



# The Corporation of the Town of Tecumseh

## Policy Manual

<b>Policy Number:</b>	<b>126</b>
<b>Effective Date:</b>	Click here to enter a date.
<b>Supersedes:</b>	Click or tap here to enter text.
<b>Approval:</b>	Click or tap here to enter text.
<b>Subject:</b>	<b>Speed Management and Traffic Calming</b>

### Table of Contents

- 1. Purpose..... 1
- 2. Authority..... 2
- 3. Related Documents..... 2
- 4. Definitions ..... 3
- 5. Procedure for Confirming Speed Issue ..... 3
- 6. Speed Mitigation Options ..... 6
- 7. Procedure for Traffic Calming ..... 7
- 8. Administration & Review ..... 7

### 1. Purpose

1.1 The purpose of this policy is to establish a process to manage speed and implement traffic calming measures on roads within the Town of Tecumseh.

- 1.2 This policy shall provide step-by-step guidance to Public Works & Engineering Services (PWES) staff for determining the need for traffic calming and the implementation of traffic calming measures or an alternative response.

## **2. Authority**

- 2.1 Decision-making authority for the Speed Management and Traffic Calming (SMTC) Policy shall be delegated to the Director, Public Works & Engineering Services.

## **3. Related Documents**

- 3.1 This Policy is prepared in accordance with the following:
  - 3.1.1 Speed Mitigation Guideline 2020, prepared by Dillon Consulting Limited for the Town of Tecumseh;
  - 3.1.2 Ontario Highway Traffic Act (HTA);
  - 3.1.3 The Canadian Guide to Traffic Calming;
  - 3.1.4 Accessibility for Ontarians with Disabilities Act (AODA);
  - 3.1.5 Geometric Design Guide for Canadian Roads;
  - 3.1.6 Traffic Calming Measures Fact Sheets – Institute of Transportation Engineers;
  - 3.1.7 Town of Tecumseh Transportation Master Plan, and;
  - 3.1.8 Town of Tecumseh Complete Streets Design Handbook.
- 3.2 Implementation of this Policy will be in conjunction with the following policies:
  - 3.2.1 Community Safety Zone Policy 123;
  - 3.2.2 Controlled Pedestrian Crossing Policy 124, and;
  - 3.2.3 School Safety Zone Policy 125.

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## 4. Definitions

- 4.1 Requestor: A resident of the Town of Tecumseh who resides, owns property or a business within the affected neighbourhood.
- 4.2 85th Percentile Speed: The speed at or below which 85 percent of the drivers are observed to travel in free-flow conditions at a representative location. An abundance of speeding is established using the 85th percentile speed.
- 4.3 95th Percentile Speed: The speed at or below which 95 percent of the drivers are observed to travel in free-flow conditions at a representative location. Dangerous speeding is established using the 95th percentile speed.
- 4.4 Posted Speed Limit: The speed prescribed for motor vehicles on a section of road by municipal by-law in accordance with the Highway Traffic Act.
- 4.5 Speed Study: The collection and analysis of vehicle speed data.
- 4.6 Traffic Calming: physical measures intended to reduce the negative effects of motor vehicle use, alter driver behaviour, and improve conditions for non-motorized street users. Seasonal or temporary traffic calming is defined as traffic calming measures installed on a temporary or seasonal basis. Traffic calming intends to restore streets to their intended function by installing physical devices aimed at slowing the speed of motorists to the desired speed, given the context of the street.

## 5. Procedure for Confirming Speed Issue

- 5.1 Flow Chart: The steps included in Figure 1 – Confirm Speeding Issue Flow Chart shall be followed by PWES staff upon a speeding complaint.
- 5.2 Pre-Screening: A Pre-Screening Assessment shall be completed prior to proceeding into any analysis. The pre-screening activities shall include the following:
  - 5.2.1 Confirm the road authority is the Town. If the road authority is not the Town, the request shall be referred to the correct road authority, and no further action will be taken by PWES staff;
  - 5.2.2 Review of past known information about the location. If the location has been reviewed within the last 3-years and it was determined that speed was not a problem, no further action will be taken at this

time, unless something has changed such as land use or traffic patterns;

5.2.3 The Director, PWES, shall retain the full authority to decline to move forward, and;

5.2.4 The Director, PWES, shall retain the full authority to proceed to the detailed analysis, thereby skipping the next step, the Community Support Petition, based on engineering experience.

5.3 Desktop Study: If the Pre-assessment criteria are met, a Desktop Study will be conducted as follows:

5.3.1 To establish whether the physical environment provides sufficient room for a vehicle to accelerate and decelerate to an excessive speed, the block length must be greater than 200m. Additionally, no other speed mitigation measures can be present nearby. The answer to both questions as indicated in the flow chart must be yes to proceed to the next stage;

5.4 Community Support: If the criteria have been met for the pre-screening and the desktop study, then confirming community support is the next step as follows:

5.4.1 A petition, favourably signed by at least 60 percent of the residents within a 300-metre radius of the alleged speeding problem, measured from the centre of the two nearest intersections, will be required for the request to move forward to the detailed analysis/data collection;

5.4.2 The PWES staff will provide a petition form, and a map depicting all the parcels/properties that fall within the 300-metre radius of the site to the requestor. The requestor shall be responsible for collecting the required signatures;

5.4.3 Each household is represented by one signature, regardless of the number of people residing in the household, and;

5.4.4 Failure to meet the 60 percent support level will result in the termination of any further investigation.

5.5 Detailed Analysis: The speed profile of the street will be established using the following process:

5.5.1 Data will be collected using one of the following methods depending on the nature of the request:

- a. 24-hour studies – deploy Automatic Traffic Recorder (ATR) for not less than one full week and up to two full weeks.
- b. Spot studies – complete spot studies for three days during time period of interest.

5.5.2 Speeding is not an issue if:

Posted Speed Limit	85 <sup>th</sup> Percentile Speed ( <b>A</b> )	Posted Speed +10km/hr ( <b>B</b> )	Is <b>B</b> is greater than <b>A</b> ?
			If YES: No Speeding Issue

OR

Posted Speed Limit	95 <sup>th</sup> Percentile Speed ( <b>A</b> )	Posted Speed +20km/hr ( <b>B</b> )	Is <b>B</b> is greater than <b>A</b> ?
			If YES: No Speeding Issue

5.5.3 A clear speeding issue is defined as follows:

Posted Speed Limit	85 <sup>th</sup> Percentile Speed ( <b>A</b> )	Posted Speed +15km/hr ( <b>B</b> )	Is <b>A</b> is greater than <b>B</b> ?
			If YES: Speeding Issue

OR

Posted Speed Limit	95 <sup>th</sup> Percentile Speed ( <b>A</b> )	Posted Speed +25km/hr ( <b>B</b> )	Is <b>A</b> is greater than <b>B</b> ?
			If YES: Speeding Issue

5.5.4 If the 85<sup>th</sup> percentile is between 10 and 15 km/hr. over the posted speed or the 95<sup>th</sup> percentile is between 20 and 25 km/hr. over the posted speed, PWES staff may choose to repeat data collection at a later date, at the discretion of the Director, PWES.

## 6. Speed Mitigation Options

6.1 If Speeding has been confirmed by following the procedures of this policy and [Figure 1](#), Potential Speed Mitigation Measures include:

6.1.1 Regulatory Modifications:

- a. Traffic calming measures as established through the School Safety Zone Policy 125.
- b. Establish a Community Safety Zone in accordance with Policy 123.

6.1.2 Other:

- a. Education Campaign (events, programs, or media campaigns to raise awareness of road safety issues)
- b. Requested Increased Enforcement

6.1.3 Physical Modifications:

- a. Traffic Calming Measures (discussed further in Section 7)

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## 7. Procedure for Traffic Calming

- 7.1 The design and implementation of appropriate traffic calming measures will be determined by PWES staff as approved by the Director, PWES.
- 7.2 Traffic calming measures supported by the Town of Tecumseh, as detailed in the Town's Complete Street Design Handbook, are listed in [Figure 2](#), Town Accepted Types of Traffic Calming.
- 7.3 Traffic calming measures are not appropriate to be applied to all types of roadways for a variety of operational and public safety reasons. The Town's Complete Street Design Handbook provides guidance in determining which measures are appropriate for each roadway classification, as summarized in [Figure 3](#) – Traffic Calming Measures by Road Classification.
- 7.4 Traffic calming along transit routes should be recommended in consultation with the Transit authority and/or service provider.
- 7.5 When a location is identified for potential traffic calming involving vertical deflection such as speed humps, the Director of Community Safety & Fire Chief should be consulted.
- 7.6 Where feasible, temporary measures may be recommended (i.e., removable speed bumps). Temporary measures may be considered at the discretion of the Director, PWES, where the type of traffic calming measure being considered has insufficient post-implementation data to confidently gauge the effectiveness of the proposed measure(s). Six months to one year of monitoring is required before the measures are implemented with permanent materials.
- 7.7 At the end of each calendar year, PWES will bring a report to Council, summarizing all traffic-related recommendations, including those governed by this policy, if any. The report will also recommend that the works be included as part of the annual PWES Capital Works Plan, for the following calendar year(s).

## 8. Administration & Review

- 8.1 Policy 126 shall be administered by the Department of Public Works & Engineering Services and subject to periodic review, at the direction of the Director, PWES.

Figure 1 – Confirm Speeding Issue Flow Chart

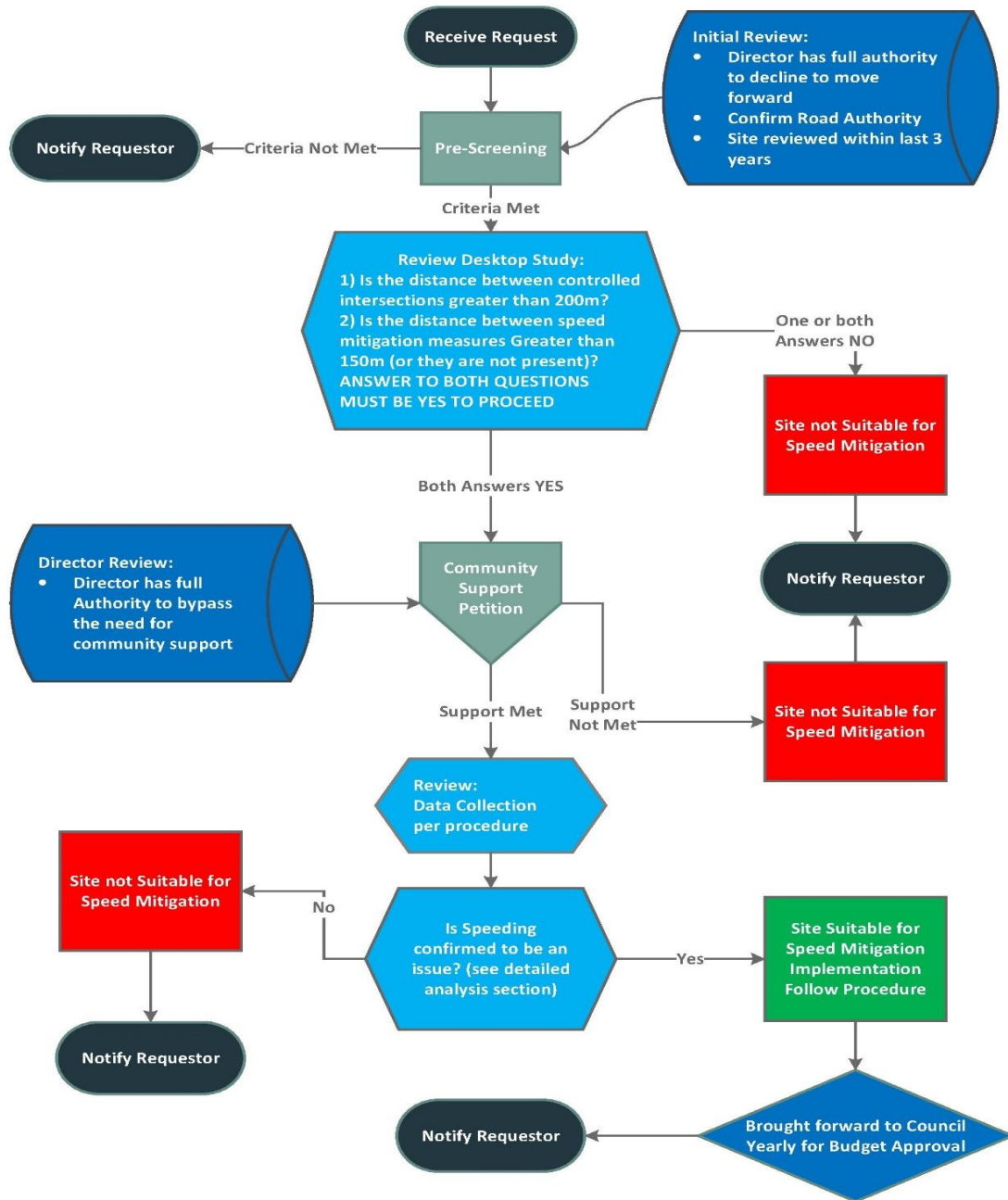




Figure 2 – Town Accepted Types of Traffic Calming



**Speed hump**  
 Vertical deflection;  
 Rounded raised areas of pavement, often placed in a series several metres apart



**Speed table**  
 Vertical deflection; Speed humps with a flat section in the middle and ramps on either side



**Speed cushion**  
 Vertical deflection; Speed humps with wheel cutouts to allow emergency and transit vehicles to travel over them unaffected



**Raised pedestrian crosswalk**  
 Vertical deflection; Speed humps with a flat section in the middle, designated as a pedestrian crosswalk



**Curb extension**  
 Horizontal deflection;  
 Extensions of the curbs into the travel lanes to narrow the street width



**Chicane**  
 Horizontal deflection; A series of curb extensions alternating between sides of the street to create S-shaped curves



**Mid-block narrowings**  
 Horizontal deflection; Curb extensions at mid-block locations



**Traffic circle**  
 Horizontal deflection; Raised islands placed in the middle of intersections to force traffic to travel around



**Rumble strip**  
 Vertical deflection; Small bumps in the roadway surface causing vibration automobiles

Photo sources:  
 (1) Traffic Calming Measures, ITE (<http://www.ite.org/traffic/todevices.asp>).  
 (2) Urban Street Design Guide, NACTO (<http://nacto.org/publication/urban-street-design-guide/street-design-elements/>).  
 (3) Blackburn News (<http://blackburnnews.com/wp-content/uploads/2013/08/rumble-strip.jpg>).  
 (4) Canadian Guide to Traffic Calming – 2<sup>nd</sup> Ed.  
 (5) fhwa.dot.gov

Figure 3 – Traffic Calming Measures by Road Classification

		Proposed Tecumseh Roadway Classification						
		Urban			Rural			
Traffic Calming Measure		Commercial Main Street	Minor Arterial	Collector	Local Road	Minor Arterial	Collector	Local Road
Vertical deflection	Speed hump	●	●	●	●	●	●	●
	Speed table	●	●	●	●	●	●	●
	Speed cushion	●	●	●	●	●	●	●
	Raised pedestrian crosswalk	●	●	●	●	●	●	●
	Rumble strip	●	●	●	●	●	●	●
Horizontal deflection	Curb extension	●	●	●	●	●	●	●
	Chicane	●	●	●	●	●	●	●
	Mid-block narrowing	●	●	●	●	●	●	●
	Traffic circle	●	●	●	●	●	●	●

● Appropriate measure    ● Implement with caution    ● Inappropriate measure