



Engineering
for **people**



TRAFFIC CALMING POLICY

MAY 7, 2025





AGENDA

01 WHAT IS TRAFFIC
CALMING?

02 TYPES OF TRAFFIC
CALMING MEASURES

03 TRAFFIC CALMING
IMPLEMENTATION
PROCESS

04 COMMENTS AND
QUESTIONS

01

What is Traffic Calming?



What is Traffic Calming?

Definition

Traffic calming is the installation of mainly physical modifications 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.





What is Traffic Calming?

When is Traffic Calming Required?

Traffic calming may be necessary when the amount of vehicular traffic, speed levels, and/or observed driver behaviour does not correspond with the type of roadway, the context of the surrounding areas, or the activities of other roadway users.





What is Traffic Calming?

What is the objective of Traffic Calming

The objective of Traffic Calming is to alter the street in such a way that motorists will drive slower, exercise caution and bring the street back closer to its intended use while limiting the negative effects on emergency response agencies and operational costs.



02

Types of Traffic Calming Measures



Traffic Calming Measures

To successfully achieve its objective, traffic calming usually involves the installation of or a combination of the following roadway design characteristics or features:

- ❖ Installation of special pavement markings and/or signage.
- ❖ Installation of visual treatments that may include entrance or gateways features, roadside trees, and/or ground cover.
- ❖ Changes to the roadways surface texture and/or colour.
- ❖ Changes to the vertical and/or horizontal alignment of the roadway.
- ❖ Changes to the travelled portion of the roadway through pavement and/or lane narrowing.



Types of Traffic Calming Measures

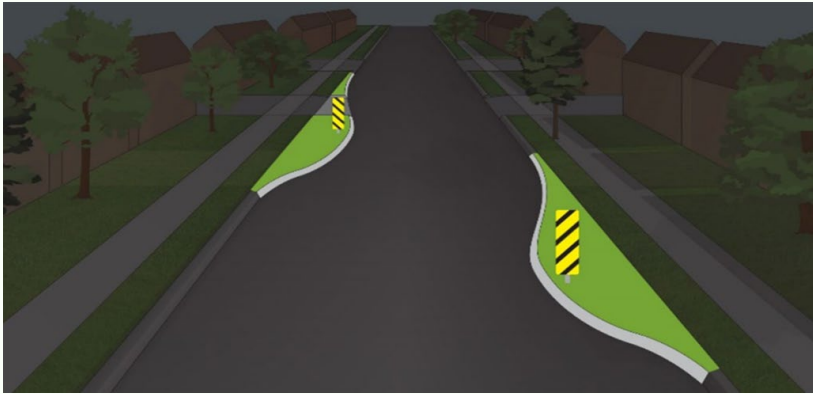
Horizontal Deflections

The Transportation Association of Canada (TAC) Canadian Guide to Traffic Calming Second Edition defines a Horizontal Deflection as a type of traffic calming measure that causes a lateral shift in the travel pattern of vehicles.

This shift forces a motorist to slow the vehicle in order to comfortably navigate the measure.

Types of Traffic Calming Measures: Horizontal Deflections

The type of horizontal deflections considered by the City of Barrie are the following:



Chicanes



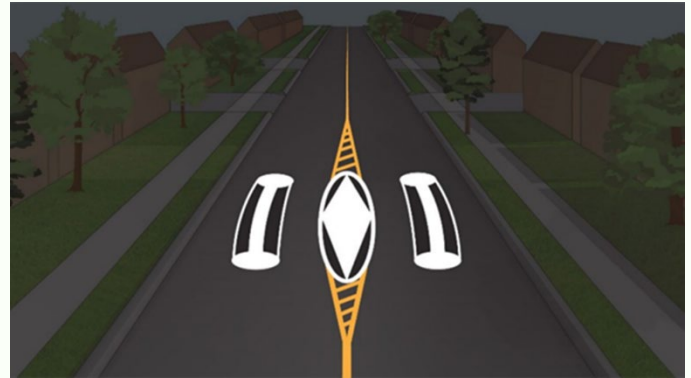
Curb Radius Reduction

Types of Traffic Calming Measures

Horizontal Deflections



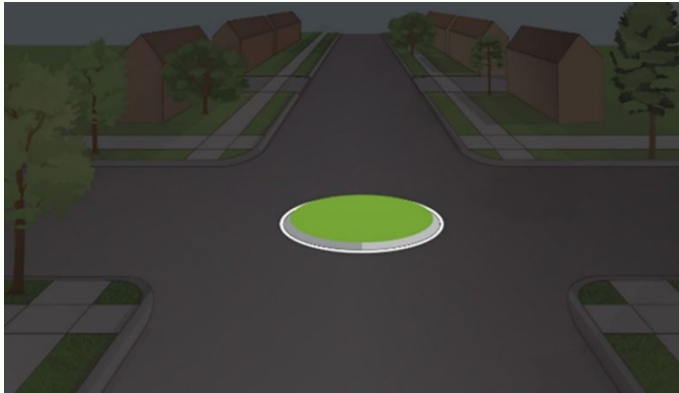
Lateral Shift



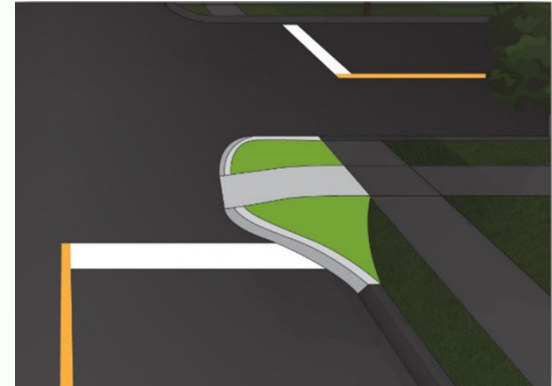
Speed Kidney

Types of Traffic Calming Measures

Horizontal Deflections



Mini Roundabout



Curb Extension



Types of Traffic Calming Measures

Horizontal Deflections



Raised Median Island



Types of Traffic Calming Measures

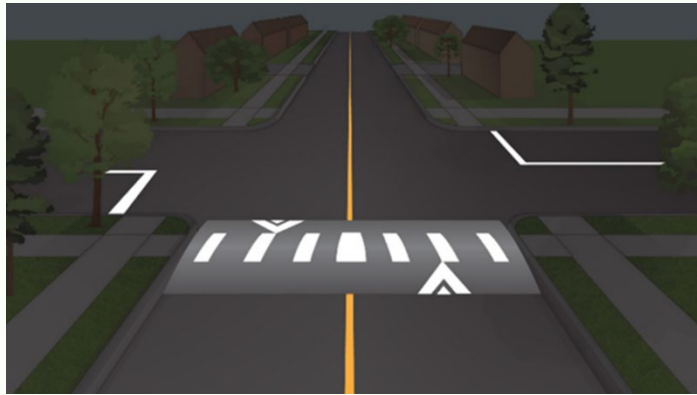
Vertical Deflections

The Transportation Association of Canada (TAC) Canadian Guide to Traffic Calming Second Edition defines a Vertical Deflection as a type of traffic calming measures that causes a vertical upward movement of the vehicle.

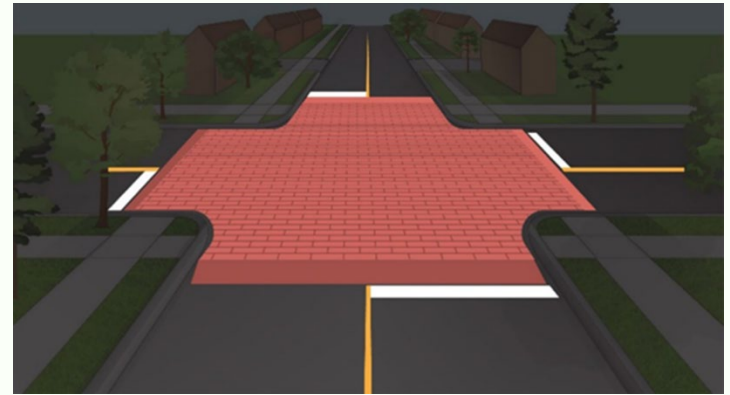
This movement generally results in lowered vehicle speeds because motorists slow to avoid unpleasant sensations when traversing the traffic calming measure.

Types of Traffic Calming Measures : Vertical Deflections

The type of vertical deflections considered by the City of Barrie are the following:



Raised Crosswalks

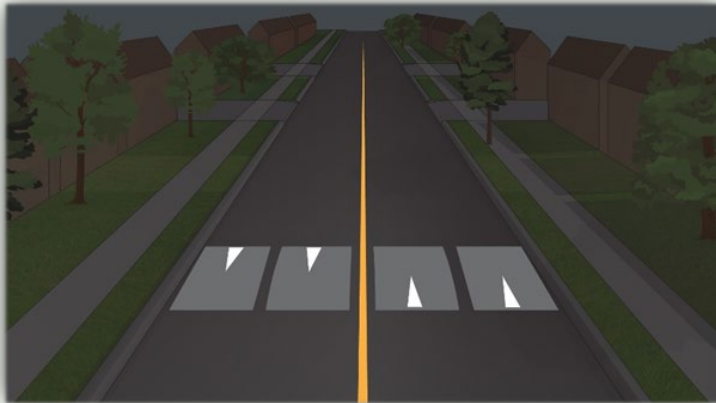


Raised Intersection



Types of Traffic Calming Measures

Vertical Deflections



Speed Cushions



Speed Hump/Table



Types of Traffic Calming Measures

Minor Adjustment Measures

Minor adjustment measures are effective, low-cost traffic calming tools that can be more quickly and easily installed relative to permanent treatments and can be more easily modified where applicable.

While often temporary or seasonal in nature, these tools are an important first step to reduce vehicular speeds and can increase safety for all road users.



Types of Traffic Calming Measures : Minor Adjustments

The type of measures considered by the City of Barrie as Minor Adjustments are the following:



Pavement Markings



Vertical Centre line



Types of Traffic Calming Measures

Minor Adjustments



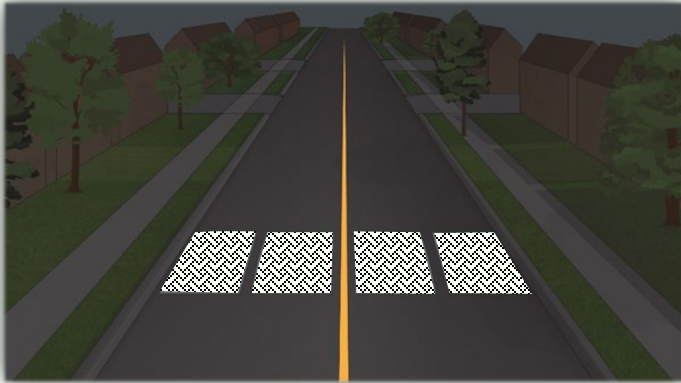
On-Road Sign Pavement Markings



Speed Display Devices

Types of Traffic Calming Measures

Minor Adjustments



Temporary Speed Cushion



Median Planter

03

Traffic Calming Implementation Process



Implementation Process

Traffic Calming Policy

Since traffic calming measures should not be applied to all types of roadways, for a variety of operational and public safety reasons, specific installation criteria as developed in the Traffic Calming Policy must always be met and adhered to.

Traffic calming involving physical treatments which include vertical deflection, horizontal deflection, roadway narrowing (except for lane narrowing through pavement markings), and surface treatments 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.



Implementation Process

Ranking System

All applications eligible for traffic calming measures will be ranked in descending order of the score obtained in the evaluation process.

To prevent eligible applications with lower scores to be repeatedly overtaken by newer eligible applications, Staff will update the ranking in January every year by adding 10 points for each year completed since the date of the application to each location's score.



Implementation Process

Selection of Traffic Calming Measures

When a high-ranked location is selected for implementation, Staff will review the list of available traffic calming measures and determine the most appropriate measure(s) based on the characteristics of the study area.

In the new process, City staff will continue to obtain the input of Emergency Services and Road Operations into account when developing a traffic calming plan, using careful engineering judgment when selecting a traffic calming measure.



Implementation Process

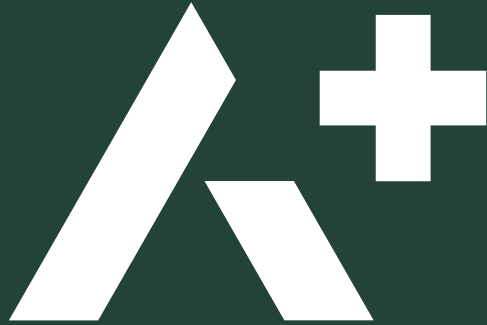
Cost Implications

Costs associated with traffic calming projects vary with the specific type of traffic calming measures selected and the overall scope and size of the project.

Where the evaluation has proven that traffic calming measures can be effective, they will be funded through Capital Improvements and are subject to funding availability. The priority of Traffic Calming measures will be based on the scoring and ranking system described in the Policy.

Traffic Calming measures have been proven to be effective in the management of neighbourhood vehicular traffic. The behaviour of motorists can be safely altered through the successful design and installation of a well thought out plan that meets the needs of neighbourhood residents, roadway users and emergency response agencies. This policy is recommended to establish the process for the City of Barrie to fairly screen and implement traffic calming requests.





Comments and Questions