

Corporate Policy and Procedure



Policy	Traffic Calming Policy
Category	Departmental
Authority	Transportation Engineering
Related Policies	Community Safety Zone Policy
Approved By	Click to insert name of approver and date approved
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Policy Statement

The City of Guelph will implement traffic calming measures on local and collector roads where validated by the criteria established in this policy.

Purpose

This policy document outlines procedures for initiating, reviewing, implementing, and evaluating traffic calming plans on local and collector roads to improve quality of life, reduce vehicle speeds, and reduce vehicle volumes.

Goals

The Traffic Calming Policy will have the following goals:

- Increase quality of life by improving public safety for all road users
- Understand how people use the street (e.g., working, playing, residing)
- Create safe and attractive streets
- Help reduce the negative effects of vehicles on the environment (e.g., pollution, sprawl)
- Promote pedestrian, cycle and transit use

Objectives

Objectives to achieve the above goals will include:

- Achieving driver compliance with posted speed limits
- Reducing collision frequency and severity
- Increasing the safety and the perception of safety for all road users of the street(s)
- Reducing the need for police enforcement
- Enhancing the street environment (e.g. landscaping)

- Increasing access for all modes of transportation
- Reducing cut-through motor vehicle traffic

Definitions

85th Percentile Speed: The speed at which 85 percent of the vehicles are travelling at or below on a roadway.

Affected Street(s): Identified roadway(s) located within the study area under review for traffic calming measures.

Arterial Road: Arterial roads are intended to move moderate to large volumes of traffic over moderate distances within the city and to collect traffic and direct it to the Provincial highway system. Arterial roads are classified according to City of Guelph's Official Plan.

Average Daily Traffic (ADT): The total volume of traffic in a 24-hour period.

Collector Road: Collector roads are intended to move low to moderate volumes of traffic within specific areas of the city and collect local traffic for distribution to the arterial or Provincial highway system. Collector roads are classified according to City of Guelph's Official Plan.

Community Safety Zone: Part of a roadway designated by council and through the Traffic By-Law where public safety is of special concern according to City of Guelph's Community Safety Zone Policy.

Geometric Improvements: Modified roadway geometry to slow turning speeds, simplify movements, and create a more predictable, lower speed environment.

Horizontal Deflections: Traffic calming measures which narrow or shift the travel path so drivers must steer laterally, encouraging lower speeds through side-to-side movement.

Local Road: The primary function of local roadways is to provide access to adjacent properties. Local roads are not intended for use as through routes or as important links to move traffic within an area's overall road network. Local roads are classified according to City of Guelph's Official Plan.

Obstructive Measures: Traffic calming measures which restrict or prohibit specific motor vehicle movements to reduce traffic volumes or eliminate cut-through traffic, while often still accommodating walking, cycling, and mobility devices.

Partners: City of Guelph internal departments and external organizations whose service may be affected by changes to road. Relevant partners in relation to traffic calming measures may include, but are not limited to: Accessibility Services, Emergency Services, Guelph Transit, Guelph Police, Sustainable Transportation, Operations and Solid Waste Collection.

Permanent Measures: Fixed, durable roadway design features intended to permanently and physically reduce vehicle speeds and improve safety.

Study Area: All roadways encompassed by the nearest collector roadway, arterial roadway and/or natural boundaries, as defined by Engineering and Transportation Services staff.

Supplemental Measures: Change to the built environment which reinforces permanent traffic calming treatments by enhancing visibility, clarifying driver expectations, controlling vehicle traffic, and improving the public realm in ways that support placemaking and active transportation.

Traffic Calming Measures: The combination of physical measures that reduce speeding and improve conditions for all road users.

Traffic Calming Location: A specific street segment or area identified through the City's review process where traffic calming plans may be developed and implemented.

Traffic Calming Plan: A coordinated set of traffic calming measures applied within a defined area or street segment developed through analysis, partner input, and in alignment with applicable municipal policies and guidelines.

Vertical Deflections: Traffic calming measures which change pavement height to physically slow vehicles through an upward deflection that reduces speeds.

Vision Zero: Road safety approach that aims to eliminate all traffic related deaths and serious injuries by designing transportation systems that prioritize human life and prevent fatal collisions.

Background

The Traffic Calming Policy for the City of Guelph was initially adopted in July 1998 and previously revised in July 2020.

In 2022, the City of Guelph committed to achieving zero serious injuries and deaths on its roads by endorsing Vision Zero. Vision Zero is guided by the Safe System approach which aims to account for all road users, design for human mistakes, and proactively address risk of serious injuries and fatalities due to vehicle collisions.

In 2025, the Traffic Calming Policy became one action among many as described in the City's Vision Zero Action Plan. Directed by the Safe System approach, the use of traffic calming measures aims to reduce the speed and volume of traffic, thereby increasing safety for all road users. Additional quality of life benefits includes the reduction of vehicular traffic, noise, vibration, and air pollution, while providing a safer environment for all road users.

The Transportation Association of Canada (TAC) published 'The Canadian Guide to Traffic Calming' in 2018 and 'Design and Operation of Lower-Speed Collector and Arterial Roads' in 2025. These documents provide guidance for traffic and transportation professionals in Canada on the use, application and recommended design parameters for various physical traffic calming measures. This policy is intended to define how and when the City will apply material contained in these documents as a means of reaching its goals and objectives.

Implementation Requirements

The following describes the implementation requirements for installing traffic calming measures on local and collector roads:

1. Traffic calming measures will be considered on all city roadways except arterial roadways.

2. Eligible traffic calming locations will be prioritized annually by staff based on the two-tiered review as described in this policy.
3. The two-tiered review requires the installation of traffic calming measures inside Community Safety Zones to be scheduled before reviewing streets outside of Community Safety Zones.
4. Streets outside of Community Safety Zones will be reviewed using the criteria outlined in Attachment 1 – Prioritization Rankings.
5. All traffic calming plans will receive traffic calming measures as described in Attachment 2 - Applicable Traffic Calming Measures. New traffic calming measures not yet described in this policy may be investigated, considered and used where feasible.
6. Traffic calming plans will prioritize the installation of vertical, horizontal, and obstructive measures, while geometric improvements and supplemental measures will be limited and subject to available budget, existing policies, plans, and site conditions.
7. Traffic calming measures will be installed based on funding available in TF0037 “Road Safety Initiatives”.
8. The Traffic Calming Policy will be updated in 5-year cycles, or whenever significant changes in legislation (i.e. Highway Traffic Act) warrant its update.
9. Developers will be required to reference street designs according to the City of Guelph’s Complete Street Design Guidelines in ways that limit the potential for excessive speeding and volume. If unable to do so to the satisfaction of the City Engineer or designate, then traffic calming measures will be designed by city staff and incorporated into new subdivision plans to limit vehicle speeds and the volume of traffic to the satisfaction of the City Engineer or designate, at the expense of the developer.
10. If a roadway has been identified in the Cycling Master Plan or in the Cycling Spine of the Transportation Master Plan, then traffic calming plans must seek to minimize the negative impact of traffic calming measures on active transportation users.
11. To accommodate the installation of a traffic calming measures there may be a requirement to locally restrict a portion of on-street parking.

Applicable Traffic Calming Measures

The following is a list of traffic calming measures that will be considered for application on affected or adjacent streets, subject to available budget, existing policies, plans, and site conditions. All applicable traffic calming measures are described in Attachment 2 - Applicable Traffic Calming Measures.

Vertical Deflections

- Raised crosswalk
- Raised intersection
- Speed cushion
- Speed table

Horizontal Deflections

- Median island
- Chicane
- Concrete median with flexible bollard

- Curb extension
- Lateral shift
- Roundabout

Obstructive Measures

- Directional closure
- Modal filter
- Intersection channelization

Geometric Improvements

- Centreline hardening
- Mountable corner apron
- Curb radius reduction

Supplemental Measures

- Traffic control measure
- Active transportation infrastructure
- Low-impact development
- Custom crosswalk design
- Temporary flex post
- Gateway treatment

Traffic Calming Measures Not Recommended

Rumble strips – The noise and vibration caused by this measure is significant, and generally not appropriate for urban areas.

Review Process

Staff will follow a two-tiered review to install applicable traffic calming measures according to an approved traffic calming plan:

- Tier One: Traffic calming locations inside Community Safety Zones
- Tier Two: Traffic calming locations outside of Community Safety Zones according to the prioritization rankings defined in Attachment 1 – Prioritization Rankings.

1.0 Initiation

Staff will initiate a review all Tier One traffic calming locations on an annual basis. Only after Tier One traffic calming plans have been scheduled can the Tier Two traffic calming locations be reviewed and considered by staff.

For Tier Two traffic calming locations, any Guelph resident(s), partner, or organization who has a traffic-related concern may initiate a traffic calming review by submitting their information to Engineering and Transportation Services through a webform. The submission may specify one or several local or collector roadways. Staff will determine how many Tier Two traffic calming locations are feasible to review and install on an annual basis depending on staff capacity and funding.

2.0 Defining the Affected Streets

The affected street(s) are defined as the roadway(s) under review for traffic calming measures. Staff may recommend expanding the traffic calming review area to include adjacent or nearby roadways where proposed interventions are anticipated to influence traffic operations, volumes, or travel patterns.

3.0 Traffic Analysis

3.1 Data Collection

Engineering and Transportation Services staff will analyse traffic patterns on affected streets to determine the extent and nature of the existing traffic characteristics. Traffic volumes, vehicular speeds and classification of vehicles data will be collected over a seven-day period. All studies will be conducted based upon established engineering practices.

3.2 Pre-Screening Eligibility Criteria

The following pre-screening eligibility criteria must be met using the collected traffic study data:

- Designated as a Community Safety Zone; or
- Both of the following:
 - ADT greater than or equal to 900 (local road) or 2,000 (collector road), measured as the combined total for all directions.
 - 85th percentile speed is greater than or equal to 10 km/h above the posted speed limit.

Roadways meeting the criteria will qualify for a traffic calming review and will be placed on the priority ranking list. Where staff has identified potential negative impacts to adjacent roadways within the area, these roadways will be included in the review and considered affected streets regardless of whether they meet the minimum criteria.

The traffic calming review submission contact(s) will be notified of the results of the traffic analysis and pre-screening eligibility decision.

3.3 Roads Not Qualifying

For roadways not meeting the criteria in Section 3.2, the process is terminated, and the resident(s), partner(s) or organization is/are advised in writing with copies sent to the affected ward Councillors. If a street fails to meet the required criteria, that street will not be considered for another review for a period of 24 months, after the date of final review, unless there is a significant change to the traffic patterns or development.

Roads that do not qualify for traffic calming measures may be eligible for other road safety measures such as radar display boards, leading pedestrian intervals and other programs that address risk of collision-related injury through the Vision Zero Action Plan.

4.0 Identify Applicable Traffic Calming Measures

Upon reviewing the benefits and impacts associated with each of the traffic calming measures, staff will identify and select the appropriate measures for inclusion in a draft traffic calming plan.

5.0 Examine Arterial Roadways for Contributory Factors

Where issues have been identified on the arterial road network, and an opportunity exists to make remedial adjustments, staff will review and consider possible solutions which complement the goals of this policy. Strategies should be considered and applied based on the latest best practices including those described in Transportation Association of Canada's *Design and Operation of Lower-Speed Collector and Arterial Roads (2025)*.

6.0 Develop Plan Alternatives

Staff will develop plans in keeping with the goals, objectives and principles set out in this policy. Comprehensive traffic calming plans will be drafted as possible solutions to address identified risk. Affected partners may be consulted to identify potential issues/concerns regarding impacts on their operations. The traffic calming plan may be modified by staff to address any concerns raised by partners.

7.0 Select Recommended Traffic Calming Plan

A recommended traffic calming plan will be selected and circulated to partners and residents on affected streets.

Staff may host a public engagement event with residents and nearby institutions on affected streets to gain additional information regarding the placement and choice of traffic calming measures to align with resident and institutional needs and concerns. Based on the information gathered, staff may modify the traffic calming plan and then proceed with selection and circulation.

8.0 Implement the Plan

Staff will proceed with preparing designs, scheduling and staging implementation of the approved traffic calming measures.

Information signs pertaining to scheduling and pending changes to roadways will be installed a minimum of two (2) weeks prior to traffic calming measures being installed. These signs will be installed at major gateways into the neighbourhood with links to the city's traffic calming review webpage.

9.0 Evaluation

Data will be collected within the study area and on adjacent streets (where deemed necessary) two years after implementation to determine how traffic patterns have been affected by the traffic calming measures. Data collected will include traffic volumes, vehicle classification, and speeds for a seven-day period using a variety of data collection methods. Collision rates before and after the traffic calming measure(s) were installed may also be reviewed.

Funding

The City funds the costs of implementing traffic calming measures through the tax-supported Capital budget TF0037 – Road Safety Initiatives.

Costs

Construction costs for traffic calming measures will vary depending on factors such as type of materials used, labour, drainage requirements, landscaping, presence of utilities and land acquisition. As a result, the cost of each measure will vary greatly. Staff will focus on using functionally effective and cost-efficient measures. This will ensure that funds can be distributed equally among the various roadways.

Attachments

Attachment 1: Prioritization Rankings

Attachment 2: Applicable Traffic Calming Measures

Attachment 3: Five Year Traffic Calming Roadway Identification

Attachment 1 - Prioritization Rankings

Speed	Points	Details
85th percentile speed (both directions combined)	0 to 40	2.5 points assigned per 1 km/h above the posted speed limit (max 40 points)
Volume		
Average Daily Traffic vpd = vehicles per day	0 to 30	Number of points based on road classification (max 30 points) Local road: 1 point per 65 vpd over minimum threshold Collector road: 1 point per 165 vpd over minimum threshold
Safety		
Collision history	0 to 15	Based on total collisions for the roadway segment. Weighted based on injury severity.
Presence of sidewalks	0 to 5	0 points: sidewalks exist on both sides 2.5 points: sidewalks exist on one side 5 points: no existing sidewalks
Cycling	0 to 5	0 points: not identified as a cycling route in the Cycling Master Plan 2.5 points: directly connects to a street identified in the cycling master plan 5 points: identified as a cycling route in the Cycling Master Plan
Pedestrian generators (within 450m of the roadway under review)	0 to 5	Weighted based on proximity to significant pedestrian generators (e.g transit stops, community centres, parks, senior centres)
Equity	0 to 5	Weighted based on most recent Ontario Marginalization Index data.

Attachment 2 – Applicable Traffic Calming Measures

The following is a list of traffic calming measures that the Traffic Calming Policy will consider for application on affected or adjacent streets.

Measure	Description
<p>Active transportation infrastructure <i>Supplemental</i></p>	<p>Active transportation infrastructure includes physical features and amenities—such as bike parking, bike racks, repair stations, secure storage, micro-mobility stations, rest areas, street furniture, and other facilities—that support and encourage travel by walking, cycling, and mobility devices by improving comfort, convenience, and accessibility for non-motorized users.</p>
<p>Centreline hardening <i>Geometric</i></p>	<p>Centreline or left-turn centreline hardening involves installing median extensions or raised pavement markers along the centerline of the road or at left turn lanes. It is designed to encourage drivers to take wider and slower turns when making a turn.</p>
<p>Chicane <i>Horizontal</i></p>	<p>Series of curb extensions on alternating sides of a roadway that narrow the travel lane and require drivers to steer from side to side, and—where width permits—these extensions can incorporate space for people cycling, low impact development features such as rain gardens, or small-scale planting.</p>
<p>Concrete median with flexible bollard <i>Horizontal</i></p>	<p>A series of poles placed in the centre of a road to separate opposing traffic. Flexible, so able to withstand impact from a vehicle and return to original upright position when the force is removed.</p>
<p>Curb extension <i>Horizontal</i></p>	<p>A horizontal intrusion of the curb into the roadway resulting in a narrower section of the roadway, known as road narrowing, is used to slow vehicles and shorten pedestrian crossings. These features can incorporate low impact development elements such as rain gardens and trees, and be shaped to maintain clear and predictable space for cyclists where width permits.</p>
<p>Curb radius reduction <i>Geometric</i></p>	<p>The reconstruction of an intersection corner using a smaller radius, usually in the 3.0 m to 5.0 m range.</p>
<p>Custom crosswalk design <i>Supplemental</i></p>	<p>A custom or textured crosswalk is a type of pedestrian crossing with a unique surface pattern or texture designed to enhance visibility for pedestrians and drivers. This surface may include raised bars or dots, different colours or materials, or a combination of these elements. Consider the use of thermoplastic material for durable designs.</p>

Measure	Description
Directional closure <i>Obstructive</i>	A curb extension or vertical barrier extending to the centreline of a roadway, effectively obstructing (prohibiting) one direction of traffic.
Gateways <i>Supplemental</i>	A gateway is a physical or visual treatment placed at the entrance to a neighbourhood, district, or lower speed street that signals to drivers they are entering a different roadway context—typically through elements such as curb extensions, medians, signage, markings, street trees, low impact development features, or large artistic object or lighting—to encourage reduced speeds and reinforce the desired character of the area.
Intersection channelization <i>Obstructive</i>	Intersection channelization, right-in/right-out islands, and raised medians through intersections are vertical barriers that obstruct or restrict specific motor vehicle movements while preserving most of the original roadway configuration and can be designed to allow people who cycle continue straight through.
Lateral shift <i>Horizontal</i>	Lateral shifts can be described as one half of a chicane. Curb extensions or pavement markings are provided on otherwise straight streets that cause travel lanes to bend one way and then bend back the other way to the original direction of travel.
Low-impact development <i>Supplemental</i>	Low-impact development features—such as bioretention planters, rain gardens, bioswales, permeable surfaces, and tree trenches—can be incorporated into traffic calming elements like curb extensions, chicanes, medians, or as stand-alone measures, to physically narrow the roadway, reduce vehicle speeds, manage stormwater at the source, provided they are referenced in Guelph’s Complete Street Design Guidelines and available width supports safe multimodal movement.
Median island <i>Horizontal</i>	Median islands are raised islands located along the centreline of a street that narrow the travel lanes at that location.
Modal filter <i>Obstructive</i>	<p>A raised barrier that restricts through-movement for motor vehicles while allowing people walking, cycling, or using mobility aids to continue through safely and comfortably.</p> <p>A variant called a diverter, a raised barrier placed diagonally across an intersection forces motor vehicle traffic to turn and prevents drivers from proceeding straight through the intersection, while still allowing people who walk, bike, or use mobility aids to pass through.</p>

Measure	Description
<p>Mountable corner apron <i>Geometric</i></p>	<p>A corner or truck apron is a mountable, paved area around the inner edge of a roundabout or tight corner that accommodates the off tracking of large vehicles while maintaining a smaller, slower speed geometry for general traffic.</p>
<p>Raised crosswalk <i>Vertical</i></p>	<p>An elevated pedestrian crossing—installed at intersections or mid-block as part of a pedestrian crossover—slows vehicles and improves pedestrian visibility by bringing the roadway up to sidewalk level.</p>
<p>Raised intersection <i>Vertical</i></p>	<p>An elevated intersection raises the entire junction to sidewalk height to slow vehicle speeds, increases pedestrian visibility, and signal pedestrian priority on all approaches.</p>
<p>Raised median <i>Horizontal</i></p>	<p>A raised median or traffic island constructed on the centreline of a two-way roadway to reduce the overall width of the adjacent travel lines and reducing the speed of passing traffic. They are not intended for pedestrians, as they have no dropped curbs and tactile paving.</p>
<p>Roundabout <i>Horizontal</i></p>	<p>A raised island located in the centre of an intersection requires vehicles to yield on all legs and travel counterclockwise around the island, slowing speeds and reducing conflict points through yield on entry control.</p> <p>Roundabout may include a truck or corner apron which is a mountable, paved area around the inner edge of a roundabout that accommodates the off-tracking of large vehicles while maintaining a smaller, slower-speed geometry for general traffic.</p> <p>Variants of roundabouts include:</p> <p>Mini-roundabout or traffic circle: A compact circular intersection with or without fully mountable central island requires drivers to travel counter-clockwise around the centre while accommodating larger vehicles by allowing them to overrun the island at low speeds.</p> <p>Traffic button: A small, fully mountable centre element placed in the middle of an intersection provides a visual cue for drivers to navigate around it but does not require yield-on-entry and does not meaningfully deflect vehicle paths or speeds.</p>
<p>Speed cushion <i>Vertical</i></p>	<p>Similar to a speed hump, with a center channel which allows for wider vehicles like Transit and Emergency Services to pass without deflection.</p>

Measure	Description
<p>Speed table <i>Vertical</i></p>	<p>An elongated raised speed hump with a flat-topped section that is long enough to raise the entire wheelbase of a vehicle. Speed tables have higher design speeds than speed humps and are preferred on collector roads.</p>
<p>Temporary flex post <i>Supplemental</i></p>	<p>Temporary flex posts are signs that are installed in the centre of the road, between opposing traffic lanes and designed to withstand impacts from, and avert damage to, vehicles if struck by collapsing and rebounding. The signs can have a narrowing effect on the lane or roadway which can give drivers' the perception of the need to slow down.</p>
<p>Traffic Control <i>Supplemental</i></p>	<p>Traffic control measures are operational treatments—such as all way stops, pedestrian crossovers, leading pedestrian intervals, and regulatory or warning signage—used to assign right-of-way, manage conflicts, and enhance safety, provided they meet all applicable provincial guidelines, warrant criteria, and the City of Guelph's operating procedures.</p>

Attachment 3 – Five Year Traffic Calming Roadway Identification

Roadway	Reason	Limits
Alice Street	CSZ	Arthur Street South to Stevenson Street South
Bishop Court	CSZ	Flanders Road to Coventry Drive
Cassino Avenue	Met	Stevenson Street North to Hadati Road
Clarke Street West	CSZ	Woolwich Street to Exhibition Street
Delhi Street	CSZ	Speedvale Avenue East to Eramosa Road
Dumbarton Street	CSZ	Renfield Street to Knightswood Boulevard
Galt Street	CSZ	Edinburgh Road South to east limit
Grange Street	Met	Stevenson Street North to Victoria Road North
Hall Avenue	CSZ	Goodwin Drive to Dominion Drive
Hands Drive	Met	Gordon Street to Dimson Avenue
Laurine Avenue	CSZ	Palmer Street to north limit
Lemon Street	CSZ	Queen Street to Franklin Avenue
London Road West	Met	Edinburgh Road North to Woolwich Street
Metcalfe Street	Met	Eramosa Road to Pleasant Road
Powell Street West	CSZ	Woolwich Street to Exhibition Street
St. Catharine Street	CSZ	Eramosa Road to Lemon Street
Tolton Drive	CSZ	Goodwin Drive to Clair Road East
Waterloo Avenue	Met	Silvercreek Parkway South to Edinburgh Road South
Westmount Road	CSZ	Speedvale Avenue West to London Road West
Whitelaw Road	Met	Shoemaker Crescent to Fife Road
William Street	CSZ	Ottawa Crescent to Cassino Avenue

Wilton Road	CSZ	Simmonds Drive to Inverness Drive
Windsor Street	CSZ	Inverness Drive to Waverley Drive
Winston Crescent	CSZ	Bennett Avenue to Metcalfe Street
Woodland Glen Drive	Met	Stone Road West to Downey Road

CSZ = Community Safety Zone

Met = Roadway qualified and was identified for traffic calming using 2020 traffic calming policy