

**SLOW STREETS** Vancouver STEP THREE | REVIEW AND REFRESH JULY 2022



# CONTENTS

Executive Summary
Introduction
What are Slow Streets?
How were Slow Streets implemented? 5
Step One
Key Findings
Conclusions
Step Two
Key Findings
Conclusions
Step Three
Slow Streets refresh
Speed Reduction Measures
Traffic Calming Measures
Changes to the Slow Streets Network
Conclusion
Appendix I - Existing Slow Streets Network
Appendix II - Step Two Engagement Summary13
Introduction
Engagement Approach
Highlights
Part 1: Site Specific Findings
Table of Site Specific Results
Part 2: Who We Heard From
Gender Identity & Age Group17
Ethnicity & Household Income18
Modal Split

# **EXECUTIVE SUMMARY**

**Over 40km of Slow Streets have been implemented in the City of Vancouver since the initiative launched in May 2020.** First created in response to the COVID-19 Pandemic, Slow Streets were rolled out across Vancouver to make it easier for people to walk, bike and roll in their local neighbourhoods while physically distancing. Since, Slow Streets has helped reshape how we interact with local residential streets in Vancouver.

In 2020, the Slow Streets network was implemented in 'waves'. Slow Streets could be identified by the new street signage and temporary barriers: the intention was to slow vehicles down, and improve access to neighbourhood amenities and the outdoors. A community survey in 2020 **received 1,942 responses, with over 70% liking or really liking the initiative.** Over the months that followed, staff reviewed successes and challenges with the Slow Streets network resulting in some additional traffic calming measures, and adjustments made based on community feedback.

By May 2022, the earliest Slow Streets had been in place for two years and requests for repairs and replacements were increasing as more barriers were misplaced or damaged. **Increasing maintenance and operational costs, combined with community feedback, warranted a review of the network.** For the Slow Streets network to continue to provide safer and comfortable routes for people walking, biking and rolling, its infrastructure had to remain fit-for-purpose.

Now, the Slow Streets 'Refresh' aims to retain the benefits of the Slow Streets network over the longer term, by improving its legibility and appearance with more permanent barriers.

No additional diversionary traffic calming measures are proposed and **three minor changes are planned for the network to better coordinate alignments with existing and future bikeways:** 

- Between E 19<sup>th</sup> Ave and Stainsbury Ave/Vanness Ave in the Kensington-Cedar Cottage neighbourhood, the Slow Street will move one block to the west, to the existing bikeway along Gladstone Ave.
- Between Gladstone St and Dumfries St in the Kensington-Cedar Cottage neighbourhood, the Slow Street will move one block to the south, from E 36<sup>th</sup> Ave to the Midtown/Ridgeway Greenway, recognizing construction completion in Jones Park.
- Between E Pender St and Kitchener St in the Hastings-Sunrise neighbourhood, the Slow Street will move one block to the east from Lillooet St to Windermere St. This will align the Slow Street with a future greenway in this area.

The refresh will take place in stages starting late October 2022 using interim materials, with the new barriers gradually replacing the old ones. Thereafter, City staff will continue to examine the network alongside other traffic calming programs and policy directions on how best to design our streets.

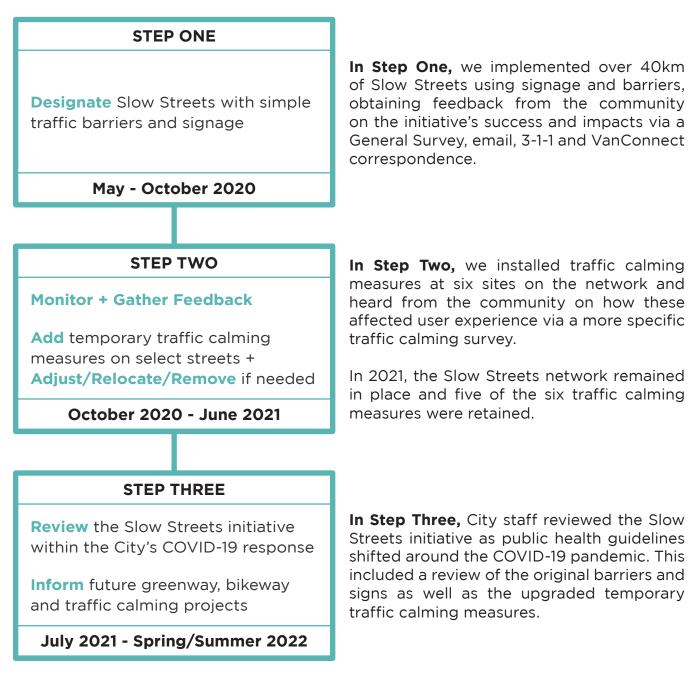
# INTRODUCTION

# What are Slow Streets?

The City of Vancouver launched various initiatives to re-shape how we use our streets and public spaces in response to the COVID-19 pandemic.

# The Slow Streets initiative provided opportunities for walking, biking and rolling and made it easier for people to exercise and access businesses in their neighbourhoods.

As the program developed, The City of Vancouver outlined a three-step implementation and engagement process.



## How were Slow Streets implemented?

Slow Street locations were planned on local streets to help residents physically distance and mitigate the risk of COVID-19 to our communities.

### Step One

In April 2020, temporary barriers and signs were installed at various intersections in Kits Point to test implementation options, serving as a 'prototype' for the Slow Streets initiative.

Later in spring/summer 2020, 40km of Slow Streets were implemented in five 'waves' (See Appendix I). The routes were designated:

- Along existing greenways and local streets to reduce and slow down motor vehicle traffic.
- Based on several criteria including traffic volumes, existing traffic signals to cross busier streets, equity and access to greenspaces like parks.
- 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 like pop-up plazas and open spaces like parks.

Staff collected feedback through the 'Step One – General Survey' which received 1,942 responses. We were interested in hearing the community's thoughts on the Slow Streets initiative, their experience of the on-street changes, and what could be improved or changed. A detailed report of those findings can be read <u>here</u>.

### Key Findings

- Over 70% of 1,942 survey participants 'liked' or 'really liked' the initiative and under 25% expressed a negative sentiment.
- Support was higher among people who walk or bike, or used Slow Streets for recreation, accessing essential services or businesses. It was lower among drivers and transit users.

### Conclusions

- There was interest in expanding the Slow Streets network, adding further interventions that prioritize walking, biking and rolling, using more durable barriers and making the initiative more permanent, and facilitating more public outreach and engagement on the initiative.
- Some concerns were that the barriers were too easy to move and so their effectiveness was limited, and others believed that the initiative was unnecessary, making driving more difficult and posing concerns for traffic flow and vehicle turning movements.

### Step Two

Based on feedback we were collecting in Step 1, we implemented temporary traffic calming measures in six locations on the Slow Streets network between fall 2020 and summer 2021. These changes were designed to make those locations safer and more comfortable for people walking, biking and rolling. The six locations were chosen for their alignment with approved community area plans, future greenway or bikeway upgrades or where staff had previously heard of traffic concerns.

As the temporary measures were installed, community members were invited to provide location-specific feedback through the 'Step 2 Traffic Calming Survey' which received 451 responses. A summary of those findings can be read in Appendix II.

#### Key Findings

- The findings varied significantly across all six sites. For some measures, the change in user experience fostered positive feedback for people walking, biking and rolling. For others, the feedback was more divided by mode.
- Overall, around half of those walking (45%) and biking (48%) reported that their experience had improved, whereas far fewer people walking (15%) and biking (9%) thought that things had gotten worse.
- For those driving, only 8% reported that their driving experience had improved and 41% reported that their experience had gotten worse.

#### Conclusions

- Where responses suggested that user experience had improved, participants supported some changes to the initiative, including: improving the aesthetic quality of the barriers using public art or planters; making the barriers more robust or harder to move; expanding the initiative to include additional traffic calming measures; and making the initiative permanent.
- Where responses suggested that user experience had gotten worse, participants felt the initiative had a negative impact on traffic on neighbouring streets, vehicle circulation and access was more difficult and the engagement process was poorly timed.

This feedback has informed how the network can evolve, including appearance, compliance and materiality. Where impacts on traffic volumes, circulation and access were tested, we did not find significant negative impacts (further details in Appendix II).

## **Step Three**

Through these ongoing engagements, the first two Steps helped us to foster detailed feedback from residents and businesses on the overall network and specific measures, and to test the influence that Slow Streets had on vehicle speeds and volumes.

City staff received various requests for improving the aesthetic and functionality of Slow Streets after their installation with temporary barriers. By May 2022, the first 'wave' of Slow Streets had been in place for two years and requests have been increasing as more barriers were removed or damaged, independently of the engagement process, increasing maintenance and operational costs.

In late 2021/early 2022, City staff reviewed community feedback together with maintenance considerations and the City's broader policies and plans to reshape our streets for people when assessing the future of Slow Streets. For the Slow Streets network to continue to provide safer and comfortable routes for people walking, biking and rolling, its infrastructure had to remain fit-for-purpose.

# SLOW STREETS REFRESH

To address ongoing maintenance costs and challenges and to improve aesthetics and compliance, the decision was made to refresh the Slow Streets network. This 'refresh' would look to retain the benefits that the Slow Streets network brought to communities by improving its legibility and appearance with more permanent barriers and more robust materials.

Minor changes to the existing network are proposed as part of the refresh to align with other forthcoming transportation projects such as bike upgrades and greenways.

Some traffic calming measures that were implemented as part of Step Two will be retained and others pending further review.

## **Speed Reduction Measures**

At major street intersections where site conditions permit, plastic barriers will be removed and new concrete barriers installed. Prioritizing the new barriers at these locations aims to encourage drivers travelling at higher speeds on arterial streets to slow down as they enter the Slow Streets network. At all other locations, plastic barriers will be removed and replaced with signage only.

The new barriers will create a pinch point at intersections, allowing only one direction of vehicle traffic at a time. Drivers will be required to slow down and potentially wait for exiting vehicles before entering the Slow Street. The design allows people cycling to bypass the pinch point by using the space between the barriers and the curb. No changes are proposed on existing sidewalks for people walking or rolling. Figure 1 shows a model of the barrier design for narrow streets and Figure 2 shows a model for wide streets.

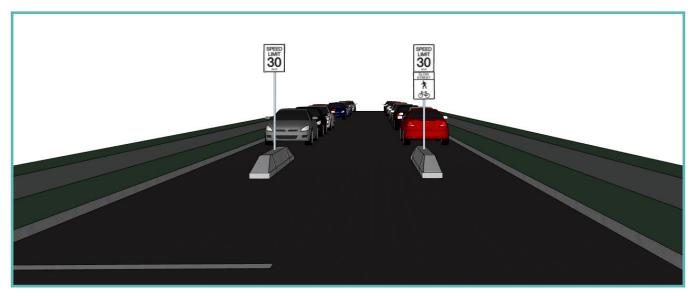


Figure 1. Slow Streets Barrier Refresh Designs for narrow streets.

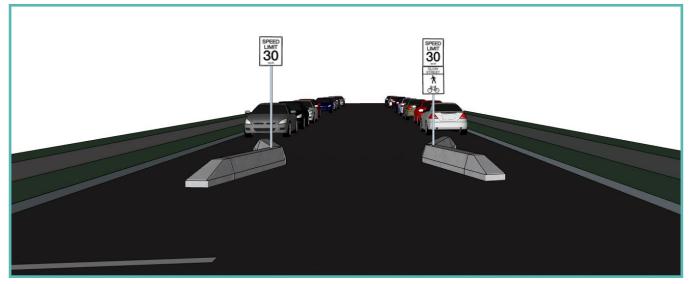


Figure 2. Slow Streets Barrier Refresh Designs for wide streets.

The design will require removing four to six parking spaces near the barriers to ensure vehicles can maneuver around them safely. The designs will not restrict any turning movements and have been approved by Vancouver Fire and Rescue Services.

The 'prototype' measures implemented at various intersections in Kits Point are to be removed as part of the refresh. These locations were not formally part of the Slow Streets network but were one of several changes in Kits Point in response to the COVID-19 pandemic, including the temporary bike lane on part of Arbutus St. Forthcoming changes near this location, including the recently approved Kitsilano Beach Park Seaside Greenway Improvements, may warrant a review of access and circulation conditions in Kits Point.

# **Traffic Calming Measures**

No additional diversionary traffic calming measures are proposed on the Slow Streets as part of the refresh. The implementation of longer-term traffic calming measures are to be deployed via the <u>Neighbourhood Traffic Management Program</u> and other existing programs.

Where temporary traffic calming measures had been installed in Step Two, the following next steps are proposed. Refer to Appendix II which details these locations.

- Location 1 Wall Street near Oxford and Cambridge Parks This measure was already removed in November 2020 following feedback from the community. Non-diversionary barriers were then installed at other locations along Wall St. These locations will be reviewed again as part of the Portside Greenway design and engagement process, set to take place in 2022/23.
- Location 2 Ontario St near Riley Park Generally, a net positive impact on user experience was recorded for this measure. It is to be retained, with an adjustment to the location of the closure along the block in Summer 2022. The relocation of the closure farther north on Ontario St was implemented as a result of conversations with nearby stakeholders to allow for different access to the adjacent sites. The new location will undergo monitoring and can be reviewed through future engagement.

- Location 3 Heather St at W 14<sup>th</sup> Ave This measure will be retained. On balance, this measure had a more positive impact on user experience than it did negative, and while this varied by mode of transportation (walking, cycling or driving), the localized negative impacts on driving were outweighed by the noted improvements for people walking, biking and rolling.
- Location 4 Charles St between Kamloops St and Slocan St This measure will be reviewed in 2023 as part of the <u>Neighbourhood Traffic Management Program</u> (NTMP), will remain in place until then. A review of survey responses, emails, 3-1-1 calls and VanConnect comments has highlighted to staff that concerns at this location are related to vehicle speeds and volumes on adjacent or neighbouring streets, which the NTMP will assess in more detail.
- Location 5 W 7<sup>th</sup> Ave at Fir St As with location 3, to be retained. On balance, this measure had a more positive impact on user experience than it did negative, and while this varied by mode of transportation (walking, cycling or driving), the localized negative impacts on driving were outweighed by the noted improvements for people walking, biking and rolling.
- Location 6 Glen Dr at E Broadway & E 12<sup>th</sup> This measure will be retained, to be reassessed alongside a more extensive review of routing options under the Broadway Plan, which is to go into effect on September 1, 2022.

## **Changes to the Slow Streets Network**

While some barriers on residential streets will be removed as part of the Slow Streets Refresh, no Slow Streets are being removed from the network. Three minor changes are planned for the network to better coordinate alignments with existing and future bikeways and greenway.

#### Change 1

Between Gladstone St and Dumfries St in the Kensington-Cedar Cottage neighbourhood, the Slow Street will move one block to the south, from E 36<sup>th</sup> Ave to the Midtown/Ridgeway Greenway, recognizing the completion of construction in Jones Park (see Figure 3).



Figure 3. Slow Streets Realignment - Gladstone St to Dumfries St.

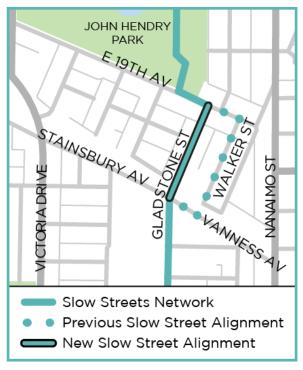


Figure 4. Slow Streets Realignment – E 19<sup>th</sup> Ave to Stainsbury Ave/Vanness Ave.

#### Change 2

Between E 19<sup>th</sup> Ave and Stainsbury Ave/Vanness Ave in the Kensington-Cedar Cottage neighbourhood, the Slow Street will move one block to the west, to the existing bikeway along Gladstone St (see Figure 4).



Figure 5. Slow Streets Realignment – E Pender St to Kitchener St.

#### Change 3

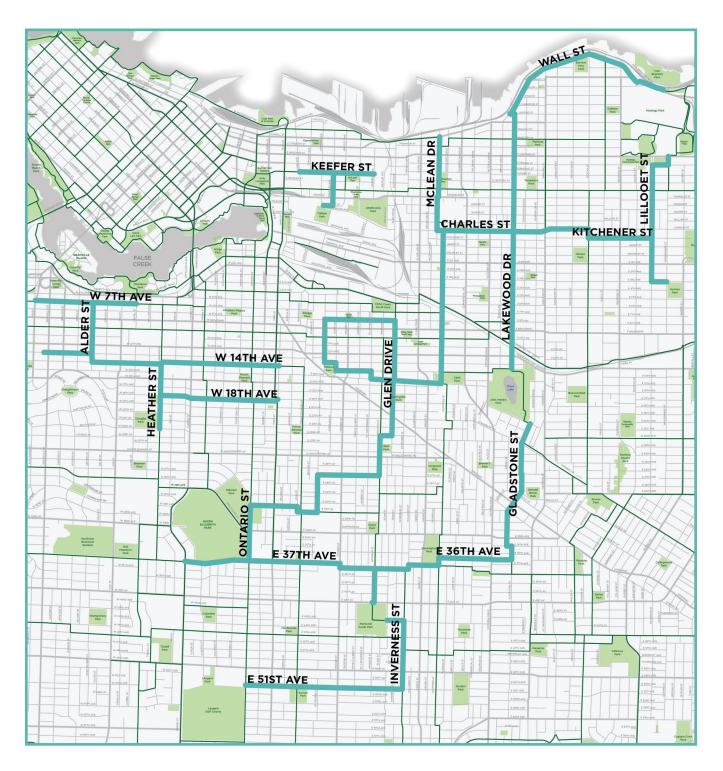
Between E Pender St and Kitchener St in the Hastings-Sunrise neighbourhood, the Slow Street will move one block to the east from Lillooet St to Windermere St. This will align the Slow Street with a future greenway in this area (see Figure 5).

# CONCLUSION

The 2022 Slow Streets refresh represents an important next step for the Slow Streets network as it moves from a temporary, COVID-19 pandemic response initiative to a more permanent fixture in Vancouver's street network.

Following implementation in May 2020, the initiative helped make streets safer and more comfortable for users. This report highlights community feedback, maintenance needs, and the impact that Slow Streets has had on the use of local streets in Vancouver. Based on staff assessments, the initiative's benefits for communities, throughout the COVID-19 pandemic, can remain over the longer term. To do so, the 2022 Slow Streets refresh looks to retain the existing network with concrete barriers at different 'gateways' to Slow Streets. The refresh will take place in stages, starting in late October 2022, with the new barriers gradually replacing the old ones. The refresh will take place using interim materials, thereby allowing adjustments if needed. Staff will monitor the refreshed Slow Streets network to ensure a good user experience.

# APPENDIX I - EXISTING SLOW STREETS NETWORK



# APPENDIX II - STEP TWO ENGAGEMENT SUMMARY

## Introduction

Slow Streets – Step 2 introduced temporary traffic calming measures at six sites on the existing Slow Streets network, designed to reduce local vehicle volumes and increase onstreet safety for people walking, biking and rolling.

Six sites were selected:

- 1. Wall St near Oxford and Cambridge Parks: A full closure to motor vehicles was installed but was later removed in November 2020 based on local resident feedback. Notification letter regarding removal of temporary vehicle closure on Wall Street (PDF).
- 2. Ontario St near Riley Park: Full closure to motor vehicles near Riley Park to create a better-connected space between the different parks and amenities.
- **3. Heather St at W 14<sup>th</sup> Ave**: Full closure to motor vehicles traveling north-south along Heather St coupled with parking changes to allow for safe turning movements around the barrier.
- **4. Charles St between Kamloops St and Slocan St**: Partial closure of Charles St to eastbound motor vehicles to limit shortcutting in the neighbourhood.
- 5. W 7<sup>th</sup> Ave at Fir St: Median diverter to reduce motor vehicle volumes and increase safety for people cycling at the intersection, especially due to obstructed visibility due to the Granville overpass (Fir St ramp).
- 6. Glen Dr at E Broadway & E 12<sup>th</sup> Avenue: Partial closure to motor vehicles, restricting turns from Broadway and E 12<sup>th</sup> Ave to limit shortcutting in the neighbourhood.

For more details on the specific traffic calming upgrades, please <u>review the supplementary</u> <u>design guide (PDF)</u>.

## **Engagement Approach**

The 'Step 2 – Traffic Calming Updates survey' was live on <u>Shape Your City</u> from October 2020 to June 2021 alongside feedback via email, 3-1-1 or VanConnect.

Notification letters, posters and signage, web content and social media were used to reach the community. Although we used a variety of techniques for notification, public health guidance dictated a reliance on 'digital and remote' engagement tools like emails, surveys and virtual meetings.

### Highlights

- 451 survey responses received.
- 73.8% of respondents owned, rented, or worked in the neighbourhood.
- Around half of those walking (45%) and biking (48%) reported that their experience had improved, whereas 15% (walking) and 9% (cycling) thought their experience was worse. For those driving, only 8% reported that their driving experience had improved and 41% reported that their experience declined.

# **Part 1: Site Specific Findings**

As our engagement approach was limited due to ongoing public health restrictions, we recognize that the summary below captures what we heard from residents who had an opportunity to provide feedback about the temporary measures. More details are shared below about next steps for each location. Staff anticipate additional opportunities for engagement when interim measures are upgraded to permanent materials or through adjacent planning efforts (bikeways, greenways, neighbourhood traffic management).

### Table of Site Specific Results

Site Name		1. Wall St near Oxford Park and Cambridge Park	2. Ontario St at W 14 <sup>th</sup> Ave	3. Heather St at W 14 <sup>th</sup> Ave	4. Charles St between Kamloops & Slocan	5. W 7 <sup>th</sup> Ave at Fir St	6. Glen Dr at E Broadway & E 12 <sup>th</sup> Ave
Site Description		Full closure of Wall St near Oxford and Cambridge Parks to reduce motor vehicle volumes and short- cutting through the neighbourhood.	Full closure of Ontario St at Riley Park to connect adjacent public spaces.	Full closure of Heather St at W 14 <sup>th</sup> Ave to reduce motor vehicle volumes in the neighbourhood.	Conversion of Charles St into a one-way road between Kamloops and Slocan to reduce short- cutting through the neighbourhood.	Full closure of W 7 <sup>th</sup> Ave at Fir St to motor vehicles to reduce motor vehicle volumes and increase cyclist safety.	Restricting left turns from E Broadway and E 12 <sup>th</sup> Ave onto Glen Dr to reduce short-cutting in the neighbourhood.
Survey Count		110	83	73	103	37	45
Email Count		139	39	34	57	17	27
% Survey Living at Site		75%	40%	67%	83%	56%	83%
Modal Split of Regular Users	Pedestrians	46%	48%	56%	48%	51%	45%
	Cyclists	31%	39%	24%	15%	16%	11%
	Drivers	20%	11%	15%	41%	27%	42%

City of Vancouver - Slow Streets Step Three - Review and Refresh

Site Name	1. Wall St near Oxford Park and Cambridge Park	2. Ontario St at W 14 <sup>th</sup> Ave	3. Heather St at W 14 <sup>th</sup> Ave	4. Charles St between Kamloops & Slocan	5. W 7 <sup>th</sup> Ave at Fir St	6. Glen Dr at E Broadway & E 12 <sup>th</sup> Ave
Summary of What we Heard	Vehicle circulation impacts* *In response to concerns with the Wall Street closure, this temporary closure was removed and motor vehicle access was reinstated in November 2020.	Perceived increase in traffic. Perception of higher vehicle speeds on E 30 <sup>th</sup> Ave and other streets. Requests for more aesthetically pleasing barriers (e.g. with art or paint) or replacement with planters.	Perception of traffic diverting to surrounding streets. Perception of increased traffic using laneways (e.g. between W 14 <sup>th</sup> and W 15 <sup>th</sup> Ave) leading to safety concerns. Requests for speed humps, stop signs, and pedestrian- activated crossings.	Perceived increase in traffic (e.g. along Kitchener St and William St), especially during busier times. Some reports of an increased sense of safety by people walking and cycling.	Concerns about access to homes & businesses. Concerns about longer vehicle journey times. Concern about Granville Bridge Ramp blocking peripheral vision of east-west cycling traffic.	Perceived increase in traffic on Windsor Street, a designated bike route south of 10 <sup>th</sup> Ave. Reports of reduced traffic on Glen Dr and increased pedestrian and cyclist safety on this segment.
Responses to Feedback	This closure to motor vehicles was removed following feedback from the community in fall 2020.	Staff have been working with Park Board on limited adjustments to support event operations. Precast concrete selected as the most efficient and adaptable materials. Planters add cost/ maintenance without stewardship but can be explored in future.	The design was modified in response to feedback from the adjacent school prior to implementation. More extensive traffic calming measures are beyond the scope of Slow Streets but can be explored as part of the city-wide Neighbourhood Traffic Management Program (NTMP).	Traffic counts in spring 2021 showed volumes were reduced from over 1500 to just over 500 vehicles/day east of Penticton St. Volumes were lower on Kamloops St, Napier St, William St, Kitchener St, Grant St.	This measure was considered in the context of upcoming Granville Bridge Connector changes and compatibility in traffic circulation. With more significant construction, more may be possible regarding bridge pier sight-lines; however, the removal of motor vehicle movements crossing the median is an initial improvement.	Traffic counts in spring 2021 showed volumes were reduced from over 1000 to below 500 vehicles/day south of E 10 <sup>th</sup> Ave. Fewer than 1000 vehicles/day were recorded on Windsor St, St. Catherines St and Prince Albert St south of Broadway.
Next Steps	Precast concrete selected as the most efficient and adaptable materials. Planters add cost/ maintenance without stewardship but can be explored in future.	The design was modified in response to feedback from the adjacent school prior to implementation.	To remain in place following post- implementation monitoring, community feedback and technical review.	To remain in place and be reviewed in 2023 as part of the Neighbourhood Traffic Management Program (NTMP).	Will remain in place following post- implementation monitoring, community feedback and technical review.	To remain in place and be reviewed in the context of Broadway Plan directions for cycling route connectivity in the area.

Figure 1 below shows the recorded change in user experience for each traffic calming location.

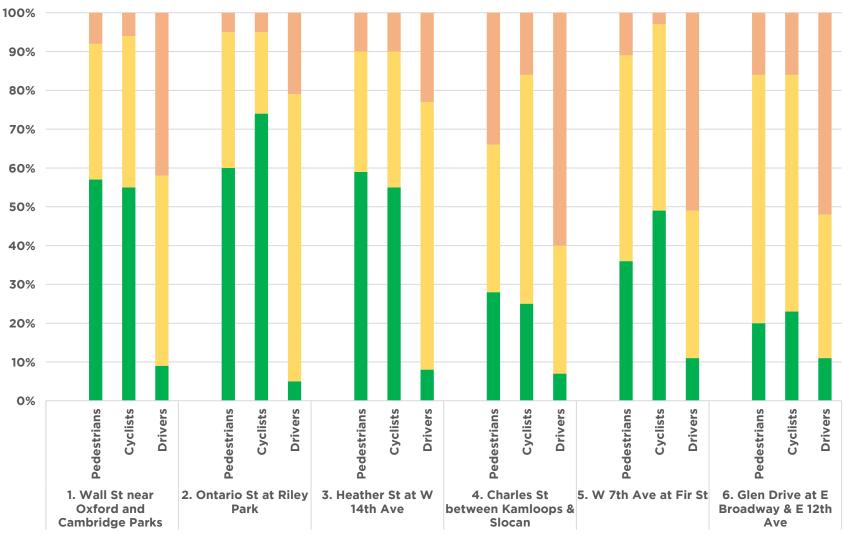
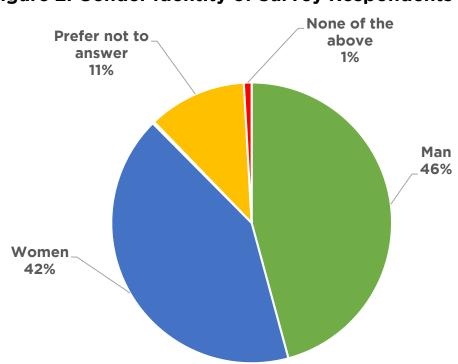


Figure 1: Change in User Experience by Mode and Location

Better Neutral Worse

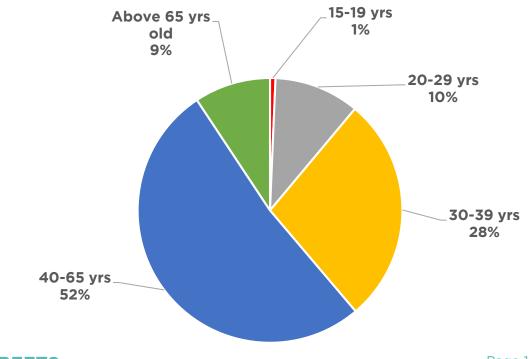
## Part 2: Who We Heard From Gender Identity & Age Group

We heard from slightly more respondents who identified as men (45.6%) than as women (41.8%) (see Figure 2).



### Figure 2: Gender Identity of Survey Respondents

Most respondents were aged 40-65 (51.9%) and 30-39 (27.7%) with just 20.4% of the total responses from seniors or youths/young adults (*see Figure 3*).

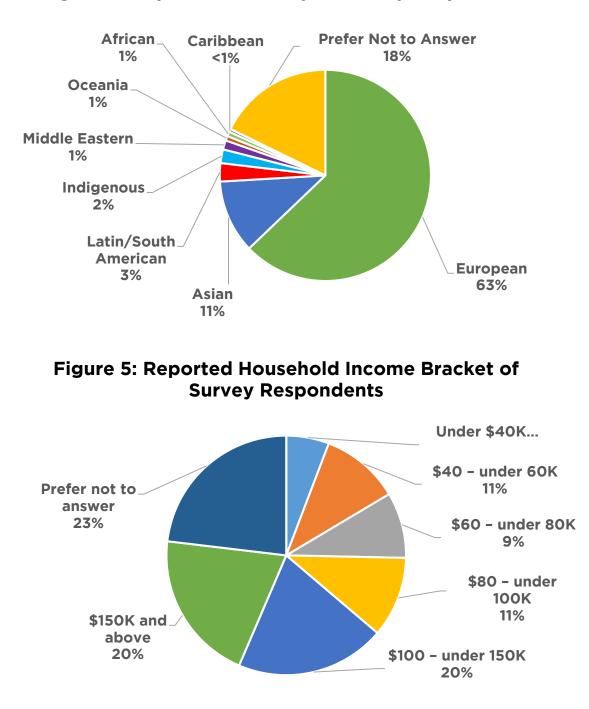


### Figure 3: Age of Survey Respondents

### Ethnicity & Household Income

A high proportion (62%) of respondents were of European ethnic origin (see Figure 4). About 20% of respondents preferred not to answer and about 18% of respondents identified as a visible minority.

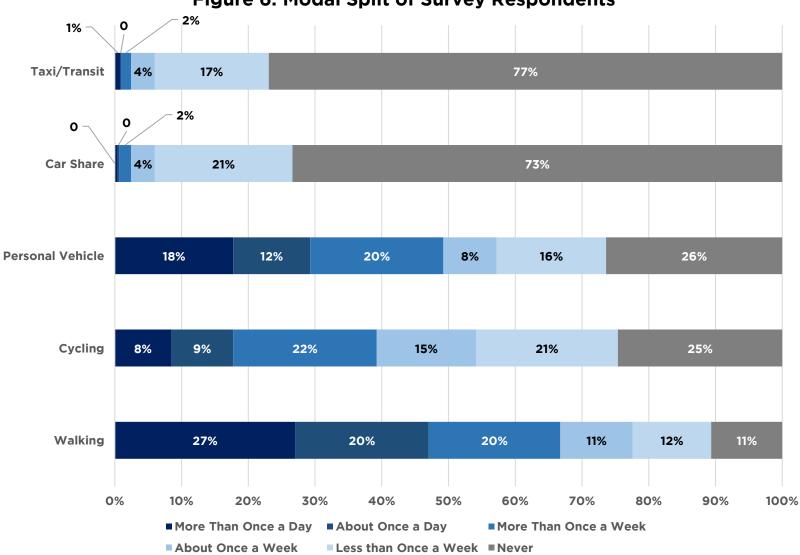
While 24.4% of respondents preferred not to indicate their household income; 39.6% of respondents reported an annual household income greater than \$100,000; well above the Vancouver median household income of \$65,000 reported in the 2016 Census (see *Figure 5*).



**Figure 4: Reported Ethnicity of Survey Respondents** 

## Modal Split

Of the total respondents who used a Slow Street site more than once a day, 49.6% walked, 32.5% drove, and 15.4% cycled *(see Figure 6)*. The two other modal options of taxi/transit and car share represented less than 2% of the daily users of the sites.



**Figure 6: Modal Split of Survey Respondents**