



Your **Cycling** Connection

Assessment Ride of Strathcona

Hastings Street Area

Vancouver, British Columbia, Canada

2017/11/26



BACKGROUND

HUB Cycling is a charitable organization that works to make cycling better through education, events and collaboration. We are Metro Vancouver's leader in making cycling an attractive choice for everyone. The Strathcona Business Improvement Association (SBIA) is working to improve the economic, environmental and community future of Strathcona's business district. The SBIA, with an interest in improving transportation and transportation choices in the Strathcona neighbourhood, is creating a Mobility Advocacy Plan (MAP). Recognizing that new development, technology, policies, and area plans are going to impact transportation and mobility in Strathcona, the SBIA is bringing together SBIA member businesses to help shape these changes. HUB Cycling is supporting this effort in regards to potential cycling infrastructure changes that would support the overall MAP direction.

INTRODUCTION



SBIA area.

Strathcona is a mixed neighbourhood bounded by the port to the north, Clark Drive to the east, Malkin Drive to the south, and Gore Avenue to the west. It includes parts of the Downtown Eastside and the False Creek Flats. Strathcona has large areas zoned residential, but also has areas zoned light industrial to the north of Hastings, east of Raymur, and south of Venables. Strathcona's southern border is expected to see considerable change in the next few years, with the removal of the viaducts, the building of the new St. Paul's Hospital and Health Campus south of Gore, the downgrading of Venables/Prior to a local street, and construction of the Malkin Connector.

Strathcona's main commercial streets are Hastings, Gore, and Powell, though there are a sprinkling of businesses within the largely residential area south of Hastings. Shopping and dining destinations in Strathcona include businesses such as Les Amis du Fromage on Hastings, and Benny's Market, Union Market, and The Wilder Snail within the just-mentioned residential area. Just outside the study area are Bomber Brewing and Off The Rail, both on the Adanac bike route.

Strathcona is also a neighbourhood with significant traffic passing through it to surrounding areas, mainly travelling east-west along Powell, Cordova, Hastings, and Venables, which all have bus routes on them (Hastings has many). Hastings Street

is the major arterial going through the area, running east and west from Downtown Vancouver to Burnaby Mountain.

Strathcona has a long history of activism in transportation changes, including a prominent part in a popular movement that stopped a massive highway project to access downtown. This movement is widely regarded as having changed Vancouver’s direction for the better. Building on this legacy is an initiative by the Strathcona Business Improvement Association (SBIA) to create a Mobility Advocacy Plan (MAP), which is a framework for advocating for improvements to the area’s transportation infrastructure.

Many residents and local employees are within walking and cycling distance of a multitude of local destinations. Census data from 1996 through 2016 reports an increase in people cycling to work, and a variable number of people walking to work.

Mode of travel to work in Strathcona	1996	2001	2006	2011	2011 City of Vancouver	2016 City of Vancouver
Walked	28.6 %	<i>Reliable data unavailable due to transit strike</i>	21.3 %	24.0 %	12.5%	29%
Cycled	6.5%		6.9%	10.2 %	4.4%	13%

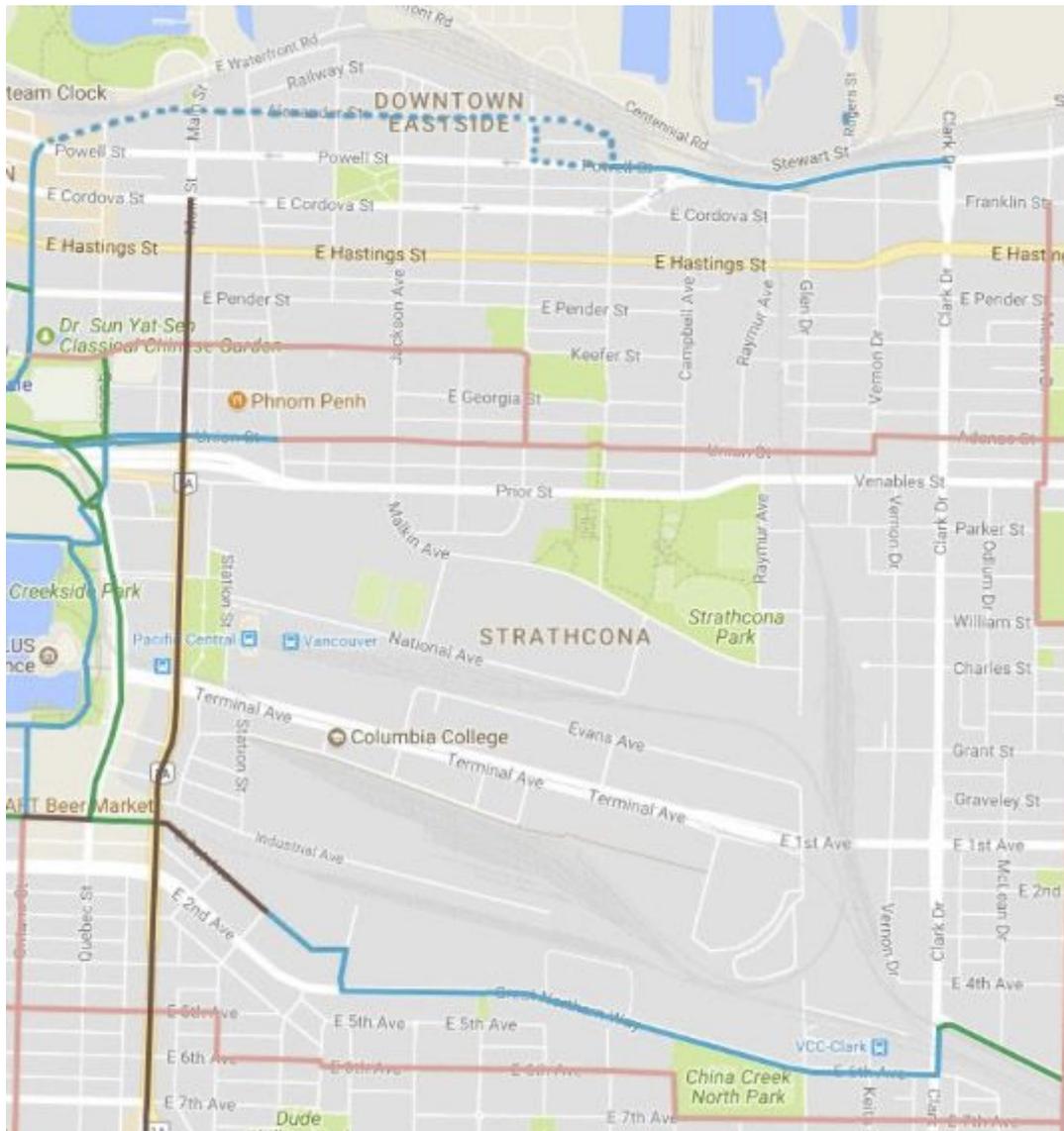
Strathcona has the city’s highest cycling mode share at 13% in 2016.¹ In the larger port area 57% of the population have said that they would like to cycle more.²

On assessment rides through Strathcona on two different Sundays, we observed a significant number of people walking and cycling. These people were likely not going to and from work, suggesting that walking and cycling are popular modes of travel in Strathcona, outside of work trips.

The streets of Strathcona have some rudimentary traffic calming with diversions but it is decades old and is no longer adequate for today’s motor traffic volumes. More advanced designs are now needed.

¹ Walking and Cycling in Vancouver 2016 Report Card
<http://vancouver.ca/files/cov/walking-cycling-in-vancouver-2016-report-card.pdf>

² 2016 Vancouver Panel Survey
<http://vancouver.ca/files/cov/transportation-panel-survey-2016-final-report.pdf>



The above map shows that there are two groupings of bike routes through Strathcona. There is a protected bike lane along Powell from Clark drive to Railway. There is also the heavily used Adanac/Union bike route, with a less heavily-used bike route along Keefe that splits from Union at Heatley. Both routes are regularly used by commuters passing through Strathcona.

What's particularly notable from the map is the lack of north-south bike routes in Strathcona, with the exception of a short stretch of Heatley. Recognized north-south bike routes would provide a means for people on bikes to access Hastings, which is Strathcona's main shopping street, both from the residential areas and Powell Street bike route to the north of Hastings, and from the residential areas to the south of Hastings and the Union/Adanac bike route. Recognized north-south bike routes would also provide access to the new St. Paul's Hospital and Health Campus south of Gore.

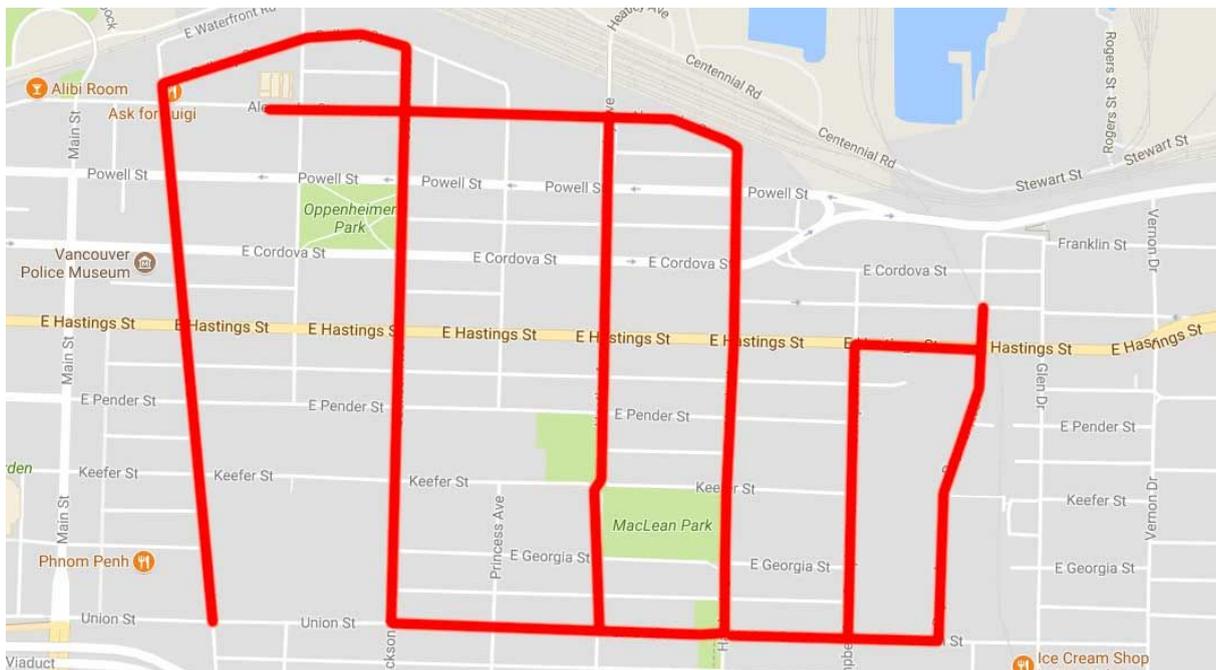
The area's transportation infrastructure is in need of change. People are increasingly wanting more transportation options, particularly for shorter distances. People are wanting to incorporate activity into their everyday lives. With better transportation infrastructure, businesses on Hastings and other streets would be more attractive to people walking and cycling to them, both local residents and people living outside Strathcona.

GENERAL ISSUES

Intersections in Strathcona are busy. In addition to vehicles passing through on their way to somewhere else, commercial and industrial activities give rise to many delivery vehicles and loading zones.

The residential part of the neighbourhood between Hastings Street and Union Street is attractive for walking and cycling; however, despite the traffic calming, there is still significant motor vehicle traffic, often moving at high speeds. Parking close to intersections creates challenges with visibility. Strathcona is the closest neighbourhood to Downtown, BC Place, and Rogers Arena that has free parking, meaning commuters and people attending events drive to Vancouver, park in the neighbourhood, and then take transit or walk to their destination.

SPECIFIC LOCATIONS



Map showing assessment ride routes. Other streets not included in the rides could also be considered.

Gore Avenue

On Gore, motor traffic moves slowly, but has delivery trucks, transit buses, and tour buses. Gore has many destinations itself (stores). Shift Delivery uses Gore to connect to destinations and suppliers.

Gore and Georgia

There is a partial east-west cycling and walking connection through the BC Housing area from Dunlevy to Georgia St. This is potentially useful but stops short before Gore. VanMap shows it as an easement.



Photo: View of car-free street in housing project: East Georgia Street looking west from Jackson Ave.

Gore and Keefer

Keefer just east of Gore is used constantly as a turn-around spot. Traffic speeds are high because of the width of the street. It is highly used by people walking and cycling. Keefer is part of the Trans Canada Trail.

Gore and Pender

Traffic is busy. There is a parking lane on both sides of the street.

Gore and Hastings.

The intersection is busy and has fast motor traffic. There is a need to cross Hastings to get from Strathcona to Railtown.

Gore and Cordova

There is a lot of motor traffic. Many motor vehicles speed northward to turn east onto Cordova. The timing of the lights encourages higher vehicle speeds.

Cordova and Powell

Cordova and Powell are both currently one-way and have high motor traffic speeds. It's difficult to cross sometimes.

Gore and Powell

Sunrise Market is a popular grocery destination. It has many delivery trucks on the east side. The west side is heavily used by people walking.

Gore and Alexander

Between Powell and Alexander the sidewalk on the east side is very wide. There was much speeding traffic. People speed down Alexander to avoid Powell.

Kefer Street

Many motor vehicles turn around just east of Gore using two driveways that are on each side. The width of Kefer between Gore and Jackson is wide which encourages speeding.

POTENTIAL NORTH-SOUTH ROUTES

The area has very few routes for cycling in both east-west and north-south directions. According to Dutch principles of a useful cycling grid, primary routes should be no more than 500 metres apart and secondary routes 250 metres from them. In Strathcona, the east-west streets are 100 M. apart. The north-south streets are mostly 140 M. apart. This means that every second north-south street should have a cycle facility. Where these routes meet busy roads such as Hastings they should include protected intersections and crossings



Photo: Gore Avenue from Pender to Union looking East. The width between buildings is much wider than most streets. This was intended to be a freeway on-ramp.

Gore Avenue

Gore Avenue is an obvious choice as a north-south active transportation route. It's almost flat for most of its length. It connects Alexander and Union Streets. In the future it will connect to Terminal Avenue and the new location for St. Paul's Hospital. The east side of Gore from Pender to Union has green space that was leftover from the halted freeway project. Some of this could be used to create an off-street two-way cycle track.

Dunlevy Avenue

Dunlevy could be a useful connector from Pender to Alexander. (South of Pender Street however it is interrupted to Union.) It is flat and goes by Oppenheimer Park and other attractions.

Jackson Avenue

Jackson is central in Railtown on Railway avenue. A good choice to connect northward from Hastings.

Jackson and Powell

There are many destinations in the 400 block of Powell, including Uncommon Cafe, Payless Meats, Mackenzie Room, Oppenheimer park

Princess Avenue

Princess is a useful street but is interrupted at Pender Street. It connects to Strathcona School and Community Centre.

Heatley

Heatley has natural attractiveness as a cycle route. It is flat between Union and Hastings and currently traffic calmed south of Pender. North of Hastings it has a very gentle slope. The Heatley overpass to the port will be removed in a few years giving opportunities. It's very wide north of Powell.

Heatley and Keefer

The traffic calming island has too high of a curb to mount when biking. People currently bike on the sidewalk to get through. The visibility (because of bushes) is bad and the route is circuitous. There can be conflicts with people walking. The apartment building on the southwest corner creates a blind corner.



Photo: Current configuration of traffic diverter at Heatley and Keefer. The curb is too high to mount when cycling.

Hawks Avenue

A good street for cycling. Similar to Heatley. Traffic calming. Flat.

Campbell Avenue

Campbell is a good route. Almost flat. Both sides are residential. There is the Ray-Cam Community Centre at Hastings. It connects to the Adanac bike route, Prior Street, Strathcona Park, the Hastings Viaduct and Alexander Street.

Raymur Avenue

Raymur Avenue has residential apartments on the west side and industrial companies on the east side. The width is very wide. Large trucks move along it. There is a rail crossing just north of the Hastings Viaduct with tracks at a bad angle for cycling. In the future access across the tracks will be removed. The north end of Raymur is close to the crosswalk ramp of the Powell Overpass.

POTENTIAL EAST-WEST ROUTES

Alexander Street

This connects the Powell street overpass to Gastown and downtown. This is soon to be upgraded to a bikeway using traffic diversion to lower motor traffic volumes and speeds.

Hastings Street

Very flat. Important corridor that someday should be made into a complete street. One of the few routes over the tracks.

Keefer Street

Fairly flat. Connects to a high school, a community centre, a park. Connects Chinatown to Raymur. Part of the Trans Canada Trail.

Georgia Street

Fairly flat. A housing complex with a car-free area, a park.

SUGGESTIONS

While Hastings should be made into a complete street, balancing the needs of all users including vehicles, transit, people walking, and people on bikes, that is likely still some years away. Until then we can look at Hastings as a spine with routes coming north and south off of it. Some of these routes can be made attractive for walking and cycling. Instead of attempting to design each side street as a complete street, choose a few to be for goods delivery and motor vehicle traffic and then traffic calm the rest. Dutch Sustainable Safety^{3 4 5} principles show three types of road: Through Roads, Distributor Roads and Local Access Roads. Under these principles the functions cannot be mixed. For Strathcona, it should be decided which travel mode would be prioritized on which street.

Choose one north-south street to be car-free at the point where it meets Hastings. Install a half-block bike-permeable parklet between Hastings and the alley. (Similar to the mini park at Yukon and 17th.⁶) Work with goods movement stakeholders to determine their delivery needs.

On Hastings, the northwest and southeast corners (at least) of all intersections should have ample bike parking. There should be spaces for future Mobi stations.

³ Sustainable Safety: principles, misconceptions, and relations with other visions

https://www.swov.nl/sites/default/files/publicaties/gearchiveerde-factsheet/uk/fs_sustainable_safety_principles_archived.pdf

⁴ Background of the five Sustainable Safety principles

https://www.swov.nl/sites/default/files/publicaties/gearchiveerde-factsheet/uk/fs_sustainable_safety_principles_archived.pdf

⁵ Sustainable Safety (Duurzaam Veilig)

<https://www.cycling-embassy.org.uk/blog/2014/03/26/sustainable-safety-duurzaam-veilig>

⁶ Park at Yukon and 17th.

<http://vancouver.ca/parks-recreation-culture/park-at-17th-and-yukon.aspx>

If neighbourhood streets are intended solely for resident and visitor access, they don't need to be as wide as they are now. This gives more room for wider sidewalks or other purposes. Some streets could be a single lane one-way. Arterials and feeders would be wider of course. These differences would be a quick visual indicator that one is entering a residential neighbourhood and they can be expected to drive differently than on an arterial. Streets that are designated as local access streets should be narrowed. Major intersections on bike routes should be protected intersections.

UPCOMING CHANGES

The area will have some changes in the next while. These include a new location for St. Paul's Hospital at the south end of Gore, and the removal of the viaducts which will include a replacement for Prior St as an arterial. Existing and future cycle traffic on Union Street is expected to increase. Alexander Street and Powell street will see an increase as well.

SPECIFIC LOCATIONS

Gore Avenue from Union to Pender

There is a green space on the east side from Union to Pender which is left over from the halted freeway project. This could provide plenty of width to make a complete street or to install a two-way off road cycle path.

Gore and Hastings

This should be redesigned as a protected intersection. The motor traffic on both Gore and Hastings is high enough to justify it.

Gore Avenue from Pender to Alexander

This should have some cycling infrastructure of some type.

Jackson and Pender

Southbound from Hastings, this intersection should have different signage to indicate that you are entering a residential area. Jackson South of Keefer is hilly. Any north-south route on Jackson could end at Keefer.

Jackson between Powell and Cordova

A bike permeable parklet could be installed here between the alley and either Powell or Cordova. Visually it would be an extension of Oppenheimer Park. Little closures like this can deter motor vehicle traffic and make it more visually the realm of bikes and pedestrians.

Georgia and Hawks

This is a large plaza. There should be a more visible cycle route through it north-south. There currently is an east-west route through it. This could be made more visible. People walking and sitting in the plaza should know where to expect bikes, and to expect bikes. There should be bike parking at the edges of the plaza for people to use to bike to the plaza. Signs informing people that cycling is indeed allowed in the plaza.

A two-way cycle path could be on the western edge of the plaza making Hawks avenue bike permeable.

If the plaza is going to be redesigned entirely, there should be a two-way east-west cycle path through it. The southern edge makes sense because of the alignment of Georgia Street.

Hastings and Hawks

Hawks south of Hastings could be a greenway. Install traffic calming. One-way for driving on the first half block for example.

Raymur

From Union Street to Hastings Street, a two-way off road cycle track could be made on the west side (where the sidewalk is now.) A new sidewalk could be made West of it.



Photo: View of Raymur Ave looking South showing current west side sidewalk

There could be a ramp from Raymur up to Campbell and Hastings to connect with the overpass.

Raymur and Hastings

The new building has a corner cut. This could be used to have a cycle track connect to Cordova. The future residents of Strathcona Village would have the potential to easily connect to the Adanac bike route.



Photo: View of corner cut of Strathcona Village building (On Raymur looking up at Hastings overpass). Could have enough room for motor vehicles and bicycles to clear tracks when construction is removed.

Hastings overpass

The sidewalks on each side of Hastings are very wide. Cycle tracks could be added. They could be two-way or one-way. Two-way would be better as Hastings is often difficult to cross. (A one-way track would likely be used both ways anyway.) There is construction currently on the North side. This should have a protected bike lane installed at the end of construction before it get claimed for parking.

Heatley

Heatley south of Hastings could be a greenway.

Hawks Ave and Powell/Alexander

From a perspective of flow, North of Hastings, Hawks Ave works well as a connecting route to Alexander (directly curves into the Alexander route). However, a lot of heavy goods movement is going on here.

Heatley Ave and Powell

Perhaps when Heatley overpass comes down, there will be less goods movement to contend with here. Very wide road north of Hastings. Need to add push button for bikes at Powell

Heatley and Keefer

The traffic diversion needs to have better bike permeability. Cut a notch in the center of the diverter giving it better bike permeability. Ideally at street level. Should be well indicated that it's meant for bikes; wide path.

Install a bulb out on the southwest corner to move traffic north and be able to see around the corner better.

There should be a sign on Heatley northbound indicating that a bike route is ahead. The northeast corner of Heatley and Georgia needs bike parking for people biking to the park from the Adanac route.

Gore and Georgia

The off road path from Dunlevy to Jackson on Georgia could be connected through to Gore making a complete route to Campbell. Georgia is a flat nice route.

Gore and Keefer

Continue path along Gore, to cross Keefer. Put in a cul-de-sac on Keefer a bit east of Gore, then the rest of the block should be redesigned, one-way, or narrowed, to become a traffic calmed neighbourhood street.

Gore and Pender

Current there is construction of a new building on the northeast corner. The building has a parking entrance in the alley for its underground parking so does not need street parking. This is a good opportunity to install a bike lane on the east side for the half block (or full block to Hastings.) Taking advantage of the opportunity the new development gives, between Pender and the alley north of it, on the east side (currently closed to traffic) and put in a protected bike lane before construction is finished.



Photo: Looking North on Gore at Pender.

Gore from Pender to Hastings.

A protected intersection could be installed at Hastings and Gore. The southwest corner currently has construction so a protected bike lane could be installed after construction. The existing building on the south east corner has its own underground parking so does not need street parking.

Cordova and Powell

Cordova and Powell are both currently one-way. If they were made two-way streets traffic would flow at a saner pace. It would allow more agility for transportation around the area. It would make the current couplet of the two streets less like a highway.

Gore and Powell

The west side of the street is extra wide so could have room for a protected bike lane between the trees and the building.

Gore and Alexander

Between Powell and Alexander the sidewalk on the east side is very wide. This could be used to make room to make it a complete street.

Make some traffic calming measure

(Such as making one block into a one-way street, diverters, etc.)

adopt the perceived lifestyle of their new area. If the only attractive way of getting around is by driving then they will do that and fill up the streets with more cars. There isn't room in the area for more cars. If new residents instead look out their window and see attractive, safe walking and cycling street design they will use incorporate those into their new lives.

More Information

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