

## Policy Manual

Section:	Infrastructure Services
Subject:	Establishing Speed Limits on Town of Essex Roads
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Approved By:	Resolution #
Prepared By:	Director of Infrastructure Services

### 1.00 Objective

The Town of Essex has a road network that is large and diverse, with varying conditions that include multiple road users, topography, surface types, road conditions, and land uses. The network consist largely of both rural and urban sections. Every year the Town receives numerous complaints of speeding and/or requests for speed limit changes on its various roadways, and so this Policy provides for a formal process to guide the Town in establishing and reviewing speed limits on Town of Essex roads.

The mere 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. Alternatively and preferably, road safety may be enhanced 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 policy is to provide Administration with a systematic, consistent, reliable, and transparent framework to assess, review, and implement appropriate speed limits on Town of Essex roads.

Implementation of this policy will also:

- Create a process for Administration to objectively review speed limit change requests from the Public, Council, and other stakeholders.
- Provide Administration and the public with an objective and reliable tool for evaluating speed limits on Town roads.
- Provide a standard format and process for resolving in a consistent manner, complaints regarding speed limits.
- Reduce the workload and duplication efforts for Town staff in responding to speed limit concerns.

## 2.00 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.

#### **85<sup>th</sup> 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.

## 3.00 Scope

The authority for the Town of Essex to set speed limits is granted through the Highway Traffic Act (HTA). Under this legislation, the Town can set speed limits ranging from 40 to 80km/h in 10km/h intervals. The HTA also sets a default municipal speed limit of 50km/h on roadways within cities, towns,

villages, or built-up areas. It further sets a default municipal speed limit of 80km/h in areas that are not built-up, and in a municipality that has the status of a Township under the Municipal Act.

The Transportation Association of Canada (TAC) Guidelines for Establishing Posted Speed Limits is the proposed method for establishing maximum speed limits on Town roads. Road section(s) will be reviewed in accordance with the TAC guidelines in order to make recommendations regarding the appropriate posted speed limits.

## 4.00 Establishing Speed Limits on Roadways

### 4.01 Setting Speed Limits on Town 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 speed to suit varying road, 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 85<sup>th</sup> percentile speed, road classification, whether the road is divided or undivided, the condition of the pavement surface, and other roadside hazards, all to determine the appropriate speed limit for the subject roadway.

### 4.02 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 shall be filed with the Operations Department of Infrastructure Services by April 1<sup>st</sup> or September 1<sup>st</sup> 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.

### 4.03 Eligibility for Speed Limit Reviews

- In order for a roadway to be eligible for review, it must meet **all** of the following criteria:
  - Town of Essex road
  - Road length must be a minimum of 500m for urban sections and 1000m for rural sections.
  - 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.
- If eligible, the process will commence through a series of structured stages until such a time as: a) a solution is implemented, or b) a speed adjustment is deemed inappropriate for implementation.

#### **4.04 Process to Initiate a Speed Limit Review**

- Requests for a speed limit reviews must follow the procedure set out in this policy.
- 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.
- Resident requests for a Speed Limit Review shall require support from at least 65% of the residents residing on that section of road where the request is eligible per section 4.03. Support will be determined through petition in the format provided in 'Appendix A'. If there is not at least 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.

#### **4.05 Speed Review Assessment**

- For all eligible requests, data along the subject roadway(s) will be collected 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; and
  - Existing roadway conditions (eg. Pavement condition, signing, marking).
- Evaluation criteria are related to physical and road user characteristics as follows:
  - '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 and cyclist exposure; and
  - On-street parking.
- For each evaluation criterion, 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 criterion. 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 Director of Infrastructure Services.
- 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 in the analysis undertaken through the review, and the subsequent conclusions, recommendations for the speed limit and its adjustment will be determined by the Director of Infrastructure Services: and.
- If warranted, a recommendation will be made to Town of Essex Council for consideration for adoption of the appropriate by-law; if unjustified, a written response will be sent to the petitioner.

## 5.00 Responsibilities

- It is the responsibility of the Director of Infrastructure Services to ensure that staff is aware and follow this policy.
- It is the responsibility of the Clerk to administer and verify the validity of the petition as described in this policy.
- It is the responsibility of the Operations Manager to ensure that reviews are conducted in accordance with this policy.
- It is the responsibility of employees of the Town of Essex to ensure that the procedures set forth in the policy are adhered to.

## 6.00 References

*Highway Traffic Act*

*Transportation Association of Canada (TAC) Guidelines for Establishing Posted Speed Limits*

*Municipal Act, 2001*

*Ontario Traffic Manual*