From:	"Mochrie, Paul" <paul.mochrie@vancouver.ca></paul.mochrie@vancouver.ca>
To:	"Direct to Mayor and Council - DL"
Date:	6/8/2022 7:55:24 PM
Subject:	Council Memo - RTS 13982 - Neighbourhood Traffic Management Program Update
Attachments:	ENG - Council Memo - RTS 13982 - Neighbourhood Traffic Management Program
	Update.pdf
	Memo - Neighbourhood Traffic Management Program and Slow Streets Update.pdf

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire regarding Neighbourhood Traffic Management Program Update. A short summary of the memo is as follows:

- □ Staff have continued to develop the new Neighbourhood Traffic Management Program. This memo represents the first phase of a two-phase report to Council, with phase two anticipated in 2023.
- □ Through internal discussions and engagement with Advisory Committees, the program scope, goals, and a selection framework for prioritizing neighbourhoods have been established.
- □ Using the selection framework, two project areas were identified for 2023: Renfrew Northwest and the adjacent neighbourhoods of Killarney Northeast and Joyce East.
- Work on the Strathcona and Hastings Sunrise (Adanac Overpass) pilot neighbourhoods is underway. Strathcona completed engagement in April and will move onto construction this summer, while Hastings-Sunrise is at the data collection stage, with engagement planned for late fall 2022.

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 paul.mochrie@vancouver.ca



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x<sup>w</sup>məθk<sup>w</sup>əỳəm (Musqueam), Skwxwú7mesh (Squamish), and səlilwəta<del>l</del> (Tsleil-Waututh) Nations.



# MEMORANDUM

June 7, 2022

- TO: Mayor and Council
- CC: Paul Mochrie, City Manager Armin Amrolia, Deputy City Manager Karen Levitt, Deputy City Manager Katrina Leckovic, City Clerk Lynda Graves, Administration Services Manager, City Manager's Office Maria Pontikis, Chief Communications Officer, CEC Anita Zaenker, Chief of Staff, Mayor's Office Neil Monckton, Chief of Staff, Mayor's Office Alvin Singh, Communications Director, Mayor's Office Paul Storer, Director, Transportation
   FROM: Lon LaClaire General Manager, Engineering Services
- SUBJECT: Neighbourhood Traffic Management Program Update

RTS #: 13982

## Purpose

This memo is an update for RTS 13982 – Council's request in July 2020 to report back on the feasibility of a second phase of the Neighbourhood Traffic Management Plan for Hastings-Sunrise.

This memo provides an update on:

- the development of the new Neighbourhood Traffic Management (NTM) Program,
- two pilot projects in the Strathcona and Hastings Sunrise neighbourhoods and
- upcoming work including selection of the next two neighbourhoods for the Program.

This memo refers back to and builds on the content of the October 2021 memo titled "Neighbourhood Traffic Management Program and Slow Streets Update" which is included as an attachment to this memo.

This represents the first phase of a two-phase report to Council on the new NTM Program. Phase two, which will include updated data as well as lessons learned from completion of the pilot neighbourhood projects, is anticipated in 2023.



## Neighbourhood Traffic Management Program Update – Phase One

Staff have continued to develop the Neighbourhood Traffic Management framework in preparation for this phase one update.

Since October, the three 'Key Opportunities' for the program, which are to *expand equity*, *expand scale*, and *improve efficiency*, have evolved into three program principles and five program goals.

The three program principles are:

- The program is structured to address speeding and shortcutting issues on local streets.
- The program will be delivered at a neighbourhood scale.
- Neighbourhoods will be selected using a data-driven and equity-informed approach.

The following program goals have been identified:

- 1. Improve comfort for people walking, rolling or biking on local streets
- 2. Improve safety for all people using local streets
- 3. Implement an objective and equitable approach for selecting neighbourhoods
- 4. Inform interventions with broad and equitable engagement
- 5. Encourage coordination with related city initiatives to identify co-benefit opportunities

These principles and goals have been presented to and refined based on discussions with Council Committees. Staff reached out to eight Civic Committees in Q1 and Q2 of 2022 to discuss the Neighbourhood Traffic Management Program Framework. In total, five Committees responded with interest including the Children Youth and Families Committee, Seniors Advisory Committee, Persons with Disabilities Advisory Committee, the 2SLGBTQ+ Advisory Committee, and the Transportation Advisory Committee.

#### Planned Neighbourhood Traffic Management Program Approach

To support the program goals, staff have developed a framework for selecting neighbourhoods, a process for working with communities to deliver projects and an expanded toolkit of interventions for traffic management on local streets.

As other City programs, such as *Moving Towards Zero*, already focus on arterial and collector streets, where there are the most barriers to walking and cycling as well as levels of collisions, the Neighbourhood Traffic Management Program will focus on local street traffic calming. Additionally, since local streets provide direct access to many homes and amenities like parks, community centres and schools, they are also places where traffic calming interventions could be linked with opportunities for enhanced community spaces and placemaking.

To work at the scale of a neighbourhood, staff used arterial streets to create neighbourhood boundaries. From a transportation network perspective, local streets between arterials should generally provide local access and not be carrying longer-distance trips.

Using arterial streets as boundaries, the City was divided into 139 neighbourhood areas as a starting point for neighbourhood analysis (shown in Figure 1). The neighbourhoods are numbered for ease of reference only, and not related to prioritization or importance. Areas of the city with few local residential streets, including the downtown peninsula and industrial areas, were excluded from this framework. Neighbourhoods within or largely within the Broadway Plan area were also excluded as the area is expected to be assessed through more detailed implementation work as part of this ongoing planning process.



Figure 1: Neighbourhood Analysis Areas

## Neighbourhood Selection Framework

Staff explored various criteria that could be used to prioritize neighbourhoods for traffic calming. The selected data (shown in Table 1) is based on research, existing data sources, and review of other North American best practices, including frameworks from Boston, Seattle, Toronto, North Vancouver, Philadelphia and Oakland.

Additional information is provided in Appendix A – Selection Framework Data, Limitations, and Detailed Analysis.

A two-stage refinement process was developed to account for various factors. The first stage of analysis helps determine a neighbourhood's potential to benefit from a traffic management program. The output for this stage is a list of the ten neighbourhoods with the highest Neighbourhood Scores, based on safety, demographic, amenity and traffic data.

Criteria	Data Source	Description/Rationale	
Safety	ICBC Collision Reports	<ul> <li>Highlighting areas of the city with higher pedestrian collision rates on local streets, as tracked by ICBC</li> </ul>	
	Activities of Daily Living		
Demographics	Seniors (65 years of age and over)	<ul> <li>Highlighting areas of the city with a greater population of people with disabilities, seniors and children, all of whom are more vulnerable</li> </ul>	
	Children (0-14 years of age)	to vehicle collisions	
Amenities	Civic Amenities	<ul> <li>Highlighting areas of the city with high concentrations of community amenities, which are often a key driver of trips in neighbourhoods</li> </ul>	
Traffic	Shortcutting Intensity *	Highlighting neighbourhoods with more through traffic on local streets	

#### Table 1: First Stage Analysis Criteria

\* A methodology for a city-wide assessment of shortcutting intensity is under development and will be considered in the next iteration of this selection process. This is a new data source to the city, and staff are testing its applications and limitations.

As there are other potential considerations that could impact the suitability of a neighbourhood for traffic management, the Neighbourhood Score is used as a *first step* to determine a neighbourhood's potential to benefit from a traffic management program.

The second stage of analysis includes additional considerations for the ten highest scoring neighbourhoods to better reflect program goals, and impacts or opportunities created by other ongoing city initiatives. Factors relate to equity and city initiatives, and are listed below in Table 2.

Table 2: Seco	nd Stage	Analysis	Criteria -	Community	/ Context
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Criteria	Data Source	Description/Rationale
Equity	Disproportionately Impacted Communities	• As referred to in the <i>Climate Emergency Action Plan</i> (2020)
	Current Planning and Development	<ul> <li>Major land use projects like Jericho Lands, Senakw, Oakridge, etc.</li> </ul>
City Initiatives	Upcoming projects with co-benefits	<ul> <li>Greenway and bikeway projects, green infrastructure project, sewer renewal, city led developments</li> </ul>

Based on the outcomes of the second analysis stage, approximately two neighbourhoods will be selected for the following year's program.

# 2023 Neighbourhood Selection





Figure 2: Ten Highest Scoring Neighbourhoods

These neighbourhoods were individually assessed based on criteria in the second stage of analysis to determine which should be undertaken first.

The second stage analysis for the ten highest-scoring neighborhoods is discussed in Appendix A. After considering the various factors, three of these neighborhoods have been selected for the next Neighbourhood Traffic Management Program work:

- #111: Renfrew Northwest (the area bounded by Nanaimo St., Renfrew St., E Hastings St. and E 1<sup>st</sup> Ave.)
- #134 & #135: Joyce East and Killarney Northeast (two adjoining neighbourhoods the area bounded by E 41<sup>st</sup> Ave./Joyce St., Boundary Rd, Rupert/Kerr St. and 49<sup>th</sup> Ave.)



Figure 3: Selected Neighbourhoods

These neighbourhoods were selected based on strong scores on the Disproportionately Impacted Communities map, as well as opportunities to enhance future greenways as a cobenefit. Work on these neighbourhoods will take place after the pilot projects are completed. Initial data collection will proceed in the interim to provide a baseline for future evaluation.

## Working with Communities

A proposed rolling annual work program which selects neighbourhoods for the following year's program each spring is outlined below. Due to evolving data and opportunities around other city or development projects, a refreshed prioritization is anticipated each year.

The process will be focused on implementing technical interventions that address speeding and shortcutting issues to meet community needs, based on conversations and engagement. As traffic calming measures can have complex impacts, we anticipate hearing diverse feedback about proposed interventions. Understanding this, the goal of each engagement process will be to seek general support, rather than unanimous agreement on any new measures. The traffic calming will generally use quick-build and/or interim measures where possible to allow interventions to be adjusted in response to monitoring and feedback.

Table 3: Program Schedule

Year 1- Fall	<ul> <li>Data Collection – Baseline</li> <li>Speed and volume data is collected in advance of engagement</li> </ul>
Year 1- Winter/ Spring	Challenges and Opportunities Assessment Staff review existing conditions and listen to community feedback about issues and opportunities
	<ul> <li>Draft Intervention Development</li> <li>Draft interventions are developed and community engagement helps refine priorities and designs.</li> </ul>
Year 1 – Summer	<ul> <li>Implementation of Quick Build Measures</li> <li>Traffic calming measures are implemented using quick build measures, including interim improvements</li> </ul>
Year 2- Fall	<ul> <li>Data Collection and Adjustments</li> <li>Data is collected in the following fall, approximately 1 year after the initial collection. Interventions may be adjusted based on observations and feedback from the community.</li> </ul>

There may be traffic calming concerns that don't fit within the NTM program but can be advanced without a full-scale neighbourhood plan. Allowing for some spot improvements outside of the formal NTM program will allow staff to respond to smaller-scale concerns and emerging issues.

## Neighbourhood Traffic Management Toolkit

Speed humps, traffic circles, raised crossings, whole or partial street closures, diverters and curb bulges characterize the majority of the traffic calming features implemented on local streets in the past 20 years. These measures will continue to be used when appropriate for neighbourhoods selected under the NTM Program. However, opportunities will be taken to pilot new kinds of traffic calming measures that may be more effective in slowing vehicles or discouraging through traffic. Emergency responders will be engaged in the design and implementation of any new measures as part of this program.

In order to expedite implementation, traffic calming measures are expected to be built using durable quick-build materials where possible, including temporary concrete barriers. These materials allow for the interventions to be quickly adjusted or removed. The current Neighbourhood Traffic Management program is funded to address as many neighbourhoods as possible – additional funding would be needed in future capital plans to upgrade from interim to permanent measures, if desired.

## Strathcona and Hastings Sunrise (Adanac Overpass) Pilot Neighbourhoods Update

Work on the first pilot neighbourhood of Strathcona is well underway. After conducting data collection and analysis in January and February of this year, engagement ran from March 14<sup>th</sup> to April 4<sup>th</sup>. In total, five new traffic calming measures were proposed with the aim of resolving identified speeding and shortcutting issues in the neighbourhood.

Community interest in the engagement was strong, with more than 225 survey responses. Residents were generally supportive of the proposed traffic calming measures. In total, five traffic calming measures were well supported by the community:

- 1. Crossing upgrades and new curb ramps at E Pender St and Dunlevy Ave
- 2. A 30km/hr speed limit for all local residential streets in the neighbourhood, with new speed limit signage at entry points
- 3. A section of one-way street (southbound) along Campbell Ave, north of E Pender
- 4. Alternating bulges (chicane) along Campbell Ave between Keefer St and E Georgia St
- 5. A pinch point (restricted road width) for vehicles on Glen Dr, south of E Georgia

These five measures will be implemented this summer. Data collection and monitoring will follow, approximately one year after the initial data collection efforts, in order to assess the impacts of the new measures and consider changes. A more detailed engagement summary with further design details will be provided to Council in early June.

Work on the second pilot neighbourhood in Hastings-Sunrise near the Adanac Overpass has also begun. Data collection is currently underway, and staff will use the summer months to conduct analysis and prepare for community engagement. Consultation with the neighbourhood is expected to begin in fall 2022, with implementation of measures in Q2 2023.

#### **Next Steps**

Key activities in the coming months will focus on continued work with the pilot neighbourhoods, initiating data collection and analysis for the next round of neighbourhoods, and preparing to report back on a finalized program framework in Q1/Q2 of 2023.

Please contact me directly should you have any questions.

Sincerely,

Lon LaClaire, M.Eng., P.Eng. General Manager, Engineering Services 604.873.7336 | lon.laclaire@vancouver.ca

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# Appendix A – Selection Framework Data, Limitations and Analysis

## Stage 1 Analysis

The first step on analysis relies on defined quantitative data from the City of Vancouver and third party sources. These data have been selected to directly and indirectly represent traffic exposure and safety, vulnerable populations, and neighbourhood amenities. Taken together these indicate the potential benefit that the NTM program could bring to a neighbourhood. Several weightings of the variables were tested by staff in the development of the framework before finalizing the strategy.

As with all data, there are limitations, which is why a second level of analysis is also completed.

#### 1. Safety

**Metric:** Number of vehicle-pedestrian and vehicle-bicycle collisions from the last five years (2016-2021) with an injury or fatality. Collisions on Arterial, Collector, and Industrial streets are removed. The data is normalized based on the length of local streets in the neighbourhood to avoid bias due to the size of a neighbourhood.

**Rationale for inclusion:** Safety is one of the key goals of the NTM program, and collision data is the best available citywide data.

**Data sources** ICBC collision data, 2016-2021. Data will be updated annually to include the most recent five years.

**Data limitations and mitigations**: This data does not cover near-misses, perceptions of safety, or traffic exposure and effects of noise and pollution on active transportation. Community feedback and engagement may assist with provide these details, as will future traffic data sources.

#### 2. Demographics

**Metric:** Total population of children, seniors, and people with disabilities in each neighbourhood.

**Rationale for inclusion**: Children, seniors, and people with disabilities are at greater risk of traffic incidents due to moving more slowly, being more at risk for tripping or falling, and being less visible to drivers. Total population rather than percentage was used to ensure that higher density neighbourhoods are not penalized.

Data sources: 2016 Census data at the Dissemination Area level including:

- Children: Total population 0-14 years
- Seniors: Total population 65 years or greater
- People with Disabilities: Based on the "Activities of Daily Living" census data. Total population which indicated any difficulty with any of the following:
  - seeing
  - hearing
  - walking

- using stairs
- using hands or fingers or doing other physical activities
- learning, remembering or concentrating
- emotional, psychological or mental health conditions
- other health problems or long-term conditions that have lasted or the respondent expects to last six months or more.

**Data limitations and mitigations:** At the time of this analysis, a full dataset was only available from the 2016 Census. Data will be updated to the 2021 Census once it is available. The Activities of Daily Living data is not typically used to estimate the total population of people with disabilities, but rather used to identify people who are likely to have a disability for a follow-up survey. It was used as this is the only neighbourhood-level data available and is considered to be a reasonable proxy of disability for the purposes of this work.

#### 3. Amenities

**Metric:** Locations of Schools (Independent and Public), childcare facilities, seniors' centres, community centres, parks, libraries

**Rationale for inclusion:** Neighbourhood amenities increase local trips in the neighbourhood and represent a strong opportunity to encourage active modes of travel and improve active connections within neighbourhoods.

**Data sources:** City of Vancouver datasets for:

- public schools
- independent schools
- childcare facilities
- seniors' centres
- Community centres
- parks
- libraries

Facilities located on arterials were included. Multiple facilities on the same site (e.g., library and community centre in the same building) were counted separately. Data was normalized based of the total street length within the neighbourhood to avoid overweighting larger neighbourhoods.

**Data limitations and mitigations:** Different amenity types and combinations drive different numbers of trips, and some are more likely to drive trips from outside the neighbourhood as opposed to from within or nearby. While there may be significant benefits from improving conditions for walking and cycling in amenity rich neighbourhoods, this metric has the lowest weighting to avoid penalizing neighbourhoods with fewer amenities.

# 4. Traffic

Metric: Shortcutting traffic volumes

**Rationale for inclusion:** The NTM Program is specifically focussed on dealing with local traffic issues like shortcutting. Neighbourhoods which experience a high degree of shortcutting often also perceive issues with speeding.

**Data sources:** Streetlight Data, a company which uses geolocation location data to estimate traffic flows.

**Data limitations and mitigations:** This is a new data source to the city, and staff are still learning about its applications and limitations. Additional information on this data will be included in a second phase report on the NTM Program in 2023.

The neighbourhoods with the highest NTM opportunity scores from the first stage of analysis were then put through a second stage qualitative analysis, which looks at equity, co-benefits with other city projects, and resident requests related to traffic calming.

#### Stage 2 Analysis

1. Equity:

Metric: Disproportionately Impacted Communities Index

**Rationale for inclusions:** Prior investment in traffic calming improvements may have been subject to institutional bias which particularly impacts some communities. By explicitly considering these communities in the selection analysis, staff can work towards addressing this historical imbalance.

Data Sources: 2016 Census data (census tracts):

- percent of residents who are indigenous
- percent of residents who do not speak an official language
- percent of residents who are visible minorities
- percent of residents who spend 30% or more of their income on shelter costs
- percent of families that are single-parent
- median income

Each metric is given a score from 1-10, then summed. As the census tracts do not line up exactly with the neighbourhoods, the neighbourhoods were given the highest DIC score of neighbourhoods they overlapped. This framework was previously used to approximate DICs as part of the Climate Emergency action plan.

**Data Limitations and mitigations:** Creating a metric for equity is challenging, as adding together different factors does not account for those who belong to multiple equity-seeking groups. Additionally, different areas of one neighbourhood may have different characteristics, and different needs. This metric will be updated to the city-wide

equity framework once it has been developed. These limitations are why the DIC index is used as a qualitative metric to inform the selection process.

#### 2. City Initiatives

Metric: Upcoming city development and planning projects

**Rationale for inclusions:** Coordination with other city projects allows for efficient use of staff time and coordinated public engagement can help communities understand overlapping projects. Similarly, significant projects such as the Broadway Plan may provide similar benefits to NTM program.

**Data Limitations and mitigations:** City priorities and project timing can change, and new priorities may be identified.

## Application of the Stage 2 Analysis – 2023 NTM Program

The table below illustrates the application of the Stage 2 analysis framework on the top ten neighbourhoods for the 2023 selection process.

Local Traffic Area	DIC	Co-benefits	Conflicts (Development, Planning Work)	Total
	0-5	0-5	0-5	Score
59 Riley Park Northwest	0	2 – Ontario Greenway Integration	<ul> <li>4 – Some ongoing development, no significant conflicting planning work</li> </ul>	6
63 Cambie Langara	2	0 – None identified	<ol> <li>Significant development related to Cambie Corridor and Marpole Plans, no significant conflicting planning work</li> </ol>	3
64 Strathcona North	5	0 – None identified	1 - Some development, adjacent to Portside Greenway, Gastown, which could achieve similar benefits as NTM program	6
74 Kensington Cedar Cottage Southwest	3	0 – None identified	5 – Generally low amount of other development, no significant conflicting planning work	8
80 Grandview Woodland – Woodland Park	5	0 – None identified	4 – Some ongoing development, no significant conflicting planning work	9
111 Renfrew Northwest	4	3 - Potential to coordinate with adjacent improvements from Adanac process	5 – Generally low amount of other development, no significant conflicting planning work	12
130 Kensington Cedar Cottage Northeast	2	2 – Potential to coordinate with Trout Lake bypass	4 – Some ongoing development, no significant conflicting planning work	8
134 Joyce East	4	3 – TransLink led work on BC Parkway, ongoing work to improve walking connections	3 – Some ongoing development under station area plan, no significant conflicting planning work	10
135 Killarney Northeast	4	0 – None identified	5 – Generally low amount of other development, no significant conflicting planning work	9
139 Champlain East	1	0 – None identified	5 – Generally low amount of other development, no significant conflicting planning work	6



# MEMORANDUM

November 18, 2021

- TO: Mayor and Council
- CC: Paul Mochrie, City Manager Karen Levitt, Deputy City Manager Katrina Leckovic, City Clerk Lynda Graves, Administration Services Manager, City Manager's Office Maria Pontikis, Director, Civic Engagement and Communications Anita Zaenker, Chief of Staff, Mayor's Office Neil Monckton, Chief of Staff, Mayor's Office Alvin Singh, Communications Director, Mayor's Office
   FROM: Lon LaClaire General Manager, Engineering Services
- SUBJECT: Neighbourhood Traffic Management Program and Slow Streets Update

RTS #: N/A

## Purpose

This memo provides information on early directions for a new and expanded *Neighbourhood Traffic Management (NTM) Program* and work that staff will be undertaking in the coming months. This also provides an update to the *Slow Streets Program*. A summary of existing NTM related programs and initiatives is provided in Appendix A.

# The Neighbourhood Traffic Management Program

Building off of the existing framework of programs, staff will report back in Q1 2022 with a proposed approach for neighbourhood traffic management moving forward. This approach would:

- Be proactive rather than reactive
- Use a **data-driven** prioritization strategy (including variables like collision, speed, volume history, equity variables, and location of community amenities)
- Incorporate greenways, bikeways and other road space reallocation efforts
- Include follow-up and evaluation of changes
- Take place at the neighbourhood-level scale



Existing programs such as the *Speed Hump Program* and the *Local Improvement Program* (LIP) are anticipated to remain.

With resourcing now in place, staff will continue to develop the new strategy over the coming months, and report back at the end of Q1 2022. This report will include a proposed prioritization strategy, early directions for pilot neighbourhoods, and considerations for program scale and potential funding.

## Key Opportunities for a New Program

The new program will provide opportunities to improve how the City addresses neighbourhood traffic management, including:

- 1. <u>Improving Equity</u>: The majority of neighbourhood traffic management responses today are resident-initiated and reactive. This means that the program likely has a bias towards neighbourhoods with residents who have more time to participate in public process, comfort with engaging with the City, and/or financial resources funds (for LIP cases). By reflecting equity variables as part of a neighbourhood prioritization framework, the city could reduce potential bias between neighbourhoods.
- 2. <u>Expanding Scale:</u> Most existing NTM processes operate at the individual street or block level. Taking a neighbourhood based approach can improve overall performance and reduce the chances that traffic simply diverts to other streets, without resolving the root causes.
- 3. <u>Improving Efficiency:</u> By taking a proactive approach across neighbourhoods, the revised NTM program should help to reduce the number of citizen NTM requests over time, which in turn should reduce the resources needed to investigate these concerns.

#### Strathcona and Adanac Overpass Neighbourhoods

The Strathcona and Adanac Overpass neighbourhoods have a history of neighbourhood traffic management issues and have been prioritized as pilot neighbourhoods.

Work within Strathcona relates to and will be informed by the ongoing collector traffic calming pilot on Prior St to improve walkability, reduce vehicle speeds and increase street lighting levels. Strathcona also scored highly in an objective review of collisions, speed, vulnerable users and community amenities.

Staff will begin data collection and early stakeholder engagement for these neighbourhoods in Q4 2021. Emerging directions will be included in the broader NTM Council report in Q1 2022.

## **Slow Streets**

Slow Streets were implemented as part of the 'rapid response' phase of the COVID-19 pandemic in order to provide more space for social distancing while walking, cycling and rolling. In total, 40km of slow streets were installed, at a total cost of approximately \$340,000 through the end of 2020. The network was envisioned as a short term program, to connect green spaces, high streets and neighbourhoods with consideration for equity and accessibility goals.

The initiative has been popular with residents (with over 70% support in City surveys), but the temporary plastic water filled barriers used across the network have been challenging to maintain, as barriers are frequently damaged by vehicles, moved or vandalized. To address these challenges, there has been a significant, unbudgeted effort across the network to monitor, replace, clean and reset barriers, with ongoing future costs of approximately \$25,000-\$30,000 per month.

#### The Future of Slow Streets

Based on ongoing public support for the program and concerns with potential for removals, staff expect to maintain the current network of slow streets through the winter as an unfunded program. This will be presented to council in the future as part of the 2022 operating budget as a one time expense.

Community stewardship of barriers has been considered as an interim solution, however there are challenges with coordination across the large network of slow streets, staff resources required to develop and manage the network of stewards, and safety considerations that would result from asking residents to manage equipment in the street.

Staff are exploring a number of options to capture the benefits of the program in the long term. Staff believe that a longer term Slow Street Network using lower maintenance materials is possible. Staff will provide an update on the future of Slow Streets as part of the Council report in Q1 2022 and outline next steps for maintaining a Slow Street network.

Sincerely,

Lon LaClaire, M.Eng., P.Eng. General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca

# Appendix A: Summary of Neighbourhood Traffic Management Programs and Initiatives

#### Resident Requests for Neighbourhood Traffic Management

The City receives between 250-450 resident-initiated neighbourhood traffic management cases per year which are primarily received through 3-1-1. Residents request a range of measures, including speed humps, traffic circles, curb bulges, stop signs, full vehicle restrictions and turn bans.

Staff review each request by evaluating existing data, collecting new data, and/or conducting a site visit as necessary. This data and observed traffic behaviour are then compared with conditions on nearby local streets, as well as data from comparable streets in the city. In each case, staff make assessments and implement changes where needed. While changes in the street are not correlated to particular requests, in 2019 there were 111 revisions to signage and pavement markings, which are often completed in response to NTM concerns. This does not include other minor street changes which are often captured as part of larger projects or through other processes.

A number of programs and opportunities exist to implement NTM measures in the City.

#### Speed Hump Program

The *Speed Hump Program* allows residents to request speed humps on their block via petition. Projects are approved if the data shows that speed humps are warranted, and sufficient neighbourhood support exists. The approval process is detailed in the diagram below:



The Program has a \$250,000 annual budget which typically allows for speed humps to be built on 20 to 30 blocks. In recent years, locations for speed humps that align with City priorities for traffic calming around schools and parks have been prioritized. In 2020, the city received 11 neighbourhood-initiated requests, but none met the criteria for implementation. There are currently 10 resident-initiated speed hump requests under review.

## Local Improvement Program (LIP)

The *Local Improvement Program* allows residents to request and fund a variety of street improvements to their block. Potential improvements under the program include:

- Lane paving
- Lane lighting
- Traffic circles
- Corner bulges
- Lane speed humps

Requests are initiated via petition, which is followed up by data collection and analysis. Approval is based on the requirements set in the *Local Improvement Procedures Bylaw 3614* and the *Vancouver Charter*. In the last three years the program was active (2017-2019), two instances of laneway speed humps were successfully approved via this process. The program has been paused for 2020 and 2021 due to the COVID-19 pandemic.

#### Slow Zones and 30km/hr Signage Regulations

In spring 2021, the City launched a trial 30km/hr 'Slow Zone' in the Grandview-Woodland neighbourhood. Grandview Woodland was identified by staff as the top ranked neighbourhood based on speed, collisions, proportion of vulnerable populations, and number of community amenities. The trial features 30km/hr gateway signs, speed limit signs, and paint markings but did not impact access or parking. Preliminary results of the trial show a small reduction in average speeds of about 1km/hr. Staff will report back with a full summary of results and next steps in 2022.

Staff have been in communication with the Province, and have recently been in discussions with Legal Services regarding signage requirements for a blanket rollout of 30km/hr speed limits on local streets. Discussions are ongoing, and staff will provide an update when more information is available.

## Capital Projects + Development Opportunities

Neighbourhood traffic management features are often incorporated into capital projects and offsite improvements delivered through development projects.

## School Active Travel Program (SATP)

The SATP works with school communities to improve walking, cycling and rolling infrastructure around schools and to educate and encourage students to use active travel to and from school.

Infrastructure upgrades as part of the program include speed humps, crosswalks, ramps, curb bulges and pedestrian signals. In the 2019 and 2020 years, the program featured:

- School Active Travel Planning at 8 schools (over the two years)
- Walk + Bike + Roll grants for school-led programming at 15 schools
- Walking and cycling education courses for 1,153 grade 6 and 7 students

#### School Streets

*School Streets* is a new pilot program that creates a car-free block beside a school during pickup/drop-off. Three schools were piloted in April/May 2021. Results from the pilots included:

- A reduction in motor vehicle traffic observed on all streets adjacent to schools
- 32% of families reported walking more
- 29% of parents reported driving less