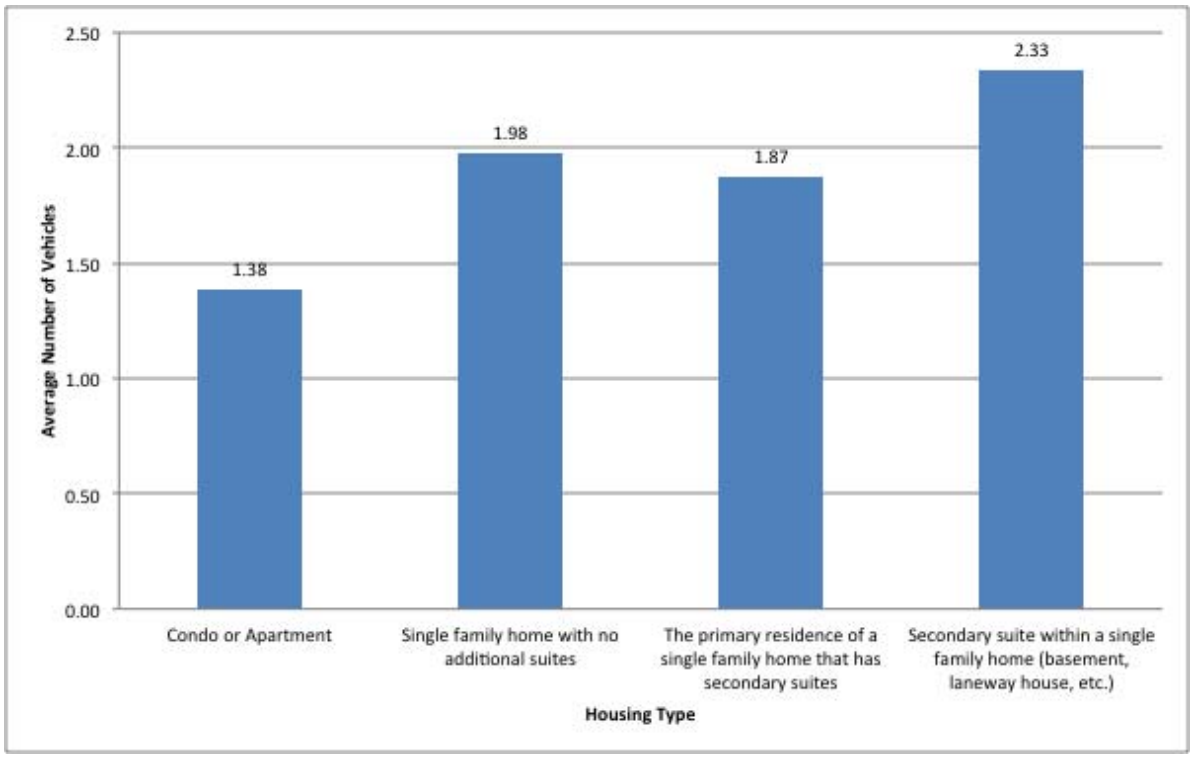
Sapperton Parking Study
January 2016

bunt & associates

5.8 Wider Resident Parking Patterns

For Sapperton residents, the survey also collected data on vehicle ownership. **Exhibit 5.15** summarises vehicle ownership by housing type based on the results of the survey.

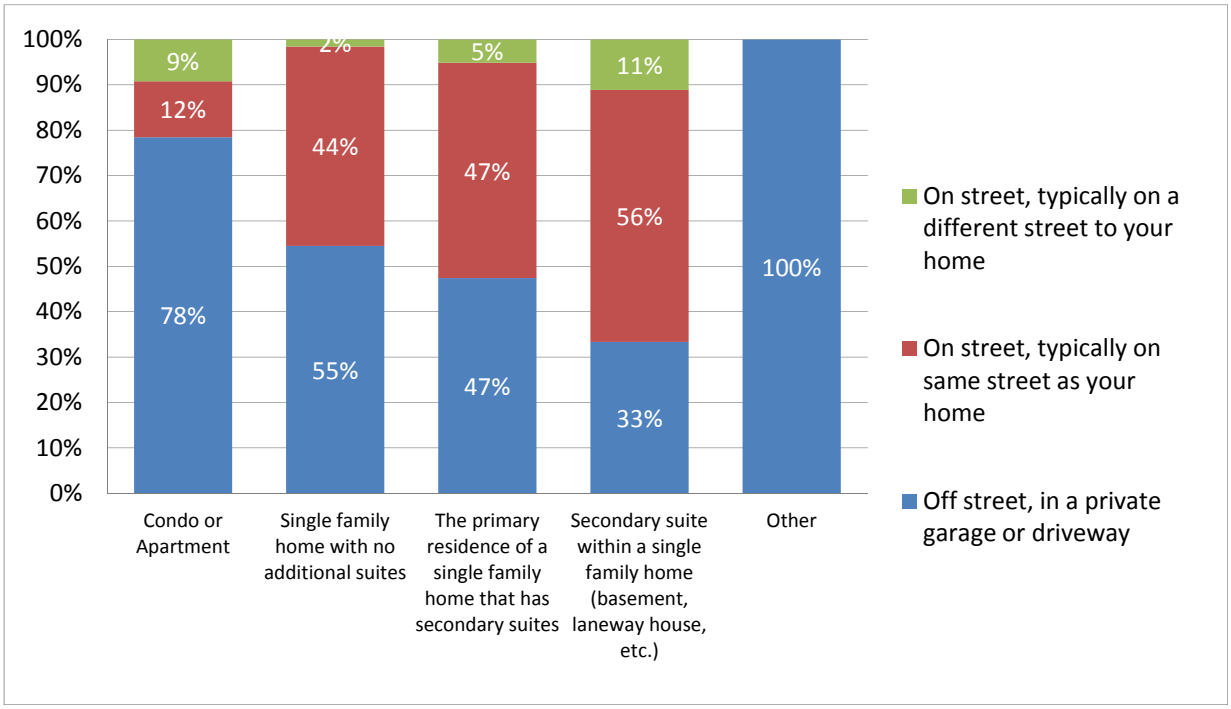
Exhibit 5.15: Vehicle Ownership by Housing Type



The 'condo or apartment' category reported an average vehicle ownership of nearly 1.4 vehicles. Single family homes either with or without secondary suites record a nearly identical vehicle ownership of nearly 1.9 – 2.0 vehicles on average. Interestingly, those occupying a secondary suite within a single family home reported the highest average rate. These rates are significantly higher than the City average of 1.2 vehicles per unit. This is reflective of the more suburban nature of Sapperton and current predominance of single-family homes. However, the sample size is small. Overall, additional research would be required to better understand vehicle ownership patterns in the community.

The questionnaire also asked respondents where they parked their vehicles. **Exhibit 5.16** outlines the response.

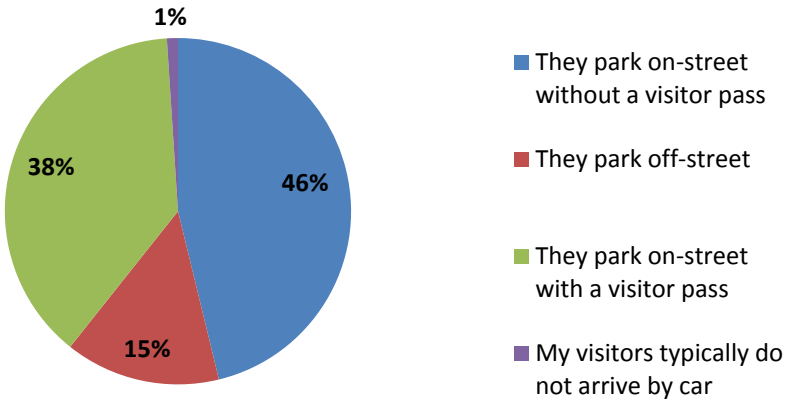
Exhibit 5.16: Parking Location by Housing Type



As expected, the vast majority of condo dwellers park off-street in a private garage, although over 20% reported that they parked on the street. The availability of off-street parking is not known for each respondent, although Sapperton does contain some older apartment buildings that may contain limited off-street parking. For those in single family homes, about half of vehicles were parked off-street and half on-street. For those vehicles parked on-street, the vast majority were able to be parked on the same street as the home.

Exhibit 5.17 outlines where residents reported that their visitors parked.

Exhibit 5.17: Visitor Parking Location



Of the 290 respondents for this question, nearly half reported that they park on-street without a pass. There are many residential areas without parking restrictions where this is legal. Nearly 40% of respondents reported that their visitors used the visitor pass, whilst 15% reported they parked off-street.

5.9 Royal Columbian Hospital Parking Demand

Based on data collected by Bunt & Associates for Fraser Health and subsequently shared with the City, the following summarises the parking demand from Royal Columbian Hospital and its potential impacts on the surrounding neighbourhood:

- RCH has an estimated peak parking demand of 1,335 stalls and approximately 1,010 stalls available on-site for staff and visitors;
- Approximately 77% of staff drivers are parking on site and 72% of patient/visitor drivers are parking on the site;
- The estimated parking demand overflow is about 375 vehicles. About 225 of the overflow is staff parkers, and about 150 are patients and visitors;
- A good portion of the overflow demand is handled by the 142 pay stalls fronting the hospital site, or by other nearby lots. However, parking demand patterns indicates that RCH staff are likely using approximately 100 free, unrestricted on-street spaces located some distance from the hospital.
- It is likely patients and visitors use the “time restricted except by permit” and “time restricted” stalls adjacent to the hospital.

5.10 Summary

The following summarises this section:

- The overall peak parking demand for the study area is less than half the supply. However, this disguises local variations, notably concentrated demand on and adjacent to East Columbia Street.
- The paid parking area is actually the most in demand during the overall peak hours, although these correspond to when the paid parking becomes free on East Columbia Street. Other parking types such as unrestricted and resident only have significant capacity during this time.
- Parking on East Columbia Street experiences a small peak late morning, which is typical of a commercial shopping street. This is also the time of the highest number of parking transactions, suggesting there is high turnover during this time. The actual peak parking demand for East Columbia Street is from 8pm onwards when parking restrictions end. It is thought that employees of RCH make use of these stalls during this time.
- On a Saturday this trend is not so marked, with a higher day time peak approaching 100 vehicles in the early afternoon.
- The Core Area residential streets surrounding the hospital experience moderate parking usage during the day. The issuance of resident permits varies between 50% and 80% of the number of spaces on the street. Demand generally increases in the evening, in line with commuters returning home. The streets are generally between half and two-thirds occupied during their peak.
- Feedback from the Open House suggests that there may be some localised parking pressures on sections of residential streets close to East Columbia Street.
- The two off-street lots at the Brewery District do not appear to be well used, peaking at approximately half their capacity during the weekday daytime. Demand is considerably lower at the weekend. Their relatively high cost is likely the main reason for this.
- Most people who replied to the questionnaire paid for on-site work parking.
- The most popular location to park for non-work related trips is East Columbia Street and the residential neighbourhood south of Sherbrooke Street. For work related parking, the most popular parking areas are residential areas, both south of Sherbrooke Street and north of Sherbrooke Street and west of East Columbia Street.
- Condominium dwellers had the lowest vehicle ownership at 1.4 vehicles per household, on average, whilst single family homes had close to 2 vehicles per household. This is higher than the City's average vehicle ownership of 1.2 per unit and higher than may be expected close to SkyTrain. But the neighbourhood is still dominated by single family homes which exhibit different travel characteristics compared to newer 'transit oriented developments'.

- Nearly 80% of people in condos parked off-street, whilst only half of single family home vehicles were parked off-street.
- RCH parking demand exceeds supply so that at peak times, approximately 375 vehicles may be parked off site. Some of these vehicles use on-street paid parking meters in the vicinity of the hospital. However, approximately 100 staff are estimated to park in residential streets within the neighbourhood.

6. CURRENT PARKING ATTITUDES

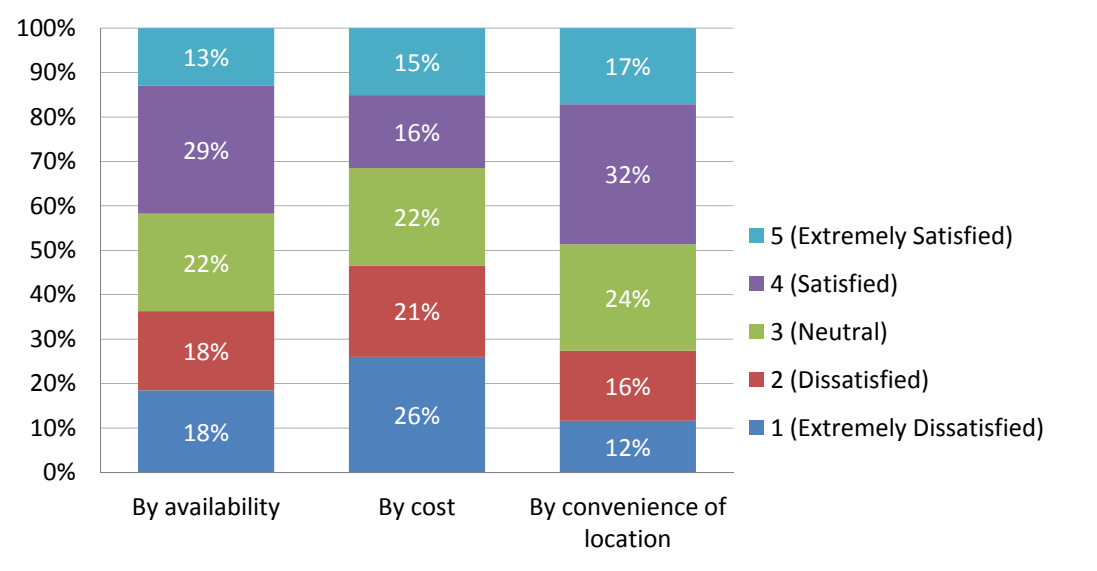
6.1 Introduction

As well as observing parking behaviour, it is also important to understand how residents, employees and visitors perceive parking in the area. Nobody enjoys paying for parking, so some of the questionnaire results are no surprise. However, differences between residents, employees and visitors should be noted, as well as concerns from the stakeholder group.

6.2 Questionnaire Results

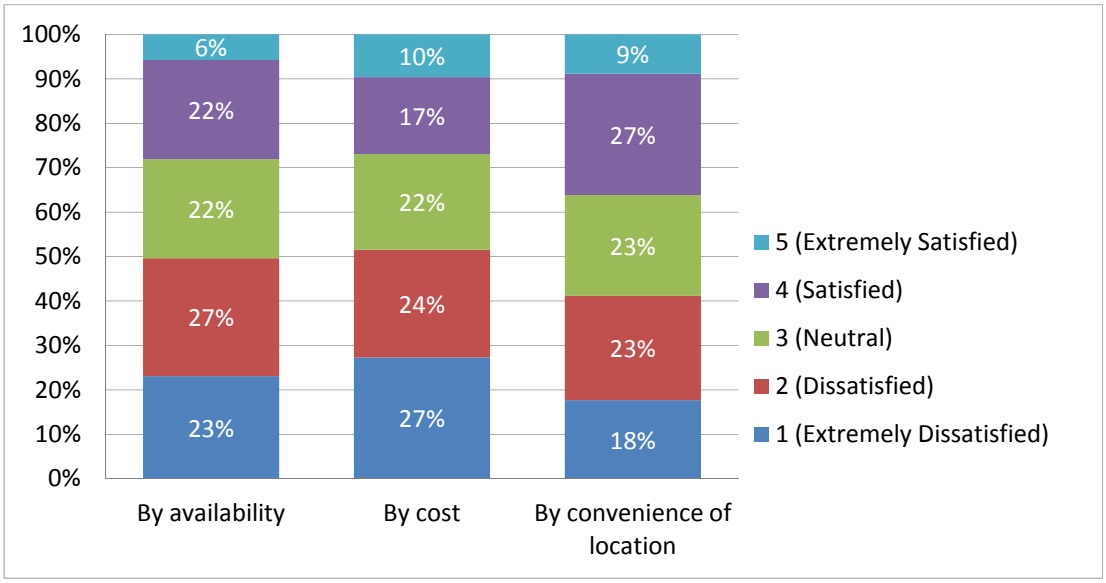
The questionnaire asked people how satisfied they were with parking in Sapperton. **Exhibit 6.1** outlines the responses from residents.

Exhibit 6.1: Resident Parking Satisfaction



Residents are split in terms of satisfaction with parking availability, although when it comes to cost, nearly half are dissatisfied or extremely dissatisfied with just over 30% being satisfied or extremely satisfied. Residents are generally happy with the location of parking, with less than 30% being dissatisfied or extremely dissatisfied. Exhibit 6.2 outlines the results for non-residents.

Exhibit 6.2: Non-Resident Parking Satisfaction



More non residents are dissatisfied by parking availability, with over half being dissatisfied or extremely dissatisfied. The same percentage of non-residents are concerned over cost, whilst only just over 40% are dissatisfied or extremely dissatisfied with the location of parking.

Overall, residents appear marginally more satisfied with public parking overall in Sapperton than visitors to the neighbourhood.

The questionnaire also included a comment box. **Table 6.1** summarises the most common comments made.

Table 6.1: Summary of Questionnaire Comments

Comment	Number of respondents
Parking too expensive	111
Lack of parking	110
Hospital staff or others parking on resident streets	59
Time restrictions	45
Lack of parking (business related)	37
Parking enforcement	21
Lack of visitor passes	20
Pay meters hard to use or inconvenient	11

As indicated, complaints stating that parking was too expensive, along with a lack of parking, were the two main concerns raised, by over 100 respondents each, approximately one-sixth of the total. Nearly 60 people complained of hospital staff parking on residential streets whilst 45 were concerned specially with time restrictions.

6.3 Stakeholder Group

6.3.1 Existing Issues

The stakeholder group was asked to identify the main issues of concern to them regarding parking in the neighbourhood. The main current issues identified were:

- Employees (TransLink and RCH) using residential streets for parking during the day.
- Concerns over parking supply for residents, especially in the area from Alberta St up to the hospital.
- Lack of event parking (park and ride) at Braid Station for Whitecaps and BC Lions games.
- Fare zone structure deters employees from using transit. (Area is close to zone 2/3 boundary).
- Lack of parking enforcement.
- Parking challenges at Hume Park in the summer.
- In general, parking for the parks and local events is limited. Mainly on street.
- Parking turnover on East Columbia is good during day, but not at night.

6.3.2 Future Visioning

The group was also asked for ideas as to changes they would like to see related to parking, in order to improve the community. Some of the key ideas put forward included:

More Sustainable Travel

- Establishing an apparitional target of three-quarters of residents travelling by sustainable travel modes.
- User friendly bike lanes.
- Incentives to promote transit.

Local Amenities

- More local amenities meaning residents have less reason to leave.

- Area should grow and have more amenities to serve local community.

Parking Specific

- Underground parking in Sapperton Park.
- Less parking, more 'parklets'.
- Developer and city to develop joint project for shared parking.
- 0.5 stalls per unit residential parking ratio.
- Reduced parking congestion for residents

Urban Planning

- Respect for current residents
- Create walkable, transit oriented neighbourhoods.
- Create opportunities to live and work in the community.

These were some of the ideas expressed by the group. Some of these are consistent with data gathered elsewhere and will be considered as part of subsequent studies. Some of the other ideas may not be practical to pursue at this time.

6.4 Relationship to Survey Data

The collected parking survey data does not clearly reflect the stakeholder's concerns and questionnaire results concerning parking availability. There may be a lack of willingness to pay for parking, as well as a lack of willingness to park more than a very short distance from a destination.

6.5 Summary

Based on the above responses, the following appear to be the main areas of concern:

- Residents appear marginally more satisfied with public parking overall in Sapperton than visitors to the neighbourhood. However, more are dissatisfied overall than satisfied.
- The two most common concerns raised overall in the questionnaire were the price of parking as well as a lack of parking. Other common complaints were that hospital staff parked on residential streets and time restrictions that people felt didn't work.
- The stakeholder group was concerned about RCH and TransLink employees parking in residential areas.

- According to the stakeholder group, parking demand for special events or at parks in the summer exceeds supply.
- The evidence does not clearly support the questionnaire data, suggesting a lack of willingness to pay or walk more than a short distance to a destination.
- The stakeholder group envisioned that in the future, more people should travel by sustainable travel modes. However, the group also hoped for more parking within the neighbourhood.

7. PARKING MANAGEMENT BEST PRACTICE

7.1 Introduction

This section reviews regional best practice in parking management around major public institutions as well as reviewing resident parking permit schemes in other municipalities. It also considers the process by which new permit areas are considered, as well as summarizing technological advancements that enhance the City's ability to manage the permit system.

7.2 Parking Management Around Major Public Institutions

The distance that parking controls are in operation around RCH are generally comparable to other public institutions such as Burnaby General, Langara College and Lionsgate Hospital, although RCH restrictions extend further in some instances. Parking Restrictions around Vancouver General Hospital (VGH) extend further still. It must be remembered that as well as RCH, other major employers are close by as well as a SkyTrain Station and retail street. These are not all present at these other locations, apart from VGH. Restrictions at these other locations are enforced with a mixture of permits (RPP) and resident only zones (RPO). RPO generally operates on a complaints based system and licence plates are not recorded.

7.3 Resident Parking Permit Regional Review

Table 7.1 summarizes resident permit practices in other municipalities for comparison with New Westminster's. Only those municipalities which are known to charge for resident permits have been included.

Table 7.1: Resident Parking Permit Management Comparison

Permit Details	New Westminster	Vancouver	North Vancouver	Calgary
Cost	$10 initially for first three, including one visitor, then $5/yr. 4th and 5th permits cost $50/yr.	$37/yr outside metro core; $55/yr in metro core; $74/yr downtown.	$25/yr for RE, $50/yr for RPP, $50/yr for one visitor*	First two are free, $50/yr thereafter
Number Permitted	5, including 1 visitor.	2	Unlimited	Unlimited

Note: Coquitlam and Edmonton have RPP schemes but they are free.

Note 2: The City of North Vancouver refer to their Resident Permit Parking system as 'Resident Permit Only', or 'RPO'. RPO usually refers to a 'resident parking only' zone where permits are not required. The City also has a 'Resident Exempt' (RE) designation, allowing residents to park for an unlimited time in time restricted spaces.

Compared to other municipalities that charge, New Westminster's fees are on the cheaper side. However, Coquitlam and Edmonton do not charge at all for their RPP schemes. Vancouver also limits the number of permits at two whilst others are unlimited.

7.4 Requests for New Residential Parking Management

New Westminster's practice concerning requests for new parking management begins with a requirement that at least 50% of the fronting properties are residential. In addition, parking on the street has to be more than 60% occupied at peak times. The City will then consider Resident Permit Parking (RPP) if more than two-thirds of residents vote in favour.

In other municipalities, most consider parking management measures based on residents requests. However, the types of measures considered, including RPP, RPO and RE zones, are determined through a variety of processes including staff discretion, surveys of residents, land uses on the street, the area in question (proximity of transit etc) and current parking utilization. New Westminster's policy is therefore similar to many other municipalities within Metro Vancouver.

7.5 Parking Permit System Management

The City of New Westminster will soon be launching an updated permit system making use of newer technology. This should increase efficiency and enforcement. The main elements of this system are:

- A new on-line permit application process: this will enable residents to obtain permits on-line, including 'temporary' parking.
- Implementation of electronic enforcement: parking enforcement officers will patrol the streets with a special car that reads license plates, and compare the license plates to those registered on-line.

These measures should result in a more efficient permit system and more effective enforcement.

8. SHORT TERM RECOMMENDATIONS

8.1 Introduction

Through the process of this project so far, potential 'quick wins' have been highlighted for consideration. Each is considered in turn below, followed by recommendations where appropriate.

8.2 Resident Parking Permit Operation

The current scheme operates in a fairly efficient manner and is fairly consistent with others in the region. Limiting the number of available permits per household would not have an immediate impact as it appears that most residents do not have more than two permits anyway. In addition, even the most pressurised streets in the neighbourhood still have available parking throughout the day, so absolute demand for permits is not an issue on the majority of streets. Limiting the number of permits may be something to consider in the future should additional secondary suites put pressure on certain streets in the community.

As mentioned earlier, an online permit application system is close to being rolled out by the City, along with mobile licence plate readers that should make enforcement more efficient.

A modest increase in cost could be considered to be more in line with the City of Vancouver's non-core area costs; currently $37/ year. This would better reflect the City's cost of maintaining that on-street parking space and would be consistent with several of the city's wider policies. Any cost increase would need to be phased in over a few years. It is unlikely that this would result in a significant number of residents being persuaded to park their vehicles off-street, which should not be the intension, as demand is not currently exceeding supply. Residents may accept higher fees in exchange for increased enforcement which should come about as a result of the new system. Higher fees without direct benefit may be harder to justify.

Recommendation

That the City consider a modest increase in cost of the resident permit parking scheme in conjunction with the new online permit application system and new licence plate reading enforcement technology. A measureable increase in enforcement should be able to be demonstrated in order to help justify any cost increases.

8.3 Changes to the RPP on Specific Streets

Given the concern expressed by residents along Hospital, Keary, Simpson and Alberta Streets regarding availability of parking close to East Columbia Street, consideration should be given to adjusting the parking regulations in this area to provide more parking opportunities for residents, at the expense of shoppers and other visitors to the area. Part of the reason that this can now be considered is that residents will be able to register visitor's vehicles via an online system, reducing the need for two hour

parking areas for residential visitors on residential streets. To note, if not all the streets vote in favour of this change, those streets that vote against could see additional parking pressures.

Recommendations

1. That the City consult with residents of Hospital, Keary, Simpson and Alberta Streets (between Richmond Street and East Columbia Street), to determine the level of support for converting the entire length of each street to RPP (except where meters currently exist), removing the ability for non-permit holders to park for up to two hours. The petition must very clearly summarize the implications, including:

- All visitors, including service vehicles, would need to obtain a temporary permit to park on the street;
- Implementation would be in coordination with a new on-line permit application process that would enable residents to obtain permits on-line, including 'temporary' parking;
- It would be implemented at the same time as implementation of electronic enforcement – parking enforcement officers would patrol the streets with a special car that reads license plates, and compares the license plates to those registered on-line; and
- Consistent with current procedure, If there is greater than two-thirds support, implement RPP and remove the two hour parking sections on the streets that support it.

2. That if residents vote in favour, that changes be implemented incrementally and that monitoring take place to measure any potential negative impacts on retail on East Columbia Street.

8.4 Adjustment of Parking Regulations to Better Serve Local Businesses

A review of commercial parking regulations was specifically requested by the City. The report has shown that the actual off-street parking supply around East Columbia Street is close to the City's bylaw requirements. Usage of the on-street spaces appears to be in line with expectations regarding overall usage as well as turnover. Business owners have not complained about a lack of customer parking in any of the consultation events so far. Survey results indicate a high percentage of Sapperton residents walking to retail stores on the street. No changes are recommended at this time. However, if residents of Alberta, Simpson, Keary and Hospital Streets vote in favour of removing the two hour limit spaces on their streets, consideration may have to be given to creating some short time limited stalls on East Columbia Street or elsewhere, to accommodate shoppers making quick trips who may otherwise be dissuaded from shopping in this neighbourhood.

8.5 Additional Recommendations

The following recommendations are based on the broad objectives and vision for development in Sapperton:

- The City should partner with Fraser Health Authority to develop a parking strategy, both for the long term scenario when the hospital is fully redeveloped, and also for the near to medium term to ensure

that construction related activity, and commissioning of the earliest phases of the project, do not negatively impact adjacent neighbourhoods.

- The City should complete a Neighbourhood Transportation ImpactStudy, including an assessment of safety and liveability, in the Sapperton neighbourhood as soon as possible to complement the outcomes of this study and to address traffic concerns expressed by some residents.
- The City should partner with Fraser Health Authority, TransLink and other businesses in the neighbourhood to encourage them to actively promote and support TDM measures to minimize the volume of traffic and on-street parking in the neighbourhood.

9. FUTURE DEVELOPMENTS

9.1 Introduction

This section outlines future known developments within the study area, and their possible impacts on parking.

9.2 Royal Columbian Hospital

Founded in 1862, this is one of Fraser Health's busiest hospitals and is chronically running over capacity. The hospital will be redeveloped with a new acute care tower, a mental health facility and additional parking. The number of beds will increase from 400 to 700 and the staff will increase from 3,500 to approximately 6,000. The floor space is expected to double. The redevelopment will take 10 to 15 years to complete.

As mentioned elsewhere, the parking implications of this redevelopment will form a central part of future studies.

9.3 Other Future Development

Colliers International's report, attached as **Appendix C** to this report, outlines the major developments expected to occur in Sapperton in the coming years. In summary, they are:

- The Brewery District. Three buildings are already complete, with a total of 77,000 sq ft of retail and over 350,000 sq ft of office. Once fully built out there will be a total of 1.4m sq ft of residential and commercial development. Five additional residential buildings are proposed with the first of these having been recently approved.

- Sapperton Green. Bentall Kennedy has submitted an application on behalf of BCIMC to amend the OCP to allow for the master planned Sapperton Green community on a 38 acre site adjacent to Braid SkyTrain station. The development could include 2.8 – 3.4m sq ft of residential space and 0.5 – 1.0m sq ft of office space. This could take 20 years to build out.

- Infill Development along East Columbia Street. East Columbia Street between Cumberland Street and Braid Street contains older, smaller retail and service commercial buildings. It is expected that this corridor will densify through redevelopment over the next few decades. Colliers International has estimated how much additional floor space could be developed under current zoning. Their estimate is that an additional 710,000 sq ft of residential and nearly 220,000 sq ft of commercial space could be added along the corridor.

In summary, the neighbourhood is likely to see an increase in both housing and commercial floor space in the years ahead. This will occur not just in master planned communities such as the Brewery District and Sapperton Green, but also in older established areas such as East Columbia Street. Although the master

planned communities will be required to supply their own parking, people may still choose to drive into the established Sapperton neighbourhood. East Columbia Street could see increased demand for parking as the commercial floor area increases. As RCH expands, parking pressures could conceivably increase in the neighbourhood if proper management is not in place.

10. SUMMARY AND NEXT STEPS

10.1 Key Issues

10.1.1 Policy Context

The OCP, Envision 2032 and the Master Transportation Plan create a clear mandate to develop a parking strategy which promotes more sustainable travel choices and starts to move towards a system whereby the impacts of owning and operating a car are more transparent, including the costs.

10.1.2 Observed Parking Demand

Although the study area as a whole does not have a parking supply issue, the core area around East Columbia Street and Sherbrooke Street does experience parking pressures due to visitors and employees looking for free parking on residential streets. After 8pm, East Columbia Street starts to be busier with RCH employees who can now park for free. There remains significant spare capacity in the two parkades in the Brewery District. However, the parking rates in affect here are higher than the street, which may discourage its use.

Residents on a number of key streets close to East Columbia Street and RCH report localized parking pressures which are not fully borne out in the survey results. The number of permits issued to residents is typically between 50% and 80% of the number of stalls on the street, whilst on a street block scale, there is reasonable spare capacity available.

10.1.3 Neighbourhood Concerns

Residents and non-residents are dissatisfied with the cost of parking in the area, whilst more non-residents are concerned about availability and location.

Whilst residents and stakeholders say that they want to see more sustainable transportation choices take hold, they also want more and cheaper parking. Making the choice to use more active forms of transportation need to be convenient and easy if residents, visitors and employees are going to use them in great numbers. Looking to the future, new developments can play an important role in supplying better infrastructure and greater amenities to the residents. In the shorter term, balancing the desire for cheaper (or 'easier') parking with the policy objectives will be a delicate balancing act and will require some education of the community to understand the trade-offs between choices.

10.2 Recommendations

The following recommendations are included in the report:

1. That the City consider a modest increase in cost of the resident permit parking scheme in conjunction with the new online permit application system and new licence plate reading enforcement technology. A measureable increase in enforcement should be able to be demonstrated in order to help justify any cost increases.

2. That the City consult with residents of Alberta Street between Richmond Street and Devoy Street to determine whether they would like to see the resident permit parking system extended to cover their street.

3. That the City petition residents of Hospital, Keary, Simpson and Alberta Streets (between East Columbia Street and Richmond Street), to determine the level of support for converting the entire length of each street to RPP (except where meters currently exist), removing the ability for non-permit holders to park for up to two hours.

4. That if residents vote in favour of No.3, that changes be implemented incrementally and that monitoring take place to measure any potential negative impacts on retail on East Columbia Street.

5. The City should partner with Fraser Health Authority to develop a parking strategy, both for the long term scenario when the hospital is fully redeveloped, and also for the near to medium term to ensure that construction related activity, and commissioning of the earliest phases of the project, do not negatively impact adjacent neighbourhoods.

6. The City should complete a Neighbourhood Transportation) Study, including an assessment of safety and livability, in the Sapperton neighbourhood as soon as possible to complement the outcomes of this study and to address traffic concerns expressed by some residents.

7. The City should partner with Fraser Health Authority, Translink and other businesses in the neighbourhood to encourage them to actively promote and support TDM measures to minimize the volume of traffic and on-street parking in the neighbourhood.

10.3 Next Steps

This report summarised existing conditions and makes recommendations for immediate consideration.. The following are anticipated to be the next steps towards completion of an overall parking strategy for the neighbourhood:

- Conduct an Open House to report on the findings so far, consideration of short term changes and gain insight from the public for Phase 2;
- Undertake further study, looking at longer term strategies in conjunction with the redevelopment of Royal Columbian Hospital. RCH will be required to develop a strong Travel Plan/ TDM Plan, including a robust parking strategy, to promote more sustainable travel choices to staff and visitors and minimise overspill parking impacts in the community.
- Incorporate community feedback and desires into the longer term strategy for the neighbourhood.
- The recommendations from future studies will help inform the creation of new bylaws and policies to guide development and changes in the years ahead.

APPENDIX A

Questionnaire Results
(Electronic Copy Only)

APPENDIX B

Stakeholder Meeting Invite List

SAPPERTON PARKING STUDY
STAKEHOLDER LIST

ORGANIZATION - FRASER HEALTH	
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ORGANIZATION – JUSTICE INSTITUTE	
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ORGANIZATION – MCBRIDE/SAPPERTON RESIDENT'S ASSOCIATION	
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ORGANIZATION – MASSEY VICTORY HEIGHTS RESIDENT'S ASSOCIATION	
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Jason Lesage	president@masseyvictoryheights.com

ORGANIZATION – SAPPERTON BUSINESS ASSOCIATION	
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ORGANIZATION – BENTALL KENNEDY (Sapperton Green)	
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ORGANIZATION – SCHOOL BOARD/DISTRICT	
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ORGANIZATION – STAFF	
NAME	DEPARTMENT
Diane Perry	Parks
Rupinder Basi	Planning
Mark Allison	CAO Office
Jerry Behl	Engineering
Roger Emanuels	Engineering
James Doan	Parking
Jim Lowrie	Engineering
Eugene Wat	Engineering

APPENDIX C

Anticipated Sapperton and Residential Real Estate Growth



Sapperton Parking Study

Anticipated Sapperton Commercial and Residential Real Estate Growth

July 14, 2015

PREPARED BY:
Colliers International Consulting

PREPARED FOR:
Tim Barton
Bunt & Associates

Colliers International
200 Granville Street, 19th Floor
Vancouver, BC V6C 2R6

July 14, 2015

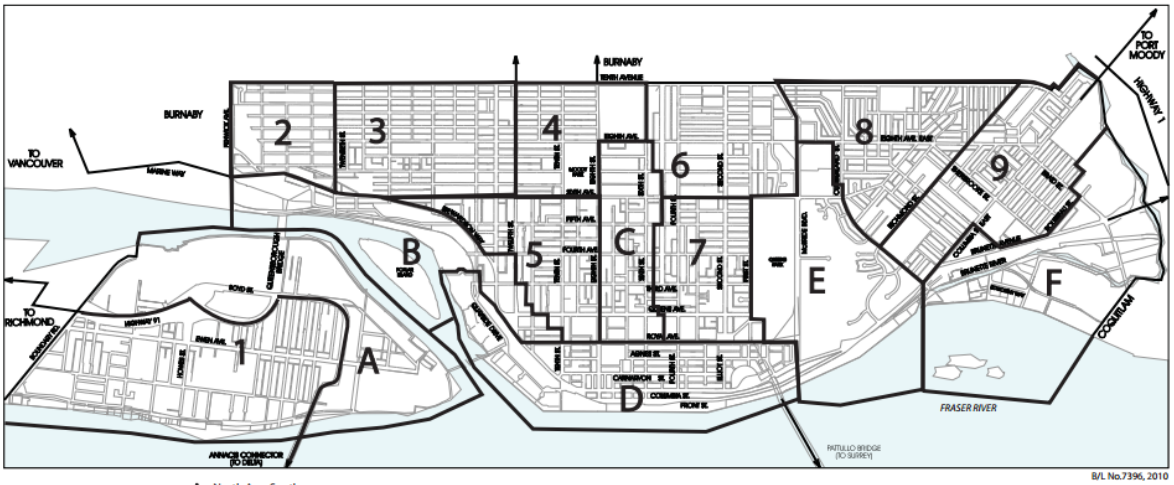
Mr. Tim Barton
Senior Transportation Planner
Bunt & Associates
Suite 1550 – 1050 West Pender Street
Vancouver, BC, V6E 3S7

Dear Tim,

Re: Memorandum on Anticipated Sapperton Commercial and Residential Real Estate Growth

Colliers International Consulting (CIC) was engaged by Bunt & Associates to provide an overview of anticipated commericial and mixed-use growth in the Sapperton community of New Westminster, B.C., and to provide market and business-driven input that can assist in evaluating parking need implications for the area.

The Study Area corresponds to the neighbourhood planning areas of Sapperton and Brunette Creek in the 2011 New Westminster Official Community Plan. Brunette Creek was included due to the Sapperton Green development located within its boundaries. This development is expected to have significant parking implications for the Sapperton Area. A map referencing these two neighbourhood planning areas is provided below. The significant Brewery District, Sapperton Green, and Royal Columbian Hospital developments as well as general build-out of the East Columbia Retail Corridor will be discussed in the following sections of this memorandum.



Source: City of New Westminster

Brewery District Development

Wesgroup's Brewery District is a 1.4-million-square-foot master-planned residential and commercial centre located within the Sapperton Neighbourhood. Wesgroup has plans for a total of eight buildings in the Brewery District, and three commercial buildings are already complete. The first residential building has recently been approved and a marketing campaign was launched in March 2015. This building will include 115 residential units. The following three buildings will include an estimated 538,000 square feet of residential space, 63,000 square feet of retail space and 266,000 square feet of office space. A sketch of all eight buildings and a table summarizing the estimated scale of development is provided below for reference.



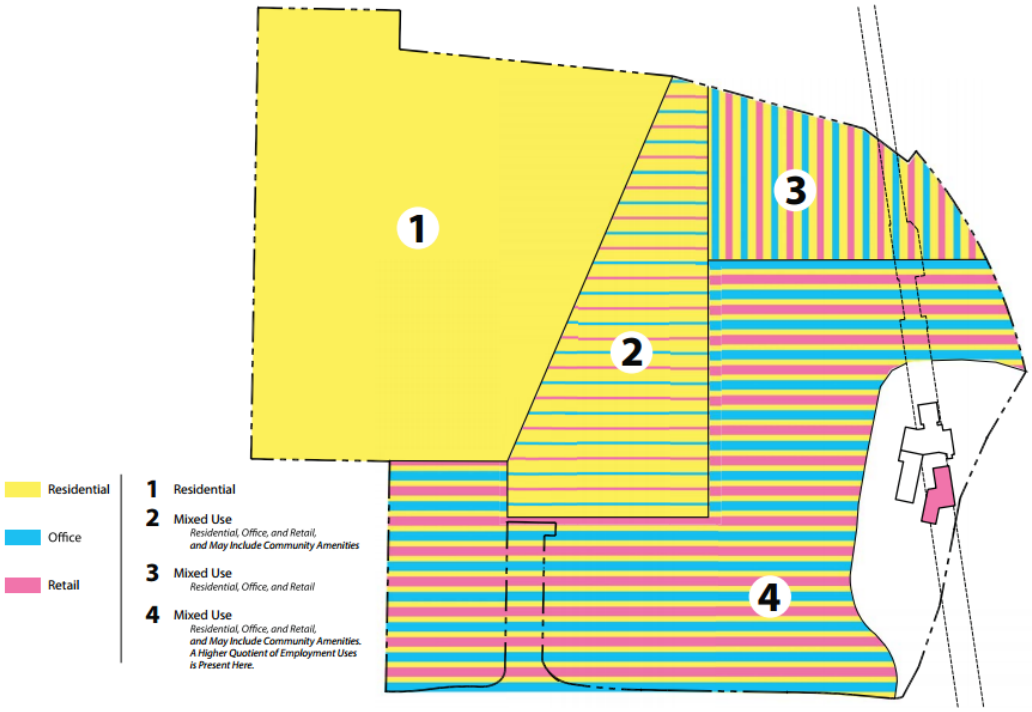
Source: City of New Westminster, Wesgroup

Building	Size	Status	Additional Notes
1	Retail: 29,000 sf Office: 265,000 sf	Completed	TransLink, Browns Social House, Shoppers Drug Mart, Starbucks, and Kids & Company Daycare are tenants.
2	Retail: 48,000 sf Office: 60,000 sf (strata)	Completed	BC Biomedical, Save-On-Foods (formerly Thrifty Foods), Take Five and TD Canada Trust are tenants.
3	Office: 27,127 sf	Completed	Health Science Association is the tenant.
4	Office: 41,860 sf Residential: 57,140 sf, 115 units	DP approved Feb 2015	Called The Sapperton. Office/residential floor area proportion as yet unconfirmed.
5, 6, 7	Retail: 63,000 sf Residential: 538,000 sf, 635 units	Pending	These floor area estimates have been derived by netting confirmed square footage from reported totals.
8	Office: 271,000 sf	Pending	This floor area is approximate and is derived from subtracting firmly planned

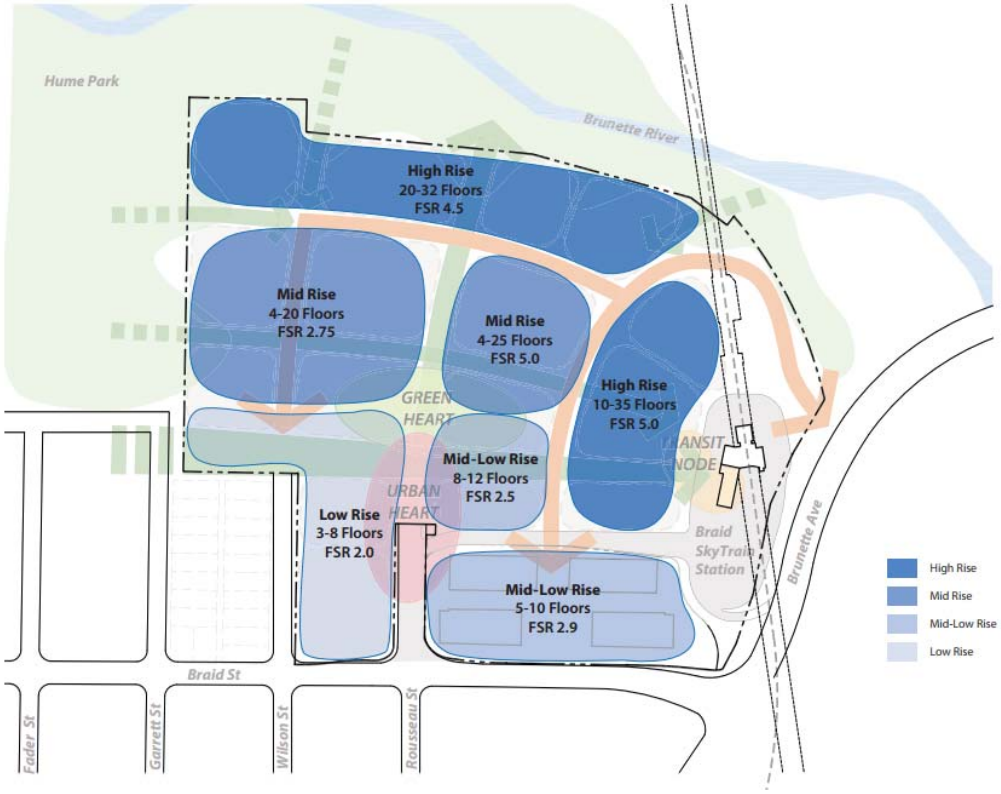
			square footage from the 600,000 sf reported office total.
Total	All Uses: 1,400,000 sf Office: 600,000 sf Retail: 140,000 Residential: 595,000 sf, 750 units Health Services Space: 65,000		Residential number is 1.4 million total sf net of office, retail, and health services.

Sapperton Green Development

Bentall Kennedy, on behalf of BCIMC, has submitted an application to amend the New Westminster Official Community Plan to allow for the master-planned Sapperton Green community on a 38-acre site adjacent to the Braid Skytrain station. Although preliminary, plan notes show that the development would ultimately include 2.8 million to 3.4 million square feet of residential space housing approximately 7,700 new residents in 3,500 to 4,200 units. It is also proposed that the site will accommodate 500,000 square feet to 1 million square feet of office uses and 100,000 square feet to 300,000 square feet of retail uses. The community is expected to develop over 20 years. Two sketches featuring preliminary land use plans and density distribution are provided below for reference.



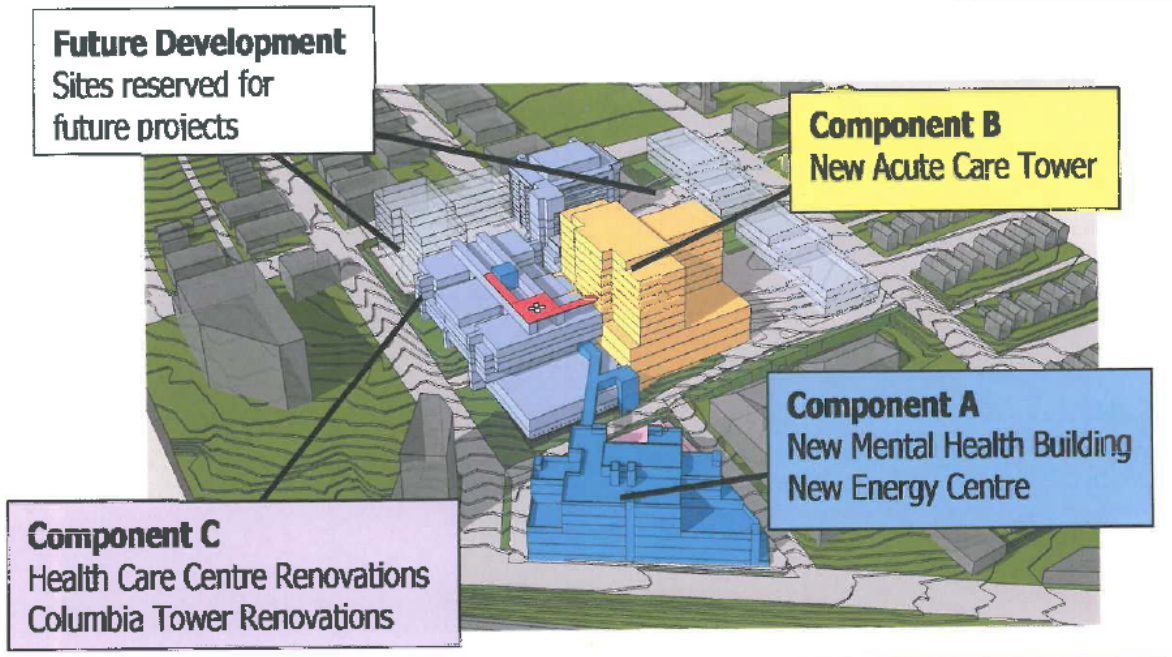
Source: City of New Westminster



Source: City of New Westminster

Royal Columbian Hospital (RCH) Redevelopment

The Royal Columbian Hospital, founded in 1862, is one of the busiest Fraser Health Authority hospitals and is chronically running at over-capacity. To address this issue, and to implement service and infrastructure upgrades, the Fraser Health Authority plans to redevelop the hospital. This project is in the preliminary stages, however it is expected to include a new mental health facility, a new acute care tower and additional parking capacity. The number of beds, currently standing at 400, will increase by 75 percent to 700 and the number of staff will increase by 70 percent from 3,500 to approximately 6,000. RCH floorspace is also expected to double. The timeline for the redevelopment is 10 to 15 years, and existing buildings will remain in place until replacements are constructed. A schematic of the components of the redevelopment is provided below for reference.

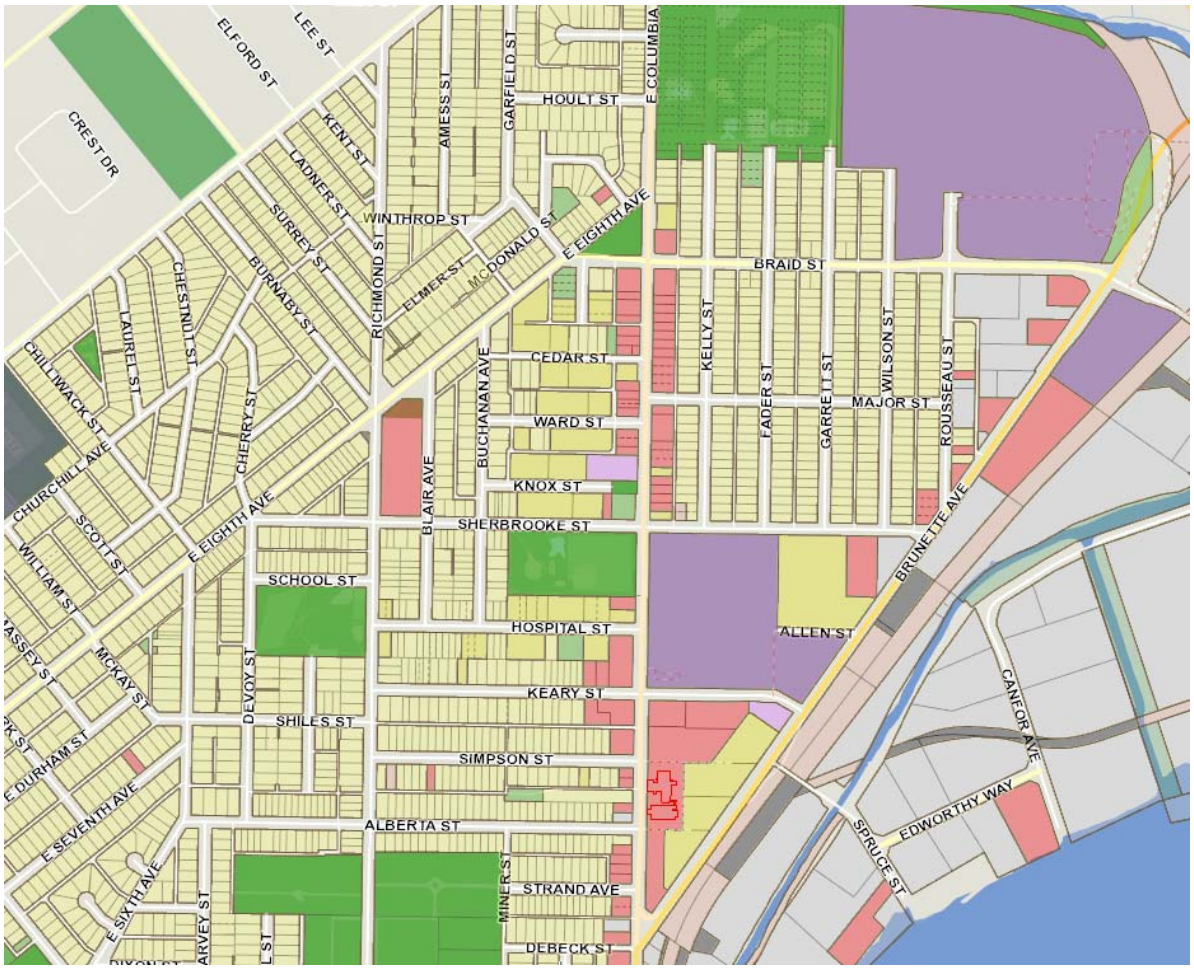


Source: City of New Westminster

Anticipated Development along the East Columbia Retail Corridor

The section of East Columbia Street stretching from Cumberland Street to Braid Street contains a collection of small, older retail and service commercial buildings. Due to market demand for transit-oriented development and the large upcoming supply of new residential units discussed previously, this corridor is expected to densify through redevelopment over the next few decades.

Colliers collected data on 60 parcels fronting East Columbia Street and, on a high level basis, used the development principle of 'highest and best use' to determine how much additional floorspace could potentially be developed under current zoning. Parcel data collected came from BC Assessment, Zoning Bylaws, and the City of New Westminster's Geographic Information System. Data includes current zoning in place, current land use, site area, square footage of existing improvements, and the maximum floor area ratio achievable under current zoning bylaws.



Source: City of New Westminster GIS

The following assumptions were made in the calculations:

- To calculate additional potential commercial and residential square footage on each lot, existing square footages were subtracted from the highest square footage achievable under current zoning and lot configurations.
- Where a maximum floor space ratio was not given in the bylaw, a proxy was calculated using site depth, rear and side yard requirements, and maximum height or site coverage restrictions.
- Adjacency to a different land use, such as residential, and its effect on setbacks, was also taken into consideration.
- The ratio of residential to commercial uses was determined by highest and best use. For example, if the zoning bylaw only stipulated at least one ground floor of commercial space, it was assumed that the remaining portion would be residential.
- Only vacant parcels or parcels with improvements built before 1980 were used in the final tally, as the other parcels still have many remaining years in their useful life and are less likely to be candidates for redevelopment.

- Colliers also refrained, as part of this high-level review, from speculating about which parcels are likely to be rezoned, since there is a considerable amount of additional density available within the existing C-2 and C-3 zoned parcels.

According to the New Westminster GIS, there are currently approximately 192,000 square feet of residential space, 210,000 square feet of commercial space, and 11,000 square feet of other uses within the selected sites.

After factoring in the above assumptions, Colliers calculated that an additional **710,000 square feet of residential** and **217,000 square feet of commercia**l space can likely be achieved through densification of the East Columbia Corridor.

Although retail/office square footage split within the commercial category could only be reliably estimated with a further market analysis of demand for these asset classes, CIC estimates that approximately 30 to 40 percent of the 217,000 square feet of commercial space will likely be made up of commercial uses. Service commercial encompasses businesses such as beauty salons, doctors and dentists, educational services, banks and insurance companies, fitness clubs, and some professional, scientific and technical offices.

The redevelopment of RCH will drive increased market interest in the area for a wide array of multi-family housing options, which in turn will generate interest in high order at-grade and ideally second-floor commercial uses.

Commercial Tenant Parking Ratios

The number of parking spaces demanded by tenants varies depending on a location's proximity to transit and the type of tenant (office or retail). In general, sites closer to transit require fewer parking spots and office tenants tend to require fewer parking spots per 1,000 square feet of gross leasable area than do retail tenants. Colliers reviewed leasing brochures and interviewed brokers active in the New Westminster Area to determine a realistic ratio range for transit-oriented commercial developments in New Westminster.

Office locations in Urban Centres typically require only 1 to 2 parking spots per 1,000 square feet of leased floor area, whereas office locations more removed from transit tend to require a ratio of 3 parking spots per 1,000 square feet of leased space. Retail tenants, generally speaking, and in more traditional retail centre formats, typically seek a parking ratio of 4 spots per 1,000 square feet of gross leasable area. These parking needs can be reduced substantially in certain locations, such as the study area, which offer superior access to public transportation and to rapid transit (i.e. SkyTrain) in particular. Given these market conditions, Colliers recommends a parking ratio of 1.5 per 1,000 square feet of office space and at least 2.5 stalls per 1,000 square feet of retail floor area in Sapperton.

Conclusion

Colliers anticipates that approximately **1.1 million to 1.6 million** square feet of commercial space and **4.1 million to 4.7 million** square feet of residential space will be added to the Sapperton Neighbourhood over the next several decades as the area continues to evolve. This will have significant parking requirement implications as commercial real estate benchmarks indicate a requirement of 1.5 to at least 2.5 stalls per 1,000 square feet of commercial floor area in Sapperton. The redevelopment of the Royal Columbian Hospital

is expected to further support this growth as its new components are expected to draw health and medical service-oriented business and create a health and medical industry cluster in the Sapperton area. Colliers understands that a detailed economic impact study of the redevelopment of RCH is currently being undertaken by several consulting firms. According to City staff, the results of this analysis will most likely be available later this summer. Colliers recommends reviewing this study when it becomes available.

Sincerely,

COLLIERS INTERNATIONAL CONSULTING





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Appendix 1: Included East Columbia Parcels

Address	Zoning	Landuse	Site Area (SM)	Existing FSR	Building Age
303 Cumberland St	Apartment (Low Rise) / RM-1B	Multi-Family / Row Housing(single Unit Owner)	2698.37	0.8	1994
119 E Columbia St	Commercial / C-1	Multi-Family / Mf - Apartment Block	979.94	0.7	1955
121 E COLUMBIA ST	Commercial / C-1	Civic-Recr / Churches & Bible Schools	1686.65	0.3	1865, 1955
125 E COLUMBIA ST	Commercial / C-1	S/f Res / Single Family Dwelling	963.7	0.3	1927
129 E COLUMBIA ST	Commercial / C-1	Commercial / Commercial Strata Lot	1134.44	0.7	1998
131 E COLUMBIA ST	Commercial / CS-1	Commercial / Store(s) And Offices	853.5	0.9	1946
135 E COLUMBIA ST	Commercial / CS-1	Industry / Auto. Paint Shop Garages Etc	853.5	0.5	1947
141 E COLUMBIA ST	Commercial / CS-1	Commercial / Stores & Service-Commercial	946.12	0.4	1968
145 E COLUMBIA ST	Commercial / C-2	Commercial / Office Building (Primary Use)	521.19	0.7	1973
149 E COLUMBIA ST	Commercial / CS-1	Commercial / Vacant	521.19	0.0	
153 E COLUMBIA ST	Commercial / CS-1	Commercial / Vacant	521.19	0.0	
201 E COLUMBIA ST	Commercial / CS-1	Commercial / Vacant	463.59	0.0	
209 E COLUMBIA ST	Commercial / CS-1	S/f Res / Sfd With Basement Suite	463.59	0.4	1943
213 E COLUMBIA ST	Commercial / CS-1	Industry / Auto. Paint Shop Garages Etc	464.52	0.6	1972
215 E COLUMBIA ST	Commercial / CS-1	Commercial / Parking-Lot Only Paved Or Grav	463.59	0.0	
219 E COLUMBIA ST (RS-1 portion)	Single Detached / RS-1	S/f Res / Sfd With Basement Suite	2182.64	0.1	1877
219 E COLUMBIA ST (assumed CS-1 portion)	Single Detached / RS-1	S/f Res / Sfd With Basement Suite	631.11	0.1	1877

227 E COLUMBIA ST	Commercial / CS-1	Commercial / Store(s) & Living Quarters	687.67	0.4	1938
237 E COLUMBIA ST	Commercial / C-2	Commercial / Office Building (Primary Use)	1466.01	0.9	1983
245 E COLUMBIA ST	Commercial / C-2	Commercial / Commercial Strata Lot	2264.98	0.7	1979
301 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Store(s) And Offices	2970.39	1.2	1996
319 E COLUMBIA ST	Commercial / C-3(C-2A)	Multi-Family / Multi-Family (Minimal Commercial)	805.1	0.9	1911
335 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	805.1	0.6	1955
402 COLUMBIA ST	Commercial / CD-16	Multi-Family / Multi-Family (Minimal Commercial)	472.41	3.9	1965
403 E COLUMBIA ST	Institutional / P-1	Civic-Recr / Churches & Bible Schools	1481.9	0.7	1891
406 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) & Living Quarters	472.41	0.7	1945
408 E COLUMBIA ST	Commercial / C-2A	Commercial / Vacant	472.41	0.0	
409 E COLUMBIA ST	Commercial / C-3(C-2A)	Civic-Recr / Parks And Playing Fields	802.4	0.0	
410 E COLUMBIA ST	Commercial / C-2A	Commercial / Vacant	472.41	0.0	
411 E COLUMBIA ST	Commercial / C-CD-3	Mixed Use (Com/res) / Strata-Lot Res. (Condo)/commercial	3209.99	3.1	2007
412 E COLUMBIA ST	Commercial / C-2A	Commercial / Vacant	472.41	0.0	
416 E COLUMBIA ST	Commercial / C-2A	Multi-Family / Multi-Family (Minimal Commercial)	472.41	1.4	1948
418 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) & Living Quarters	1417.24	1.4	1942
421 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Neighbourhood Pub	458.66	1.0	1925
425 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	921.41	0.7	1946

427 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	460.71	0.6	1958
431 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Restaurant Only	458.66	0.5	1972
434 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) And Offices	1438.23	0.3	1930, 1947
437 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	460.71	0.4	1949
441 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Restaurant Only	551.84	0.7	1953
444 E COLUMBIA ST	Commercial / C-2L	Commercial / Stores & Service-Commercial	482.91	0.7	1959
308 CEDAR ST	Commercial / C-3(C-2A)	Multi-Family / Multi-Family (Minimal Commercial)	909.52	1.4	1982
450 E COLUMBIA ST	Commercial / C-2A	Commercial / Shopping Centre	1899.68	0.4	1954
451 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	183.95	0.8	1946
307 CEDAR ST	Commercial / C-3(C-2A)	Commercial / Store(s) & Living Quarters	367.9	0.9	1921, 1948
452 E COLUMBIA ST	Commercial / C-2A	Commercial / Stores & Service-Commercial	472.88	0.6	2006
455 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Store(s) & Living Quarters	551.84	0.8	1991
457 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	551.84	0.6	1954
459 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Store(s) & Living Quarters	464.52	1.0	1986
460 E COLUMBIA ST	Commercial / C-2A	Commercial / Office Building (Primary Use)	474.55	0.5	1974
463 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Store(s) & Living Quarters	934.51	0.8	1970

467 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Stores & Service-Commercial	464.52	0.8	1951
470 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) & Living Quarters	474.55	0.9	1945, 1954
474 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) & Living Quarters	453.55	1.3	1946
478 E COLUMBIA ST	Commercial / C-2A	Commercial / Stores & Service-Commercial	495.54	1.0	1946
480 E COLUMBIA ST	Commercial / C-2A	Commercial / Store(s) & Living Quarters	474.55	1.0	1912
484 E COLUMBIA ST	Commercial / C-2A	Commercial / Stores & Service-Commercial	474.55	0.8	1944
485 E COLUMBIA ST	Commercial / C-3(C-2A)	Commercial / Commercial Strata Lot	1385.56	0.4	2005
496 E COLUMBIA ST	Commercial / CS-2	Commercial / Self Serve Service Station	1425.6	0.0	1992
502 E COLUMBIA ST	Commercial / C-2	Commercial / Restaurant Only	1417.24	0.1	1969

Appendix 2: Office Parking Ratio Examples

Address	Ratio
625 Agnes St	1 to 885 sf
960 Quayside Dr	2 per 1,000 sf
88 6th Street	1 per 600 sf
1 8th St	1 per 600 sf
625 5th Ave	1 per 600 sf
555 6th St	1 per 333 sf
601 6th St	1 per 500 sf
668 Carnarvon St	1 per 1,040 sf
620 Royal Ave	1 per 500 sf
628 6th Ave	1 per 1,000 sf
624 6th Ave	1 per 800 sf
287 Nelson's Court	1 per 1,000 sf
277 Brunette Ave	2 per 1,000 sf
424 Columbia St	2.5 per 1,000 sf

Sources: Colliers International professionals, Landlord and Broker leasing brochures, AltusInsite