# Regional Municipality of Halton Planning and Public Works Department

# **Speed Control Policy**

## Adopted by Regional Council on June 21, 2000

#### 1 Goal

Under *The Regional Plan (1995)*, the goal for transportation is to provide a safe, convenient, affordable, efficient and energy-conserving transportation system in Halton, while minimizing the impact on the environment.

### 2 Purpose

The purpose of this policy is to provide guidelines for establishing and reviewing posted speed limits on Regional Roads in accordance with the above stated goal. A balance has to be struck between competing objectives such as safety, convenience, efficiency, energy conservation, and environmental impact.

## 3 Application

This policy applies to all Regional Roads, i.e. roads under the jurisdiction of the Regional Municipality of Halton. Posted speed limits will be enacted in accordance with *The Highway Traffic Act* and the Region's Uniform Traffic Control By-law 1984-1 As Amended.

#### 4 Definitions

*Design Speed* is a 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.

*Inferred Design Speed* is the design speed calculated by applying current design guidelines to geometric data of the road section derived from the field.

*Operating Speed* is the speed at which a driver is observed operating a vehicle at a particular location.

*85*<sup>th</sup> *Percentile Speed* is the speed at or below which 85 per cent of the drivers are observed to travel at a particular location.

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

Road Classification is the classification by function of major roads in Halton in accordance with the network adopted by Regional Council on January 19, 2000 through Staff Report PPW02/00.

*Urban Sections* are road sections located within the urbanized or built-up areas, generally characterized by a storm water management system using curbs and gutters.

*Rural Sections* are road sections located outside the urbanized or built-up areas, generally characterized by a storm water management system using open drainage channels.

#### 5 Context

In adopting this policy, Regional Council has given considerations to the following:

- · As travel speeds increase, the pressure on the environment from higher noise levels and greater exhaust emissions also rises.
- · Collision severity increases with higher travel speeds.
- Mobility increases with higher travel speeds and most drivers tend to operate at the highest speed that they are comfortable with under the prevailing roadway and weather conditions.
- The strongest influence on a driver's selection of travel speed is the physical appearance of the road, which is partly influenced by the design speed selected for that particular road section.
- The potential for collisions is lowest when the differentials in speed between vehicles in the traffic stream are smallest.
- Setting the posted speed limit at the 85<sup>th</sup> percentile speed will generally result in a low dispersion in travel speeds in the traffic stream.
- Speed control, aimed at encouraging drivers to travel at an appropriate speed for prevailing conditions, encompasses enforcement, education, and engineering techniques.
- While police enforcement has been the traditional approach to controlling speeds, research has shown that significant increases in enforcement levels are required to influence driver behaviour, and those effects are relatively short lived.

- Based on extensive research, it was concluded that raising or lowering the posted speed limit has little overall effect on the operating speed and did not lead to any statistically significant changes in total or severe collisions.
- A posted speed limit that is set too low will result in a significant number of "reasonable" drivers operating illegally, place unnecessary burdens on law enforcement personnel, lead to a lack of credibility of the posted speed limit, and result in increased tolerance by enforcement agencies.
- Given the functional hierarchy of the Regional Road System, posted speed limits should be set in accordance with the function that each road is designed to serve.

## 6 Policy

## **6.1 Setting Posted Speed Limits**

- (a) Posted speed limits should be set between 50 km/h and 80 km/h in increments of 10 km/h.
- (b) The posted speed limit should ideally be set at or near the 85<sup>th</sup> percentile speed based on actual measurements of the operating speed.
- (c) The recommended posted speed limits for different classes of Regional Roads are as shown in Table 1.

**Table 1 Recommended Posted Speed Limits on Regional Roads** 

Road Classification	Urban Sections	Rural Sections
Major Arterials	60 or 70 km/h	80 km/h
Multi-purpose Arterials	50 or 60 km/h	Not Applicable
Minor Arterials	50 or 60 km/h	70 or 80 km/h

- (d) The posted speed limit may be set below the recommended level in Table 1 when:
- i) constrained by physical characteristics of the road,
- ii) constrained by adjacent land uses and associated activities,
- iii) required for heightened safety in sensitive areas such as a school zone,
- iv) required for safe operation temporarily in a construction zone,
- v) evidenced by a significantly higher than normal frequency or severity of accidents attributable to excessive speeds, or
- vi) the recommended level in Table 1 is shown to be higher than the inferred design speed.
- (e) Under unusual circumstances, the posted speed limit may be set above the recommended level in Table 1 if justified through a review of the 85th percentile

- speed, the collision record, and the inferred design speed, but in no circumstances should it exceed 80 km/h.
- (f) The difference in posted speed limits between adjacent road sections should not exceed 20 km/h, unless there is a drastic change in the physical characteristics of the road such as a sharp curve. The latter should be accompanied by appropriate warning signs.
- (g) When constructing new road sections or re-constructing existing sections, a design speed of between 10 and 20 km/h over the recommended posted speed limits in Table 1 should be selected.

## **6.2** Annual Review of Posted Speed Limits

- (a) The Region will undertake annual measurements of operating speeds at selected locations of the Regional Road System.
- (b) Based on these measurements, the 85<sup>th</sup> percentile speeds will be compared with the posted speed limits to identify those locations with significant variance between these two speeds.
- (c) For locations with the 85<sup>th</sup> percentile speed significantly higher than the posted speed limit, a review of the posted speed limit will be undertaken taking into account the following factors: physical characteristics of the road, adjacent land uses, collision history (both frequency and severity), and the (inferred) design speed. Input from the Regional Police Services will also be sought in terms of their experience in speed enforcement at the location. Based on the review, Regional staff may recommend one of the following courses of action:
- i) no action is required,
- ii) the operating speed is too high and needs to be controlled through one or more of the following measures:
- · stepped up enforcement by Regional Police Services,
- · a community education program,
- · introduction of design features aimed at reducing speeds and improving safety,
- iii) the posted speed limit is too low and should be raised.
- (d) For locations with the 85<sup>th</sup> percentile speed significantly lower then the posted speed limit, consideration should be given to lowering the posted speed limit to the 85<sup>th</sup> percentile speed level.
- (e) The results and recommendations of the annual review will be presented to Regional Council for appropriate action.

## 6.3 Requests by Members of the Public To Change Posted Speed Limits

- (a) A request by members of the public to change the posted speed limit at a specific location on a Regional Road should generally be referred to the annual review under Section 6.2.
- (b) The results and recommendations of the annual review related to the specific location under (a) will be communicated to the requestors and other interested parties, prior to their presentation to Regional Council under Section 6.2(e).
- (c) When there are grounds for immediate action or when it is supported by a signed petition of no less than 75 per cent of the residents abutting the affected road section, Regional Council may direct that an individual review of the posted speed limit be carried out immediately by Regional staff, without delaying it to the annual review.
- (d) Regional staff will undertake the review following the steps outlined in Section 6.2.
- (e) A public open house, with notification to the petitioners and the general public, will be held to present the results and recommendations of the review and to receive input.
- (f) Regional staff will forward the final recommendations as well as any comments received in the public consultation to Regional Council for its deliberations on an appropriate course of action.

#### 7 Effect

This policy came into effect on the date of adoption by Regional Council.