



County of Essex Best Management Practice (BMP)

Establishing Speed Limits on County Roads

CHAPTER:	Traffic
SECTION:	Speed Limits
BMP Number:	ECH-R06-12
Department:	Transportation Planning & Development
Effective Date:	2017-05-17
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1.0 Purpose

The County of Essex's road network is a large, diverse system, with varying conditions that includes multiple types of road users, topography, surface types, road conditions and land uses. The network consist of both urban and rural sections.

The purpose of this policy is to provide Administration with a standardized and transparent framework to assess, review, and implement appropriate speed limits on County Roads.

2.0 Definitions

2.1 TAC – Transportation Association of Canada

2.2 TAC Speed Limit Guidelines

The Transportation Association of Canada's Guidelines for Establishing Posted Speed Limits (Dec 2009). Provides an evaluation tool to assess the posted speed limits based primarily on function, classification and physical characteristics of the road.

2.3 Posted Speed Limit

The speed prescribed for the motor vehicles on a section of road by municipal by-law in accordance with the Highway Traffic Act.

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2.4 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.

2.5 Operating Speed

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

2.6 85th Percentile Speed

The speed at which 85 percent of drivers observed to travel at or below.

2.7 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, 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 Policy

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

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

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4.0 Establishing Speed Limits on Roadways

4.1 Setting Speed Limits on County 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 conditions.
- The Transportation Association of Canada's (TAC) Guidelines for Establishing Posted Speed Limits (April 2009) are used as best practice. The 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 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 consider roadway elements and risk factors, including 85th percentile, road classification, if the road is divided or undivided, pavement surface and roadside hazards to determine the appropriate speed limit for the subject roadway.

4.2 Timing for Speed Limit Reviews

- Speed limit reduction and/or increase requests require a written request and explanation to the Transportation Services Department by April 1st or Sept 1st of each year.

Studies are 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.

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4.3 Process to Initiate a Speed Limit Review

- 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 concerns require support from at least 75% of the residents residing on that section of street where the request is applicable (through petition). If there is not 75% support for the request, a written reply will be sent to the petitioner advising that the request will not be considered. If petition approval is achieved, the assessment phase begins.

4.4 Eligibility for Review

- Staff will review the subject road section with the local municipal administrative staff and/or enforcement agency in which section of County Road is geographically located having jurisdiction.
- In order for a street to be eligible for technical review, it must meet **all** of the following criteria:
 - County Road
 - Road length minimum of 1500 m
 - Road has not been evaluated in the last 5 years
- If the street is not eligible, the project assessment process is discontinued.
- If eligible, the process will commence through a series of structured stages until such time as a) a solution is implemented, or b) a speed adjustment is deemed inappropriate for implementation.

4.5 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.

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- The data collection may include any or all of the following:
 - Vehicle volume count to determine 24-h traffic;
 - Speed study to determine existing speed data;
 - Classification count to determine heavy vehicle traffic;
 - Collision data; and
 - Existing roadway conditions (e.g. pavement condition, signing, marking).
- Evaluation Criteria are related to physical and road user characteristics as follows:
 - 'Built-up area';
 - Horizontal & Vertical Alignment;
 - Average Lane Width;
 - Roadside Hazards;
 - Number of intersections with public roads, private driveways;
 - Pedestrian & 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 each evaluation criterion. An automated spreadsheet is 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 is to be conducted to allow for consideration of special circumstances by reviewing the road segment with local municipal administrative staff and enforcement personnel as deemed appropriate.

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- Based on the analysis undertaken through the review, and the subsequent conclusions, recommendations for the appropriate speed limit will be determined by the County of Essex.
- If warranted, a recommendation will be made to County Council for consideration for adoption of the appropriate by-law; if unjustified, a written response will be sent to the petitioner.