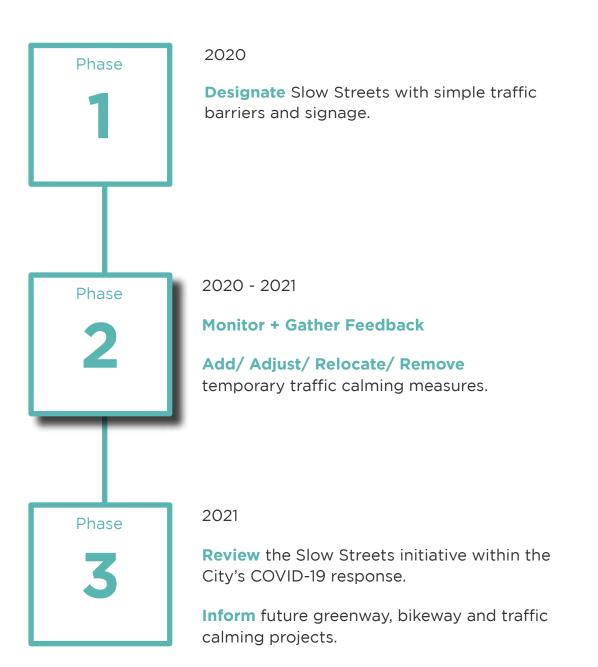
|   | · · · · · · · · · · · · · · · · · · · |
|---|---------------------------------------|
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   | <br>                                  |
|   |                                       |
|   |                                       |
|   | <br>                                  |
|   | · · · · · · · · · · ·                 |
|   |                                       |
|   | <br>                                  |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
| 🥵 |                                       |
|   |                                       |
|   |                                       |
|   |                                       |
|   |                                       |

SUPPLEMENTAL DESIGN GUIDE

# **SLOW STREETS**

## Approach



# INTRODUCTION

## What are Slow Streets?

To help residents physically distance and mitigate the risk of COVID-19 to our communities, we are re-shaping how we use our streets and public spaces.

#### Slow Streets provide opportunities for walking, rolling and cycling and make it easier for people to exercise and access businesses in their neighbourhoods.

We've designated Slow Streets routes:

- to reduce and slow down motor vehicle traffic.
- busier streets, equity and access to greenspaces like parks.
- like pop-up plazas and open spaces like parks.

Since May 2020, we have installed about 40 km of Slow Streets with barriers and signs. In Phase Three of BC's Restart Plan, the City is continuing initiatives that provide additional space for people to exercise and access services. We anticipate that many Slow Streets will be in place through fall 2021.

As part of the second phase of the Slow Streets, staff reviewed opportunities to improve the comfort of select routes by installing additional temporary traffic calming.

## What is the purpose of this guide?

This document is intended to supplement the City of Vancouver's Slow Streets initiative. This guide provides details about each traffic calming measure and the rationale behind the upgrade.

The Slow Streets Team will regularly update this document with detailed information about upcoming Slow Streets upgrades. We encourage you to stay involved with the Slow Streets initiative, fill out an online survey and share feedback about how these changes are working.

Project webpage: vancouver.ca/slow-streets

#### **SLOW STREETS** VANCOUVER



Along existing greenways and local streets where light interventions are introduced

Based on several criteria including traffic volumes, existing traffic signals to cross

To provide segments that can be part of a healthy walk, connect with other segments for a longer run or bike ride and link to other public life recovery projects

# INTRODUCTION

## What do Slow Streets look like?

We have installed simple traffic barriers (orange and white) with signage to encourage people driving to go slow, use the streets for local access only and watch for other users.



Figure 1: Examples of Slow Streets with simple traffic barriers (orange and white) with signage

# BACKGROUND

## What are Slow Streets Traffic Calming Upgrades?

Since the fall of 2020, we have been implementing temporary traffic calming measures on selected routes. Traffic calming measures help reduce motor vehicle volumes and make these routes more comfortable for walking, cycling and rolling.

As part of the Slow Streets Upgrades, additional signage and concrete barriers will be installed and there will be some local changes to parking and traffic circulation.

The planned upgrades align with upcoming and long-term transportation projects such as existing and future greenways, parks, civic facilities and where we've previously heard concerns about traffic volumes from a neighbourhood. This initiative is giving us an opportunity to trial measures that can help fast track some transportation projects.

## **Initial Feedback**

Between August and October 2020, we heard from 1,942 people through our Slow Street survey. Overall, Slow Streets have a high level of support with more than 70% of survey participants 'Liking or Really Liking' the initiative. A number of suggestions were made to improve the program including adding traffic calming measures to lower motor vehicle volumes (70% of participants supported) and lowering motor vehicle speeds (75% of participants supported). The main concerns that survey participants reported while using Slow Streets were non-local traffic using the street (41% of participants), higher motor vehicle speeds (30% of participants) and damaged/missing signs and barriers (26% of participants). To review the full Phase One Engagement Summary, please <u>click here</u>.

As we continue to implement Slow Streets Traffic Calming Upgrades, staff will monitor these traffic calming measures by reviewing public feedback, collecting data and making adjustments as needed. These measures may stay in place longer than the Slow Streets initiative and staff will seek additional public input before making any changes permanent.

#### STAYING INVOLVED WITH SLOW STREETS

We encourage you to stay involved with the Slow Streets initiative by filling out a survey online and sharing feedback about how these changes are working.

Fill in a survey at: <u>shapeyourcity.ca/slow-streets</u>

#### **SLOW STREETS** VANCOUVER

#### **SLOW STREETS** VANCOUVER

# BACKGROUND

## Where are these upgrades located?

#### 1. Wall Street

1.1 Wall Street near Oxford and Cambridge parks

NOTE: To address the concerns about the impact of the changes along Wall Street, we removed the temporary closure in November 2020. Refer to *Appendix A* for more details.

#### 2. Ontario Street

2.1 Ontario Street near Riley Park

#### **3.** Heather Street

3.1 Heather Street at W 14th Avenue

#### 4. Charles Street

4.1 Charles Street between Nanaimo and Kamloops streets

#### 5. W 7th Avenue

5.1 W 7th Avenue at Fir Street

#### 6. Glen Drive

6.1 Glen Drive at E Broadway and E 12th Avenue

# SLOW STREETS NETWORK AND PLANNED UPGRADES



#### LEGEND

Slow Streets

Existing Bike Network

Vancouver's bike network has route types that range from more comfortable (protected bike lanes, local street bikeways) to less comfortable (painted bike lanes and shared lanes), please review the City of Vancouver Cycling Map and Guide to find a route for your desired level of comfort.

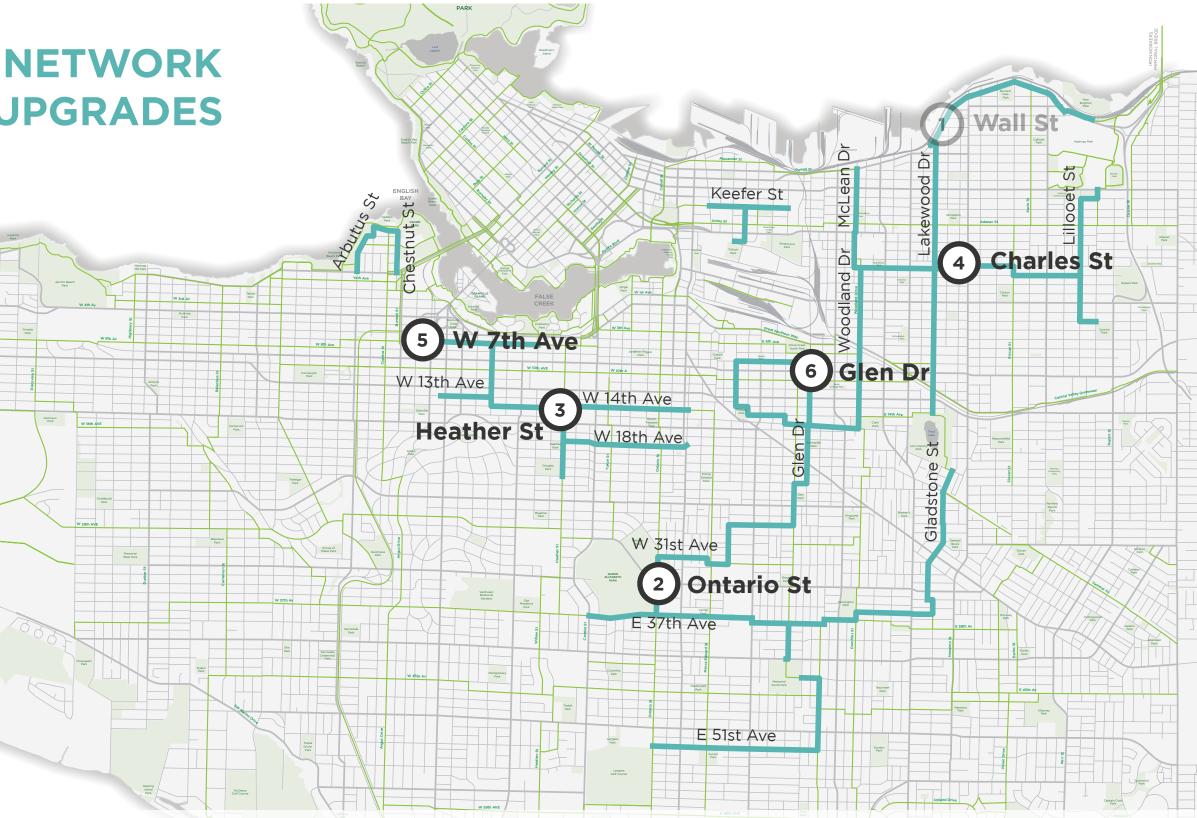
#### Disclaimer of responsibility:

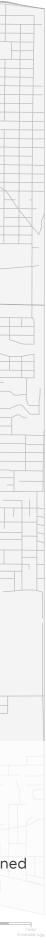
This map is produced as a guide to cycling routes and Slow Streets in the City of Vancouver. The City, its employees, officers, directors and representatives do not guarantee the accuracy of the information contained therein nor warrant the safety of any route, highway, road, street, designated cycling route or other shown in the map or information.

© 2020 City of Vancouver

#### SLOW STREETS VANCOUVER

#### **SLOW STREETS** VANCOUVER





# BACKGROUND

## **Related Initiatives and Policies**

**Council Report: Reallocation of Road Space to Support** 1. Shared Use During Pandemic (PDF 338 KB)

#### 2. Slow Streets Network (Webpage Link)

Since May 2020, we have installed about 40 km of Slow Streets with simple barriers and signs.

Climate Emergency Response (PDF 600 KB) 3.

Big Move #1 - Walkable Complete Communities By 2030, 90% of people live within an easy walk and roll of their daily needs.

#### **Transportation Design Guidelines: All Ages and** 4. Abilities Cycling Routes (PDF 1.6 MB)

Page 1 - Rule 2 Considerations: On routes with more than 500 vehicles/day (more than 50/hr), consider additional traffic calming or diversion to bring volumes down to the target value.

#### 5. 2019-2022 Capital Plan (PDF 6.6 MB)

Page 59 - Major new/upgrades to Projects: Upgrade and construct new active transportation corridors including 10th Avenue, Bute Greenway, Portside Greenway, Richards Street, Drake Street, East Van City Greenway, and other corridors identified in the 5-year cycling map.

Page 56 - Expand Sustainable Transportation Capacity: Funds are allocated to "Expand and upgrade the network of convenient and comfortable cycling routes for people of all ages and abilities (AAA) across the city."

- 6. 5-Year Cycling Network: Additions and Upgrades 2018-2022 (PDF 1 MB)
- Vancouver Greenways Plan (PDF 7.3 MB) 7.

#### **Coordination with Park Board** 8.

Staff are consulting with Park Board on future improvements to the Slow Streets Traffic Calming Upgrades in coordination with other related projects.

# TYPES OF UPGRADES

## A. Temporary Full Closures

This type of closure uses temporary concrete barriers to prevent motor vehicles from travelling or turning onto a street but provides adequate space for people cycling and walking to travel.



and Yukon Street at W 12th Avenue (right)

## **B.** Temporary Diverters

- Temporary concrete barriers that prevent one or more motor vehicle movements through the intersection



Figure 4 and 5: Examples of traffic calming measures with concrete barriers at Ontario Street at Peveril Avenue (left) and Macdonald Street at W 3rd Avenue (right).

#### **SLOW STREETS** VANCOUVER

Figure 2 and 3: Examples of traffic calming measures with concrete barriers at Adanac-Vernon Plaza (left)

This is not a full closure - motor vehicles are still able to make some movements.

People walking and cycling are able to travel through gaps in the diverters.

# **2. Ontario Street Upgrades**

## 2.1 Ontario Street near Riley Park

## **Related Projects**

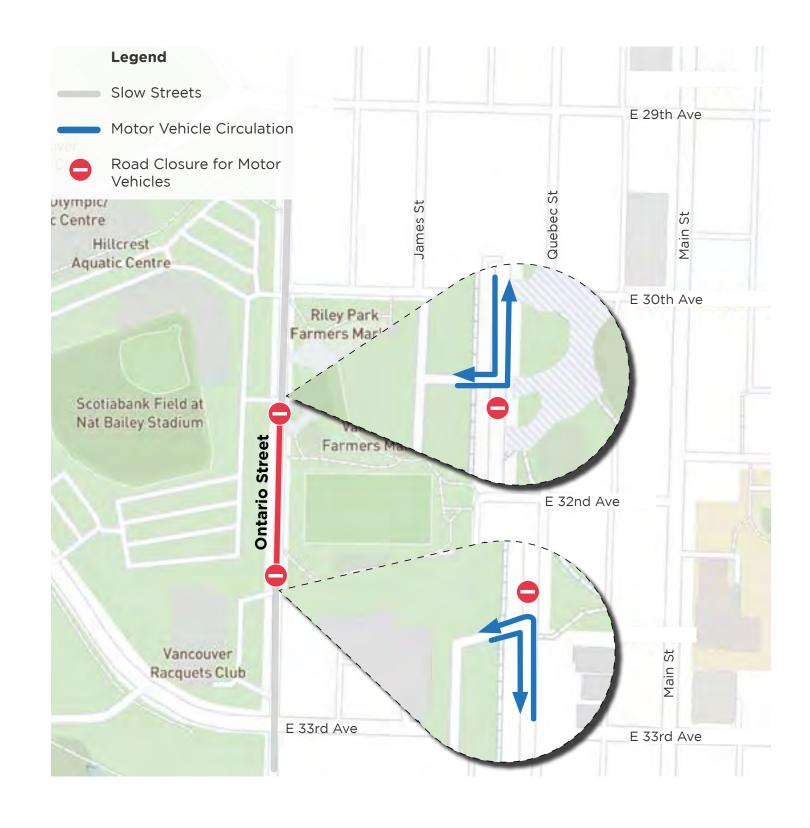
- These traffic calming measures are part of the long-term Ontario Greenway Upgrades. Similar upgrades are planned for Ontario Street at E 5th Avenue, E 7th Avenue and E 16th Avenue to be constructed in Fall 2020.
- The fifth wave of Slow Streets, installed in early August 2020, created a connection along Ontario St between E 37th Avenue and E 30th Avenue.

## **Current Challenges along Ontario Street**

- The traffic counts collected in 2019 show that the motor vehicle volumes exceed the City's AAA guidelines by up to three times even with the existing diverter at Ontario Street and Peveril Avenue.
- Motor vehicle volumes are much lower in the afternoon compared to the morning, possibly due to the activities at the nearby community centre and other amenities.

## **Planned Upgrades - Temporary Full Closure**

- A full closure of approximately 120 metres on Ontario Street between the driveway to the Vancouver Racquets Club driveway south of E 30th Avenue. Forty parking spaces will be re-purposed to accommodate the traffic calming closure on Ontario Street.
- These upgrades would encourage visitors from nearby amenities to use driveway access on Ontario Street at E 33rd Avenue, and use arterial streets such as Main Street and 33rd Avenue as much as possible. It would create safer and interconnected public spaces for people walking, rolling and cycling to travel between different parks and amenities.
- Staff consulted with Riley Park Farmers Market about the planned upgrades and the potential for activating these public spaces in the future. The temporary full closure creates an opportunity to work with the farmers market and other community services to activate these spaces.
- Staff will monitor motor vehicle volumes north and south of the full closure and may implement additional traffic calming measures in the area if needed.



#### Continued on next page ----->

#### **SLOW STREETS** VANCOUVER

#### Page 10 of 27

#### **SLOW STREETS** VANCOUVER

## **Motor Vehicle Access Map**

# **3. Heather Street Upgrades**

## 3.1 Heather Street at W 14th Avenue

## **Related Projects**

- As part of wave four, we installed Slow Streets signs and barriers along Heather Street and W 14th Avenue including this location as part of Slow Streets network.
- These traffic calming measures are part of the long-term W 14th Avenue Upgrades.

## **Current Challenges along Heather Street**

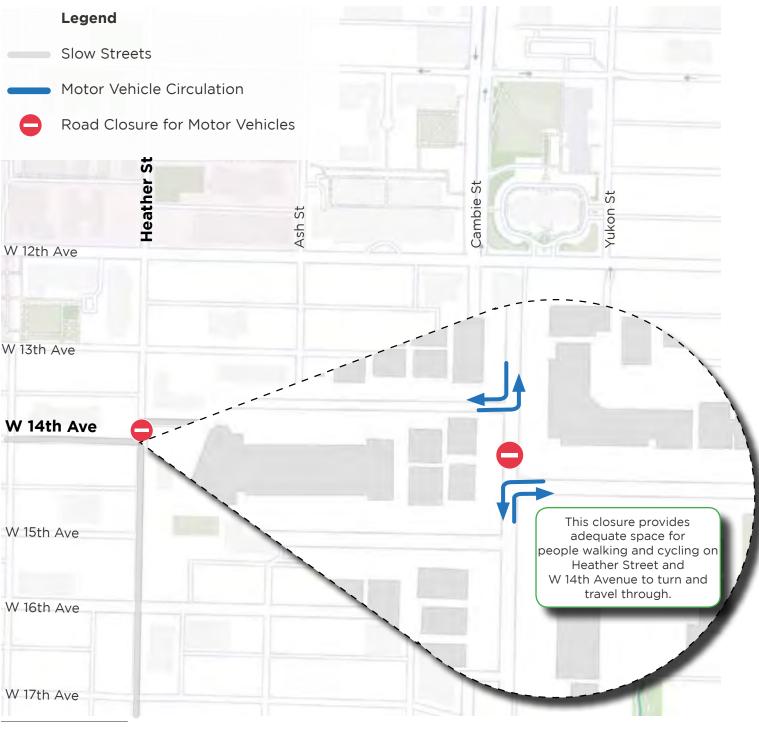
- The traffic counts collected in 2017 on Heather Street at W 14th Avenue, show that the motor vehicle volumes exceed the City's AAA guidelines by up to five times with highest peak hour showing 250 vehicles per hour (AAA threshold is 50 vehicles per hour).
- The City's parking by-law designated 'no stopping' zones at T intersections, like the offset intersection of W 14th Avenue and Heather Street. We have observed this 'no stopping' zone is used for on-street parking and can obstruct visibility between road users.

## **Planned Upgrades - Temporary Full Closures**

- A full closure for motor vehicles on Heather Street at W 14th Avenue to help reduce the motor vehicle volumes in the neighbourhood. This closure would provide adequate space for people cycling and walking on Heather Street and W 14th Avenue to turn and travel through.
- Temporary parking restrictions near the closure will provide additional space for motor vehicles to turn safely around the barrier.
- Adding new 'no parking'/ 'no stopping' signs near the intersection to:
  - Provide adequate space for motor vehicles to turn safely around the barrier. 0
  - Clearly identify where parking is already restricted at the offset intersection 0 per the City's Street and Traffic By-Law 2849. Parking regulations near intersections help ensure good visibility for people walking, cycling and driving, this is especially important around schools.

- on the initial feedback about:
  - 0
  - 0 Maintaining access to the nearby parking lot
- traffic calming measures in the area if needed.

## **Motor Vehicle Access Map**



Continued on next page ----->

#### **SLOW STREETS** VANCOUVER

Staff consulted with Blessed Sacrament School and Parish about the traffic calming upgrades on Heather Street at W 14th Avenue. The design has been modified based

Maintaining existing motor vehicle circulation for school pick-up/ drop-off

Staff will continue to receive public feedback on this design and monitor motor vehicle volumes north and south of the full closure and may implement additional

# **4. Charles Street Upgrades**

## 4.1 Charles Street between Kamloops and Slocan streets

## **Related Projects**

- The third wave of the Slow Streets network included Charles Street from McLean Drive to Slocan Street and continued on Kitchener Street from Slocan Street to Lillooet Street providing an east-west connection in the Grandview-Woodland and Hastings-Sunrise neighbourhoods.
- These traffic calming measures will support the Grandview Woodland Plan (page 150).
- Many of existing diagonal diverters to the west of Nanaimo Street have helped calm the traffic and limit short-cutting on Charles Street. These additional traffic calming measures will support calming the traffic east of Nanaimo Street as well as provide adequate space for people walking, cycling and rolling.

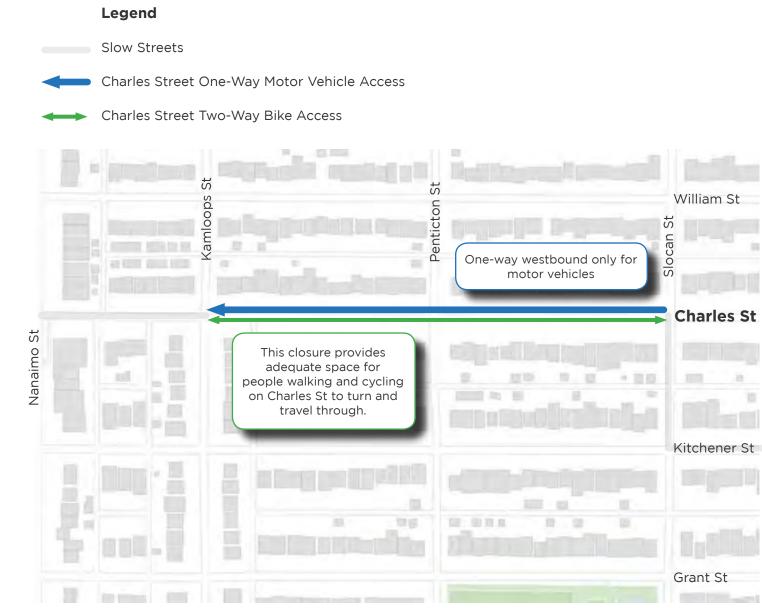
## **Current Challenges along Charles Street**

Historically, staff have received a number of complaints about traffic volumes and short-cutting on local streets both east and west of Nanaimo St, north of 1st Avenue as people driving access downtown and the Trans-Canada Highway.

## **Planned Upgrades - Temporary Diverters**

- To limit short-cutting through the neighbourhood, we will install diverters and convert Charles Street to one-way westbound between Kamloops and Slocan streets while still allowing residents to circulate and park on Charles Street.
- Parking will be maintained on both sides (facing westbound) along Charles Street between Kamloops Street and Slocan Street. Minimal (1-2 spots) parking restrictions are required on the east side of the intersections to provide additional space for motor vehicles to turn safely around the barriers.
- Staff will monitor motor vehicle volumes east and west of the changes and may implement additional traffic calming measures in the area if needed.

### Motor Vehicle Access Map



Continued on next page ----->



# 5. W 7th Avenue Upgrades

## 5.1 W 7th Avenue at Fir Street

## **Related Projects**

- In Spring 2021, we will extend the W 7th Ave Slow Street west from Alder St to Fir St, providing an upgrade to the Off-Broadway route in relation to Granville Bridge as per the 5-year Cycling map.
- These upgrades are in conjunction with the Pine Street traffic calming upgrades between 9th Ave and 6th Ave, additionally the 7th Avenue route provides connections to the AAA Arbutus Greenway.

## **Current Challenges along W 7th Avenue**

- The traffic counts collected in 2015 on W 7th Avenue at Fir Street, show that the motor vehicle volumes exceed the City's AAA guidelines by up to five times with highest peak hour showing 250 vehicles per hour (AAA threshold is 50 vehicles per hour).
- We observed that the Fir Street ramp onto Granville Bridge obstructs visibility between road users especially at the stop-controlled intersection for traffic traveling eastbound through W 7th Avenue.

## **Planned Upgrades - Temporary Diverters**

- To help reduce motor vehicle volumes, we will install temporary diverters for motor vehicles traveling through along W 7th Avenue.
- These diverters will run between northbound and southbound travel lanes of Fir Street preventing motor vehicles from turning left from all approaches. The upgrade will allow traffic along W 7th Avenue to turn right; traffic along Fir Street to go through and turn right. Motor vehicles will not be able to travel straight through W 7th Ave.
- These traffic diverters will provide adequate space for people cycling and walking on W 7th Avenue to turn and travel through.
- A similar treatment has previously been installed (using permanent materials) on the Off Broadway route at Macdonald St and W 8th Avenue. See it <u>here.</u>

## **Motor Vehicle Access Map**



Continued on next page ----->

#### SLOW STREETS VANCOUVER

Page 16 of 27



Page 17 of 27

# **6. Glen Drive Upgrades**

## Motor Vehicle Access Map

## 6.1 Glen Drive at E Broadway and 12th Avenue

### **Related Projects**

- In August 2020 we added Glen Drive from W 8th Avenue to W 22nd Avenue and continued on to Windsor Street. This route is part of the existing Windsor bikeway, providing a north-south to various neighbourhoods, parks and key destinations in East Vancouver.
- This trial will support planning for potential future upgrades to Glen Drive, part of the Windsor bikeway.

## **Current Challenges on Glen Drive**

- E Broadway, Clark Drive and E 12th Avenue are major arterial roads in this area. Staff have received complaints from nearby residents about people using local streets, like Glen Drive which has a signalized crossing, as short-cutting routes.
- Glen Drive serves a number of small businesses and is one of a few access points to Vancouver Community College.
- Although we want to maintain local circulation and access, we want to prevent Glen Drive from being used as a north/south short-cutting route.
- The traffic counts collected in 2018 at E Broadway and Glen Drive show that the motor vehicle volumes exceed the City's AAA Guidelines by up to five times with highest peak hour showing 343 vehicles per hour (AAA threshold is 50 vehicles per hour).

## **Planned Upgrades - Temporary Diverters**

- To reduce motor vehicle shortcutting, we will install traffic diverters that will restrict left turns for motor vehicles travelling in either direction along E Broadway and E 12th Avenue.
- These traffic diverters will prioritize walking, cycling and rolling along the Slow Street.
- These upgrades will encourage people driving to use arterial streets such as E Broadway, Clark Drive, Great Northern Way and E 12th Avenue as much as possible, and minimize traffic using local streets to access Vancouver Community College.

Legend Glen Drive **E Broadwav** All other through and turning movements are maintained All other through and turning movements are maintained E 12th Ave Driv Glen

Continued on next page ----->

#### **SLOW STREETS** VANCOUVER

**SLOW STREETS** VANCOUVER



#### **APPENDIX - A: WALL STREET UPGRADES**

- Design Details
- Notification Letter

# **1. Wall Street Upgrades**

## 1.1 Wall Street near Oxford and Cambridge parks

## **Related Projects**

- Lakewood Drive).
- Portside Greenway.

## **Current Challenges along Wall Street**

- street and a designated bikeway (or a future greenway).
- of complaints about higher motor vehicle volumes on local streets in the neighbourhood.

## **Planned Upgrades - Temporary Full Closure**

- neighbourhood.
- motor vehicles to turn safely around the barrier.
- implement additional traffic calming measures on Wall Street if needed.

The first wave of Slow Streets implemented in May 2020 included Wall Street between New Brighton Road and Oxford Park (to connect the Slow Street on

These traffic calming measures are part of the long-term development of the

Traffic counts collected over the last two years show that motor vehicle volumes exceed the City's AAA guidelines by up to six times than what is expected on a local

Since the start of the Nanaimo Street Upgrades Project, we have received a number

A full closure for motor vehicles on Wall Street near Oxford and Cambridge Park to help reduce the motor vehicle volumes and deter short-cutting through the

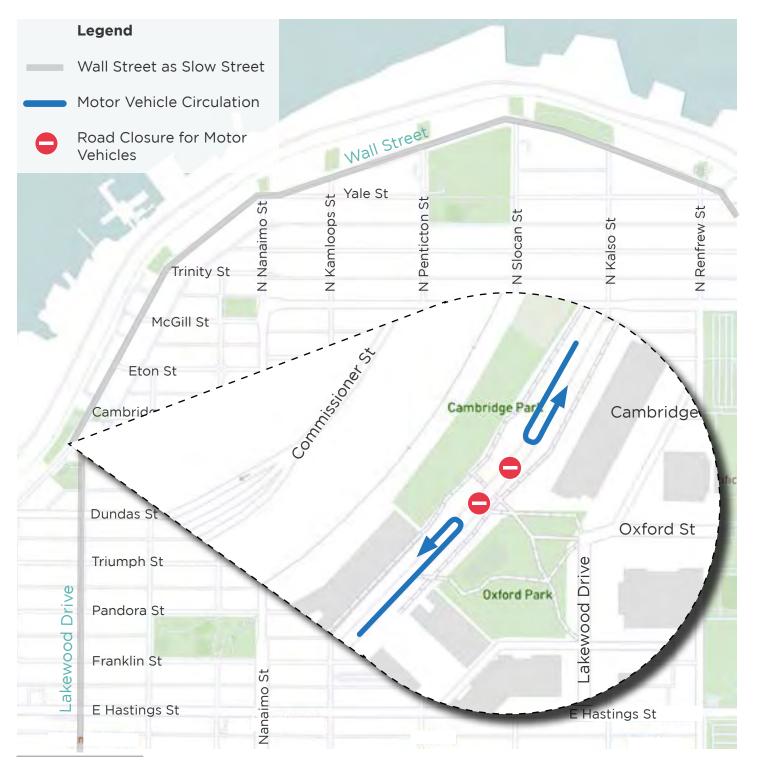
Temporary parking restrictions near the closure to provide additional space for

Staff will monitor motor vehicle volumes east and west of the full closure and may

# **1. Wall Street Upgrades**

## 1.1 Wall Street near Oxford and Cambridge parks

### **Motor Vehicle Access Map**



# 2. Wall St - Notification Letter

#### IMPORTANT INFORMATION Please have this translated

**RENSEIGNEMENTS IMPORTANTS** Prière de les faire traduire 重要資訊 請找人為你翻譯

重要资讯 请找人为你相译

Mangyaring isalin ito

ਜ਼ਰੂਰੀ ਜਾਣਕਾਰੀ

TIN TÚC QUAN TRONG Xin hãy dịch sang tiếng Việt

November 2, 2020

Dear Resident and/or Business Owner:

#### RE: Removal of temporary vehicle closure (concrete barriers) on Wall St near **Oxford and Cambridge parks**

In response to the COVID-19 pandemic, we have been re-shaping how we use our streets and public spaces to help residents physically distance and provide opportunities to exercise and travel more comfortably.

Under typical circumstances, changes to the street are implemented following consultation with the community. Over the last few months, as we have mobilized quickly to respond to the pandemic, we have shifted our approach to use a 'try, learn and adjust' approach and are installing changes using temporary materials.

We have been monitoring locations where we are making changes and adjusting based on public feedback. The goal is to be responsive - in some locations, where we have heard significant concerns from the local community we will be adjusting or removing temporary changes.

To address the concerns about the impact of the changes along Wall St, we will remove the temporary closure in November 2020.

#### **Slow Streets - Background**

Since May 2020, we've designated 40 km of residential streets as 'Slow Streets' with construction style barriers and signs to provide local opportunities for exercise and access to businesses. Our goal is to provide routes that are comfortable for walking, biking and rolling for people of all ages and abilities.

As part of the second phase of the Slow Streets, staff reviewed opportunities to improve the comfort of select routes by installing additional temporary traffic calming. Staff considered how streets compared to the City's All Ages and Ability guidelines, previous feedback from the neighbourhood and their significance in the walking and cycling network (ex. future greenway)

City of Vancouver, Engineering Services Mailing Address: 320-507 West Broadway Vancouver, British Columbia V5Z 0B4 Canada Tel: 3-1-1, Outside Vancouver 604.873.7000 fax: 604.873.7200 website: vancouver.ca/engsvcs/

#### **SLOW STREETS** VANCOUVER

#### **SLOW STREETS** VANCOUVER

MAHALAGANG KAALAMAN

ਕਿਰੰਪਾ ਕਰਕੇ ਕਿਸੇ ਕੋਲੋਂ ਇਸ ਦਾ ਓਲਬਾ ਕਰਵਾਓ

INFORMACIÓN IMPORTANTE Busque a alguien que le traduzca

중요정보 번역해주세요

اطلاعات مهم لطفا درخواست كنيد این اطلاعات ر آ بر ای شما ترجمه کنند



when planning these improvements. Additional background can be found in the Slow Streets Supplemental Guide (vancouver.ca/slow-streets).

#### Wall St - Background

The first wave of Slow Streets implemented in May 2020 included Wall Street between New Brighton Road and Oxford Park (to connect the Slow Street on Lakewood Drive).

Prior to the pandemic, following many requests from the public, staff collected traffic counts on Wall Street. Motor vehicle volumes exceed the City's All Ages and Abilities guidelines by up to six times than what is expected on a local street and a designated bikeway. Staff reviewed a number of locations and design options for the traffic calming barriers.

In September 2020, temporary traffic calming measures were installed on Wall St near Oxford and Cambridge Parks. This full closure (refer to Figure 1 below) used concrete barriers to prevent motor vehicles from short-cutting along the street but provided adequate space for people cycling and walking.



Figure 1: Photo of temporary traffic calming closure at Wall St at Oxford and Cambridge Parks

#### What we've heard

We've been tracking and reviewing public feedback about the Slow Streets initiative and the recent traffic calming measures through e-mails, 3-1-1, social media and an online public survey.

#### Wall St Feedback:

We have heard a mix of support and concerns about this closure. Some people noted that the closure has helped reduce motor vehicle volumes while others have outlined concerns about:

- Traffic circulation changes including (a) local traffic needing to use busier streets with turning restrictions for access and (b) increasing traffic in alleys
- Non-compliance by people driving through the closure
- Limited public consultation around the changes ٠

#### **Next Steps**

We want to thank everyone who has provided feedback about the changes and the implementation process.

To address the concerns about the impact of the changes, we will remove the temporary closure in November 2020 until staff can return to have additional conversations about mobility in the neighbourhood.

Over the long term, Wall Street has been identified as part of the Portside Greenway. Greenways enhance the experience of walking and cycling around the city and are designed to be comfortable for all ages and abilities. They include improvements like expanded parks, increased landscaping, public art, and drinking fountains. The Portside Greenway will be developed in stages with a number of opportunities for public consultation.

We welcome further input about the Slow Streets initiative and ideas you may have for the future of Wall Street. Staff will review and incorporate feedback into the broader Portside Greenway planning process.

If you have any questions or comments related to Slow Streets, please contact our team by: By e-mailing slowstreets@vancouver.ca Through online services in the VanConnect app

- By calling 3-1-1

Sincerely,

Engineering Services, City of Vancouver

Page 2 of 3



Page 3 of 3

This Supplemental Design Guide is a working document. The Slow Streets Team will regularly update this guide with detailed information about Slow Streets Upgrades.

We encourage you to stay involved with the Slow Streets initiative, fill out an online survey and share feedback about how these changes are working.

Project webpage: vancouver.ca/slow-streets





#### TY OF NCOUVER