

## TRAFFIC CALMING PROCEDURE

### ***POLICY REFERENCE:***

Corporate Policy No. X, Traffic Calming Policy (Draft)

### ***PROCEDURE STATEMENT:***

This Procedure outlines the process to review, design and implement Traffic Calming Measures in the City of Thunder Bay.

### ***PROCEDURE:***

### ***DEFINITIONS***

**“Arterial Roads”** refers to roads which are planned, designed, and constructed to carry large volumes of through traffic (vehicles, transit, pedestrians, cyclists) at high to moderate speeds – while facilitating the movement of goods throughout the City. The primary function of these roads is to support traffic flow and goods movement with minimal interruptions.

**“Collector Roads”** refers to roads which are planned, designed, and constructed to carry moderate volumes of traffic (vehicles, transit, pedestrians, cyclists) at moderate speeds while facilitating the movement of goods to destination points. Equal importance is placed on traffic flow and land access.

**“Local Roads”** refers to roads which are planned, designed, and constructed to provide property access and carry low volumes of traffic (vehicles, pedestrians, cyclists) travelling at relatively slow speeds between points of origin and collector roads. Access to land is the primary function of the street.

**“Road Network”** refers to municipal roadways owned and maintained by the City of Thunder Bay and includes arterial, collector, and local roads.

**“Non-Restrictive Traffic Calming Measures”** refers to traffic calming techniques or devices that slow down traffic or improve safety without impeding or diverting the normal flow of vehicles. This traffic calming measure focuses on education.

**“Restrictive Traffic Calming Measures”** refers to traffic calming methods that establish physical impediments or restrictions to limit the flow of vehicles, reduce speeds, and discourage through-traffic. These measures may establish access restrictions or involve vertical and horizontal alignment changes.

“**Technical Review**” refers to the evaluation of the traffic issues and potential solutions to assess the technical feasibility, safety, and adherence to engineering standards, guidelines, and best practices as conducted by Engineering staff or designated reviewers.

“**Traffic Calming Measures**” refers to the use of traffic management measures to reduce vehicular travel speeds and discourage through traffic on roadways that are not meant to provide such functions, to create safer conditions for all users, including pedestrians and cyclists. Measures can include physical street design elements that act as vehicle self enforcing methods. Educational techniques may also be used to inform the drivers.

## **1.0 IMPLEMENTATION**

### **1.1 INITIATING A REQUEST**

A request for traffic calming shall be initiated in one (1) of four (4) ways:

1. Upon Receipt of a Petition signed by at least 66% of affected residents (50% in the case of a multi-residential building). Petitions will be received by the Engineering Section outside of the Corporate Petitions Policy 03-03-13;
2. City Council direction;
3. A request by the City’s Traffic Safety Committee; or
4. A recommendation by relevant City Staff.

### **1.2 INITIAL SCREENING**

Requests for Traffic Calming Measures of roadway sections will be screened based on the criteria outlined below to determine eligibility for Traffic Calming Measures. Further details on scoring and the evaluation matrix can be found in the attached **Table: Traffic Calming Scoring Matrix for Urban Local and Collector Roadways**.

1. **Traffic Speeds:** The 85<sup>th</sup> percentile of vehicle speeds exceeding the posted speed limit for the roadway.
2. **Adjacent Land Use:** Roadway section near locations with vulnerable street users such as parks, schools, community centres, childcare centres, hospitals, or seniors’ residences. Additional consideration is given to roadways that are primarily residential or pedestrian-orientated retail.
3. **Inappropriate Driver Behaviour:** Documented instances of inappropriate driver behaviour, supported by history of complaints and verified through police enforcement.
4. **Pedestrian Facilities:** Presence of sidewalks along the roadway.
5. **Traffic Volumes:** Traffic volumes above threshold for the designed roadway classification.
6. **Non-local traffic:** Through traffic (cut-through traffic) exceeding 10% of the total traffic volume. This does not apply to Collector Roads and excludes vehicles travelling to schools, childcare facilities, or businesses.

- 7. Collision History:** Roadway has a collision rate above average in comparison to similar roadways.

A minimum score of 20 points is required for Local Roads and 25 points for Collector Roads to qualify for further consideration. Qualifying roadway sections will be prioritized based on the screening results for Technical Review and design.

During the initial review, Engineering Division will investigate improvements to the Arterial Road network first for potential efficiency improvements.

### **1.3 TECHNICAL REVIEW AND DESIGN**

If the request for Traffic Calming Measures meets the minimum threshold as defined in the Initial Screening, the Engineering Division will undertake a Technical Review and cost analysis to assess traffic issues, evaluate possible solutions, and then if warranted propose improvements to the roadway and prepare a design.

The design will consider the impact the Traffic Calming Measure will have on diverting traffic to nearby Arterial roads or other surrounding Local roadways.

Traffic Calming Measures must also comply with the following eligibility criteria:

1. Only Non-Restrictive Traffic Calming Measures will be applied to Arterial roadways. Traffic Calming Measures on Local and Collector Roadways can be Restrictive or Non-Restrictive.
2. Restrictive Traffic Calming Measures will only be considered on roads within the urban limits as defined by the Official Plan.
3. The Traffic Calming Measure should not significantly obstruct or negatively impact the travels of pedestrians and cyclists through the area.
4. The Traffic Calming Measure shall not hinder emergency services (Thunder Bay EMS, Fire, and Police) by causing delays, restricting access, or impairing response times
5. Traffic Calming Measure shall not cause delays, unwanted route deviations, impact safety, or present accessibility challenges for Thunder Bay Transit.
6. Restrictive Traffic Calming Measures shall not be permitted on road grades equal to or greater than 8%.

### **1.4 AREA RESIDENT SURVEY**

Where traffic calming is found to be beneficial and the proposed measures identified by Engineering are feasible, an area resident survey shall be conducted with a target of at least 66% of affected residents being supportive of the proposed measures. However, Engineering may still recommend a Traffic Calming Measure without the target support, if warranted.

### **1.5 APPROVAL AND IMPLEMENTATION**

A report will be brought with recommendations for implementing Traffic Calming Measures for approval at City Council.

If approved, Traffic Calming Measures shall be scheduled into the City's Capital Budget process, based on a priority sequence and considering available budget.

### **REFERENCE MATERIAL ATTACHED**

Attachment A: Table: Traffic Calming Scoring Matrix for Urban Local and Collector Roadways

### **REFERENCES:**

- City of Thunder Bay Transportation Master Plan
- City of Thunder Bay Active Transportation Plan
- Ontario Traffic Manual Books 1 through 18
- Manual of Uniform Traffic Control Devices
- City of Thunder Bay Development and Engineering Standards
- Traffic Calming Primer – MORR Transportation Consulting
- Transportation Association of Canada – Traffic Calming Guidelines
- Transportation Association of Canada – Geometric Design Guide for Canadian Roads
- Thunder Bay Transportation Master Plan – Background Report F Traffic Calming

## Attachment A:

Table – Traffic Calming Scoring Matrix for Urban Local and Collector Roadways

Indicator	Points score	Local Road	Collector
Speed above posted limit	10 local 8 collector	0-5km/h over equals 1 point 5-10 km/h over equals 3 points >10 km/h over equals 10 points	5-10 km/h over equals 2 points 10-15 km/h over equals 4 points >15 km/h over equals 8 points
Generators of vulnerable road users	15 local 10 collector	5 points per generator (schools, parks, community centers, old age homes and hospitals)	5 points per generator (schools, parks, community centers, old age homes and hospitals)
Aggressive driver behaviour	5 local 3 collector	5 points if claims are verified by policed	3 points if claims are verified by policed
Pedestrian facilities	5	5 points if no sidewalk exists	5 points if no sidewalk exists
Traffic volumes	6	1000 VPD primarily residential area 3000 VPD mixed resident & business  3 points for volumes 0-15% above expected levels  6 points for volumes 15-30% above expected volumes	8000 VPD  3 points for volumes 0-15% above expected levels  6 points for volumes 15-30% above expected volumes
Non-local traffic	1+ Max 4	1 point for each 10% addition of non-local traffic	N/A
Collision History	1+ Max 5	1 points for each vehicle collision type that may be prevented by the application in the past 5 years  5 points for preventable pedestrian impact	1 points for each collision type that may be prevented by the application in the past 5 years  5 points for preventable pedestrian impact
	Max points 50 local 41 collector	Recommend TC over __20__ points	Recommend TC over __25__ points