

Policy 0051



Neighbourhood Traffic Calming Policy

Department:	Infrastructure and Planning Services
Division:	Transportation
Section/Function:	Transportation Services
Approval Level:	Council
Effective Date:	2021-05-26
Revision #:	N/A

1.0 Purpose

- 1.1. The purpose of the Neighbourhood Traffic Calming Policy is to:
- Set-up a transparent and systematic process to receive and process neighbourhood Traffic Calming requests from residents;
 - Establish Screening Criteria to identify neighbourhoods/locations eligible for Traffic Calming;
 - Create a uniform Ranking system across the City to prioritize neighbourhood Traffic Calming project implementation; and
 - Establish community support threshold requirements for implementing neighbourhood Traffic Calming.

2.0 Application

- 2.1 This Policy applies to all City-owned Local Roads, Low Capacity Collector Roads, High Capacity Collector Roads and Arterial Roads.
- 2.2 This Policy applies to all road users within the City and those responsible for or involved in leading or delivering Traffic Calming initiatives for the City.

3.0 Definitions/Acronyms

85th Percentile Speed- The speed separating the fastest 15% of vehicles from the slowest 85%. This speed is typically used by traffic professionals for a variety of reasons including to gauge the magnitude of a speeding problem.

Arterial Road – A high-capacity urban road (identified in Schedule B of the Official Plan) which is intended to carry all types of traffic (cars, trucks, buses, bicycles) between major land use areas through the City. Examples include McDonnel Street, Monaghan Road, Hilliard Street and Lansdowne Street.

City – The Corporation of the City of Peterborough, its agencies, boards, and commissions.

Collector Road – A low to moderate capacity road (identified in Schedule B of the Official Plan) which serves to move traffic from local streets to Arterial Roads. Examples include Cherryhill Road, Weller Street, and Royal Drive.

Horizontal Deflection – A Traffic Calming measure that hinders the ability to a motorist to drive in a straight line by creating a horizontal shift in the roadway. The shift forces a motorist to slow the vehicle in order to comfortably navigate the measure.

Hospital Routes- Any local road, low-capacity Collector Roads, high-capacity Collector Roads, Arterial Roads or any roads assumed by the City providing access to a hospital and frequently used by ambulance.

Operating Speed- The speed at which motor vehicles generally operate on that road.

Primary Fire Route- Any local road, low-capacity Collector Roads, high-capacity Collector Roads, Arterial Roads or any roads assumed by the City and identified by Peterborough Fire Services for frequent use by authorized emergency vehicles.

Shortcutting Traffic- Traffic which is travelling through a neighbourhood to bypass congestion on the arterial street network, or to make use of a more direct route.

Traffic Calming- The process and measures applied by road authorities to address concerns about the behavior of motor vehicle drivers travelling on streets within their jurisdictions.

Transit Routes- Any local road, low-capacity Collector Roads, high-capacity Collector Roads, Arterial Roads or any roads assumed by the City and identified by Peterborough Transit for frequent use by transit vehicles.

Vertical Deflection – A Traffic Calming measure that creates a change in the height of the roadway that forces a motorist to slow down in order to maintain an acceptable level of comfort while navigating the measure.

4.0 Policy

- 4.1 Neighbourhood Traffic Calming measures can be applied in locations experiencing excessive vehicle speed and/or high volumes of Shortcutting Traffic and/or demonstrated safety concerns. The application of these measures is intended to restore neighbourhood streets to their desired function of providing mobility and access in differing combinations depending on the specific location, role, and classification of the roadway.
- 4.2 For the purposes of this policy, Traffic Calming measures are broadly categorized into the following two groups:
- **Physical Measures** consist primarily of Vertical and Horizontal Deflections in the roadway. This group also includes treatments that narrow the roadway, alter the road surface, or restrict access; and
 - **Non-Physical Measures** include tools and strategies intended to influence or modify driver behaviour, often described as education and enforcement.
- 4.3 The City will consider the installation of physical Traffic Calming measures in the following situations:
- When there is a demonstrated safety, excessive speed, and/or Shortcutting Traffic concern and acceptable alternative measures have been exhausted or are not appropriate;
 - After exploring methods to improve operation of the Arterial Road network, such as signal timing optimization; and
 - After Non-Physical Measures have failed to produce the desired results.
- 4.4 For Arterial Roads, Primary Fire Routes, signed Hospital Routes and Transit Routes, Traffic Calming will typically be limited to Non-Physical Measures.
- 4.5 The City may consider implementing Traffic Calming in new developments as part of the development approval process.
- 4.6 The City may consider implementing Traffic Calming on-road reconstruction projects where safety, excessive speed, and/or Shortcutting Traffic concerns are anticipated to occur upon (re)opening the road to traffic.
- 4.7 The City will not entertain resident requests for Traffic Calming on streets in new development areas until the roads have been assumed by the City.
- 4.8 Where the installation of physical Traffic Calming measures is deemed the preferred course of action, the City will:

- Determine whether an area-wide plan or street-specific scheme is more suitable. An area-wide plan will be pursued if a street-specific scheme would likely result in the displacement of traffic onto adjacent streets.
 - Take into consideration the needs of non-motorized modes of transportation through the introduction of Traffic Calming. Measures will typically be designed to enhance or minimize impacts to pedestrian and cyclist movement.
- 4.9 The City will not consider the use of regulatory signs for the sole purpose of Traffic Calming. Traffic control devices in this category include all-way stop control and maximum speed limit signs.
- 4.10 The City will consider initiating a Traffic Calming Study following the Neighbourhood Traffic Calming Study Process for streets meeting the Screening Criteria listed in Table 3.1. Requests for a study that do not satisfy these minimum thresholds will be denied.
- 4.11 The City will not entertain new requests for a Traffic Calming Study for a period of at least:
- Three years, on streets that have been reviewed and denied for physical Traffic Calming at any stage in the process; or
 - Five years, on streets where Traffic Calming measures have been removed.
- 4.12 The City will gauge the level of resident support to proceed to subsequent stages or steps in the Neighbourhood Traffic Calming Study Process through neighbourhood surveys. For each survey, a minimum response rate of:
- 25% of all eligible households, for study areas comprising up to 40% apartment units; or
 - 15% of all eligible households for study areas comprising 40% or more apartment units; and
 - a minimum of 51% of respondents in agreement (support rate), is required to move forward.

Surveys not meeting these minimum thresholds will typically result in the study being ended. The City will issue only one survey questionnaire to each household within the study area regardless of the number of residents living at the address.

Table 3.1: Screening Criteria for Initiating A Traffic Calming Study

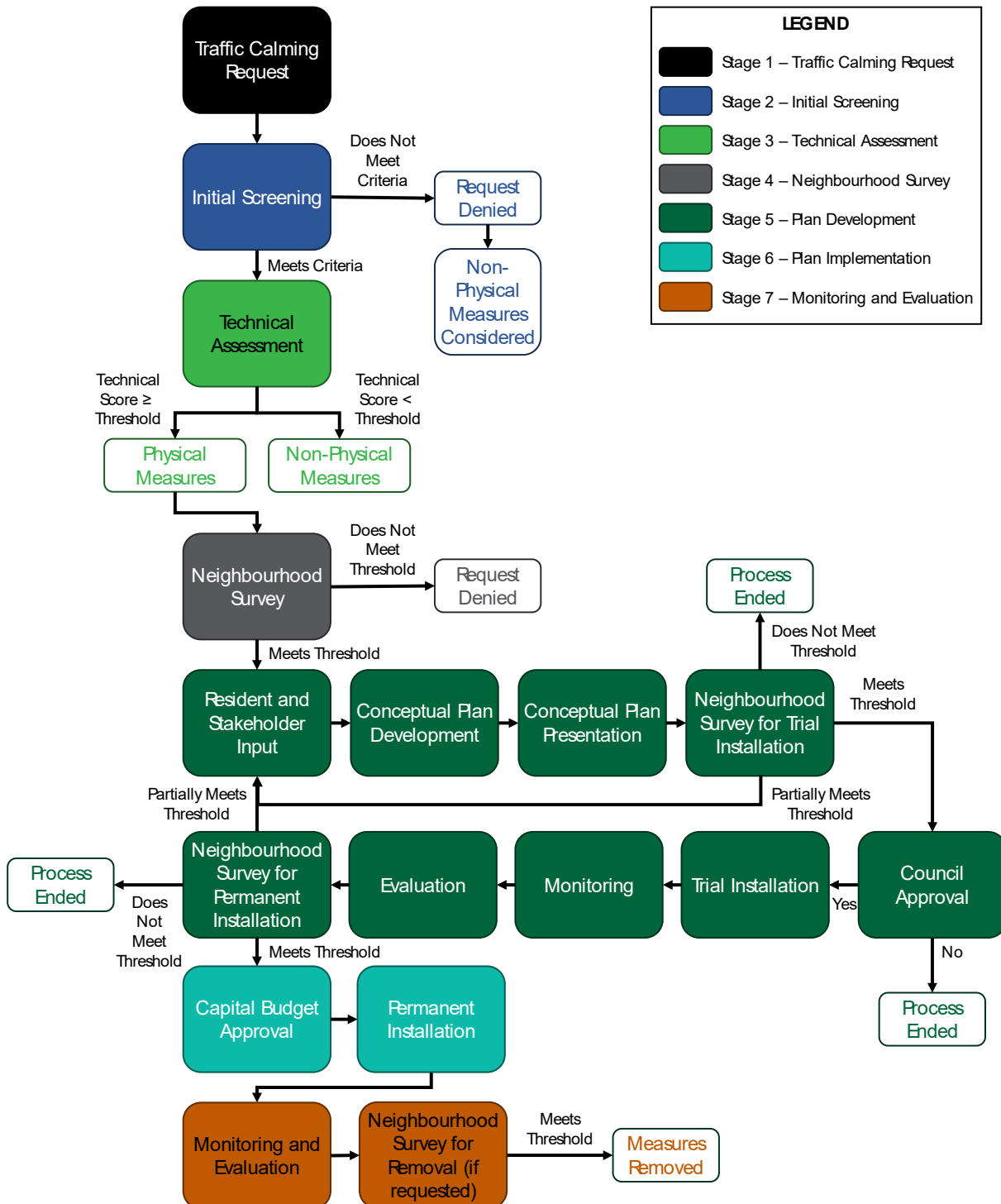
Criteria	Threshold	A Traffic Calming Study may be considered if:
All Criteria Must be Met		
Previously Requested	Within Last Three Years	A prior request for Traffic Calming has not been denied within the last three years.
Measures Removed	Within Last Five Years	Traffic Calming measures have not been removed within the last five years.
Roadway Classification	Local Street, Low Capacity Collector, or High Capacity Collector	The subject street is designated a Local Street, Low Capacity Collector or High Capacity Collector in the City of Peterborough Official Plan (Schedule B – Roadway Network).
Location	Transit Routes, Signed Hospital Routes, or Primary Fire Route	The subject street does not serve as a transit route, signed hospital route, and/or Primary Fire Route in the City.
Speed Limit	≤ 50 km/h	The posted speed limit on the subject street is 50 km/h or less.
Road Grade	< 8%	That the average grade over the study area is less than 8%.
Segment Length	≥ 150 metres	The distance between stop-controlled intersections along the subject street is 150 metres or more.
At Least One Criteria Must be Met for <u>Local Streets and Low Capacity Collectors</u>		
Operating Speed	≥ 5 km/h above posted speed limit	The 85 th Percentile Speed is 5 km/h or more above the posted speed limit.
Shortcutting Traffic	> 30%	The percentage of non-local traffic is more than 30%.
At Least One Criteria Must be Met for <u>High Capacity Collectors</u>		
Operating Speed	≥ 10 km/h above posted speed limit	The 85 th Percentile Speed is 10 km/h or more above the posted speed limit.
Shortcutting Traffic	> 60%	The percentage of non-local traffic is more than 60%.

Notes:

1. The 85th Percentile Speed is calculated from data collected using automated traffic recorders (or similar units) over a 7-day period.
2. The percentage of non-local traffic is estimated by comparing the expected trip generation for an area to the actual volume counts. Alternatively, data will be collected through a license plate trace survey or data collection units with Bluetooth readers.

4.13 Figure 3.1 Illustrates the Neighbourhood Traffic Calming Study Process

Figure 3.1: Neighbourhood Traffic Calming Study Process



- 4.14 Requests satisfying the initial Screening thresholds listed in Table 3.1. will be assessed against other eligible locations to determine relative priority for a Traffic Calming Study. The point system shown in Table 3.2 for Local Streets and Low Capacity Collectors and Table 3.3 for High Capacity Collectors provides the basis for ranking requests, with projects achieving the highest scores given top priority. The maximum score, calculated by summing the individual criteria points, is 100 points based on this methodology. Note the final prioritization score is not determined until after the neighbourhood survey results are incorporated.

Assessing technical merit is the first step in determining priority. City staff will assign a point score to each criterion in Table 3.2 or Table 3.3 except “Resident Support” using data on existing traffic and road conditions to gauge the potential benefit of installing physical Traffic Calming measures on the subject street. Requests meeting the following minimum scores for the technical criteria (out of 75) will proceed to a neighbourhood survey:

- 25 points for Local Streets and Low-Capacity Collectors; and
- 40 points for High-Capacity Collectors.

Requests not attaining these minimum scores will only be considered for non-physical Traffic Calming measures such as education and enforcement.

Table 3.2: Priority Ranking Criteria for Local Streets/Low-Capacity Collectors

Criteria	Point Assignment	Maximum Points
Collision History	1 point for each qualifying collision ¹ over the last three years	15
Pedestrian Generators	5 points for each designated pedestrian generator (i.e. school, recreation centre, park, senior's home or centre, daycare, etc.) within the study area	15
Operating Speed	1 point for each 1% of vehicles observed 5 km/h or more over the posted speed limit	10
Total Traffic Volume	Based on total daily traffic volumes ² , 1 point for each: <ul style="list-style-type: none"> • 50 vehicles over 1,000 vehicles per day <u>OR</u> 5 vehicles over 100 vehicles per hour in the peak hour for Local Streets • 50 vehicles over 2,000 vehicles per day for Low-Capacity Collectors 	10
Shortcutting Traffic	Based on estimated non-local traffic (see Table 3.1), 5 points for each 5% increment in share above 30%	10
Sidewalks	5 points if there are no sidewalks on the subject street	5
Cycling Facilities	5 points if there are designated cycling facilities on the subject street	5
Adjacent Land Use	0 points for 0% adjacent residential land use <u>OR</u> 5 points for 100% adjacent residential land use <u>OR</u> 2 points for between 0% and 100% adjacent residential land use	5
Total Maximum Points After Technical Assessment (Stage 3)		75
Resident Support	¼ point for each 1% of respondents on the subject street voting in favour of Traffic Calming ³	25
Total Maximum Points After Neighbourhood Survey (Stage 4)⁴		100

Notes:

1. Includes all collisions along the subject street except for crashes occurring at intersections with Arterial Roads.
2. Traffic volumes used in the evaluation are two-way average daily volumes over a 24-hour period.
3. If the minimum response rate is not achieved, community support is deemed insufficient and 0 points are assigned. Physical Traffic Calming measures will not be considered in this case. Points awarded based on the percentage of “yes” votes compared to total eligible votes received through the neighbourhood survey in Task 4.
4. In case of a tie, priority will be determined using a risk-based approach, considering the relative safety benefit of installing Traffic Calming in competing locations. Priority

will typically be given to streets that serve more vulnerable users such as seniors and children. If still tied, the lower cost project will receive priority since the investment in Traffic Calming would generate greater benefit per dollar spent.

Table 3.3: Priority Ranking Criteria for High Capacity Collectors

Criteria	Point Assignment	Maximum Points
Collision History	1 point for each qualifying collision ¹ over the last three years	15
Pedestrian Generators	5 points for each designated pedestrian generator (i.e. school, recreation centre, park, senior's home or centre, daycare, etc.) within the study area	15
Operating Speed	1 point for each 1% of vehicles observed 10 km/h or more over the posted speed limit	10
Total Traffic Volume	Based on total daily traffic volumes ² , 1 point for every 50 vehicles over 5,000 vehicles per day	10
Shortcutting Traffic	Based on estimated non-local traffic (see Table 3.1), 5 points for each 10% increment in share above 60%	10
Sidewalks	5 points if there are sidewalks on only one side of the subject street	5
Cycling Facilities	5 points if there are designated cycling facilities on the subject street	5
Adjacent Land Use	0 points for 0% adjacent residential land use <u>OR</u> 5 points for 100% adjacent residential land use <u>OR</u> 2 points for between 0% and 100% adjacent residential land use	5
Total Maximum Points After Technical Assessment (Stage 3)		75
Resident Support	¼ point for each 1% of respondents on the subject street voting in favour of Traffic Calming ³	25
Total Maximum Points After Neighbourhood Survey (Stage 4)⁴		100

Notes:

- Includes all collisions along the subject street except for crashes occurring at intersections with Arterial Roads.
- Traffic volumes used in the evaluation are two-way average daily volumes over a 24-hour period.

3. If the minimum response rate is not achieved, community support is deemed insufficient and 0 points are assigned. Physical Traffic Calming measures will not be considered in this case. Points awarded based on the percentage of “yes” votes compared to total eligible votes received through the neighbourhood survey in Task 4.
4. In case of a tie, priority will be determined using a risk-based approach, considering the relative safety benefit of installing Traffic Calming in competing locations. Priority will typically be given to streets that serve more vulnerable users such as seniors and children. If still tied, the lower cost project will receive priority since the investment in Traffic Calming would generate greater benefit per dollar spent.
 - 4.15 The recommended Traffic Calming Plan may be implemented on a trial basis using temporary/seasonal measures to:
 - Further understand the Plan potential and its desirability before investing in a permanent installation, thereby allowing for refinement of the final design;
 - Avoid or defer the initial capital cost of more expensive permanent installations;
 - Gauge community reaction on a concept in reality prior to permanent installation; and
 - Retain flexibility to remove Traffic Calming measures seasonally.
 - 4.16 After evaluating the trial application and surveying neighbourhood residents, the City will decide whether to install the approved Traffic Calming Plan permanently.
 - 4.17 In certain circumstances, the City may decide to move forward with permanent installation without a trial application after taking into consideration the possible negative aspects of using temporary/seasonal measures, which can include:
 - Lower relative aesthetic value;
 - On-going operational costs and/or additional operational resource requirements;
 - Requirements for seasonal installation and removal;
 - Potential to have similar or higher overall costs than permanent installations;
 - Potentially lower effectiveness than permanent materials; and
 - Quicker degradation of roadway surfaces (specifically where measures are anchored into existing road surfaces).

- 4.18 The City may elect to conduct Traffic Calming pilot projects to test new innovations and technologies. Requests of this nature will be brought to City Council for approval prior to consideration.
- 4.19 The City may consider removal of permanent Traffic Calming installations if a majority of residents directly fronting the subject street support the request. The approved Traffic Calming Plan must be installed for at least three years before removal can be requested. If the measures are removed, the subject street must wait at least five years before submitting a new request for Traffic Calming.
- 4.20 If the City receives a request to remove one Traffic Calming measure within an overall approved Traffic Calming Plan, all measures may be considered for removal. While it may be possible in certain circumstances to remove only one Traffic Calming measure, in most cases, the entire plan will need to remain to be effective.
- 4.21 The City reserves the right to remove Traffic Calming measures determined to be ineffective or causing a safety risk, or if the treatments have created unplanned consequences that cannot be rectified. This may include an unintended diversion of traffic onto a parallel or adjacent Local Street, Low Capacity Collector, and/or High Capacity Collector rather than onto the Arterial Road network.

5.0 Appendix, Related Documents & Links

Pertinent Resources:

- www.connectptbo.ca/trafficcalming
- Official Plan

Related Policies:

- N/A

Related Procedures:

- N/A

Related Forms:

- Traffic Calming Request Form

6.0 Amendments/Reviews

Date (yyyy-mm-dd)	Section # Amended	Comments
2021-05-26		Policy Approved by Council as Appendix A to Report IPSTR21-007. Policy document format is compliant with the Accessibility for Ontarians with Disabilities Act (AODA) Regulation 191/11 Integrated Accessibility Standards.
Next Review Date:		2023-05-01