



**Subject:** Traffic Calming Policy  
**Service Area:** Engineering Services  
**Source:** Municipal Services and Design Engineer  
**Date:** 2023 05 01

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## 1. Introduction

The purpose of this Policy is to provide an established process to fairly evaluate all neighbourhood requests for the installation of traffic calming measures. The policy has been developed so that traffic calming measures can be implemented, where deemed appropriate to improve safety for all road users on Sault Ste. Marie streets and not adversely affect operational costs and Emergency Services.

### 1.1. What is Traffic Calming?

Traffic calming is the modification to a roadway and its roadside environment for the purpose of reducing the negative effects of motor vehicle use. These negative effects are usually associated with excessive vehicle speed and, in some instances, the impacts of cut through traffic in a neighbourhood. A successful traffic calming program is one which will alter the street in such a way that motorists will drive slower and exercise caution, creating a safer and more livable street for all users. It also minimizes negative impacts on emergency response agencies and operational activities.

Traffic calming methods are typically grouped into two categories: Active Traffic Calming and Passive Traffic Calming.

**Active Traffic Calming** measures involve the addition of vertical or horizontal deflections to a roadway, which force drivers to reduce their speed in order to comfortably navigate these barriers. Some examples of active traffic calming include: speed humps/tables, raised crosswalks, chicanes, roundabouts, etc.

**Passive Traffic Calming** measures do not involve physical modifications to the roadway. Instead, they aim to alter the driver's perception of the road environment in order to encourage slower and more cautious driving. Some examples of passive traffic calming include: lane narrowing, vertical centreline treatment, pavement markings, signage, etc.

### 1.2. How Traffic Calming Works (Principles of Traffic Calming)

The following principles will be applied when selecting and implementing traffic calming measures. This will ensure that appropriate traffic calming measures are selected, that they are compatible with the community's needs, and that any potential negative impacts are minimized. While each situation is unique, the principles of traffic calming must be applied to each situation. Application of these principles will maximize effectiveness of the traffic calming plans and help build community acceptance and support of the final traffic calming solutions.



- **Identify the Real Problem.** To implement effective traffic calming measures, it is important to accurately identify the underlying problem. Traffic related and road safety concerns can be complex and emotional topics. It is important to keep the issues and problems in perspective to maximize the limited resources on proven problems and not perceived problems.
- **Quantify the Problem.** To select the appropriate measures, it is important to quantify the extent of the problem. This requires gathering data, including traffic counts, speeds, accident data and pedestrian usage while also taking into consideration the adjacent land uses of the subject road, including the presence of schools, parks, and other pedestrian generators.
- **Maintain and Minimize Impacts on Delivery of Emergency Services.** Consideration of these services when identifying appropriate traffic calming measures for implementation will minimize delays/impacts to these services. This will also aid in building support for traffic calming in general. When selecting traffic calming measures, staff will strive to balance the needs of these services with slowing traffic on residential streets. In addition, the City will work with Fire and Emergency Services to ensure that the negative impacts resulting from the implementation of traffic calming measures are minimized.
- **Maintain and Minimize Impacts on Delivery of Public Services.** Consideration of snow plowing, street sweeping, drainage, waste collection and school bus services when identifying appropriate traffic calming measures for implementation will minimize delays/impacts to these services.
- **Use Cost Effective Measures.** The cost of traffic calming measures can vary greatly depending on the materials used, labour involved and the cost of the process to implement certain alternatives. For cost control reasons, only appropriate traffic calming measures will be implemented, and a phased approach should be used when appropriate. Traffic calming measures can generally, be upgraded after initial installation therefore over design of the initial implementation must be avoided to allow distribution of funds throughout the City rather than concentrating limited funds on a smaller number of locations.
- **Minimize Impacts on Adjacent Residential Streets.** Prior to considering traffic calming, any potential negative impact on adjacent streets will be considered. Impacts may include traffic diverted to another street, or changes in turning movements with increase delays with other intersections. These effects will be considered in advance of approval, so traffic calming solutions do not create or exacerbate existing problems.
- **Target Automobiles and Not Non-Motorized Modes.** The purpose of traffic calming is to reduce the negative effects of motor vehicles while improving conditions for other road users. Traffic calming measures will be designed to permit cyclists and pedestrians to travel unaffected, while slowing down motor vehicles.
- **Monitor and Follow-up.** It is important to report to Council and to the community of the results of implemented traffic calming measures. It also provides an opportunity for the community to provide feedback, and for staff to identify any measures that do not produce the desired



results. Comparable traffic volumes, speed and collision data will be collected before and after implementations.

## **2. Implementation Process**

Staff review all requests on a first-come, first-served basis. The procedure involves the following steps:

- Traffic Calming Request;
- Confirmation of Prerequisite Requirements;
- Collection and Evaluation of Traffic Data;
- Traffic Calming Warrant Review;
- Ranking and Prioritization; and
- Selection of Traffic Calming Measures.

### **2.1. Traffic Calming Request**

To request a location be considered for traffic calming, the requester may:

1. Complete the Traffic Concern Form located on the city website; or
2. Submit a request in writing to the City's Engineering Services Division.

### **2.2. Confirmation of Prerequisite Requirements**

For a variety of operational and public safety reasons, traffic calming should not be applied to all types of roadways. It is strongly recommended that the specific installation criteria, as developed in this policy, be met, and followed. Active traffic calming designs that involve physical interventions (e.g. vertical deflection or horizontal deflection) will be limited to installation on roadways that are proven by a traffic study and evaluation to have significant aggressive driving problems and must meet all the other criteria as set out in this policy. Traffic calming designs that involve vertical alignment shifts will not be permitted on arterial roads and primary routes for emergency response agencies.

The screening process sets requirements that must be met for a location to be eligible for traffic calming measures. The screening criteria will also help identify whether a more complex issue exists that may need to be addressed using a different approach.

The following criteria must be met to be considered for traffic calming measures:

- Must be a local or collector roadway;
- Must have a minimum 500 Annual Average Daily Traffic (AADT);
- The posted speed limit shall not be greater than 50km/h (urban) or 60km/h (rural); and
- The roadway has not been evaluated within the last 24 months.



Arterial roadways are designed to accommodate large traffic volumes. Active traffic calming methods are not recommended on arterial roadways as this may hinder the function of the road or divert traffic to adjacent streets that were not designed to accommodate large traffic volumes. In some instances, passive traffic calming methods may be appropriate and will be considered on a case-by-case basis.

### 2.3. Collection and Evaluation of Traffic Data

If the requested location meets the initial screening criteria outlined in Phase I, staff will collect volume and speed data to determine the 85<sup>th</sup> percentile speed, daily volumes, and peak hour volumes present at the location under review. This data will be used by staff to provide a better understanding of the current traffic conditions and to prioritize locations for the investigation of traffic calming.

### 2.4. Traffic Calming Warrant Review

The warrant process focuses on various attributes of the requested location to quantify its potential need for traffic calming. The process incorporates five factors, with appropriate weighting applied to each. Each eligible traffic calming request is awarded points for its score based on each factor, with a maximum score of 100 points. Table 1 below shows the scoring matrix.

Table 1 – Traffic Calming Scoring Matrix

Factor	Criteria	Maximum Points
Traffic Speeds	3 points for every 1km/h the 85 <sup>th</sup> percentile speed is above the posted speed limit	45
Traffic Volumes	Local: 1 point for each 50 vehicles above 500 vehicles per day Collector: 1 point for each 100 vehicles above 1,500 vehicles per day	30
Collision History	5 points for any collision within the study area disregarding the cause of collision	5
Pedestrian Generators	5 points for each pedestrian generator (school, park, community centre, retail centres designated pedestrian crossing, etc.) are present in the study area	10
Bicycle Facilities or Routes	10 points if bicycle lanes, multi-use trails, or designated routes or trails are present in the study area	10
Total		100

The total number of points (score) determines whether the location will be considered for implementation of traffic calming measures. The minimum threshold to qualify for traffic calming is 75 points.



## **2.5. Roads Not Qualifying**

For roadways not meeting the criteria in Sections 2.3 and 2.4, the process will be terminated, and the requester will be advised of the decision in writing with copies sent to the affected ward Councillors. If a roadway does not meet the warrants for traffic calming, the roadway will not be considered for another review for a period of 24 months after the final review, unless there have been significant changes to the traffic patterns in the area.

## **2.6. Traffic Calming Ranking and Prioritization**

Locations that achieve the minimum score will be added to a ranking list and will be eligible for implementation of traffic calming measures. The appropriate measures will be selected based on the specific characteristics of the road segment.

All locations eligible for traffic calming measures will be ranked in descending order by the score obtained in the warrant process. The resulting list will be compiled and presented to Council on a yearly basis.

To ensure that locations with lower scores are not continually overtaken by newer eligible locations, staff will update the ranking list annually by assigning an additional five points to the score of each location for every year that has passed since the location was added to the ranking list.

Locations that did not obtain the minimum score in the original warrant process cannot become eligible based on the age of the application. They can only become eligible if traffic conditions change sufficiently to raise its score above the minimum requirement.

## **2.7. Selection of Traffic Calming Measures**

When a location is selected for implementation, staff will use engineering judgement along with industry best practices to determine the most appropriate traffic calming measure(s) based on the characteristics of the study area. The Canadian Guide to Traffic Calming, Second Edition (TAC, 2018) will be referenced as a guiding document during this process. Staff will also seek input from Emergency Services prior to implementation.

From this list, staff will make recommendations for implementation subject to budget availability.

## **3. Design Considerations**

The design of all traffic calming measures shall be subject to the guidelines of the Institute of Transportation Engineers (ITE), TAC Canadian Guide to Traffic Calming, Ontario Traffic Manuals, and all relevant City of Sault Ste. Marie design and construction standards and specifications.



#### **4. Record Keeping**

All traffic calming requests will be kept on file to ensure transparency and to improve response efficiency for similar requests.

#### **5. Public Consultation**

When a location is selected for the implementation of traffic calming measures, a public information centre will be held prior to detailed design and installation. The intention of the public information centre is to obtain input from affected area residents, road users, and community stakeholders. This feedback can be used to fine-tune the proposed solutions, ensuring that the specific needs of the community are met.