Staff Report

If this information is required in an alternate accessible format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To:	**General Government Committee**		
Date of Meeting:	March 3, 2025	**Report Number:**	PUB-003-25
Authored By:	Slav Potrykus, Traffic Engineering Supervisor		
Submitted By:	Lee-Ann Reck, Deputy CAO, Public Services		
Reviewed By:	Mary-Anne Dempster, CAO		
By-law Number:		**Resolution Number:**	GG-046-25
File Number:			
Report Subject:	Traffic Calming Policy		

Recommendations:

1. That Report PUB-003-25, and any related delegations or communication items, be received;

2. That the policy and all its supporting documents attached to Report PUB-003-25, as Attachment 1, be approved; and

3. That all interested parties listed in Report PUB-003-25, and any delegations be advised of Council's decision.

Report Overview

The purpose of this report is to introduce the new Traffic Calming Policy, in accordance with the 2024-2027 Strategic Plan, which aims to enhance road safety and improve the quality of life for residents by addressing issues related to speeding and traffic infiltration in residential neighborhoods.

1. Background

1.1 As per the Council endorsed 2024-2027 Strategic Plan Section C.2: Residents are Safe and Healthy, staff have developed a Traffic Calming Policy which is intended to assist with various traffic related items such as speeding, cutting-through, vulnerable road users, roadside activities and well-being of residents. This report seeks Council approval of the presented policy, including all attached supporting documents.

2. Policy Overview

2.1 The Traffic Calming Policy establishes a consistent approach to determining suitable traffic calming measures within the Municipality of Clarington. The policy applies to municipal roadways with a posted speed limit of 60 km/h and lower and does not have authority over roadways not under the Municipality's jurisdiction.

2.2 Through research of similar documents from various road authorities around North America, and based on the dominant types of complaints related to traffic calming requests which staff experience, this policy was specifically formulated to achieve its goals based on two main principles:

- Reduce excessive speeds
- Reduce excessive cut-through traffic

2.3 Aside from the two main warranting principles mentioned above, the policy process will also include a review of the roadside environment, road purpose and function, emergency access and other typical operational factors. These additional conditions may serve as supporting factors to the selection of the appropriate traffic calming measures.

Key Components

2.4 Traffic Calming Measures:

- The policy includes engineered and non-engineered traffic calming measures.

- Traffic calming measures will be implemented in areas experiencing excessive vehicle speeds and increased shortcutting through neighborhoods.

2.5 Evaluation and Implementation:

- A technical assessment process will be conducted to evaluate the suitability and applicability of traffic calming measures based on empirical data derived from traffic studies and observations.

- Identified needs for traffic calming measures will be prioritized based on suitability, availability, and budget. This may include inclusions into upcoming or planned projects, potential necessary modifications to the road or roadside environment outside of traffic calming, or classification based on the overall traffic impact.

2.6 Roles and Responsibilities:

- Council is responsible for adopting, reviewing, and amending the policy as appropriate.

- The Chief Administrative Officer (CAO) and Deputy CAO of Public Services are responsible for ensuring staff compliance with the policy and providing direction to mitigate future traffic calming interventions during the development review process.

- Public Works will develop a Management Directive on the assessment and implementation of traffic calming measures.

- Directors and Managers from Public Works or Planning and Infrastructure are responsible for developing and monitoring key performance indicators, preparing reports, and conducting policy reviews.

3. Financial Considerations

3.1 Any temporary or intermediate implementations of traffic calming solutions will be funded by the current traffic calming budget maintained by the Public Works Department. Any new measures or roadway modifications will be identified through a technical assessment and reported to Planning and Infrastructure for consideration as part of capital road improvements. All traffic calming financial needs involving any of the two departments will be reviewed each budget year.

4. Strategic Plan

This traffic calming policy is in line with the 2024-2027 Strategic Plan Section C.2: Residents are Safe and Healthy.

5. Climate Change

Not Applicable.

6. Concurrence

This report has been reviewed by the Deputy CAO, Planning and Infrastructure who concurs with the recommendations.

7. Conclusion

The new Traffic Calming Policy is a proactive approach to addressing traffic-related safety issues within the Municipality of Clarington. By implementing targeted traffic calming measures and public education programs, the policy aims to create a safer and more livable environment for all residents.

It is respectfully recommended that Council adopt the new Traffic Calming Policy as presented.

Staff Contact: Slav Potrykus, Traffic Engineering Supervisor, 905-623-3379 extension 2315 or spotrykus@clarington.net.

Attachments:

Attachment 1 – Traffic Calming Policy

Interested Parties:

There are no interested parties to be notified of Council's decision.

Council Policy

If this information is required in an alternate format, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131

Number:	CP-00#
Title:	**Traffic Calming Policy**
Type:	**Traffic Management**
Sub-type:	Click or tap here to enter text.
Owner:	**Public Services Department, Public Works Division**
Approved By:	**Council**
Approval Date:	Click or tap to enter a date.
Effective Date:	Click or tap to enter a date.
Revised Date:	Click or tap to enter a date.
Applicable to:	**All Staff**

1. Legislative or Administrative Authority:

1.1. This policy is developed in accordance with Report CAO-020-23 whereby Council endorses and direct staff to implement the 2024-2027 Strategic Plan.

1.2. The Ontario Highway Traffic Act provides the Statutory authority to implement measures to control traffic movements.

2. Purpose:

2.1. The primary purpose of this policy is to modify and improve motorists' behaviours through targeted traffic calming initiatives and public education programs. The goal is to foster a safer road network for all users and modes of travel. The policy establishes a comprehensive and consistent process for determining suitable traffic calming measures within the Municipality of Clarington.

2.2. This policy guides the decision-making process based on empirical data derived from traffic studies and observations through various methods and equipment available to staff.

3. Scope:

3.1. This policy applies to municipal roadways that are under the jurisdiction of the Municipality of Clarington.

3.2. This policy applies to roadways with a posted speed limit of 60 km/h and lower.

4. Definitions:

4.1. **85th percentile speed**: the speed at which 85% of traffic is travelling at or below. This benchmark is used as an indicator of speed in relation to the posted speed limit.

4.2. **Arterial Roads:** roads which are the primary transportation corridors designed to accommodate high volumes of traffic, serve as primary commercial routes, often connecting major urban centers and facilitating long-distance travel. Arterial roads are further divided into:

- **Type A**: Major arterial roads with higher speed limits and limited access points to optimize traffic flow between important centers of activity.
- **Type B**: Arterial roads that balance traffic movement and access, connecting smaller communities or urban centers.
- **Type C**: Roads that serve a mix of regional and local traffic, with slightly lower traffic volumes and speeds compared to Types A and B.

4.3. **Chicanes and Lateral shifts:** utilize alternating parking, curb extensions, or delineating objects to create an S-shaped travel path, which effectively reduces vehicle speeds. This measure aims to discourage shortcutting or and encourage lower overall speeds by causing lateral shifting of vehicles navigating the chicane or lateral shift.

4.4. **Closure/Diverter:** a directional closure involves placing a vertical barrier that obstructs or prohibits one direction of traffic, typically at the intersection of a local road with collector or arterial roads. The objective of this measure is to eliminate actual or potential traffic infiltration along a specific corridor. In contrast, a diverter extends through the entire length of an intersection.

4.5. **Collector Roads**: roads which serve as intermediaries, connecting local roads to arterial roads. They are designed to handle moderate traffic volumes, providing access to residential areas, businesses, and local amenities while also facilitating short to medium-distance travel.

4.6. **Curb extension:** a horizontal protrusion ('bump out') of the curb line into the travelled lane of a roadway thereby resulting in a reduction of lane width. This constriction encourages motorists to reduce approach speeds to safely

navigate the narrowed lane. A curb extension is also often used in conjunction with a crossing facility to reduce the crossing distance across a roadway.

4.7. **Digital Sign boards:** digital traffic sign boards, or variable message signs (VMS), provide real-time information to drivers about traffic conditions or actions.

4.8. **Flexible bollards:** rubber-mounted devices that are bolted into the roadway surface and are designed to absorb impacts and 'flatten' when struck by vehicles, thereby allowing emergency vehicles or heavy trucks to maintain necessary speeds.

4.9. **Hamlets:** villages or low populated areas within the municipality.

4.10. **Local Roads**: roads which primarily serve residential neighborhoods and local traffic. They are designed for low-speed travel and provide direct access to homes, parks, and community facilities, with minimal through-traffic.

4.11. **Nonphysical Calming measures**: include public education campaigns, and other messaging tools such as radar and messaging boards.

4.12. **Ontario Traffic Manual**: a comprehensive set of guidelines, divided into 22 books, designed to ensure uniformity in the design, application, and operation of traffic control devices and systems across Ontario.

4.13. **Pavement markings and surface treatments**: using coloured, patterned, textured materials on the road surface to promote slower vehicle speeds. They can be applied across the width of roadways or specific areas such as crosswalks or intersections.

4.14. **Pedestrian Crossovers:** traffic control devices governed by the Highway Traffic Act. Drivers are required to stop for pedestrians and wait until all pedestrians have completely exited the roadway before proceeding.

4.15. **Raised crosswalk:** a designated pedestrian crossing at an intersection or mid-block location, constructed at a higher elevation than the adjacent roadway. Raised crosswalks are designed to reduce vehicle speeds and enhance pedestrian visibility, thereby mitigating pedestrian-vehicle conflicts.

4.16. **Raised median island:** a physical barrier positioned in between two directions of traffic, typically installed on two-way roadways. Median islands narrow the roadway, causing motorists to reduce their speed. They may also serve as a pedestrian crossing refuge.

4.17. **Roundabouts and traffic circles:** circular intersection treatments designed to reduce vehicle speeds by requiring drivers to navigate a circular path. Unlike traditional intersections that use stop or signal controls, roundabouts apply yield-at-entry principles to manage right-of-way.

4.18. **Speed cushions**: a narrower variant of speed humps strategically placed in the center of each travel lane. They are engineered to reduce the speed of passenger vehicles while permitting vehicles with larger wheelbases (e.g., emergency vehicles and buses) to traverse without hindrance.

4.19. **Speed humps:** vertical structures that span across the width of a roadway (excluding gutters) and are designed to reduce vehicle speeds.

4.20. **Study Area:** an area of a neighbourhood or a list of roads determined to be impacted by a traffic calming request and is included in the Technical Assessment sheet during site evaluation.

5. Policy Requirements:

5.1. Traffic calming measures target areas with excessive speeds and shortcutting to modify behaviour.

5.2. The municipality will consider these measures when excessive speed (exceeding the 85th percentile, or design speed) or increased shortcutting traffic is demonstrated, and alternative measures (public education, enforcement, non-physical) have failed.

5.3. On arterial roads, primary emergency routes and transit routes, only non-physical measures will be used.

5.4. A neighbourhood approach will be used to minimize the impacts on adjacent streets when evaluating traffic calming measures.

Site Verification Conditions

5.5. The following criteria will be used to evaluate traffic calming requests:

- The subject road falls under the jurisdiction of the Municipality of Clarington (MOC) and is located within the urban boundary or part of a hamlet;
- The road segment must be long enough to allow for potential speeding, and traffic calming treatments should not be placed near stop signs or other traffic control devices;
- Any previous assessments and measures have been given sufficient time to take effect, ensuring equitable resource distribution across the municipality;
- Education, enforcement, and other traffic engineering efforts have been exhausted and have failed to produce the desired results; and
- The nature of the request can be addressed within the scope of traffic calming measures.

Technical Assessment Process

5.6. If a traffic calming request meets the criteria outlined in the initial Site Verification Checklist, a technical assessment will be conducted. This assessment evaluates various factors that influence the suitability and applicability of traffic calming measures.

5.7. The Technical Assessment will be based on the roadway having a measured 85th percentile speed that is greater than 10km/h above the posted speed limit. The 85^{th} percentile speed is the industry standard used as a benchmark speed for various operational and design analyses.

5.8. Relevant factors may include traffic speed, different traffic volumes and types, road classification, pedestrian facilities, type of road cross section, and traffic infiltration thresholds.

Prioritization and Implementation

5.9. Identified need for traffic calming measures will be prioritized based on measures best suited, availability, and budget. Staff will monitor the needs

based on technical assessments and make budget recommendations through the budget process.

5.10. Additional measures may be taken into consideration when prioritizing when and where traffic calming measures are warranted such as traffic volumes, motor vehicle collisions, sightlines, and roadside environment.

5.11. Traffic calming measures may require engineered solutions which require physical changes to the roadway and will be permanent in nature. These measures typically involve planning, detailed designed and construction to achieve the desired outcome. These measures will be evaluated and when possible, considered during scheduled road construction or rehabilitation works.

Development and Planning

5.12. When new development proposals have been submitted to the municipality, Planning and Infrastructure Services will consider the design and layout of neighbourhoods and incorporate traffic calming best practices and consistent with this policy. This proactive approach ensures that traffic calming measures are integrated from the outset, promoting safer streets and better traffic management within new communities. By addressing potential traffic issues during the planning stages, the municipality can create more livable and pedestrian-friendly environments for residents and reduce future costs associated with assessing traffic calming measures and retrofits.

Evaluation

5.13. After implementing traffic calming measures, municipal staff will monitor the affected streets and, if necessary, the entire study area to evaluate their effectiveness and impact. Post-implementation data will be compared to baseline data from the technical assessment. The evaluation will check for traffic transference to adjacent, lower-classification roadways.

5.14. The evaluation will assess if the measures were successful in achieving the desired effect. In circumstances where measures were not successful, recommendations will be formulated to adopt alternative actions.

6. Roles and Responsibilities:

6.1. **Council is responsible for:**

6.1.1. Adopting, reviewing and amending this Policy as appropriate.

6.2. **Chief Administrative Officer (CAO) /Deputy CAO is responsible for:**

6.2.1. Ensuring staff compliance with this Policy.

6.2.2. Providing direction to Planning staff to mitigate future traffic calming interventions and retrofits during the development review process.

6.3. **Directors / Managers are responsible for the following within their scope of authority:**

Director of Public Works

6.3.1. Develop key performance indicators for traffic calming measures throughout the municipality.

6.3.2. Conduct a review of this policy every four (4) years.

Public Works, Manager of Operations

6.3.3. Develop and maintain a Management Directive on Traffic Calming with reviews every three (3) years.

6.4. **All Staff are responsible for:**

6.4.1. Adhering to the policy and Management Directives stemming from this Policy.

6.4.2. Applying traffic calming solutions as outlined in this policy.

7. Related Documents:

7.1. Appendix A: Traffic Calming Site Verification Checklist

7.2. Appendix B: Traffic Calming Technical Assessment Process Table

8. Inquiries:

8.1. Traffic Engineering Supervisor, Public Works Division

9. Revision History:

Date	Description of Changes	Approved By
	Original effective date	

Appendix A: Traffic Calming Site Verification Checklist

Step 1 - Site Verification Checklist		
Location:		
Condition	Condition Description	Yes / No
1 – Road Jurisdiction	Is the road under the jurisdiction of the Municipality of Clarington?	
2 – Road Classification	Is the road a Local, Collector or Arterial C?	
3 – History	There have been no previous traffic calming assessments in the last 3 years? Have any significant changes occurred along the road section within the 3 years which justify an earlier review?	
4 – Road Length	Is the road section uninterrupted for at least 150 meters? This includes any regulatory traffic control devices, such as Stop, Yield, PXO, traffic Signal, School Crossing	
5 – Posted Speed limit	Is the posted speed limit 60 km/h or less?	
Are all conditions met? If yes, proceed to the Technical Assessment Process. If not, conduct a more detailed site assessment, including considerations for alternate or modified solutions.		
Comments		

Appendix B: Traffic Calming Technical Assessment Process Table

Step 2 – Technical Assessment Process					
Location Description:					
Condition		Condition Description	Requirement	Result	Satisfied? Yes/No
Traffic Trigger (A or B)	A. Speed	Is the operating (85th percentile) speed higher than the minimum required	Greater than 10 km/h over speed limit on Local roads		
			Greater than 10 km/h over speed limit on Collector roads		
			Greater than 15 km/h over speed limit on Arterial C roads		
	B. Cut Through Traffic	Is the percentage of cut through traffic higher than the minimum required, as documented through proper studies (cut through traffic criteria does not apply to arterial roads due to their intended function)	Greater than 30% on a Local road		
			Greater than 50% on a Collector road		
Additional Criteria and Conditions					
Traffic Volume (AADT)		Is traffic volume higher than the minimum required (traffic volume criteria does not apply to arterial roads due to their intended function):	Greater than 1000 on a Local road		
			Greater than 5000 on a Collector road		
Pedestrian Facilities		Local road does not have a continuous sidewalk			
		Collector or arterial C road does not have continuous sidewalks on both sides			
Transit Route		Is a transit route directly affected? Certain traffic calming measures will not be considered for transit routes.	The road section is not used for public transit		
Road Cross-section		Some urban area roads have a non-urbanized cross section, meaning no curb and gutter or shoulders. Certain traffic calming measures will not be considered for non-urbanized roads.	The road section is urbanized (has curbs and gutters)		
Emergency Access		Has the site been consulted with various emergency services agencies?	No opposition from emergency services agencies		
			There are conditions provided by emergency services agencies		
Assessment Results and Comments:					