

Speed Limit Evaluation Guideline

Adopted by Council Motion # 2022-181 July 6, 2022 Establishing Speed Limits on the Roads of the Municipality of Magnetawan

1.0 OBJECTIVE

The Municipality of Magnetawan consists of approximately 233.2 kilometers of centerline roadway that is large and diverse, with varying conditions that include multiple road users, topography, surface types, road conditions, land uses, etc. This network consists largely of rural and some urban intown sections.



The objective of this Guideline will provide a for a formal process to guide the Municipality in establishing and reviewing speed limits on the Municipally owned and/or maintained roads only and does not include private roads or provincial highways, referred to herein. The Municipality has no jurisdiction over Provincial Highways or Private Roads.

The reduction of posted speed limits, without changing the characteristics of the roadway to encourage reduced speeds, has been shown to have a minimal impact on vehicle operating speeds. In addition, the posting of additional signage and/or adjusting the posted speed limit of a roadway are generally not considered to be traffic calming measures.

Road safety may be improved through the posting of credible speed limits that match the expectation of drivers for a given roadway and its surrounding area.

The purpose of this Guideline is to provide the Municipality with a systematic, consistent, transparent, and reliable means in assessing, reviewing, and implementation of a determined appropriate speed limits on the Municipal roads to help Council address requests for speed limit changes.



This Guideline will also:

- ✓ Create a process for the Municipality to objectively review speed limit change requests.
- Provide the Public and the Municipality with an objective and reliable tool for evaluating speed limits on Municipal roads.
- ✓ Provide a standard format and process for resolving, in a consistent manner, complaints regarding speed limits.

2.0 DEFINITIONS



TAC: Transportation Association of Canada

TAC Speed Limit Guidelines: The Transportation Association of Canada's guidelines for Establishing Posted Speed Limits (2009) provides an evaluation tool to assess posted speed limits which is based primarily on factors relating to the function, classification, and physical characteristics of the road.

Urban Road: A road that is located within an urban area as defined by the TAC Speed Limit Guidelines

Rural Road: A road that is located within a rural area as defined by the TAC Speed Limit Guidelines. **Posted Speed Limit:** The speed prescribed for motor vehicles on a section of road by municipal by-law in accordance with the provincial Highway Traffic Act.

Design Speed: The speed selected as a basis to establish appropriate geometric design elements for a particular section of road so that drivers can travel safely at that speed under ideal conditions.

Operating Speed: The average speed at which a driver is observed operating a vehicle at a particular location.

85th Percentile Speed: The speed at which 85 percent of drivers are observed to travel at under free flowing conditions past a monitored point.

Speed Limit Review Study: A review of the operating characteristics and infrastructure data for a roadway to determine the appropriate speed limit. For the purposes of this policy, the review will apply the Canadian Guidelines for Establishing Posted Speed Limits as produced by the Transportation Association of Canada, and as updated from time to time. This approach considers roadside environment, access density, roadway alignment, lane widths, pedestrian and cyclist activity, and pavement condition.

3.0 <u>SCOPE</u>

The authority for the Municipality of Magnetawan to set speed limits is granted under *The Highway Traffic Act (HTA)*.

The Transportation Association of Canada (TAC) Guidelines for Establishing Posted Speed Limits is the proposed method for establishing maximum speed limits on Municipal roads.

4.0 SPEED LIMITS



Setting Speed Limits on Municipality Roads

Speed limits are intended to be an upper boundary when all other conditions are considered favourable such as: the geometry of the road and the capabilities of the vehicles travelling them. Road users are expected to adjust their speeds and drive to the varying road conditions such as weather, visibility, and traffic volumes.

The TAC Guidelines for Establishing Posted Speed Limits (April 2009) are used for best practices management. These guidelines provide an evaluation tool to assess appropriate speed limits based primarily on the classification, function, and physical characteristics of a roadway. It is an objective and reliable assessment based on measurable criteria.

The risks associated with each of the criteria determine the appropriate speed limit. A higher level of risk results in a lower recommended speed limit.

The guidelines take into consideration roadway element risk factors, including 85th percentile speed, road classification, whether the road is divided or undivided, the condition of the surface, and other roadside hazards, all to determine the appropriate speed limit for the subject roadway. As well as geometry (horizontal and vertical), average lane width, roadside hazards, pedestrian/cyclist exposure, surface treatment, number of intersections, stop signs, driveways, on-street parking, etc.

Timing for Speed Limit Reviews

Speed limit reduction and/or increase requests will require a written request with an explanation or reasons for the request which be filed with the Public Works Department by **April 1**st of each year.



Studies on such written and eligible requests will be completed on a bi-annual basis. The timing for the traffic count period should consider a representative time of day, day of month, and month of year to be studied. Counts are typically most reliable in May and October of each year.

Eligibility for Speed Limit Reviews

For a roadway to be eligible for review, it must meet ALL of the following criteria:

- 1. Owned or maintained by the Municipality of Magnetawan
- 2. Road length must be a minimum of 500 metres for urban sections and 1,000 metres for rural sections. The lengths are based on speeds that can be accomplished within a distance.
- 3. Any part of the road length requested has not been evaluated in the last 5 years.

If the road is not eligible, a speed limit review will be discontinued but the Municipality may do a speed study to compile data for OPP enforcement.



If deemed eligible, the process will commence through a series of structured stages until such a time as:

- a solution is implemented, OR
- a speed adjustment is deemed inappropriate for implementation.

Process to Initiate a Speed Limit Review

Requests for a speed limit review must follow the procedure set out in this Guideline.

Speed Limit reviews are initiated periodically and/or if a traffic related concern is identified on a particular road segment.

Traffic concerns can be identified by staff, Council, Enforcement Agencies, residents, etc.



A request for a Speed Limit Review shall require support from at least 65% of the property owners with access to the road and/or require to travel this portion of the road to access their property signing the petition are in favour.

If one or more people are registered as owners, the property shall be counted as one property only.

The sufficiency and validity of the petition shall be determined by the Clerk.

If there is less than 65% support for the request, a written reply will be sent to the petitioner advising that the request will not be considered at this time.

If there is 65% or greater support for the request, the assessment phase begins.

Speed Review Assessment Phase

For all eligible requests, data along the subject roadway(s) will be collected by the Municipality, or its agent, in the spring or fall to qualify and quantify the extent of the local traffic issues.

The data collection may include any or all of the following:

- Vehicle volume count to determine 24-hr traffic.
- Speed study to determine existing speed data.
- Classification count to determine heavy vehicle traffic.
- Collision data
- Existing roadway conditions (e.g. Road surface conditions, signing, marking).
- 'Built-up-area' as defined in the Highway Traffic Act.
- Horizontal and Vertical alignment.
- Average lane width.
- Roadside hazards.
- Number of intersections.
- Number of driveways.
- Pedestrian, cyclists, horse riding and or carriages
- On-street parking.

For each evaluation a risk level that appropriately matches prevailing conditions is identified. In general, three levels of risk (higher, medium, and lower) have been defined for evaluation criteria.

An automated spreadsheet provided with the TAC Guidelines is to be used for the analysis.



The spreadsheet includes all the factors to be evaluated. Each factor is assigned a risk level; once all factors are considered, a final total risk score is assigned, and a resulting recommended posted speed limit is assigned.

Following the initial analysis using the TAC Guidelines, additional analysis may be conducted to allow for consideration of special circumstances by reviewing the road segment with enforcement personnel as deemed appropriate by the Public Works Superintendent.



When recommending a change in the posted speed limit, consideration will be given to adjacent speed zones to avoid incremental speed fluctuations of more than 20km/h as outlined in the Ontario Traffic Manual Book 5: Regulatory Signs as published and updated by the Ministry of Transportation.

Based on the analysis undertaken through the review, and the subsequent conclusions, recommendations for the speed limit and its adjustment will be determined by the Public Works Superintendent.

A written report will be presented to Council. Council will review the request, the report, and the data. Council makes the decision and approves the passing of a new by-law if warranted.

5.0 <u>REFERENCES</u>

Highway Traffic Act Transportation Association of Canada (TAC) Guidelines for Establishing Posted Speed Limits

Municipal Act, 2001

Ontario Traffic Manual



6.0 PROCESS





Petition Form

Establishing Speed Limit for the Municipality of Magnetawan

Initiator Contact Name: Date Submitted:

Address:

Telephone:

Email:

PRINTED NAME	PROPERTY ADDRESS	SIGNATURE
We, the undersigned owners, hereby petition the Municipality of Magnetawan to review the speed limit		
along:	(name of road)	
from:		
to:		
in accordance with the Municipality's Speed Limit Evaluation Guideline.		

******Additional signature pages may be added as needed

Please note: Your signature on this petition represents your **Expression of Interest** in proceeding with the speed limit review as outlined above. A change in the posted speed limit is subject to review per the Municipality's "Establishing Speed Limits on the Municipality of Magnetawan" Guideline and signing this petition does not ensure a speed limit change.

Your name, address, comments, and any other personal information, is collected and maintained for the purpose of creating a record that is available to the general public in a hard copy format and on the internet in an electronic format pursuant to Section 27 of the Municipal Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c.M.56, as amended.

Questions about this collection should be directed to the Clerk's office at clerk@magnetawan.com or 705 387 3947