From: "Mochrie, Paul"

To: "Direct to Mayor and Council - DL"

Date: 2024-06-18 2:18:34 PM

Subject: Memo - Neighbourhood Traffic Management and Program Update - Pilot

Neighbourhoods

Attachments: ENG - Memo - RTS 12874 13982 - Neighbourhood Traffic Management and Program

Update - Pilot Neighbourhoods.pdf

Dear Mayor and Council,

Please see the attached Council Memo from Lon LaClaire regarding Neighbourhood Traffic Management and Program Update - Pilot Neighbourhoods. A short summary of the memo is as follows:

- Staff are providing an update on the implementation, initial findings and lessons learned from the two Neighbourhood Traffic Management Program (NTMP) pilot neighbourhoods (Strathcona and Hastings-Sunrise: Adanac Overpass).
- The program aims to address vehicle speeds and volumes on local streets through quick-build measures.
- Staff are refining the traffic calming measures for the Hastings-Sunrise: Clinton Park area and anticipate providing the traffic calming plan to the community in summer 2024.

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclaire@vancouver.ca

Best, Paul

Paul Mochrie (he/him) City Manager City of Vancouver



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x m k y m (Musqueam), S wwwi7mesh (Squamish), and s lilw ta (Tsleil-Waututh) Nations.

ENGINEERING SERVICES



Lon LaClaire, M.Eng., P.Eng. City Engineer/General Manager

MEMORANDUM

June 17, 2024

TO: Mayor and Council

CC: Paul Mochrie, City Manager

Armin Amrolia, Deputy City Manager Karen Levitt, Deputy City Manager Sandra Singh, Deputy City Manager

Katrina Leckovic, City Clerk

Maria Pontikis, Chief Communications Officer, CEC

Teresa Jong, Administration Services Manager, City Manager's Office

Mellisa Morphy, Director of Policy, Mayor's Office

Trevor Ford, Chief of Staff, Mayor's Office

FROM: Lon LaClaire

General Manager, Engineering Services

SUBJECT: Neighbourhood Traffic Management Program Update – Pilot Neighbourhoods

RTS #: RTS 12874 and RTS 13982

Purpose

This memo provides an update on implementation, initial findings and lessons learned from the two Neighbourhood Traffic Management Program (NTMP) pilot neighbourhoods (Strathcona and Hastings-Sunrise: Adanac Overpass). This update responds to RTS 12874 and RTS 13982—Council's request to engage the Hastings-Sunrise: Adanac Overpass neighbourhood on traffic calming—and builds on the October 2021 and June 2022 NTMP Council Memos.

Pilot Neighbourhoods

Strathcona and Hastings-Sunrise: Adanac Overpass Area were the pilot neighbourhoods for the NTM Program (see Appendix A for Strathcona and Appendix B for Hastings-Sunrise: Adanac Overpass). Traffic calming measures focus on reducing vehicle speeds and volumes on local streets as well safety improvements that prioritized pedestrian crossings at intersections with bus stops and streets with high pedestrian traffic (i.e. around schools, parks, community centres, and other neighbourhood amenities). See Appendix C for the toolkit of measures in the program.

Traffic calming is implemented on a neighbourhood-wide scale to ensure an equitable distribution of vehicle volumes on each street, not simply moving the bulk of shortcutting traffic from one street to another within the neighbourhood. Where vehicle volumes exceeded 2,000



vehicles a day, diversionary traffic calming was proposed to reduce volumes to a 'comfortable for most' level of walking and cycling. Where speeds were greater than 40 kph, speed reduction measures were proposed to reduce speeds. When neighbourhoods confirmed a desire for neighbourhood-wide speed reduction through community feedback, staff are implementing a 30km/h on all local streets.

Engagement

We've learned the importance of hearing about local access needs from the broader neighbourhood when shifting traffic patterns, so a targeted community engagement is helpful for projects of this scale. Staff use surveys, workshops, meetings and in-person events to gather input on proposed traffic calming measures. We have appreciated the level of participation and depth of understanding of traffic issues from residents, businesses, and key destinations (ex. community centres, schools, etc). Feedback from community members has helped staff refine and amend the plans for the pilot neighbourhoods.

Community members were most comfortable with speed reduction measures and safety improvements in the pilot neighbourhoods. Community members have also been comfortable with diversionary measures, some of which were adjusted to address local concerns.

<u>Implementation</u>

Staff are using a mix of permanent and interim materials in both neighbourhoods. Implementation of measures in Strathcona began in 2023 and the 30km/h zone has shown a decrease in speeds consistent with previous Neighbourhood Slow Zones. Staff are working to implement the additional measures to further reduce speeds in the neighbourhood (see Appendix A for details). Implementation for the Hastings-Sunrise: Adanac Overpass Area will begin Fall 2024. Staff will monitor and adjust measures as needed.

Update on NTM Framework Neighbourhoods

The Hastings-Sunrise: Clinton Park Area and Joyce-Killarney neighbourhoods were the first two neighbourhoods selected using the NTM Framework. Engagement for Hastings-Sunrise: Clinton Park Area occurred in December 2023. Staff will be sharing the Engagement Summary with the neighbourhood (see Appendix D) and are refining the neighbourhood traffic calming plan based on that feedback. Staff have refined the neighbourhood boundaries of the Joyce-Killarney neighbourhood and will begin engagement with the Killarney North East neighbourhood in Fall 2024 (see Appendix E). Staff will share the 2026-2027 neighbourhoods selected through the framework later this year.

Please contact me directly if you have any questions with regard to this information.

Lon LaClaire, M.Eng., P.Eng.

General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca

APPENDIX A STRATHCONA TRAFFIC CALMING PILOT

Due to a history of neighbourhood traffic management issues, Strathcona was identified as a pilot neighbourhood for the Neighbourhood Traffic Management (NTM) Program. Major projects in the area are to be completed in the coming years, including the New St. Paul's Hospital and a rail underpass on Venables St near Glen Dr. The purpose of the traffic calming pilot was to address traffic issues and concerns in the short term before longer-term infrastructure projects are realized.

After conducting data collection and analysis, engagement with the neighbourhood began in March 2022. In total, five new traffic calming measures were proposed with the aim of reducing speeding and shortcutting in the neighbourhood. The community was generally supportive and staff moved ahead with implementation of the following measures:

- 1. 30km/h speed zone for the neighbourhood (implemented) implemented in 2023
- 2. One-way southbound on Campbell Avenue (implemented) implemented in 2023
- 3. Painted crosswalk at Pender and Dunlevy upgraded to raised intersection with curb bulges, to be implemented in 2024
- 4. Chicane on Campbell Ave between E Georgia and Keefer St alternate speed reduction measures to be implemented in 2024
- 5. Roadway narrowing on Glen Drive at E Georgia on hold due to construction at 1120 E Georgia

Two additional measures have also been provided next to the elementary schools:

- 6. Speed humps installed on 600 Glen Drive next to Admiral Seymour Elementary
- 7. Strathcona Elementary participated in the School Street program in Spring 2023 and 2024

The measures can be seen in Figure A.1.



Figure A.1: Strathcona Traffic Calming Measures

1. 30KM/H SPEED ZONE FOR THE NEIGHBOURHOOD

30 km/hr signs and Neighborhood Slow zone signs were added to both sides of each entrance to the neighbourhood, and 30 km/hr paint was added to several higher traffic locations. Figure A.2 shows the locations of the gateway sings and paint, and Figure A.3 shows an example of the gateway treatment. Speed data was collected for each of these blocks as well as several locations within the neighbourhood.



Figure A.2: Slow Zone Sign/Paint Locations



Figure A.3: Slow Zone example

Before implementation of the Slow Zone, the overall 85th Percentile Speed (85% of vehicles are at or below this speed) for this area was 36.8 km/hr, which was lower than the 85th percentile speed for the Granville Woodland Slow Zone area pre-implementation (42.7 km/hr). Less than 0.5% of vehicles in the Strathcona area were going over 50 km/hr before the Slow Zone was implemented.

After the Slow Zone was implemented, overall speeds did not change significantly. However, for vehicles entering the neighbourhood, there was a slight reduction in speeds. In particular, there was a reduction in the number of vehicles going between 31-50 km/hr (see Figure A.4). The number of vehicles going more than 30 km/hr was reduced by 7.0%, and those travelling at over 40 km/hr was reduced by 6.0%.

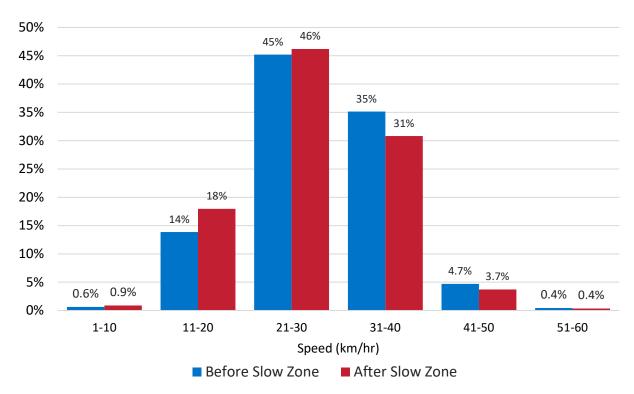


Figure A.4: Speed distribution of vehicles entering the Strathcona Neighbourhood Slow Zone from major streets

When comparing streets with 30 km/hr paint to those with signage only, those with paint had slightly lower speeds than those without (85th percentile speed of 36.3 km/hr with paint vs 36.6 km/hr for those without), but the difference was small enough that the paint does not seem to have a significant additional effect on slowing drivers.

For interior streets, which did not get new signs or paint, the data did not show a reduction in vehicle speeds. So while the Slow Zone Gateway treatment is effective in slowing vehicles as they enter the neighbourhood, additional speed reduction measures may still be needed on interior neighbourhood streets. As no street in the Strathcona neighbourhood had an 85th percentile speed of more than 40 km/hr (the threshold for speed humps on 30 km/hr streets), additional speed control measures are likely not needed.

2. ONE-WAY SOUTHBOUND ON CAMPBELL AVENUE

A one-way southbound on the 400 block of Campbell Ave between E Pender St. and the lane south of E Hastings Street was implemented in 2023 (Figure A.5). The goal of this measure was to reduce northbound shortcutting on Campbell Ave while still allowing access to the neighbourhood at Prior/Venables St and Campbell Ave, and maintain access to the RayCam Community Centre from Hastings St.



Figure A.5: 400 Campbell Ave one way

Traffic counts show that northbound vehicle volumes on Campbell Ave have reduced by 47% in the 800 block, and 63% in the 400 block, suggesting the one-way is working as intended. Vehicle volumes on adjacent streets (800 E Pender St and 400 Hawks Ave) have increased but remain below 1,500 vehicles per day, an acceptable volume for local streets.

Since implementation, residents have complained about people driving violating the one-way. Staff added an additional "Do Not Enter" sign to address these concerns, but data shows violations still occur. Staff are working with Google and Apple Maps to ensure the one-way is displayed correctly in routing software, as this has been inconsistent in the past.

3. PENDER AND DUNLEVY CROSSING

Informed by resident feedback, this measure was upgraded to include a raised intersection and bulges. The goal of this measure is to slow down vehicles approaching the intersection, improve visibility, and make the crossing safer and more comfortable for people walking. A new streetlight will be installed on the northeast corner of this intersection to improve visibility at night. Construction is expected to complete in September 2024. A before-and-after study will be conducted to analyze the effectiveness of this raised intersection.

4. CHICANE ON CAMPBELL AVE BETWEEN E GEORGIA AND KEEFER ST

A chicane was proposed on Campbell Ave between E Georgia & Keefer Streets (see Figure A.6 for an example of a chicane). After additional analysis, staff determined street width of Campbell Avenue would not accommodate a typical chicane design without significant parking removal.



Figure A.6: Example of a chicane on a local street in Seattle, Washington

Instead, staff are exploring roadway narrowing by physically delineating the extents of parking areas along the eastern side of Campbell Ave at Keefer and E Georgia Streets . The intent is to daylight the intersection – providing more visibility between drivers and people crossing the street, as well as narrow the street and encourage lower speeds.

5. & 6. ROADWAY NARROWING ON GLEN DRIVE AT E GEORGIA & SPEED HUMPS ON 600 GLEN DRIVE

Staff proposed two options for traffic calming on Glen Drive – a one-way northbound on the 600 Block on Glen Drive (adjacent to Admiral Seymour School) or a pinch point (narrowing the roadway to only allow one direction of travel at a time) on the 700 block of Glen Drive between E Georgia and the lane south of E Georgia. The pinch point was preferred by residents, however construction at 1134 E Georgia occupied the street on Glen Drive, prohibiting construction of this measure in 2023. As an alternative, the speed hump on 600 Block of Glen Drive (adjacent to Admiral Seymour Elementary School) was rebuilt and an additional speed hump was added to the block.

The design for the 1134 E Georgia development includes a curb bulge on the southeast corner of Glen and E Georgia. Staff are considering additional measures at this location to provide roadway narrowing at the intersection.

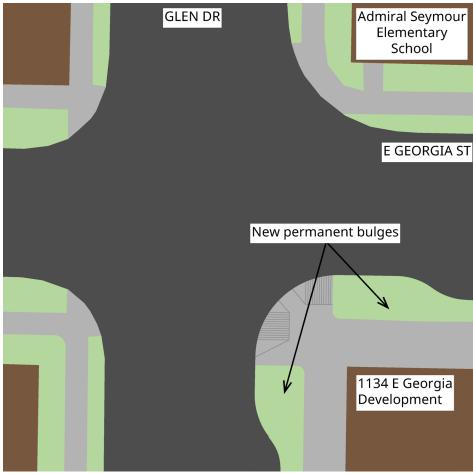


Figure A.7: New bulges at E Georgia & Glen Drive intersection

7. STRATHCONA ELEMENTARY SCHOOL STREET PROGRAM

Lord Strathcona Elementary School is participating in the volunteer-run Spring School Streets Program from May 21st to June 14th, 2024, as a returning school. The 500-block of Jackson Avenue (between E Pender St and Keefer St) will be closed to motor vehicle traffic during pick-up/drop-off times (30-75 minutes).

Staff also explored a Year-Round School Street Pilot concept with the school community and various other neighbourhood stakeholder groups in early 2024. The concept consisted of a carfree block (accessible to emergency vehicles) at the same location on Jackson Avenue while providing more space for active travel and community activities. Staff heard support for safe, active travel options. However, we also heard concerns about impacts on accessibility, parking, sanitation, and safety. The information collected has helped staff decide not to proceed with piloting a car-free School Street initiative here at this time.

The School Travel Planning program is working with Lord Strathcona Elementary School to support active travel to and from school with a tailored action plan that includes education, promotion, enforcement, and engineering measures. These measures are expected to be implemented in 2025-2026.

APPENDIX B HASTINGS-SUNRISE: ADANAC OVERPASS AREA TRAFFIC CALMING PILOT

The first of a two-phase engagement began in April 2023, with staff presenting the speed and volume data to the community and introducing the traffic calming toolkit (see Appendix C). There was general agreement with the data presented and additional areas of concern were highlighted. The most common theme heard from the community was to keep the Adanac Overpass open to all traffic (see Phase 1 Engagement Summary). To keep the overpass open to general traffic and meet our safety and accessibility standards for people walking and cycling and taking transit, staff took a Complete Street approach in re-designing Adanac St between Boundary Road and Rupert St.

Staff returned to the community for the second phase of engagement in September 2023 sharing proposed traffic diversionary measures, speed reduction, and safety improvements. Along with this, staff shared the rationale for the Adanac Street redesign. Staff heard general agreement from the community on the measures proposed, with more concerns about diversionary measures (see Phase 2 Engagement Summary). Based on this feedback, staff reduced the number of diversionary measures in the plan and increased the number of speed reduction and safety measures. The final plan can be seen in Figure B.1.

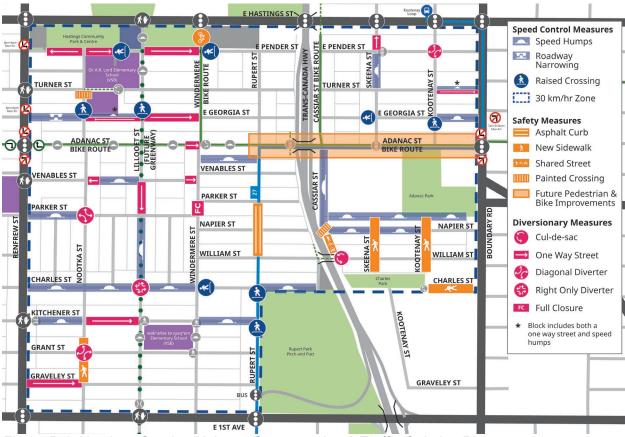


Figure B.1: Hastings Sunrise (Adanac Overpass Area) Traffic Calming Plan

These measures will begin implementation Fall 2024 with implementation continuing through 2025. Staff have prepared an <u>Implementation Plan</u> to inform the community of the final traffic calming plan and implementation timeline.

APPENDIX C TRAFFIC CALMING TOOLKIT

TRAFFIC CALMING MEASURES

How can we reduce short-cutting and vehicle volumes?

Some people use local streets thinking they will save time when major roads are congested. This is called short-cutting. Installing traffic calming measures can help reduce this driving behaviour and increase comfort for people walking and cycling.



Fewer people drive on a street if it is in one direction. Emergency vehicles and people walking and cycling can use the street in both directions.



Barriers restrict the types of turns vehicles can make, while still allowing people walking and cycling to travel through the barrier. This can reduce vehicle short-cutting as an indirect route is less desirable.



This discourages people from shortcutting. Emergency vehicles and people walking and cycling can still use the road in both directions.

How can we encourage people to drive slowly on local streets?

Reducing vehicle speed on the street can help increase comfort for people walking and cycling and lower the risk of collision.



This is a raised surface on the road to help slow travel speed. Different variations are used on bus and bike routes or pedestrian crossings.



Narrowing or realigning the street to include curves helps reduce speeds and requires people driving to yield to oncoming traffic.



Crossing improvements like painted crosswalks, signage, and improved visibility provide a visual cue for people driving to slow down.

How can we make streets safer to walk, bike and roll?



Measures include providing space to walk on streets without sidewalks or using interim curbs to minimize people parking too close to sidewalks.



Signage at street corners tells people not to park too close to intersections, which helps people driving better see people walking.



Curb bulges shorten the road's crossing distance, improve sightlines at intersections, and better delineate parking.

APPENDIX D HASTINGS-SUNRISE: CLINTON PARK AREA TRAFFIC CALMING

In 2023, we engaged the neighbourhood on our proposed traffic calming plan (Figure D.1). The measures are meant to slow vehicles down, improve safety and reduce vehicle shortcutting. We plan to use durable, quick-build materials that can be adjusted if needed. Community members gave feedback on our proposed measures throughout our engagement period.

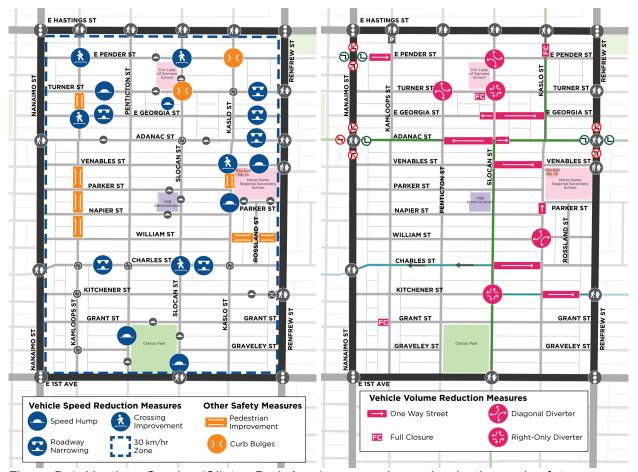


Figure D.1: Hastings Sunrise (Clinton Park Area) proposed speed reduction and safety measures (left) and diversionary measures (right)

Themes from engagement included:

- 1. Concern with high vehicle speeds and volumes across the neighbourhood.
- 2. Desire to make it safer for people walking and biking, especially near schools.
- 3. Comfort with reducing vehicle speeds.
- 4. Comfort with measures that lower vehicle volumes, but overall these had lower levels of comfort than measures that reduce vehicle speeds. Participants shared concerns about the measures increasing travel time to destinations in the neighbourhood when they drive.

A full report on what we heard can be found in the <u>Engagement Summary</u>. Based on this feedback, staff are working to reduce the number of diversionary measures in the plan and increase the number of speed reductions and safety measures. We will share the final traffic calming plan with engagement participants in summer 2024. Implementation is anticipated to start in Fall 2024.

APPENDIX E JOYCE-KILLARNEY UPDATED NEIGHBOURHOOD BOUNDARIES AND TIMELINE

The Joyce East and Killarney North East neighbourhoods (Figure E.1) were selected through the Neighbourhood Traffic Management (NTM) Program Framework and were proposed to be bundled together for the NTM Program.

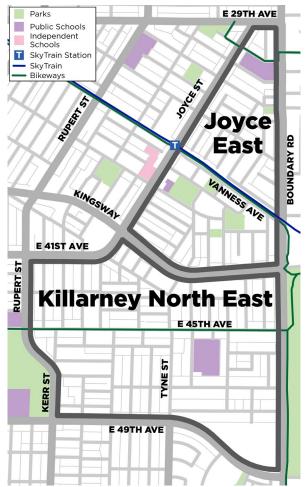


Figure E.1: Original boundaries for Joyce East and Killarney North East neighbourhoods

Together, these are one of the largest neighbourhoods in the NTM Framework. Additionally, these neighbourhoods have very different land-uses. Joyce East is higher density and mixed use (with much ongoing and future development) whereas Killarney North East is mostly single family residential.

Staff determined a significant level of risk for engagement and implementation by keeping these two neighbourhoods bundled together. As such, Staff have separated these two neighbourhoods and plan to approach them separately as previous neighbourhoods in the NTM Program. Additionally, staff have decided to add the neighbourhood west of Joyce East (between Rupert and Joyce Streets) to the Joyce East neighbourhood, as it shares similar land use and transportation patterns. Staff have redrawn the boundaries for each neighbourhood as can be seen in Figure E.2.

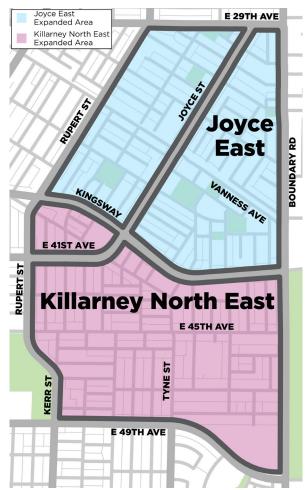


Figure E.2 2024 Joyce East and Killarney North East neighbourhoods for NTM Program

Killarney NE will begin engagement during Q3 2024. Staff expect to begin engagement with Joyce East in 2025.