# Schedule A
# Traffic Calming Policy
# Township of Springwater

| | |
|---|---|
| Approved: February 19, 2020 | Department: Public Works |
| Effective: February 19, 2020 | Subject: Traffic Calming Policy |

## A. Policy Statement

This policy outlines the process when traffic calming measures projects are requested by Springwater residents.

## B. Purpose

The purpose of the policy is to provide a formal process for the evaluation of traffic calming efforts requested by residents, committees or affiliates that live in or work with the Township.

## C. Scope

This policy applies to Township staff, committees and Council with respect to addressing traffic calming requests.

## D. General

This Policy shall be administered by the Public Works Department

This Policy shall be referred to as the 'Traffic Calming Policy'.

This Policy shall come into force and effect on the day of passage.

This Policy shall be reviewed as required due to new or emerging technologies or when requested by Council.

## E. Authority

The authority for the Traffic Calming Policy shall be by the Council for the Township of Springwater.

# PROCEDURES FOR THE TRAFFIC CALMING POLICY

## General:

The Traffic Calming Policy has been created to provide residents, staff, committees and Council with a process for addressing traffic calming requests in the Township.

The Public Works Department, Council and the Policing Committee periodically receive requests for traffic calming measures on the various types of community roads.

This Policy supports staff and Council reviews with community involvement for local solutions.

The review process may be a simple as:

- Informal discussions with the Public Works technical staff;
- Deliberation between staff, public and Ward Councilor; and/or
- Reviews between staff and the Policing Committee and or Council.

For reasons of risk management, the process can also be a formal process whereby:

- Reviewers collectively determine necessity for Council action; and/or
- Determine potential liability may cause staff to report for Council resolution or by-law.

The Policy includes references the Traffic Calming Measures Guide and its appendices.

The Township developed Traffic Calming Measures Guide serves as the tool for staff to use in addressing requests in a fair and consistent manner. It defines the different road types and purpose and provides various guidelines and alternatives to consider for traffic calming.

Investigations, meetings or studies will be in accordance with the Traffic Calming Measures Guide.

Appendix A of the Traffic Calming Measures Guide is the Traffic Calming Request Form. It is the official means by which initial requests will be received by Public Works Staff. It is available on through the Township website within the Public Works section.

Appendix D is a flow Chart that depicts the process as outlined in this policy.

As with any undertaking any costs associated with a Traffic Calming Request will affect budget. Budgets can include solutions and budget planning will benefit from the policy process.

## Requests for Traffic Calming Measures and Procedure

The variety of requests received for calming measures on any type of road requires staff to consider a number of associated factors including local impacts that will help parties proceed in a manner combining technical guidance with public interest and reasonable alternatives to achieve a positive outcome.

Generally, the majority of complaints or requests received by the Township involve alleged excessive vehicle speeds and the resultant public safety concerns and conflicts in regards to:

- Children at play;
- Pedestrians at road side;
- School crossings;
- Cyclists sharing the road;
- Driveway access; and/or
- Trail crossings.

A number of relatively low cost options to resolve concerns are available to consider.

Examples are but not limited to:

- Shared costs for warning signage in isolated areas;
- Additional speed or warning signs due to existing conditions or need to comply;
- Painted shoulder lines; and/or
- Council by-laws through formal process for:
    - Community safety zone designations with increased fines;
    - Lowering of or creation of speed zones; and
    - Stop sign placement.

At additional costs there are also “physical” methods of calming that can be considered in either new subdivision design or existing special circumstance such as school zone crossings.

Examples are but not limited to:

- Temporary Lane Narrowing;
- Raised speed tables or cushions;
- Permanent medians; and
- Dynamic flashing warning lights.

The Traffic Calming Measures Guide refers to and defines most examples above with photos.

The process below, which is further defined in the Traffic Calming Measures Guide shall be followed when a request is received from the public for traffic calming (refer to Flow Chart Appendix D):

1. The Proponent, either an individual or neighbourhood will be directed to the Public Works Department which will advise the proponent of the Township Policy regarding traffic calming. Proponents will be made aware of the Traffic Calming Request Application Form found in Appendix A of the Traffic Calming Measures Guide. The Proponent and the Ward Councilor will be kept informed by staff throughout the traffic calming process.

2. Applications are to be submitted on the provided form in clear legible form (mailed, faxed or emailed) complete with the proponent's name, address and with a comprehensive description of the concern. Pictures and drawings can be attached or included.
3. When a form is submitted staff will determine whether the request applies to a road of Township authority. If the road is under jurisdiction of other government (i.e., County, Province or other municipality) staff will direct residents accordingly.
4. When an application form is provided staff may conduct, a field survey, a traffic study or if necessary attend a meeting at the location with the proponent.
5. If staff can accommodate the calming request through section 4, appropriate action will be taken should the works be in the best interests of public safety and budget.
6. Subject to outcome of section 4, the application at the discretion of the Director may require neighbourhood notification or a Public Information Centre (PIC) for further consideration.
7. Should a PIC be required, affected parties including the proponent, members of the public, Township Senior Staff, Policing Committee members, affiliated agencies such as the OPP, Council and/or Mayor will be notified.
8. PIC meeting results will determine next steps to be shared with all parties affected in a timely fashion. It is after the PIC when the Director of Public Works will determine if the application and process can continue. It may be required at this time that a local petition is required by the proponent in accordance with the Traffic Calming Measures Guide. The Petition form can be found in Appendix B of the Traffic Calming Measures Guide.
9. The petition process may require further community consultation and support to develop the calming measures plan. A report to Council will then be generated and the community will be advised as to when the Council will consider the motion to adopt the plan.
10. If the Director determines the matter does not warrant further consideration, the process will stop and the proponent and affected parties, including the Ward Councilor will be advised in writing.
11. If Ward Council or any member of Council feels the process should continue then the elected official may bring forward to Council a notice of motion requesting a report from the Director explaining the decision to stop the application process.
12. Through the report, Council may repeal the Director's decision and direct staff through resolution and or by-law to support the request.
13. A request that is denied at Council may not be brought forward for 36 months or until a new Council is in place; however, this may be waived in circumstances where new information is brought forward.

# TOWNSHIP OF SPRINGWATER

# TRAFFIC CALMING MEASURES GUIDE

**Township of Springwater**
**Staff Resource**

## February 2020

PREPARED BY PUBLIC WORKS STAFF

# Table of Contents

# 1 Introduction

## 1.1 Background

The Township of Springwater is responsible for ensuring that roadways serve the needs of the community and all users, including: cars, pedestrians (including those with accessibility needs), cyclists, emergency vehicles and snow removal equipment. Ensuring roadways are safe may involve the implementation of traffic calming measures and speed management.

Traffic calming and speed management are a significant challenge for many communities in Canada. Communities with a mix of both urban and rural areas often find this to be exceptionally challenging. Roads often provide both high-speed travel over long distances within a built-up area; however, the same road may accommodate local traffic, pedestrians and on-street parking. This convergence of road purposes presents both an enforcement challenge and a safety concern for the public and the community. Speed management is also a concern on connector roads with strip development, as well as within residential neighbourhoods. Neighbourhoods and urbanized areas generally experience higher volumes of pedestrians, and therefore require more stringent consideration for the safety and well-being of the residents.

Addressing speed issues through law enforcement alone often leads to temporary compliance at a significant cost. One way to reinforce the need to reduce speed is to change the visual appearance of the road by installing traffic calming measures that communicate to drivers that the function of the road is changing.

The Township of Springwater receives numerous concerns from residents pertaining to speeding, traffic volumes and/or cut through traffic on Township roads. The Township responds by investigating the potential for neighbourhood traffic calming measures.

This Guide outlines the prerequisites, process, and criteria to consider when traffic calming concerns are voiced by residents within the Township and how the Township proceeds when a traffic calming request is brought forth.

## 1.2 Purpose

The purpose of this Guide is to provide Township staff with a systematic procedure for the initiation, investigation and implementation of traffic calming measures within residential neighbourhoods and on connector roads, within the Township of Springwater. This Guide does not apply to the following: rural collector roads or arterial roads as they are intended to serve higher traffic volumes and higher speeds, roads located within Township boundaries that are not owned by the Township (i.e., County Roads or Provincial Highways) or roads or road segments with a speed posted above 50km/hour. This guide is NOT to be used for requests for posted speed reductions. These requests shall go through a request for speed reduction and reviewed under a separate process.

This Guide also ensures that there is a formal process defined by which all sites/traffic calming requests can be evaluated against uniform criteria to ensure consistency throughout the Township.

The Traffic Calming Measures Guide has also been developed to act as an educational tool for residents, encourage public involvement and provide a standard throughout the Township.

## 1.3 Potential Liability

Liability resulting from the introduction of traffic calming measures on public roads has been a concern for many municipalities. Although these concerns continue to exist, experience has proven that the most effective means of reducing the potential for litigation is to establish and follow a set implementation procedure. This procedure should include: an approved guide, a defined process, specific design guidelines and standards, a uniform approach to advise road users through standard signs and markings, and a prudent maintenance program that addresses the additional attention required in traffic calmed areas. Although the implementation procedure may not completely eliminate potential liability, it is believed that the benefits associated with traffic calming far outweigh the risks involved.

## 1.4 Traffic Calming Defined

Traffic calming as defined by the Institute of Transportation Engineers (ITE) Subcommittee as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non-motorized street users." Traffic calming measures combined with engineering, educational and enforcement tools can significantly improve the safety of neighbourhoods and roads. The primary purpose of traffic calming is to reduce high traffic speeds within residential neighbourhoods and to improve safety for all road users.

### 1.4.1 Objective of Traffic Calming

To address undesirable traffic conditions such as poor sight lines, speeding and excessive volume on local and collector roads, the specific objectives of traffic calming and this Guide are to:

**Increase the Safety of Neighbourhoods**

Through the use of physical measures to alter driver behaviour, traffic calming can improve safety on neighbourhood streets and within rural communities. The resulting reduction in volume and speed creates a safer environment for all residents including cyclists, children, persons with accessibility needs, and seniors.

**Improve the Livability of Neighbourhoods**

Traffic calming is intended to uphold and restore the livability and sense of community within neighbourhoods by minimizing the volume and speed of through traffic. As a result, negative impacts from traffic such as excessive noise, air pollution, visual presence of

numerous vehicles, and potential safety hazards are minimized. In addition, attractively designed traffic calming measures can enhance the aesthetics of a neighbourhood and improve streetscapes.

**Restore Streets to the Intended Function**

The intended function of a local road is to accommodate low to moderate volumes of traffic travelling at low speeds in and out of neighbourhoods or from points of origin to the collector road system. Local roads provide direct vehicle access to residences that typically front onto these roads; through traffic should be discouraged from using local roads. Collector streets within the Township are intended to provide access to properties and to provide linkages between local roads and other collector and arterial roads at lower operating speeds.

**Maintain Access Routes for Emergency Services, Public Transit and Maintenance Services**

The potential impacts to these services have been considered in the development of this Guide and will continue to be considered throughout the implementation of traffic calming measures. The needs of these services will be balanced against the need to slow and/or reduce traffic. In addition, this Guide outlines the process through which all potentially impacted services will have the opportunity to comment on any proposed plans before implementation.

**Promote Public Participation and Community Support**

Traffic calming measures have a direct impact on neighbourhoods and the residents living in them. As such, an integral part of the process includes resident communication and feedback. Good community involvement leads to solutions to specific local traffic issues. Effective communication with residents provides staff with the opportunity to explain to residents the benefits of traffic calming measures while deterring less effective countermeasures.

## 1.4.2 Advantages and Disadvantages

General advantages and disadvantages of traffic calming measures are outlined below:

Advantages:

- Reduced motor vehicle speeds;
- Reduced traffic volumes;
- Discouragement of through traffic;
- Improvement of overall road safety;
- Improvement of neighbourhood livability; and
- Reduced conflicts between road users.

Disadvantages:

- Increased emergency vehicle response time;
- Reduced ease of access in and out of neighbourhoods;
- Results in expensive solutions (time and resources);
- Diverts traffic onto neighbouring roads;

- Increases maintenance time and costs (i.e., snow clearing, garbage pick-up); and
- May be visually unattractive and/or cause increased noise pollution.

### 1.4.3 Common Traffic Calming Misuses and Misunderstandings

In consideration of the Township objectives in implementing a Traffic Calming Policy and Guide, and in recognizing that a large extent of the Township's road system is within a rural environment, the following traffic calming measures will be considered when a public request is received:

There has been a significant amount of knowledge gained through research and implementation of successful traffic calming measures in recent years. The following is a list of traffic calming

Traffic calming typically does not include the following:

- All Way Stop (unwarranted);
- 40km/h Speed Zones;
- "Children at Play" Signs;
- Speed Limit Sign;
- Rumble Strips; or
- Speed Bumps.

**All Way Stop (unwarranted):**

Unwarranted all way stops do not act as effective traffic calming measures due to the following:

- Traffic speed increases between stop signs;
- Reduced compliance adhering to stop signs;
- Increased rear-end collisions and driver frustration; and
- Requires enforcement from police.

**40km/hr Speed Zones:**

Artificially reduced speed zones are not conducive to traffic calming for the following reasons:

- Reduced driver compliance to posted speeds;
- Pedestrians often perceive roadways with reduced speeds to be safer, providing a false sense of safety; and
- Compliance with artificially reduced speeds is achievable through police enforcement and presence.

**‘Children at Play’ Signs:**

Signage warning motorists of children at play are ineffective for providing traffic calming measures for the following reasons:

- ‘Children at Play’ signs can provide residents with a false sense of security; and
- Children playing in the streets, while common, is dangerous and strictly prohibited under the Highway Traffic Act.

**Speed Limit Sign:**

Speed limit signs do not act as traffic calming measures for the following reasons:

- Posted speed limits for roadways are typically established based upon engineering criteria in relation to roadway characteristics;
- Posted speed limits not matching characteristics of the roadway lead to motorist frustration and foster aggressive driving behaviours;
- Posted speed limits should be consistent to maintain a level of credibility and compliance throughout the Township; and
- Speed limits are enforced through police presence, thus requiring additional police resources.

**Rumble Strips:**

Rumble strips are raised pavement sections that are closely spaced along a roadway in regular intervals allowing vehicles traveling over them to be alerted through both noise and vibration. The purpose of rumble strips is to caution inattentive motorists of potential danger.

Rumble strips do not constitute as a traffic calming measure due to the following:

- Rumble strips become less effective if overused;
- They create additional noise for nearby residents; and
- Rumble strips require additional maintenance.

**Speed Bumps:**

Speed bumps are vertical obstructions that typically measure between 75-100 mm in height and 3m in length and are often found in privately-owned parking lots as they are designed for a speed that is much lower than a typical posted speed limit along a public roadway. Speed bumps are not to be mistaken for speed humps. Speed bumps provide inadequate traffic calming for the following reasons:

- Speed bumps are not designed for public roadways;
- Traffic speeds between speed bumps generally increases;
- Speed bumps require maintenance and additional staff resources; and
- Speed bumps lead to increased noise for nearby residents.

# 2 Traffic Calming and Speed Control Measures

There are different classifications of traffic calming and speed control measures: physical vertical deflection, horizontal traffic calming measures, physical obstruction, and passive and mitigating measures. A description of each classification is described below:

### Physical Vertical Deflection

Physical vertical traffic calming measures provide a vertical obstruction that vehicles are able to travel over. The change in pavement height leads motorists to reduce speed prior to traversing the object. It should be noted that vertical traffic calming measures are not preferred as they can increase emergency vehicle response time and cause additional challenges for snow removal equipment. All vertical traffic calming measures shall be appropriately signed and marked in accordance with reference material provided by the Institute of Transpiration Engineers (ITE) and the Transportation Association of Canada (TAC).

Vertical traffic calming measures are typically more effected when installed in series. The deceleration and acceleration of a vehicle, while negotiating a series of vertical traffic calming measures, is dependant on the number of and spacing of the installation of the traffic calming devices. Vertical traffic calming measures can also lead to increased cut-through traffic which diverts on to parallel streets. Consideration of vertical traffic calming measures should include improving the traffic flow in the neighbourhood as a whole.

Vertical traffic calming measures include the following:

- Seasonal Speed Cushion;
- Seasonal Speed Humps;
- Speed Tables;
- Raised crosswalks;
- Raised Crosswalks; and
- Raised Intersections.

### Horizontal Traffic Calming Measures

Horizontal traffic calming measures incorporate raised islands and curb extensions to prevent vehicles from traveling at excessive speeds through straight stretches of roadway. This creates a physical perception of a narrower roadway, causing vehicles to reduce speed or to reduce speed to maneuver around the obstacle. Horizontal traffic calming measures shall be signed and marked in accordance with reference material provided by the Institute of Transpiration Engineers (ITE) and the Transportation Association of Canada (TAC).

Implementing horizontal traffic calming measures can result in the diversion of traffic onto parallel streets. Consideration of horizontal traffic calming measures should include improving the traffic flow in the neighbourhood as a whole.

Horizontal traffic calming measures include the following:

- Neighbourhood Traffic Circles;
- Roundabouts;
- Chicanes;
- Lateral Shifts;
- Centre Medians; and
- Curb Extensions.

**Physical Obstruction**

Physical obstructions are the most drastic traffic calming tool and are only used in cases where it has been determined that vertical or horizontal measures will not address the identified problem. Physical obstructions eliminate cut-through traffic by eliminating specific vehicle movements. It should be noted that physical obstructions are not intended to obstruct bicycle or pedestrian traffic. These measures are typically implemented at intersections, but may be applied in other locations.

Physical obstructions include the following:

- Directional Closures;
- Raised Median Through Intersection;
- Rights-in/Rights Out;
- Diverter; and
- Full Closure.

**Passive and Mitigating Measures**

Passive traffic calming measures do not require engineering or construction of physical modifications to the roadway. Passive traffic calming measures are often lower in cost and prevent construction of permeant changes to the roadway. Physical traffic calming measures will be considered by the Township when passive measures have not alleviated valid traffic calming concerns in the neighbourhood and the Township deems them necessary.

Passive traffic calming measures include the following:

- Education;
- Dynamic Speed Signs; and
- Targeted Speed Limit Enforcement.

## 2.1 Considered Measures

In recognizing that a large extent of the Township's road system is within a rural environment, the following traffic calming measures may be considered when a public request is received:

- Enforcement;
- Stop Signs;
- Dynamic Speed Signs;
- Lane Narrowing via Pavement Markings;
- Speed Humps;
- Speed Tables;
- Public Education;
- Centre Medians;
- Lane Narrowing (temporary); and
- Maintenance and Signage.

There may be exceptions made to the above list at the discretion of the Township. Below is a list explaining some of the commonly implemented traffic calming measures within the Township:

**Enforcement**

Enforcement is defined as a police presence to monitor speeds and issue tickets for violations. It is often used with other traffic calming devices to regulate behaviour and is proven to be quite effective in reducing travel speeds (provided the enforcement measures are consistent).

Advantages:

- Effective capturing drivers' attention;
- No impact to emergency vehicles or snowploughs;
- Can be implemented immediately; and
- Does not affect vehicle operations.

Disadvantages:

- May be costly as additional revenue for tickets does not pay for officer work time; and
- Does not provide for a continuous and consistent solution (i.e., not present for 24 hours per day and 7 days a week).

**Stop Signs**

It is noted that stop signs may be employed as a means of traffic calming; however, this is not recommended as a speed reduction method. As per the Ontario Traffic Guide Book 5 Regulatory Signs, stop signs should not be used for speed control. Unwarranted stop signs increase vehicular speeds between stop signs and encourage rolling stops (stop signs only affect speeds within approximately 40 metres of the stop sign). An excessive number of stop signs, particularly those that are not warranted, also breeds disrespect for stop control signs and other traffic control devices.


Advantages:

- Cost effective; and
- Signs and markings are easily installed.

Disadvantages:

- Deficiencies must be identified; and
- On-going maintenance for trees/landscaping.

**Dynamic Speed Signs**

Dynamic speed signs are portable, temporary or permanent radar activated signs that instantaneously display approaching speeds for individual vehicles. The signs can also be programed to record outgoing traffic speeds. Appropriate messages (i.e., Please Slow Down) may also be displayed.


These devices create a sense of being monitored to the driver and provide an instant notification that the speed limit is being exceeded (if such is the case).

Advantages:

- Educational tool;
- Positive public relations; and
- Effective as a temporary speed reduction measure.

Disadvantages:

- Relies on motorists to voluntarily comply;
- Duration of effectiveness is limited; and
- Not accurate on multi-lane roads.

**Lane Narrowing through Pavement Markings**

This measure narrows the travel lanes to a minimum width of 3.0 metres through the use of pavement markings (centreline and edge lines). Reduced lane widths provide a feeling of constraint, causing motorists to reduce travel speed; remaining road width would be designated as shoulder.

Transverse markings can also be painted on the shoulders provided there is sufficient hard surface to accept such.

Advantages:

- Provides additional space for shoulders which may be used for

Disadvantages:

- Lane narrowing;

other road uses (Particularly in absence of sidewalks);
- No impact to emergency vehicles and snowploughs; and
- Can be readily implemented and does not affect vehicle operations.
- Reduces separation between oncoming vehicles; and
- Pavement markings require maintenance and are not visible during winter months.

**Seasonal Speed Humps or Tables**

Speed humps are defined as a raised area of the road, which deflects both the wheels and frame of a traversing vehicle. Typically, 80mm high and 4.0 metres wide (in the direction of travel), spaced 125 to 225 metres apart. Speed humps are used on urban residential streets and connector roads. Speed tables are flat-topped rubber mounds that cover the full width of the roadway. The ramps of the speed table are more gently sloped than speed humps and thus speed tables are less jarring than a standard speed hump and can allow larger vehicles (emergency vehicles, trucks and snowploughs) to cross with reduced disruption.

<u>Advantages:</u>
- Relatively cost-efficient;
- Easy to construct;
- Deters cut-through traffic; and
- Reduces vehicle speed.

<u>Disadvantages:</u>
- May delay emergency vehicles; and
- May cause damage to snow removal equipment.

**Centre Median**

A centre median is a raised island installed in the centre of a road to reduce the overall width of the travelled lanes. They help slow traffic without affecting the capacity of the road. Raised median islands can be combined with curb extensions and/or textured crosswalks to further improve pedestrian safety. This measure may be considered on both local and collector roads.

Advantages:

- Provides refuge for pedestrians;
- Increases motorist awareness; and
- Can be designed to prohibit left turns thereby reducing traffic.

Disadvantages:

- May reduce on street parking;
- Restricts driveway access;
- Speeds may increase due to lack of left turns; and
- Additional maintenance if landscaped.

**Temporary Lane Narrowing**

This measure narrows the lane width through the installation of signs and/or bollards in the roadway. Reduced lane widths create a feeling of constraint and should cause drivers to reduce their speed well traveling through the area of narrowing. More bollards can be added to further narrow the street where the road is over 12m.

Advantages:

- No Impact to emergency vehicles or snowploughs; and
- Can be readily implemented and does not affect vehicle operations.

Disadvantages:

- Lane narrowing; and
- Restricts separation between oncoming vehicles.

**Maintenance and Signage**

Poor sight lines can have significant adverse effects on the overall safety of roads, whether residential streets or connector roads. Being able to properly see pedestrians/cyclists, street signs, on-coming traffic, and road geometry is of paramount importance to maintaining safe driving conditions. Landscaping, tree trimming/removal, and road maintenance are on-going threats to road safety and need to be considered throughout the life cycle of the road. In addition, pavement markings and road signs are simple and efficient tools to make drivers aware of speed reductions ahead, speed humps, hidden intersections, etc.

Advantages:

- Relatively easy once identified;
- Cost effective; and
- Signs and markings are easily installed.

Disadvantages:

- Deficiencies must be identified; and
- On-going maintenance for trees/landscaping.

# 3 Traffic Calming Measures Guidelines

## 3.1 Consideration for Traffic Calming

Traffic calming measures will be considered under the following circumstances:

- When there is a demonstrated safety, speed or short-cutting traffic concern and acceptable alternative measures have been exhausted;
- After focus is placed first on improvements to the arterial road network, such as signal timing optimization;
- Include consideration as to whether an area-wide plan versus a street-specific plan is more suitable: an area wide plan should be considered if a street-specific plan would likely result in displacement of traffic onto adjacent streets;
- Be predominantly restricted to two lane roads (one lane of through traffic in each direction);
- Not impede non-motorized, alternative modes of transportation and be designed to ensure pedestrian and cycling traffic is unaffected;
- Not impede Emergency and Transit services access unless alternate measures are agreed upon;
- Maintain reasonable automobile access to Township roads;
- Consider parking removal on a project-by-project basis. Parking needs of residents should be balanced with the equally important functions of traffic, emergency vehicle access, transit, bicycle, and pedestrian movement;
- Only be installed after staff has investigated existing traffic conditions and the necessary approvals have been received; and
- Be monitored; follow-up studies will be completed to assess effectiveness and the results will be communicated to the community and Council.

## 3.2 Community Involvement

Restoring neighbourhood streets to their intended function and improving overall livability are primary objectives of traffic calming. In order to achieve this goal, community involvement and support is paramount. Throughout the process, residents are encouraged to participate in the development of a traffic calming plan suitable to the neighbourhood and the concerns within it.

Communication with residents is made at various stages throughout the process as the traffic calming plan is developed and implemented. Traffic calming plans should be developed with an understanding of current and historical traffic patterns within the area

under investigation. For a traffic calming program to be successful, the community must support and be committed to the solution. The only means of gaining this commitment is to involve the residents by informing them of the study location being considered for traffic calming measures.

The benefit of community involvement is that it generates support for a traffic calming program and assists in the implementation of a plan without significant opposition upon completion. Community involvement also enhances the credibility of the traffic calming program, particularly when it is eventually presented to Council for approval. In order to obtain a working partnership with the community, meetings will be scheduled and survey's delivered to residents affected by the implementation of traffic calming measures.

These forms of contact will provide the community with opportunities to offer input into the development of the plan, as well as publicize and increase the awareness of the study.

The review and implementation of traffic calming measures is a time consuming and expensive process requiring many resources. Without public support, the traffic calming measures intended to alleviate traffic concerns, could be met with negative public opinion, as a result jeopardizing the outcome and potential positive impacts to affected neighbourhoods.

Neighbourhood support, enforcement, education of motorists, bicyclists and pedestrians, appropriate engineering applications and economics typically determine the success of any traffic calming endeavor. A cooperative partnership between the affected residents and the Township is essential to the success of the project.

## 3.3 Class Environmental Assessment Process

Traffic calming is exempt from the Ontario Environmental Assessment Act and is not an undertaking subject to the Municipal Engineers Association Municipal Class Environmental Assessment (October 2000, as amended in 2007). Where appropriate, public consultation elements of the Municipal Class EA for a Schedule B project have been incorporated as a best practice.

It should be noted that the retirement of existing laneways, roads and road related facilities is classified as a Schedule A+ project under the Municipal Engineers Association Municipal Class Environmental Assessment (October 2000, as amended in 2007). Schedule A+ projects are pre-approved, provided that the public is advised prior to implementation. The manner in which the public is informed throughout this Guide will serve as the preferred method of public notification for any traffic calming measures that involve the retirement of existing road facilities.

# 4 Traffic Calming Staff Review Considerations

The following process will be used when proceeding with a request for traffic calming measures within the Township of Springwater. An established and formal process for

investigating roads provides consistency and equality in the determination of need and suitability of traffic calming measures.

## 4.1 Step 1: Initiate Traffic Calming Request

### Resident Concern

Residents with traffic related concerns are instructed to submit a written traffic calming request (Appendix A) to the Township. Township staff will then conduct a brief preliminary assessment to determine if the requested road and/or area meets the initial screening criteria.

### Initial Screening by Township Staff

Initial screening criteria to determine eligibility for consideration for traffic calming measures have been established.

With respect to the road or road section in question, it must:

- Be a local or collector road assumed and maintained by the Township of Springwater;
- Have a minimum length of 150m; and
- Have a posted speed limit of 50km/hour or less.

In addition, the following must also be satisfied

- All reasonable efforts have been made to addresses the concerns utilizing other means including engineering, education and enforcement tools; and
- Zoning should be primarily residential along the subject road segment.
- Have had no previous studies and/or assessments within the past 36 months; however, the 36 month waiting period will be waved in circumstances where new information is brought forward.

For roads or road sections with restricted horizontal and/or vertical alignment, and hence restricted sight lines, traffic calming measures should be considered in conjunction with reduced speed limits and adequate warning signs.

### Response to Residents

Following this initial review, the Township will inform residents as to whether or not their location meets the initial screening criteria. Residents with requests that meet the above noted initial screening criteria will receive information about the traffic calming process. Roads that do not meet the above-noted criteria may still be eligible for other mitigating measures and/or enforcement initiatives.

For road segments that do not meet the above initial screening, staff will consider frontline mitigation measures to address neighbourhood traffic concerns. These methods may include tools such as targeted police enforcement, sign installation and pavement

marking modifications. Front-line mitigation measures may require monitoring to evaluate and assess their effectiveness.

## 4.2 Step 2: Neighbourhood Petition

Should it be determined that the neighbourhood and/or road segment meets the criteria, the neighbourhood proponent will be required to submit a written application request, accompanied by a petition; the petition form can be found in Appendix B of this Guide. The focus of the petition will centre on whether or not there is sufficient neighbourhood/local support for the Township to initiate an investigation into the need for traffic calming on the requested road.

The petition must contain an indication of support from at least 60 percent of the households with direct frontage or flankage onto the road segment that has been identified as the location for the potential implementation of traffic calming measures, as defined by Township staff. Each household is represented by one signature, regardless of the number of people residing in the household. Failure to meet the 60 percent support level will result in termination of the investigation; meeting the required 60 percent support level will trigger the commencement of a traffic calming investigation. This step in the process is crucial in determining the level of concern from the residents and will prevent frivolous requests that are not supported by the remainder of the neighbourhood from consuming valuable resources.

## 4.3 Step 3: Data Collection

If the requested location meets the initial screening criteria and a petition results indicating that there is at least 60 percent support, data collection and analysis will commence. The collection of traffic data, as deemed necessary by Township staff, will serve to provide a better understanding of the current traffic conditions and to prioritize locations for the investigation of traffic calming.

Staff will conduct the necessary traffic studies to quantify and qualify the submitted traffic concerns. The data collected may include traffic volumes and composition (cars and trucks), vehicle speeds, collisions, sight lines related to deficient horizontal and/or vertical alignment and stopping distance, pedestrian activity, an origin/destination study if the request relates to shortcutting traffic, and historical site-specific information.

Data collection methods may include the following:

- Vehicle volume count over a 24-hour period;
- Speed study to determine existing speed data;
- Review of collision data for the most recent three (3) years, if available;
- Study to quantify cut-through traffic;
- Review of existing roadway conditions (i.e., pavement condition, signage, road markings);

- Pedestrian activity;
- Presence of sidewalks on one or both sides of the road segment;
- Presence of pedestrian generators, such as schools, senior residents, playgrounds, etc.;
- History of traffic operations for the area within the last five (5) years; and
- Stopping study to determine compliance with vehicle stoppage at posted signage.

For vehicle speeds, it is not prudent to consider the highest speed at which motorists travel. Rather, the 85th percentile speed considered, which is the speed at which 85 percent of the total traffic volume on a road is travelling at or below. In considering the need for traffic calming, the 85th percentile speed must exceed the posted speed limit by the values provided in Table 1.

**Table 1: 85th Percentile Speed Considerations**

| Posted Speed (km/h) | 85th Percentile (km/h) |
|---|---|
| 40 | 50 |
| 50 | 61 |

With respect to sight distances and the need for traffic calming to reduce travel speeds upon approach to intersections, the existing sight distances at intersections must be less than the distances outlined in Table 2 for traffic calming to be warranted. For lower speed roads (i.e., posted speed of 40km/h or less), the design speed is typically taken as 10km/h over the posted speed, whereas for higher speed roads (i.e., posted speed of 60km/h or more), design speed is 20km/h greater; however, roads posted at speeds greater than 50km/h are not applicable to this Guide.

**Table 2: Stopping Sight Distance Considerations**

| Posted Speed (km/h) | Sight Distance (m) |
|---|---|
| 40 | 45 |
| 50 | 65 |

Once collected and summarized, the data will be utilized in the overall assessment to determine the need for traffic calming and assist in setting priority for locations of consideration. The review of data will be completed using Council approved metrics (Appendix C).

## 4.4 Step 4: Data Assessment

### Basis for Assessment

The data assessment is a screening process focused on the various attributes of a road segment in order to quantify its potential need for traffic calming. By means of assigning weighted points based on the severity of certain road attributes (i.e., 85th percentile speed), this process will bring to the forefront roads requiring consideration while

quantifying the current conditions. A basis for assessment has been prepared in consideration of comparable traffic calming policies in effect throughout the area (refer to Appendix C). Depending on funding availability, locations will be selected based on the point system; locations with the highest points will be implemented first. If funding does not permit all locations to be implemented in one year, roads will be carried forward to the next year when they will then be re-prioritized to include any new locations.

### Assessment Thresholds

The minimum number of points required to proceed with the investigation of traffic calming measures differs based on the classification of road. In keeping with the objective of restoring roads to the intended function, local and collector roads are designed and expected to convey varying levels of traffic volume. This, in turn, has a bearing on the minimum point value required to proceed, as traffic volume is a major consideration. Based on this, the following are minimum point values for each road type:

- Local road minimum 35 points; or
- Collector road minimum 52 points.

### Response to Residents

Should a location fail to meet these requirements, residents and the Ward Councillor will be notified in writing and the investigation for traffic calming measures will discontinue. However, staff will continue to address the concerns of the residents by means of the front-line mitigating measures including:

- Targeted police enforcement; or
- Community entrance signs “Drive slowly…think of us”.

The signs used as front-line mitigation measures are visual reminders to motorists that they are entering a residential area where the residents are concerned about safety. Targeted police enforcement will increase driver awareness of the speed limit and force motorists to temporarily reduce speed and comply with posted limits.

## 4.5 Step 5: Design Consideration and Community Feedback

### Selection of Traffic Calming Measures

The data collected combined with site visits, historical information, future maintenance and construction plans, as well as resident feedback will be taken into consideration to determine potential traffic calming measures. Appropriate traffic calming measures will be determined based on the list of traffic calming measures outlined in Section 2 of this Guide. The traffic calming design could include one or more different types of traffic calming techniques. The proposed traffic calming measures will be in accordance with the design guidelines outlined in the Canadian Guide to Neighbourhood Traffic Calming and the judgment and experience of Township staff.

## Agency Consultation

Staff will provide the preferred design to the relevant agencies (i.e., emergency services, road maintenance department, transit services, etc.). Comments from the potentially affected services and stakeholders will be solicited and feedback with respect to possible impacts will be encouraged. As required, Township staff will work with stakeholders to modify the design, as necessary. While it is preferable to modify the traffic calming design, if modifications are not able to remedy concerns, the traffic calming process will be discontinued for the road segment under consideration and residents will be notified.

## Community Consultation

Staff will host a public information meeting to present the purpose, objectives and implementation process of traffic calming in general. Staff will then present and explain the rationale behind the specific preferred traffic calming design. The public meeting will provide residents with an opportunity to become involved in the process, learn more about the proposed traffic calming treatment(s) and to provide their feedback.

Using summarized comments from the submitted petition and preliminary information about the road and surrounding area, staff will define the study area for community consultation. As part of this process, surrounding roads may be identified as part of the investigation. As a minimum, households with direct frontage onto the road to be investigated will be surveyed, in addition to each property whose side yard abuts the subject road segment. Households that do not directly front the subject road, but who have no other option but to use the section of road where traffic calming is being proposed (i.e., a cul-de-sac), will not receive the survey; however, a public meeting notice will be delivered to their homes.

Notification will be published in the local newspaper having general circulation in the project area. The purpose of this notice is to provide notification to the public regarding the meeting date, time and location of the community consultation. It will also present an opportunity to solicit comments on the alternative traffic calming measures.

## Community Support Survey

The objective of the community support survey is to determine the level of support for the traffic calming design and to provide an opportunity for the most directly affected residents to oppose any modifications to the road. It is also intended to measure the support of the preferred design proposed to the residents. Surveys will be delivered by mail and at a minimum, will contain:

- A brief description of traffic calming, including its advantages and disadvantages;
- The results of the traffic studies undertaken by staff;
- A survey question asking if residents are in favour, opposed or neutral to the implementation of traffic calming measures in identified location(s);
- The preferred traffic calming designs;
- A request for comments and feedback; and

- An indication that this is the final opportunity to modify and improve the preferred design to address any outstanding concerns and to incorporate resident inputs.

In order for the process to continue, a minimum of 25 percent of total surveys delivered must be returned to the Township. Of this 25 percent, 60 percent acceptance for the implementation of traffic calming is required. This reinforces that community support is vital for the ultimate success of traffic calming. For example, if 100 surveys are delivered, a minimum of 25 surveys is required to be returned and of those, 15 must indicate acceptance of the recommended traffic calming measure.

If this support rate is not met, the process will cease and a notification of failure to meet the community support levels will be sent to the residents on the mailing list.

## 4.6 Step 6: Finalize and Implement the Traffic Calming Plan

### Finalize the Traffic Calming Plan

Using technical data, community feedback, and in keeping with the goals, objectives and principles set out in this Guide, staff will finalize the preferred traffic calming design to be put forward as the preferred Traffic Calming measure. In finalizing the preferred Traffic Calming Measure, general consideration will be given to the various aspects of road design such as utility placement, landscaping, sign requirement and drainage.

### Council Notification

A report recommending the implementation of the preferred traffic calming measure will be submitted to Township Council. The neighbourhood and affected parties will be made aware of when and where Council will be considering the staff report.

### Council Approval

Council approval will be required for the following traffic calming methods and/or devices:

- Stop Signs;
- Lane Narrowing through Pavement Markings;
- Seasonal Speed Humps and Tables; and
- Centre Medians.

### Implementation

Upon approval of Council, resident notification, and sufficient funding, traffic calming measures will be implemented. Where feasible, staff may decide it is beneficial to phase in traffic calming through the use of temporary or removable traffic calming measures such as pavement markings or barrels. This will allow time to examine the impact of the measures and their effectiveness before committing funding to permanent treatments.

## 4.7 Step 7: Feedback Monitoring and Evaluation

### Monitoring and Evaluation

Township staff will seek feedback and monitor the road to determine the effectiveness of the utilized measures and their impact on the surrounding road network.

### Removal of Traffic Calming Measures

Traffic calming devices may be removed, at the request of residents provided that at least the same level of support exists to remove as was measured for installation (25 percent returned surveys, with 60 percent of respondents agreeing to the removal). The survey will be delivered to the same residents as was initially done to gauge support for traffic calming. Traffic calming measures must be installed for at least a three (3) month trial before starting the process to remove them. If traffic calming devices are removed, the subject street must wait at 36 months before requesting a new traffic calming measure; at this point the approval process will start over. The 36 month waiting period will be waved in circumstances where new information is brought forward.

If a request to remove a single traffic calming device, within an overall traffic calming measure, is received, all traffic calming devices will be considered for removal. Depending on circumstances, it may be possible to remove a single device constructed as part of an overall plan, however, in most cases all devices work together to be effective. The Township reserves the right to remove traffic calming measures at any time, without notification if it is determined that the measures are ineffective or unsafe, or if they have created a negative impact that cannot be corrected. The Township will mail out a notification and advertise in local newspapers informing of its decision to remove traffic calming measures.

# Appendix A: Traffic Calming Request

# Traffic Calming Request

**Application Date: _____**
**Location of Traffic Calming Request:**
**Street:_____From_____To_____**
**Applicant Information:**

| | |
|---|---|
| Name: | |
| Phone: | |
| Email: | |
| Address: | |

Provide reasoning for Request:

_____

_____

_____

_____

_____

_____

Provide sketch if warranted:

**Completed petition forms can be delivered in person or by mail to the Township office, or submitted electronically:**

Township of Springwater
Public Works Department
2231 Nursery Road
Minesing, ON
L9X 1A8

Or **publicworks@springwater.ca**

*Office use only* Received by:
Date Received:

# Appendix B: Petition for Traffic Calming Measures

INCOMPLETE PETITIONS WILL NOT BE ACCEPTED

Township of Springwater

# Petition for Traffic Calming Measures

**What is traffic calming?**

The purpose of traffic calming is to alter driver behaviour to encourage vehicle travel at appropriate speeds on local and collector roads. Traffic calming is successful at reducing vehicle speeds where the majority of traffic is driving inappropriately. It is not intended for locations where there is ongoing construction and changing traffic patterns, or where only a few motorists are speeding; police enforcement is the best solution in such situations.

**What are the disadvantages of traffic calming?**

Please be aware that traffic calming may increase both noise and air pollution, as vehicles slowdown in advance of potential traffic calming measures (i.e., speed cushion).

Should you require additional information, please review the Township of Springwater Traffic Calming Guide or contact the Township Office.

**We, the undersigned, request a traffic calming assessment on the section of road listed below:**

**Street:_____From_____To_____**

**Description of concerns and request for traffic calming:**

_____

_____

_____

_____

_____

_____

_____

_____

_____

BY SIGNING BELOW, YOU ARE ACKNOWLEDGING THAT YOU HAVE READ AND AGREE WITH THE REQUEST AS OUTLINED

## Petition for Traffic Calming Measures

| Name | Address | Phone Number | Signature |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Petition Organizer Contact Information | |
|---|---|
| Name: | |
| Phone: | |
| Email: | |
| Address: | |

**Completed petition forms can be delivered in person or by mail to the Township office, or submitted electronically:**

Township of Springwater
Public Works Department
2231 Nursery Road
Minesing, ON
L9X 1A8

Or **publicworks@springwater.ca**

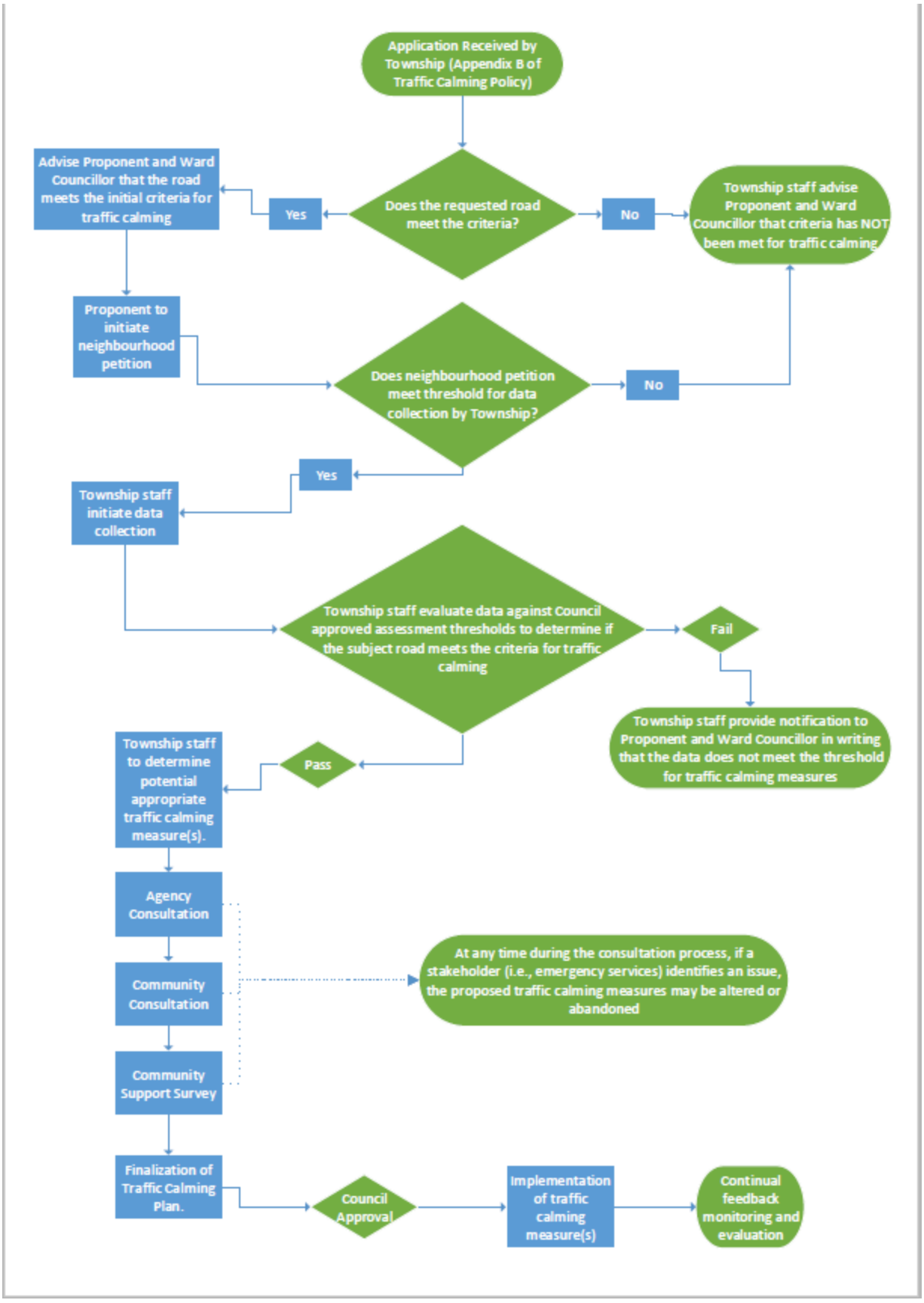
# Appendix C: Traffic Calming Point Assessment

## Traffic Calming Point Assessment

FOR OFFICE USE ONLY

| Location: | | Date Compiled: | | |
|---|---|---|---|---|
| Roadway Type: | ☐ Local Road | | ☐ Collector Road | |
| **Traffic Data** | | | | |
| | **Feature** | **Range** | **Criteria** | **Total** |
| 1a. | Speed | 0 to 35 | 5 points for every 2km/h that the 85$^{th}$ percentile speed is greater than 10km/h over the speed limit. | |
| 1b. | High Speed | 0 to 5 | 5 points if the minimum of the 5% of daily traffic exceeds posted speed by 20km/h. | |
| 2. | Volume | 0 to 20 | Local Roadways: 5 points for every 500 ADT.<br>Connector Roadways: 5 points for every 1,000 ADT. | |
| 3. | Short-Cutting Traffic | 0 to 15 | 5 points if there is a presence of 25% or more for every 10% increment above 25%. | |
| 4. | Collisions | 0 to 10 | 1 point for every collision/year over a 3 year period. | |
| **Road Characteristics** | | | | |
| 5. | Sidewalks | 0 to 10 | 10 points for no sidewalks with evidence of pedestrian activity, 5 points for sidewalks on only one side. | |
| 6. | Pedestrian Generator | 0 to 15 | 5 points for each nearby pedestrian generator | |
| **Total** | | | | |
| Does the location meet the minimum requirements? ☐ Yes ☐ No | | | | |
| Local Road = Minimum 35 points / Collector Road = Minimum 52 points | | | | |

# Appendix D: Traffic Calming Flow Chart


Application Received by Township (Appendix B of Traffic Calming Policy)
Does the requested road meet the criteria?
Yes
Advise Proponent and Ward Councillor that the road meets the initial criteria for traffic calming
No
Township staff advise Proponent and Ward Councillor that criteria has NOT been met for traffic calming
Proponent to initiate neighbourhood petition
Does neighbourhood petition meet threshold for data collection by Township?
No
Yes
Township staff initiate data collection
Township staff evaluate data against Council approved assessment thresholds to determine if the subject road meets the criteria for traffic calming
Fail
Township staff provide notification to Proponent and Ward Councillor in writing that the data does not meet the threshold for traffic calming measures
Pass
Township staff to determine potential appropriate traffic calming measure(s).
Agency Consultation
Community Consultation
Community Support Survey
At any time during the consultation process, if a stakeholder (i.e., emergency services) identifies an issue, the proposed traffic calming measures may be altered or abandoned
Finalization of Traffic Calming Plan.
Council Approval
Implementation of traffic calming measure(s)
Continual feedback monitoring and evaluation

# Appendix E: Example of Traffic Calming Scenario

*The following is an example of a traffic calming request scenario. Please note that this is an example only.*

**Scenario:**

Jane Doe lives at 123 Sesame Street. Sesame Street is a local road, with sidewalks on one side of the street and a posted speed of 50km/h. Ms. Doe has noticed that there has been excessive speeding on her street and she is concerned for the safety of the local neighbourhood children. Ms. Doe decides to contact the Township to see what traffic calming measures can be implemented to reduce speeding on her street.

When Ms. Doe contacts the Township, she is informed that she must first submit a completed Traffic Calming Request (Appendix A of Traffic Calming Measures Guide) to the Public Works Department.

**Next Steps:**

1. Jane Doe submits the completed Traffic Calming Request to the Public Works Department.
2. Township staff determine that Sesame Street meets the criteria for potential traffic calming measures. Township staff notify both the Ward Councillor and Ms. Doe that they will be proceeding to the next step, data collection.
3. Township staff deploy data collection devices (i.e., temporary speed board, cameras, traffic counters, etc.).
4. Township staff evaluate the data collected using the Traffic Calming Points Assessment criteria.

Township staff collect the following data over a 5-day period (see table below and example of completed Traffic Calming Point Assessment):

| Parameter | Data |
|---|---|
| Incoming Vehicles | 1007 |
| Outgoing Vehicles | 1263 |
| ADT | 454 |
| Percentage of Vehicles Traveling </= 50km/h | 95.63% |
| Percentage of Vehicles Traveling >50km/h | 4.37% |
| Percentage of Vehicles Traveling 20km/h or greater over the posted speed | 1.99% |
| Short Cutting of Traffic | No evidence |
| Collisions | 0 Collisions in the past 2 years |
| Sidewalks | There is a sidewalk on the East side of the street |
| Pedestrian Generators | There is a park on Sesame Street |

Township of Springwater

# Traffic Calming Point Assessment

FOR OFFICE USE ONLY

| Location: Sesame Street | | | Date Compiled: 06/02/19 |
|---|---|---|---|
| Roadway Type: | ☒ Local Road | ☐ Collector Road | |

| | Feature | Range | Criteria | Total |
|---|---|---|---|---|
| **Traffic Data** | | | | |
| 1a. | Speed | 0 to 35 | 5 points for every 2km/h that the 85th percentile speed is greater than 10km/h over the speed limit. | 0 |
| 1b. | High Speed | 0 to 5 | 5 points if the minimum of the 5% of daily traffic exceeds posted speed by 20km/h. | 0 |
| 2. | Volume | 0 to 20 | Local Roadways: 5 points for every 500 ADT.<br>Connector Roadways: 5 points for every 1,000 ADT. | 0 |
| 3. | Short-Cutting Traffic | 0 to 15 | 5 points if there is a presence of 25% or more for every 10% increment above 25%. | 0 |
| 4. | Collisions | 0 to 10 | 1 point for every collision/year over a 3 year period. | 0 |
| **Road Characteristics** | | | | |
| 5. | Sidewalks | 0 to 10 | 10 points for no sidewalks with evidence of pedestrian activity, 5 points for sidewalks on only one side. | 5 |
| 6. | Pedestrian Generator | 0 to 15 | 5 points for each nearby pedestrian generator | 5 |
| **Total** | | | | |

Does the location meet the minimum requirements? ☐ Yes ☒ No

Local Road = Minimum 35 points / Collector Road = Minimum 52 points

**Results explained:**

| | Feature | Explanation | Total |
|---|---|---|---|
| 1a. | Speed | 0 points were awarded as greater than 85% of vehicles were traveling at or below the posted speed. | 0 |
| 1b. | High Speed | Less than 5% of vehicles were traveling 20km/h above the posted speed. | 0 |
| 2. | Volume | Average daily traffic (ADT) was below 500 vehicles/day. | 0 |
| 3. | Short-Cutting Traffic | There was no evidence of short-cutting traffic. | 0 |
| 4. | Collisions | No collisions occurred on the street within the past 3 years. | 0 |
| **Road Characteristics** | | | |
| 5. | Sidewalks | There is a sidewalk on one side of the street. | 5 |
| 6. | Pedestrian Generator | There is a park on the street. | 5 |

**Conclusion:**

Based on the data collected, there is not enough evidence to support traffic calming measures on Sesame Street. At this point, Township staff will update the Ward Councilor and proponent of the outcome. A required minimum of 36 months is required before an additional Traffic Calming Request can be submitted for consideration for the same segment of road; however, the 26 month waiting period will be waved in circumstances where new information is brought forward.