

DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

6.

COUNCIL REPORT

Date:	February 1, 2024
From:	Sean O'Sullivan, Senior Manager, Roads & Transportation Jessie Lei, Assistant Transportation Engineer
Subject:	Traffic Calming Policy
File:	1700.09

RECOMMENDATION

THAT

1. the proposed "Traffic Calming Policy 0157" be approved;
2. the "Speed Humps and Other Vertical Deflections Policy 02-20-382" be rescinded;
3. \$60,000 of existing capital funding be redirected towards a 2024 Traffic Calming Implementation Program; and
4. staff evaluate on an annual basis future traffic calming implementation programming needs and request supportive funding as part of the annual budget process.

1.0 Purpose

The purpose of this report is to seek Council approval of the proposed Traffic Calming Policy 0157, **Appendix A**. This policy would replace the existing Speed Humps and Other Vertical Deflections Policy 02-20-382, **Appendix B**.

2.0 Executive Summary

The District receives approximately 50 requests a year for traffic calming. If all the requests were approved and implemented, the costs could exceed \$1,000,000. The proposed Traffic Calming Policy 0157 will clarify where traffic calming measures are supported and the accompanying Traffic Calming Procedure 0158, **Appendix C**, will establish a fair and consistent process to evaluate and prioritize traffic calming requests and implementation.

3.0 Legislation/Bylaw/Policy

The Traffic and Parking Bylaw No. 4370, 2004, regulates speed limits and speed zones within District highways.

The B.C. Motor Vehicle Act (MVA) sets a default speed limit of 50 km/hr on municipal streets when a different speed limit has not been posted by signs.

Currently, Municipalities have the authority to regulate the use and enforcement of traffic on roads through their Streets and Traffic Bylaw under the context of the “parent” provincial legislation, primarily the MVA.

4.0 Council Strategic Objective(s)/Official Community Plan

Council Strategic Plan

This report aligns with Council’s Strategic Objective to:

- 4.0 Mobility – Enhance the mobility within the community.
- 4.3 Diversify, expand, and improve the safety and appeal of active transportation options.

As part of **Council’s approved Strategic Plan, 2024–2025**, there is an action to develop and implement a traffic calming policy.

Official Community Plan

The Official Community Plan (OCP) Section 2.4 outlines a need to use existing road networks more efficiently and provide a range of safe and accessible transportation options within our community and across the region. The OCP seeks to enhance road network safety for all users.

5.0 Financial Implications

There is currently no allocated funding for traffic calming implementation with past funding typically provided for through capital programming. If Council adopts the proposed Traffic Calming Policy 0157, staff are recommending a supporting budget of \$60,000 to be redirected from existing funding and allocated to a 2024 traffic calming implementation program. This will provide a basis for the cost for administering the traffic calming program and implementing traffic calming measures at a limited number of prioritised locations focusing on smaller, cost-effective measures. Staff can use this to inform future funding requests to support programming implementation in subsequent years. Larger, more costly projects would be standalone capital program requests funded separately through capital programming.

Alternatively, residents have the option to apply to privately finance traffic calming measures through the Local Area Services Policy 0139, provided the requested locations meet requirements as set out in the proposed Traffic Calming Procedure 0158.

6.0 Background

Within the District, one of the most received complaints that both Engineering and Transportation, as well as the West Vancouver Police Department receive is regarding speeding; these complaints are often accompanied by requests for implementation of traffic calming measures.

It is important to note that reported accounts of speeding are subject to perspective, perceptions, and standards. Often the data shows, particularly on local roads, that most vehicles are travelling slower than the posted speeds. It is also not uncommon to receive contradictory concerns about a single road. One resident may request speed bumps to slow drivers down, while another finds speed bumps problematic.

If all the current traffic calming requests were implemented, it could cost more than \$1,000,000. Currently the District does not have a dedicated budget for traffic calming.

6.1 Previous Decisions

Council, at its **July 10, 2023, regular meeting**, passed the following resolution:

THAT

1. allocated funding for the 30 km/hr Speed Reduction Initiative be redirected towards the implementation of an ongoing annual School Safety Assessment Program to identify safety and mobility improvement opportunities around all schools in the District;
2. ***staff be directed to develop a traffic calming policy and program to target specific locations where data (speed, collision, West Vancouver Police Department (WVPD)) shows there is a speed or congestion related safety concern;***
3. staff be directed to undertake an assessment of the intersections within the District’s road network to identify the highest collision rates and the intersections with the greatest benefitting potential of road safety improvements;
4. the District partner with other agencies, including Vancouver Coastal Health (VCH), and prepare a letter to encourage the Province to increase the number of intersection red light and speed cameras; and
5. staff report back to Council with an update in Q4 of 2023.

Council, at its **January 22, 2018, regular meeting**, passed the following resolution:

THAT

1. The “Speed Bump/Ramps Policy 03-20-134”, dated January 05, 1987 and amended on November 28, 1988 be rescinded;
2. The “Speed Humps and Other Vertical Deflections Policy 02-20-382” be approved;
3. The document titled, “Technical Assessment for Speed Humps and other Vertical Deflections” be received for information.

6.2 History

In 1987, Council directed staff to maintain the policy of not permitting speed bumps on public roads, suggesting that the policy pre-dated this time period. It was amended in 1988 to allow for a “test case” of speed deterrent ramps in the lane north of 1700 block of Marine Drive. These speed deterrent ramps do not appear in this lane at the present day.

In 2018, the Speed Humps and Other Vertical Deflections Policy 02-20-382 was approved by Council, which introduced the use of vertical deflections such as speed humps, raised crosswalks, and speed cushions. Vertical deflections are only considered:

- a. on collector roads, local roads, lanes, and municipal parks that are located in school or playground zones; and
- b. on roads directly connected to pedestrian generators such as a community facility.

Staff also developed a Traffic Calming Point Assessment System, which considers factors such as 85th percentile speed, daily volumes, collision history, and other road characteristics to determine if the application of vertical deflections are warranted.

Since the adoption of the Speed Humps and Other Vertical Deflections Policy 02-20-382, 85 speed humps have been installed at 34 locations amounting to approximately \$500,000 in total costs, some of which were installed outside of the areas defined in the Policy. Other traffic calming devices, including speed boards, roundabouts, traffic circles, medium refugee islands, have been implemented across the District based on individual traffic safety reviews.

Recognizing a need for a comprehensive policy, Council directed staff to develop a Traffic Calming Policy at the July 10, 2023, regular Council Meeting.

7.0 Analysis

7.1 Discussion

According to Canadian Guide to Traffic Calming by Transportation Association of Canada, traffic calming is a method to reduce the speed and/or volume of non-local traffic infiltrating into neighbourhoods. The goal of traffic calming is to improve road safety and enhance neighbourhood livability. Common traffic calming measures include speed humps, roundabouts and traffic circles, roadway narrowing, raised centre medians, on-street parking, and no-vehicle-access areas.

Regionally, local governments have taken different approaches towards traffic calming, most of which have processes in place for speed hump implementation as it is one of the most efficient and cost-effective means for speed reduction. On the North Shore, the District of North Vancouver has endorsed a Traffic Calming Program that one location will be selected

each year based on the number of concerns and staff-determined eligibility criteria, including speed and volume data. The City of North Vancouver has implemented a Community Traffic Calming Program where a traffic calming plan is developed on a per neighbourhood basis. A summary of traffic calming processes in different municipalities can be found in **Appendix D**.

The Speed Humps and Other Deflections Policy 02-20-382 is restricted in terms of traffic calming options and locations, as it only supports implementation of vertical deflections on collector and local roads in school and playground zones. There is no comprehensive traffic calming policy in place to explore different options for traffic calming, or on roads outside school or playground zones. Requests are evaluated on a case-by-case basis, which is time consuming, resource intensive and does not consider District-wide needs and priorities. Based on Council direction, an updated Traffic Calming Policy has been developed to consider a wide variety of traffic calming options and to provide a fair and consistent method to evaluate and prioritize traffic calming requests.

Purpose

The goal of the Traffic Calming Policy is to create a structured and systematic approach to improve safety for all road users, particularly pedestrians and cyclists, by reducing vehicle speeds, and discouraging traffic short-cutting. The policy will aid District staff in evaluating traffic calming requests and implementing traffic calming measures. The process is intended to provide reasonable and cost-effective solutions to traffic calming requests in a fair and consistent manner.

Applicability

Roads in the District of West Vancouver are generally classified into three classes: Arterial Roads, Collector Roads, and Local Roads. A Road Classification Map can be found in **Appendix E**.

- a. Arterial roads are defined as major streets for which the primary function is to provide for vehicle movement and is intended to carry higher vehicle volumes and larger vehicles and are frequently primary emergency response and transit routes.
- b. Collector roads are streets for which vehicle movement and access are of equal importance and is intended to carry higher vehicle volumes and larger vehicles.
- c. Local roads are streets for which the primary function is to provide access to adjacent properties.

Within the proposed Traffic Calming Policy 0157, traffic calming measures are only considered:

- a. On local roads excluding cul-de-sacs or dead-end streets less than 90 meters long;

- b. On collector roads that are located within school or playground zones.

The reasoning behind the decision to limit the application of the Traffic Calming Policy is based on the function of arterial roads (i.e. Marine Drive) and collector roads not within school or playground zones (i.e. 15th Street) to move large volumes of people and goods throughout the District and beyond. Restrictive measures taken on higher volume roads negatively impact emergency response times and effective transit functioning as well as may shift traffic onto local roads and into neighbourhoods.

Traffic Calming Process

The following steps for traffic calming process has been established.

- a. Initiation

Residents can submit requests for traffic calming using the Traffic Calming Request Form located on page 6 of **Appendix C**. A traffic calming request should be accompanied by signatures of support from 50% of the owners in the benefitting area for the District's consideration. Staff will conduct a Traffic Calming Point Assessment to determine if the location meets minimum requirements. The Traffic Calming Point Assessment is a screening tool that considers various attributes of a roadway, including but not limited to 85th percentile speeds, daily traffic volumes, proximity to schools, in order to quantify its potential for traffic calming, see page 9 of **Appendix C**.

- b. Plan Development

Locations that meet minimum requirements will be ranked based on their point assessment scores. Staff will develop preliminary designs for the top ranked locations subject to resource and funding availability.

- c. Approval

Staff will send a letter to owners in the benefitting area of the proposed traffic calming measures asking them to confirm whether or not they support the proposed traffic calming measures. To move forward with the implementation, the following criteria must be met:

- a. response from at least 67% of the owners in the benefitting area;
- b. a minimum of 67% of the respondents in favour of the proposed traffic calming plan;
- c. a maximum of 20% of the respondents opposing the proposed traffic calming plan.

- d. Implementation

Staff will schedule the implementation of traffic calming measures to begin only when there are sufficient resources available to proceed.

Appendix F shows a flowchart of the traffic calming process.

Traffic Calming Measures

The proposed Traffic Calming Policy 0157 considers a variety of traffic calming devices that allows for a more nuanced and adaptable approach to address specific challenges in different locations.

The following traffic calming measures are considered:

- a. vertical deflection, including speed humps, raised crosswalks, and speed cushions;
- b. horizontal deflection, including traffic circles, chicanes, curb radius reduction, and lateral shift;
- c. roadway narrowing, including curb extensions, on-street parking, and raised median islands;
- d. access restriction, including directional closure, diverters, and intersection channelization.

Stop signs and speed limit reduction are not considered traffic calming measures.

A table summarizing the potential benefits and implications of different traffic calming measures can be found in **Appendix G**.

7.2 **Climate Change & Sustainability**

Both the Council’s Strategic Objectives and the District’s Strategic Transportation Plan promote a modal shift from vehicular transportation to alternative modes of active transportation, including cycling and walking. There is a need to use various traffic calming measures to influence motorists’ behaviour to decrease driving speeds, thus making it more attractive to use sustainable modes of transportation and reducing greenhouse gas emissions.

7.3 **Public Engagement and Outreach**

Not applicable.

7.4 **Other Communication, Consultation, and Research**

Engineering staff maintain an open dialogue with staff from WVPD, the Bylaws Department, the Communications Division, and the West Vancouver School District on reported speeding related matters. Staff across these various departments receive a significant volume of complaints regularly for areas throughout the District regarding purported observed incidents of speeding. As part of the process to develop the proposed Traffic Calming Policy, staff reviewed traffic calming programs in other jurisdictions including:

- City of North Vancouver
- District of North Vancouver
- City of Vancouver
- City of Surrey
- City of Coquitlam

8.0 Options

8.1 Recommended Option

THAT

1. the proposed “Traffic Calming Policy 0157” be approved;
2. the “Speed Humps and Other Vertical Deflections Policy 02-20-382” be rescinded;
3. \$60,000 of existing capital funding be redirected towards a 2024 Traffic Calming Implementation Program; and
4. staff evaluate on an annual basis future traffic calming implementation programming needs and request supportive funding as part of the annual budget process.

8.2 Considered Options

Council may request further information or provide alternate direction (to be specified).

9.0 Conclusion

If approved, the proposed Traffic Calming Policy will provide staff with clear direction what type of traffic calming will be supported and where traffic calming will be supported. The accompanying Traffic Calming Procedure will provide a fair and consistent method to evaluate and prioritize traffic calming requests and implementation.

Author:



Sean O’Sullivan, Senior Manager, Roads & Transportation

Co-Author



Jessie Lei, Assistant Transportation Engineer

Appendices:

- Appendix A: Traffic Calming Policy 0157
- Appendix B: Speed Humps and Other Vertical Deflections Policy 02-20-382
- Appendix C: Traffic Calming Procedure 0158
- Appendix D: Traffic Calming Process by Municipality
- Appendix E: Road Classification Map

Date: February 1, 2024
From: Sean O'Sullivan, Senior Manager, Roads & Transportation
Jessie Lei, Assistant Transportation Engineer
Subject: Traffic Calming Policy

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Appendix F: Traffic Calming Process Flowchart
Appendix G: Potential Benefits and Implications of Traffic Calming Measure

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District of West Vancouver
POLICY

Title: Traffic Calming Policy
Division: Engineering & Transportation
Policy Number: 0157
File Number: 0282-20-0157

1. Purpose

- 1.1. This policy outlines the District's approach to identify and prioritize how and in which circumstances traffic calming measures requested by the public, may be implemented.

2. Scope

- 2.1. This policy outlines the District's approach to receiving, evaluating, and implementing all requests pertaining to implementation of traffic calming measures within the Districts road network.

3. Definitions

- 3.1. In this policy:

“Access Restriction” means a traffic calming measure which restricts specific vehicle movements.

“Arterial Road” means a major street for which the primary function is to provide for vehicle movement and is intended to carry higher vehicle volumes and larger vehicles.

“Benefitting Properties” means any property or parcel, either fully or partially, located within the block of a requested traffic calming measure.

“Chicane” means a series of curb extensions on alternating sides of a roadway, which narrow the roadway and require drivers to steer from one side of the roadway to the other to travel through the chicane. Typically, a series of at least three curb extensions is used.

“Collector Road” means a street for which vehicle movement and access are of equal importance and is intended to carry higher vehicle volumes and larger vehicles.

“Curb Extension” means a horizontal intrusion of the curb into the roadway resulting in a narrower section of roadway.

“Curb Radius Reduction” means the circular curved curb which connects the tangent curb sections of two intersecting streets.

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“Directional Closure” means a curb extension or vertical barrier extending to approximately the centreline of a roadway, effectively obstructing (prohibiting) one direction of traffic.

“District” means The Corporation of the District of West Vancouver.

“Diverter” means a raised barrier placed diagonally across an intersection, that forces traffic to turn and prevents traffic from proceeding straight through the intersection.

“Horizontal Deflection” means a traffic calming measure which causes a lateral shift in the travel pattern of vehicles.

“Intersection Channelization” means the use of raised islands or bollards located in an intersection to obstruct specific traffic movements and physically direct traffic through an intersection.

“Lanes” means a street with the primary function of providing access to properties from the rear instead of the fronting street.

“Lane/Road Narrowing” means reduced lane widths using pavement markings or other features with the intention for drivers to perceive the roadway to be less comfortable at higher speeds.

“Lateral Shift” means a roadway alignment change, introducing a ‘jog’ to the left or to the right.

“Local Road” means a street for which the primary function is to provide access to adjacent properties and is not intended to carry higher volumes of traffic or larger vehicles.

“On-street Parking” means the reduction of the roadway width available for vehicle movement by allowing motor vehicles to park adjacent to the curb.

“Raised Crosswalk” means a marked pedestrian crosswalk at an intersection or mid-block location constructed at a higher elevation than the adjacent roadway.

“Raised Median Island” means an elevated median constructed on the centreline of a two-way roadway to reduce the overall width of the adjacent travel lanes.

“Speed Cushion” means a segmented speed hump which allows for the passage of larger vehicles, such as emergency vehicles or buses, without difficulty while still reducing passenger vehicle speeds.

“Speed Hump” means a raised area of a roadway, which deflects both the wheels and frame of a traversing vehicle.

“Traffic Calming” means the combination of mainly physical measures intended to reduce vehicle speeds and discourage traffic short-cutting.

“Traffic Calming Point Assessment” means a screening tool focused on the various attributes of a roadway in order to quantify its potential need for traffic calming.

“Traffic Circle” means a small, raised island located in the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction around the island that is not intended to accommodate larger vehicles.

“Vertical Deflection” means a traffic calming measure which causes a vertical upward movement of the vehicle.

4. Policy Statement

4.1. General

- 4.1.1 The District shall use traffic calming measures to improve safety for all road users, particularly pedestrians and cyclists, with the intent of reducing vehicle speeds, and discouraging traffic short-cutting.
- 4.1.2 The following types of traffic calming measures are considered by the District:
- a. vertical deflection, including speed humps, raised crosswalks, and speed cushions;
 - b. horizontal deflection, including traffic circles, chicanes, curb radius reduction, and lateral shift;
 - c. roadway narrowing, including curb extensions, on-street parking, and raised median islands;
 - d. access restriction, including directional closure, diverters, and intersection channelization.
- 4.1.3 Traffic calming measures are only considered:
- a. on local roads excluding cul-de-sacs or dead-end streets less than 90 metres long; or
 - b. on collector roads that are located within school or playground zones.
- 4.1.4 Traffic calming measures are not considered where there is ongoing construction and changing traffic patterns.
- 4.1.5 Traffic calming measures are not applicable to lanes.
- 4.1.6 The following are not considered traffic calming measures.
- a. stop signs;
 - b. speed limit reduction.

4.2. Initiation

A traffic calming request should be accompanied by signatures of support from 50% of the owners in the benefitting area for the District's consideration. Staff will conduct a Traffic Calming Point Assessment to determine if the location meets minimum requirements as set out in Traffic Calming Procedure 0158.

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4.3. Plan Development

Each year staff will evaluate requests received from April of the previous year to March of the current year based on the Traffic Calming Procedure 0158. All the requests meeting the minimum requirements will be added to the ongoing traffic calming priority list and evaluated along with the rest of the existing requests, until implemented. Staff will develop preliminary designs for the top ranked locations selected for the year subject to resource and funding availability.

4.4. Approval

Staff will send a letter to owners in the benefitting area of the proposed traffic calming measures asking them to confirm whether or not they support the proposed traffic calming measures. To move forward with detailed design and implementation, the following criteria must be met:

- a. response from at least 67% of the owners in the benefitting area;
- b. a minimum of 67% of the respondents in favour of the proposed traffic calming plan;
- c. a maximum of 20% of the respondents opposing the proposed traffic calming plan.

4.5. Implementation

Staff will schedule the detailed design and implementation of traffic calming measures to begin only when there are sufficient resources and budget available to proceed. The District will undertake, manage, and make decisions pertaining to all aspects of work in order to coordinate and execute the construction activities.

5. Related Policies or Procedures

- 5.1. Traffic Calming Procedure 0158

6. Approval

Approved by	<input type="checkbox"/> CAO	<input type="checkbox"/> Mayor and Council
Approval date	Click here to enter a date.	
Council minutes eDocs # (Council Policies only)		
Council report eDocs # (Council Policies only)		

District of West Vancouver
POLICY

Signature	X _____
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7. Additional Information

Category	<input type="checkbox"/> Council	<input type="checkbox"/> Administrative
Related procedure	<input checked="" type="checkbox"/> Yes (0158)	<input type="checkbox"/> No
Date of last review	Click here to enter a date.	

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District of West Vancouver

Speed Humps and Other Vertical Deflections Policy 02-20-382

Effective Date: January, 2018

District of West Vancouver

CORPORATE POLICY

Engineering & Transportation Division	Speed Humps and Other Vertical Deflections
Policy 02-20-382	
CIS File:	

1.0 Purpose

To identify and prioritize circumstances in which Vertical Deflections are to be used for traffic calming.

2.0 General Principles

Vertical Deflections are effective tools used to reduce vehicle speeds in order to address safety concerns. Their implementation must be used strategically to bring the greatest benefit. When used in response to influence motorist behaviour to deter high travelling speeds, they are very effective methods to achieve traffic calming.

3.0 Scope

3.1 This policy applies to four types of specific Vertical Deflections for traffic calming:

- a) Speed Humps;
- b) Speed Cushions;
- c) Raised Crosswalks; and
- d) Speed Bumps.

3.2 Vertical Deflections are only considered:

- a) in Lanes or municipal parks;
- b) on Local Roads and Collector Roads that are either located in school or playground zones; and
- c) on roads directly connected to Pedestrian Generators.

Vertical Deflections will not be considered for Arterial Roads.

3.3 Speed Bumps will not be considered as a traffic calming measure in the District given they pose the risk of vehicle damage and liability.

4.0 Definitions

“Arterial Road” refers to a highway whose primary function is to deliver traffic from Collector Roads to freeways or expressways, and between urban regions at the maximum level of service.

“Collector Road” refers to a highway whose primary function is to distribute traffic between Arterial Roads, other Collector Roads, and Local Roads within an area, but which also usually provides full direct access to properties.

“Engineer” refers to a Professional Engineer licenced with the Province of British Columbia, employed at the District of West Vancouver, or a designated employee.

“Lanes” refers to a highway whose primary function is to allow residents and business owners to access their property from the rear instead of the fronting street.

“Local Road” refers to a highway whose primary function is to service vehicle destinations by providing direct access to properties, and which usually connects to other Local Roads or to Collector Roads.

“Pedestrian Generator” refers to any sort of facility that attracts a large number of pedestrian traffic, such as schools, playgrounds, recreation centres or libraries.

“Point Assessment System” refers to a screening tool focused on the various attributes of a roadway in order to quantify its potential need for vertical deflection. The Point Assessment System is outlined under a separate technical document.

“Raised Crosswalk” refers to a crosswalk that is elevated from the rest of the roadway with ramps on either side.

“Speed Bump” refers to an abrupt rounded ridge built crosswise into the pavement of a road.

“Speed Cushion” refers to raised portions of pavement that are narrow enough to allow emergency vehicles to straddle the cushion without slowing down, but other vehicles are forced to slow down for safe travel.

“Speed Hump” refers to gradually raised portions of pavement that cover the entire width of the road so as to slow all traffic crossing it.

“Vertical Deflection” refers to the raised portion of a road surface to encourage drivers to reduce speeds.

5.0 Policy

5.1 Speed Humps, Raised Crosswalks and Speed Cushions will be considered:

- a. in municipal parks, Lanes, or on Local Roads and Collector Roads;
- b. located in school or playground zones; and
- c. on roads directly connected to Pedestrian Generators.

5.2 Speed Humps, Raised Crosswalks and Speed Cushions will not be considered on Arterial Roads as these are roadways that carry vehicles at higher speeds and volumes and are primarily used for the movement of passengers and goods.

5.3 Speed Bumps will not be considered as a traffic calming measure in West Vancouver.

5.4 Initiation

There are two ways Vertical Deflections will be considered for locations where speeds are identified to be excessive:

- i. the District proactively identifies locations, or
- ii. external requests are communicated to the Roads and Transportation Department of the Engineering and Transportation Division.

5.5 Prior to implementing a Vertical Deflection measure, staff will conduct a preliminary assessment to determine if the roadway meets initial screening criteria.

5.6 Initial Screening Criteria

To be evaluated for vertical deflections, the roadway must be:

- classified as a Lane or;
- in a municipal park or;
- classified as a Local Road or Collector Road; and
 - located in a school or playground zone; as defined by the limits of the 30km/hr regulatory signs, or;
 - directly connected to a Pedestrian Generator.

If a site meets the above criteria, it is considered through a Point Assessment System to determine the priority level.

A site that does not meet the initial criteria screening and is not eligible for a vertical deflection may be considered for other traffic calming interventions.

Approval Date: January 22, 2018	Approved by: Council	
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District of West Vancouver
PROCEDURE

Title: Traffic Calming
Division: Engineering & Transportation Services
Procedure Number: 0158
File Number: 0282-20-0158

1. Governing Policy

- 1.1. This procedure is associated with Traffic Calming Policy 0157.

2. Scope/Application

- 2.1. This procedure describes the process by which traffic calming measures can be initiated by a property owner(s) through traffic calming request, and how traffic calming requests will be evaluated and prioritised.

3. Definitions

- 3.1. In this procedure:

“**Access Restriction**” means a traffic calming measure which restricts specific vehicle movements.

“**Arterial Road**” means a major street for which the primary function is to provide for vehicle movement and is intended to carry higher vehicle volumes and larger vehicles.

“**Benefitting Properties**” means any property or parcel, either fully or partially, located within the block of a requested traffic calming measure.

“**Chicane**” means a series of curb extensions on alternating sides of a roadway, which narrow the roadway and require drivers to steer from one side of the roadway to the other to travel through the chicane. Typically, a series of at least three curb extensions is used.

“**Collector Road**” means a street for which vehicle movement and access are of equal importance and is intended to carry higher vehicle volumes and larger vehicles.

“**Curb Extension**” means a horizontal intrusion of the curb into the roadway resulting in a narrower section of roadway.

“**Curb Radius Reduction**” means the circular curved curb which connects the tangent curb sections of two intersecting streets.

“**Directional Closure**” means a curb extension or vertical barrier extending to approximately the centreline of a roadway, effectively obstructing (prohibiting) one direction of traffic.

“**District**” means The Corporation of the District of West Vancouver.

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“Diverter” means a raised barrier placed diagonally across an intersection, that forces traffic to turn and prevents traffic from proceeding straight through the intersection.

“Horizontal Deflection” means a traffic calming measure which causes a lateral shift in the travel pattern of vehicles.

“Intersection Channelization” means the use of raised islands or bollards located in an intersection to obstruct specific traffic movements and physically direct traffic through an intersection.

“Lanes” means a street with the primary function of providing access to properties from the rear instead of the fronting street.

“Lane/Road Narrowing” means reduced lane widths using pavement markings or other features with the intention for drivers to perceive the roadway to be less comfortable at higher speeds.

“Lateral Shift” means a roadway alignment change, introducing a ‘jog’ to the left or to the right.

“Local Road” means a street for which the primary function is to provide access to adjacent properties.

“On-street Parking” means the reduction of the roadway width available for vehicle movement by allowing motor vehicles to park adjacent to the curb.

“Raised Crosswalk” means a marked pedestrian crosswalk at an intersection or mid-block location constructed at a higher elevation than the adjacent roadway.

“Raised Median Island” means an elevated median constructed on the centreline of a two-way roadway to reduce the overall width of the adjacent travel lanes.

“Speed Cushion” means a segmented speed hump which allows for the passage of larger vehicles, such as emergency vehicles or buses, without difficulty while still reducing passenger vehicle speeds.

“Speed Hump” means a raised area of a roadway, which deflects both the wheels and frame of a traversing vehicle.

“Traffic Calming” means the combination of mainly physical measures intended to reduce vehicle speeds and discourage traffic short-cutting.

“Traffic Calming Point Assessment” means a screening tool focused on the various attributes of a roadway in order to quantify its potential need for traffic calming.

“Traffic Circle” means a small, raised island located in the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction around the island that is not intended to accommodate larger vehicles.

“Vertical Deflection” means a traffic calming measure which cause a vertical upward movement of the vehicle.

4. Procedure

4.1. Timeline

4.1.1. Traffic calming is an annual program with the following timeline:

- 4.1.1.1. Request intake is open year-round.
- 4.1.1.2. Each year, staff will evaluate requests received from April of the previous year to March of the current year using the Traffic Calming Point Assessment (Appendix B).
- 4.1.1.3. All the requests meeting the minimum Point Assessment score of 60 will be added to the ongoing traffic calming priority list and evaluated every year along with the rest of the existing requests, until implemented.
- 4.1.1.4. If the request is rejected at any point in the process on the basis of failure to meet minimum criteria or lack of public support, the requestors and affected residents shall be notified in writing, and traffic calming shall be excluded from additional review for 24 months.

4.2. Initiation

4.2.1. If a resident perceives a traffic concern related to speeding or traffic short-cutting on a street, they may submit a Traffic Calming Request Form (Appendix A) to Engineering & Transportation at engineeringdept@westvancouver.ca.

4.2.2. The following criteria must be met for the Traffic Calming Request to be considered for assessment:

- 4.2.2.1. Traffic calming are only considered:
 - a. on local roads excluding cul-de-sacs or dead-end streets less than 90 meters long; or
 - b. on collector roads that are located within school or playground zones.

A Road Classification Map can be found in Appendix B.

- 4.2.2.2. Traffic calming are not considered where there is ongoing construction and changing traffic patterns.
- 4.2.2.3. Traffic calming measures are not applicable to lanes.
- 4.2.2.4. The following are not considered traffic calming measures:
 - stop signs;
 - speed limit reduction.
- 4.2.2.5. A traffic calming request should be accompanied by signatures of support from 50% of the owners in the benefitting area for the District's consideration.

4.3. Plan Development

4.3.1. Once the Traffic Calming Request submission has met all the requirements, staff will conduct a traffic calming point assessment (Appendix C) to determine if the location meets the minimum criteria.

District of West Vancouver

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- 4.3.2. Staff will confer with West Vancouver Transit, West Vancouver Fire Department, and West Vancouver Police Department for their comments and acceptance before developing traffic calming plans.
- 4.3.3. Locations that meet minimum traffic calming point assessment of 60, will be ranked based on their point assessment scores. Staff will develop preliminary designs for the top ranked locations based on constructability, opportunities to combine the traffic calming project with other District projects, and budget availability.
- 4.3.4. Only the following types of traffic calming measures are considered in relation to Traffic Calming Policy 0157:
 - a. vertical deflection, including speed humps, raised crosswalks, and speed cushions;
 - b. horizontal deflection, including traffic circles, chicanes, curb radius reduction, and lateral shift;
 - c. roadway narrowing, including curb extensions, on-street parking, and raised median islands;
 - d. access restriction, including directional closure, diverters, and intersection channelization.

4.4. Approval

- 4.4.1. Staff will send a letter to notify owners in the benefitting area of the proposed traffic calming measures asking them to confirm whether they support the proposed traffic calming measures. To move forward with detailed design and implementation, the following criteria must be met:
 - a. response from at least 67% of the owners in the benefitting area;
 - b. a minimum of 67% of the respondents in favour of the proposed traffic calming plan;
 - c. a maximum of 20% of the respondents opposing the proposed traffic calming plan.

4.5. Implementation


- 4.5.1. Staff will schedule the detailed design and implementation of traffic calming measures to begin only when there are sufficient resources and budget available to proceed. The District will undertake, manage, and make decisions pertaining to all aspects of work in order to coordinate and execute the construction activities.

5. Approval

Approved by	<input type="checkbox"/> CAO	<input type="checkbox"/> Mayor and Council
Approval date	Click here to enter a date.	
Council minutes eDocs # (Council Procedures only)		

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District of West Vancouver
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Council report eDocs # (Council Procedures only)	
Signature	

6. Additional Information

Category	<input type="checkbox"/> Council	<input type="checkbox"/> Administrative
Date of last review	Click here to enter a date.	

Appendices:

- Appendix A – Traffic Calming Request Form
- Appendix B – District Road Classification Map
- Appendix C - Traffic Calming Point Assessment Form

District of West Vancouver
Traffic Calming Request Form

Thank you for completing this request form. Please ensure you have read the District of West Vancouver Traffic Calming Policy and Procedure prior to proceeding. If you have any questions about this request or about the District's Traffic Calming Policy, please contact Engineering & Transportation Services at engineeringdept@westvancouver.ca.

Name: _____

Address: _____

Phone: _____ Email: _____

Description of Concern:

1. Is the cause of speeding on your street the result of congestion on a nearby arterial street or the result of nearby construction? YES ___NO ___

If yes, staff will focus on addressing the causes.

2. Do any of the following conditions apply to your street (A map showing road classifications can be found on the traffic calming web page) :

- Arterial road. YES ___NO ___
- Collector road not located in school or playground zones. YES ___NO ___
- Cul-de-sacs or dead-end street less than 90m in length. YES ___NO ___
- Steep grades or sharp curves. YES ___NO ___

If yes to any of the above conditions, traffic calming is not permitted.

3. Is speeding or short-cutting occurring during specific times of day or days of the week?

YES ___NO ___ If yes, please specify:

Freedom of Information and Protection of Privacy Act Notice

Your personal information will be collected for the purpose of evaluating your request for implementing traffic calming measures in the District of West Vancouver. This information is being collected by the District of West Vancouver pursuant to section 26 (c) and (e) of the *Freedom of Information and Protection of Privacy Act*.

If you have any questions about the collection of this personal information, please contact the Privacy Officer, Legislative Services, District of West Vancouver, 750 17th Street, West Vancouver, BC V7V 3T3, 604-921-3497.

District of West Vancouver
PROCEDURE

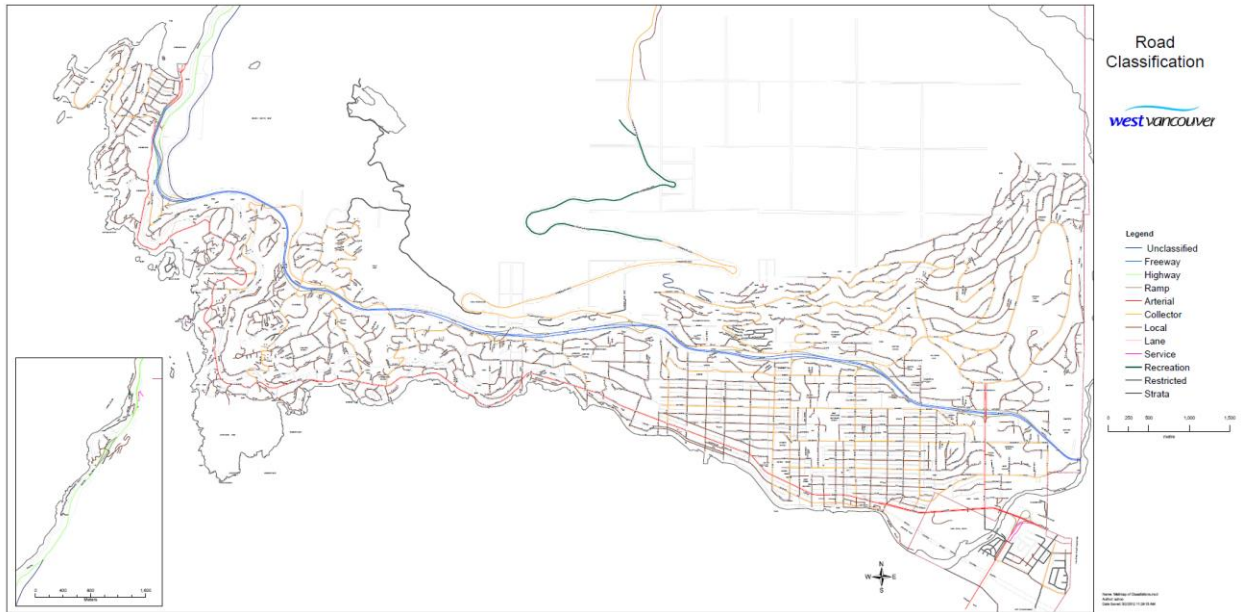
The District will only consider a traffic calming request if it has initial support of 50% of the owners on the block. Please have your neighbours complete the following:

For supporters of this traffic calming request: By signing below and indicating your support for this traffic calming request, you are voluntarily consenting to the collection of your personal information by the District of West Vancouver through the requestor named above. If you have any questions about the collection of this personal information, please contact the Privacy Officer, Legislative Services, District of West Vancouver, 750 17th Street, West Vancouver, BC V7V 3T3, 604-921-3497.

We support the above traffic calming request on _____.

Name	Address	Phone	Email	Signature

Appendix B



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District of West Vancouver
PROCEDURE

Appendix C

District of West Vancouver – Engineering and Transportation				
TRAFFIC CALMING POINT ASSESSMENT. A minimum score of 60 is required to proceed to preliminary design.				
Location:			Date Compiled:	
Roadway Type:	<input type="checkbox"/> Local	<input type="checkbox"/> Collector		
Traffic Data				
	Feature	Range	Criteria	Max
1.	Speed 85 th percentile speed	0 to 20	Local Road: 1 point for every kph above 40kph School/Playground zone: 1 point for every kph above 30kph	20
2.	Daily Volume	0 to 15	Local Road: 5 points for every 250 vpd; Collector Road: 5 points for every 500 vpd	15
3.	Collisions	0 to 20	5 points for every ICBC collision over the past 3 years that may be mitigated by traffic calming	20
Road Characteristics				
4.	Walking Route	0 or 5	5 points if the street is part of the District's pedestrian network, has a sidewalk, or a path	5
5.	School and Playground routes	0 or 10	10 points if there is an elementary school or playground in or adjacent to the study area,	10
6.	Bicycle Concerns	0 or 5	5 points if the road is an existing or planned bicycle route	5
7.	Other Pedestrian Generators	0 or 5	5 points for other nearby* Pedestrian Generators such as a community centre, library, retail centre, etc. <i>(*Nearby = must have direct connection to subject roadway)</i>	5
8.	Transit Route	0 or 10	10 points if not on an existing or planned transit route	10
9.	Length of Straight Road	0 to 10	1 point per 100 m of straight road	10
Total				
Minimum 60 points - Does the location meet the minimum criteria?				
			<input type="checkbox"/> YES	<input type="checkbox"/> NO

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Traffic Calming Process by Municipality

Speed hump request procedures comparisons are being provided as they are the most widely used, cost effective, and requested measures of traffic calming on local streets. As a result, most Municipalities have established request procedures.

	<i>CNV</i>	<i>DNV</i>	<i>Vancouver</i>	<i>Surrey</i>	<i>Coquitlam</i>
Speed Humps Permitted					
Arterial Roads	N	N	N	N	N
Collector Roads*	N	Y	N	N	Y**
Local Roads	Y	Y	Y	Y	Y
Owner Petition Required	Y	N	Y	Y	Y
Funding					
Municipal	✓	✓***	✓	✓	
Owner ****					
Combination					✓*****

* Exceptions made for school zones.

** Primary emergency response routes excluded.

*** If request meets minimum requirements, 100% Municipal funded based on a priority list established by the Municipality. Owners can apply to fund the traffic calming measure through a Local Area Service Project.

**** In most Municipalities traffic calming in lanes is funded by owners.

*****90% owner funded: 10% Municipal funded.

Links to complete Traffic Calming Programs:

City of North Vancouver

<https://www.cnv.org/Streets-Transportation/Traffic/traffic-calming>

District of North Vancouver

<https://www.dnv.org/streets-transportation/traffic-calming-program>

Vancouver

<https://vancouver.ca/streets-transportation/traffic-calming-and-safety.aspx>

Surrey

<https://www.surrey.ca/services-payments/parking-streets-transportation/roads-in-surrey/traffic-calming>

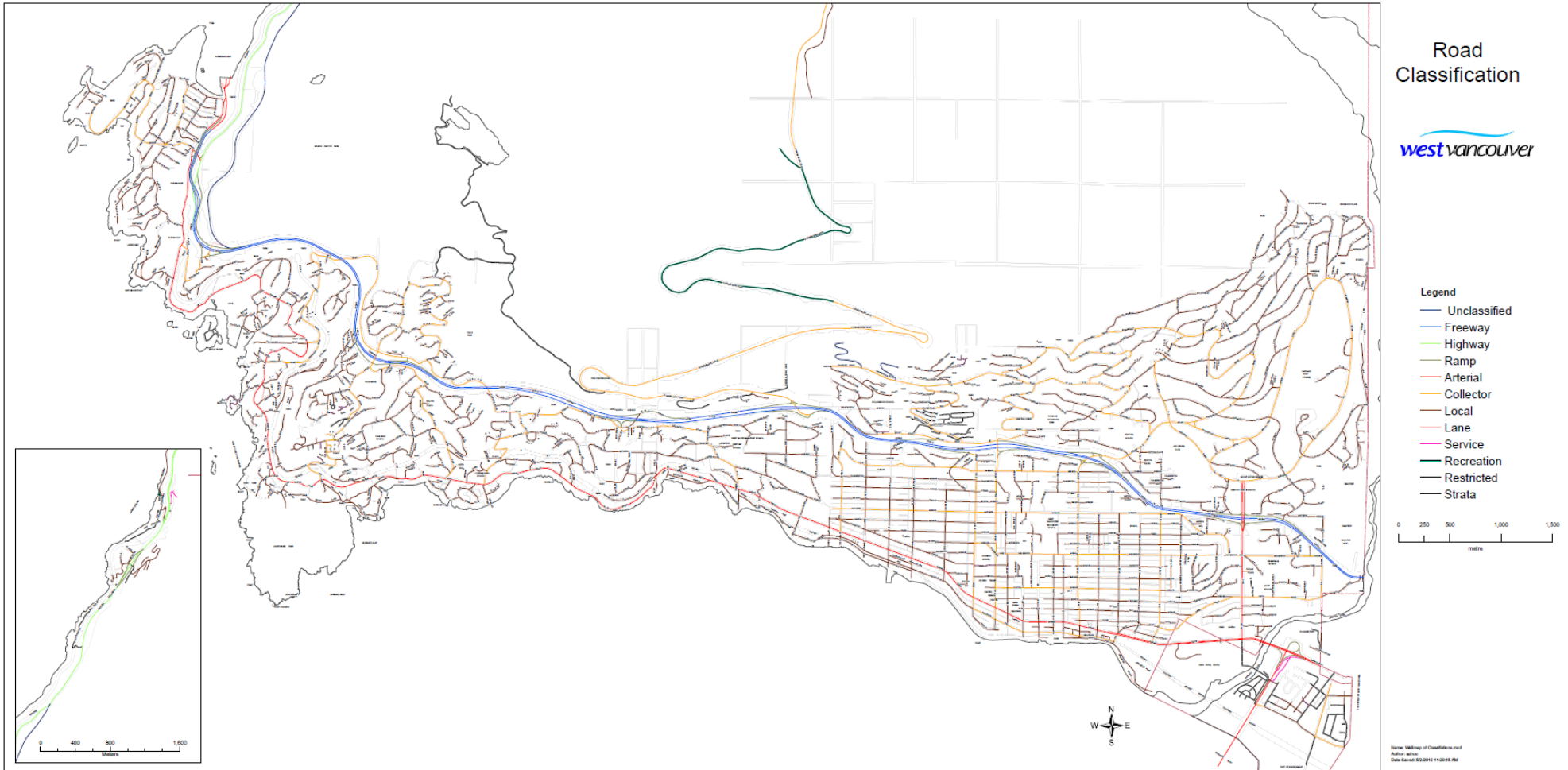
Coquitlam

<https://www.coquitlam.ca/192/Traffic-Calming>

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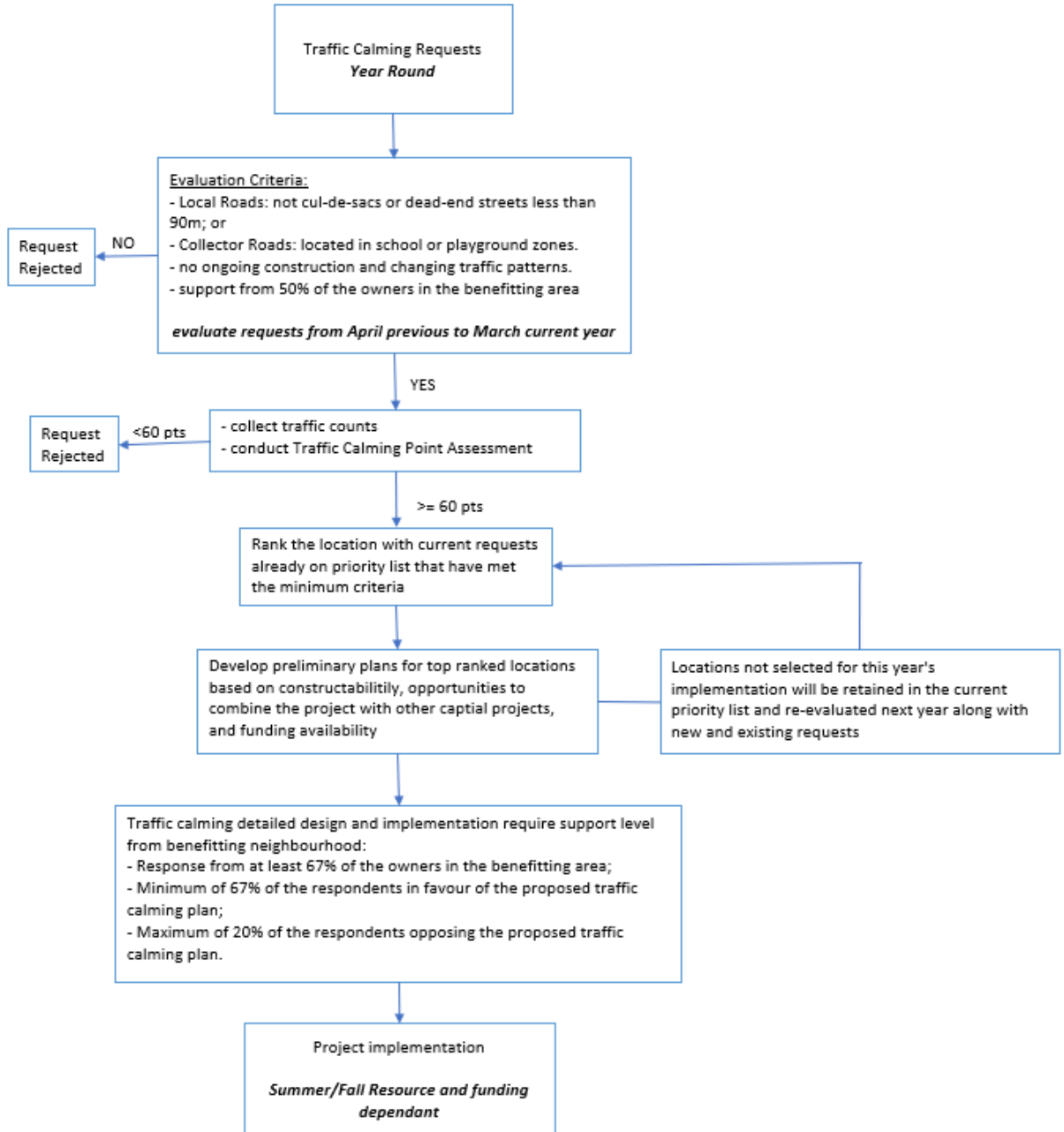
District of West Vancouver Road Classification Map



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District of West Vancouver Engineering & Transportation Services Traffic Calming Process Flowchart



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Potential Benefits and Implications of Traffic Calming Measures

POTENTIAL BENEFITS AND IMPLICATIONS OF TRAFFIC CALMING MEASURES										
TRAFFIC CALMING / SPEED MANAGEMENT MEASURES	POTENTIAL BENEFITS				POTENTIAL DISBENEFITS					
	Speed Reduction	Volume Reduction	Conflict Reduction	Environment	Local Access	Emergency Response	Active Transportation	Enforcement	Parking	Maintenance
VERTICAL DEFLECTION										
Raised Crosswalk	■	□	▣	▣	○	●	●	○	○	●
Speed cushion	■	▣	■	▣	○	●	●	○	●	●
Speed Hump / Table	■	▣	■	▣	○	●	●	○	●	●
HORIZONTAL DEFLECTION										
Chicane (One-Lane)	■	■	■	▣	○	●	●	○	●	●
Chicane (Two-Lane)	▣	□	▣	▣	○	○	○	○	●	●
Curb Radius Reduction	▣	□	□	▣	○	○	●	○	○	●
Lateral Shift	□	□	□	□	○	○	○	○	●	○
Traffic Circle	■	▣	■	■	○	●	●	○	●	●
ROADWAY NARROWING										
Curb Extension	▣	□	□	■	○	○	●	○	●	●
On-street Parking	▣	□	□	▣	○	●	●	○	○	●
Raised Median Island	▣	□	▣	□	●	○	○	○	●	●
ACCESS RESTRICTION										
Directional Closure	■	■	▣	▣	●	●	●	●	○	●
Diverter	□	■	▣	▣	●	●	●	○	○	●
Intersection Channelization	□	▣	▣	▣	●	●	○	○	○	●
LEGEND	■ Substantial Benefits ▣ Minor Benefits □ No Benefits or Limited Data Available				● Substantial Disbenefits ● Moderate Disbenefits ○ No Disbenefit or Limited Data Available					

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