

Regional Clerk's Office
Corporate Services Department

February 19, 2010

Ms. Kimberley Kitteringham
Town Clerk
Town of Markham
101 Town Centre Boulevard
Markham, Ontario
L3R 9W3

Mayor + Members of Council
J. Leung
J. Baird
S. Lambson
A. Brown

Dear Ms. Kitteringham:

**Re: Policy Update
Establishing Speed Limits on Regional Roads**

Regional Council, at its meeting held on Thursday, February 18, 2010, adopted the following recommendations of the Transportation Services Committee regarding the report entitled "Policy Update Establishing Speed Limits on Regional Roads":

1. The Regional Clerk forward this report to the Clerks of the local municipalities in York Region requesting their review and comment by the fall of this year.
2. Regional staff report back to Committee in 2011 summarizing the results of this review.
3. The Regional Clerk forward this report to the Chief of York Regional Police for his review and comment.

A copy of Clause No. 1, Report No. 2 of the Transportation Services Committee, is enclosed for your information.

Please contact Steven Kemp, Director – Traffic Engineering and Integrated ITS at 905-830-4444, Ext 5226, if you have any questions with respect to this matter.

Sincerely,

Denis Kelly
Regional Clerk

B. Bridle
Attachment

Copy to: Kathleen Llewellyn-Thomas, Commissioner of Transportation Services
Steven Kemp, Director, Traffic Engineering and Integrated ITS

The Regional Municipality of York, 17250 Yonge Street, Newmarket, Ontario L3Y 6Z1
Tel: 905-830-4444 Ext. 1320, 1-877-464-9675, Fax: 905-895-3031
Internet: www.york.ca

Clause No. 1 in Report No. 2 of the Transportation Services Committee was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting on February 18, 2010.

1

POLICY UPDATE ESTABLISHING SPEED LIMITS ON REGIONAL ROADS

The Transportation Services Committee recommends:

- 1. Receipt of the presentation by Kathleen Llewellyn-Thomas, Commissioner of Transportation Services; and**
- 2. Adoption of the recommendations contained in the following report dated January 26, 2010, from the Commissioner of Transportation Services, with the following additional recommendation:**
- 3. The Regional Clerk forward this report to the Chief of York Regional Police for his review and comment.**

1. RECOMMENDATIONS

It is recommended that:

1. The Regional Clerk forward this report to the Clerks of the local municipalities in York Region requesting their review and comment by the fall of this year.
2. Regional staff report back to Committee in 2011 summarizing the results of this review.

2. PURPOSE

This report presents a new policy for establishing speed limits on the Regional road network that is in keeping with Council's future transportation system plans as expressed through the Regional Official Plan. If approved, this policy would supersede the existing speed limit policy approved by Regional Council in September of 2004.

3. BACKGROUND

On June 17, 2009 a report entitled *Policy Update – Establishing Speed Limits on Regional Roads* was presented to the Transportation and Works Committee. Committee's response to the proposed policy was to ask for a more comprehensive review that addressed the different requirements for urban and rural roads in York Region. Subsequently, on January 6, 2010 another report was presented to the Transportation Services Committee which included the results of a consultant's independent review of the existing and proposed speed limit policy.

The January 6, 2010 report was referred back to staff for a more comprehensive report to include:

- a) Further details on the safety-based methodology proposed in the speed limit policy and the impetus for recommending a safety based approach.
- b) More extensive information on other jurisdictions that utilize the safety-based approach and which North American jurisdictions have considered implementing this methodology.
- c) An update that addressed the outstanding speed change requests received from local municipalities as well as the speed change requests on roads identified at the January 6, 2010 meeting.
- d) An outline of the intended strategy for enforcement to be implemented by York Regional Police.

This report provides additional information on items a), b) and d) as described above. The update that addresses outstanding speed change requests (item c) is provided in a separate report titled "Speed Limit Revision and Review – Various Regional Roads".

4. ANALYSIS AND OPTIONS

Travel speed is an important and relevant public policy matter to road users. However, motor vehicle speed can be a divisive issue. Motorists typically desire faster speeds to minimize travel time whereas pedestrians, cyclists, and area residents typically desire slower speeds for safety and comfort reasons. In an attempt to balance the desires of both groups, Regional staff set maximum speed limits on Regional roads using a technical process and policy endorsed by Regional Council in 2004. It has now become apparent that a new policy that is better aligned with Regional strategic initiatives will support the transformation of Regional roads into shared-use facilities.

Currently, York Region applies an engineering approach to setting speed limits on the Regional Road system

The current speed limit policy is principally based on setting the speed limit at the 85th percentile speed (the speed at which 85% of traffic is traveling at or below) for a particular section of road. Speed limits are also set taking into consideration the presence of schools, pedestrians and access points – all of which may result in a lower posted speed limit than the 85th percentile analysis indicates. This approach has been used in order to reflect a reasonable expectation of driver compliance with the set speed limit. Our review of current Regional policy has demonstrated that the current engineering approach to establishing speed limits is inconsistent with leading edge international safety approaches.

The 85th percentile engineering approach has recently been modified by the release of new Transportation Association of Canada guidelines for speed limit setting

The Transportation Association of Canada is a National association which promotes sustainable transportation services. The association provides a neutral independent body to gather and exchange ideas on technical guidelines and best practices throughout Canada. The primary focus of the association is roadways in urban and rural areas and all transportation related components of those roadways.

In the time since the existing speed limit policy was adopted in 2004, the traffic engineering profession has developed a Canadian expert system for setting speed limits. The Transportation Association of Canada has recently produced guidelines for establishing speed limits that account for traffic and infrastructure data in selecting an appropriate speed limit on a variety of road types.

The Transportation Association of Canada approach to setting speed limits uses a two-step process: a base speed limit is set according to either the 85th percentile speed or the design speed for the road. The speed limit is then further adjusted according to traffic and infrastructure conditions such as pedestrian and cycling use, median presence and driveway frequency. In general, this method of setting speed limits scores very favourably as being considered good practice in North America, and as a result will also provide consistency across jurisdictions.

These guidelines are considered good engineering practice and will replace the previous engineering approach across Canada.

A revised speed limit policy will match Regional Council's strategic initiatives to balance movement of traffic with the needs of other road users

Over the past few years, Regional Council has endorsed several strategic policy initiatives that will, over time, transform Regional roads to be more accommodating for all road users. These initiatives include transit improvements such as VIVA; high occupancy vehicle lanes; updated design standards for roadways; bike lanes and streetscaping. Regional roads are undergoing a transformation process from roads emphasising the movement of traffic to roads which are more urban in nature that balance the requirements of pedestrians, cyclists, transit users, motorists and communities.

Staff identified the need to revise the existing speed limit policy because:

1. Current Regional initiatives such as the Transportation Master Plan, vivaNext, HOV lanes, and the Pedestrian and Cycling Master Plan are establishing York Regional roads as a shared-use system where the impact of speed on vulnerable road users such as pedestrians and cyclists must be considered.
2. Residents are concerned about high vehicle speeds in their communities.
3. Posted speed limits on some Regional roads are too high for the new urban streetscapes that the Region is striving for.
4. Several years of experience with the current speed limit policy highlighted some inconsistencies and patchwork approach to establishing speed limits that should be corrected.

The essence of a new speed limit policy is to establish speed limits that will minimize risk to all road users taking into account the differences in complexity of moving around on rural and urban roads

The principle approach to a new policy is to base it on urban structure of the Region as described in the *Official Plan, (see Attachment 1)* and is generally described as follows:

- In urban areas and rural settlements, the Regional road should be posted at speeds appropriate for higher volumes of pedestrians, cyclists and transit transfers.
- On roads that straddle rural and urban areas (urban border areas) posted speeds will be appropriate to transition areas.
- In rural areas, speeds will be set recognizing the limited access points and low number of cyclists and pedestrians.

The "land use" approach to setting speed limits contemplates lower speed limits in urban areas where streets are shared by motor vehicles, cyclists, pedestrians, and transit users.

A review of speed limit policies in other jurisdictions indicates that some are moving towards an injury minimization approach

As requested by Committee, a more extensive review of speed limit policies in other jurisdictions was conducted. Appended to this report is a chart summarizing the method used to set speed limits in various jurisdictions (*see Attachment 2*). Based on this summary, most roadway authorities are using the “engineering approach” to set speed limits. Although some jurisdictions are moving toward an “injury minimization approach” this is not yet common practice and any road authorities considering this approach would be considered as leaders in road safety.

Injury minimization is based on reducing the risk involved with any activity. For example, injury minimization programs are established in schools where children are taught to recognize and identify hazards involved in playground and sporting activities; in the construction trade, workers are trained to operate and maintain machinery safely; in the public health field, staff use methods to reduce the chance of transmitting illness. With respect to establishing speed limits using an injury minimization approach, the risk of a serious or fatal injury is greatly reduced when vehicle crashes occur while travelling at lower speeds. In all cases, the intent is to minimize the risk involved in the completion of necessary tasks.

Based on this review of other jurisdictions, options were developed based on combinations of the following approaches available:

- Adopt an “injury minimization” approach.
- Adopt the engineering approach (based on the Transportation Association of Canada Guidelines).

Three policy options have been developed

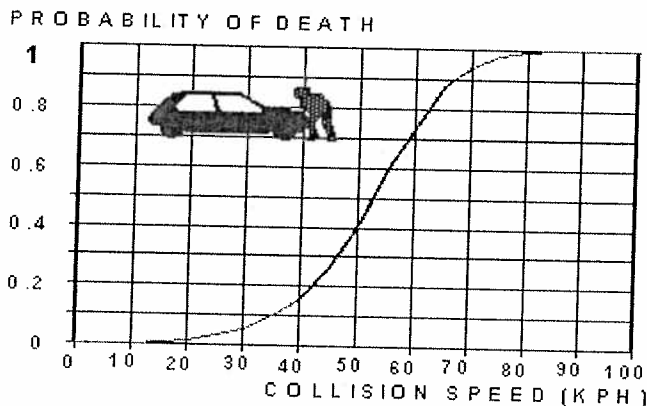
Option A would set speed limits with injury minimization as a goal which is a new approach to North America. It is employed primarily in Sweden, Austria, and the Netherlands. The injury minimization approach is scientifically linked to improved road safety, and is leading-edge thinking, but generates lower speed limits than the North American culture has come to expect. For example, speed limits in areas of high pedestrian activity are recommended to be a maximum of 30 kilometres per hour under the injury minimization approach.

The injury minimization approach to setting speed limits requires that speed limits be set according to the crash types that are likely to occur, and the tolerance that the human body can withstand in the expected crashes. For example, head-on collisions between two vehicles may be expected on a road that is not divided by a raised median. The maximum speed that the human body can tolerate in a head-on collision (given a well engineered vehicle and proper use of all safety equipment by occupants) is about 70

kilometres per hour. Hence, under an injury minimization approach to setting speed limits, undivided roads would have a maximum speed limit of 70 kilometres per hour or less.

In the case of a collision involving a vehicle with a pedestrian or cyclist, the probability of death or severe injury is directly related to the speed of the vehicle at the time of the collision. These road users are safer when motor vehicles are traveling slower (see Figure 1).

Figure 1
The probability of pedestrian injury and death increases substantially with higher vehicle speeds



Source : Wegman, F.C.M. & Aarts, L.T. (eds.) (2006). *Advancing sustainable safety; National Road Safety Outlook for 2005-2020. SWOV, Leidschendam.*

This approach to setting speed limits is strongly aligned with the primary goal of road safety. However, while it is an accepted practice, it is not yet a *widely-accepted* practice in North America.

Finally, the speed limits that would be implemented by the injury minimization approach would be lower than those expected in North America. This would create inconsistencies across roads within the same area with the possibility of local roads ending up with higher speed limits than some Regional roads. *This approach is not recommended.*

A combination approach which allows the use of the engineering approach (based on Transportation Association of Canada Guidelines) and an injury minimization approach based on the urban structure in the Regional Official Plan

Option B is a combination approach that calls for an engineering approach to setting speed limits for rural areas and controlled-access facilities and the injury minimization type of approach for the urban areas. This approach is similar to the policy proposed to Committee in June 2009.

As discussed above, in the instance of urban areas, the speed limit for Regional roads based on injury minimization would be significantly lower than 60 kilometres per hour. These lower speed limits are inconsistent with North American driver expectations. *This approach is also not recommended.*

A revised combination approach best suits the needs of York Region and is also an acceptable practice in North America

Option C is a modified combination approach that, similar to Option B, calls for an engineering approach to setting speed limits in the rural areas and on controlled-access, facilities with an injury minimization type of approach for the urban areas.

However, instead of very low speed limits such as 30 kilometres per hour or 40 kilometres per hour in urban areas, the speed limit for Regional roads would be set at 60 kilometres per hour unless a study determines that a lower speed limit is required. The idea behind the 60 kilometres per hour speed limit in urban areas is to protect cyclists, pedestrians and other vulnerable road users without setting an unrealistically low speed limit. Sixty kilometres per hour is a balanced speed that yields safety gains while providing consistency across all streets.

The recommended policy is presented in *Attachment 3*.

The impact of the proposed policy will be to improve safety

The most often cited impacts of a change in the speed limit relate to safety, travel delay, vehicle emissions, and enforcement issues. In this instance, the main change over time will be a lowering of some speed limits in the urban areas of the Region. These lower speed limits will improve safety by lowering collision severity, and will have only a minor impact on travel time and vehicle emissions. This is because urban area travel is mainly dictated not by the speed limit, but by the ambient traffic conditions, traffic signal timing, and other sundry factors.

An Implementation Plan will be developed once consultations with local municipalities are completed

Based on the discussions held and direction given by the Transportation Services Committee on January 6, 2010, staff have reconsidered the implementation plan proposed in the January report on speed limits. It is likely, if the new policy is adopted by Regional Council, more appropriate for the limits to be phased-in over time. An important component of the consultation with local municipalities will be to understand their opinions on implementation. Accordingly, staff will develop an Implementation Plan to accompany the Speed Limit Policy when it is brought back before Regional Transportation Services Committee after the local municipal consultations are completed.

Road sections where future speed limit changes may be recommended which conform to the proposed policy are included as *Attachment 4*. These are provided as illustration and will be subject to the Implementation Plan to be presented later.

York Regional Police will continue their existing strategy for speed limit enforcement

As requested by Committee, Regional staff confirmed the York Regional Police speed limit enforcement strategy in light of the policy changes recommended in this report.

York Regional Police are committed to improve the level of traffic safety on our road system. Enforcing speed limits is an important part of their overall mandate to improve road safety.

The policy changes recommended in this report will not impact the York Regional Police strategy for speed limit enforcement. As speed limits are changed in order to be in compliance with the proposed policy, York Regional Police will immediately conduct enforcement in those areas as part of their routine practice. No “grace” or “phase-in” enforcement strategy would be employed.

Continued communication is essential to ensure public and community acceptance of the need to lower speed limits in certain areas of the Region

Regional staff will continue to liaise with the appropriate staff at the local municipalities concerning area speed limits to ensure consistency across the Region.

Furthermore, in order to encourage public and community acceptance, it is recommended to issue a media release utilizing the York Region Media Group. In advance of the new speed limits being implemented, this media release will be distributed throughout all communities within the Region to advise residents of the changes to the speed limits.

It is recognized lowering speed limits on Regional roads to promote consistency within urban areas will be met with support from local communities, however; there may be some resistance from the motoring public at large. In order to promote public and community acceptance, the development of a public education campaign to explain the benefits of this initiative is recommended.

5. FINANCIAL IMPLICATIONS

The estimated cost for the speed limit policy implementation strategy including a comprehensive communication plan, advertising in local newspapers, a public education plan and, manufacturing and installing the required signage is approximately \$120,000. These costs are included in the current Transportation Services budget.

6. LOCAL MUNICIPAL IMPACT

This report recommends that each of the local municipalities review and provide comments on the proposed speed limit policy. Over the next few months, Regional staff will meet with staff from the local municipalities to discuss the potential impact on Regional roads within their municipality.

If required, and at the request of the local municipality, Regional staff will attend any local Committee or Council meetings to discuss the proposed Regional policy and to hear any feedback from the local point of view.

7. CONCLUSION

With the urbanization of York Region there is an increasing need for Regional urban arterial roads to be transformed from facilities that only process motor vehicles into urban streets that provide equal priority to pedestrians, cyclists and transit users. The amended policy for establishing speed limits on Regional roads will complement and support this ongoing Regional initiative, and at the same time improve safety on our roads.

As presented in *Attachment 3* appended to this report, it is recommended that a new policy for establishing speed limits on Regional roads be adopted that will establish speed limits that consider acceptable speeds for all road users and road uses and that also minimizes injury risk.




























For more information on this report, please contact Steven Kemp, Director - Traffic Engineering and Integrated ITS at extension 5226.

The Senior Management Group has reviewed this report.

(The four attachments referred to in this clause are attached to this report.)

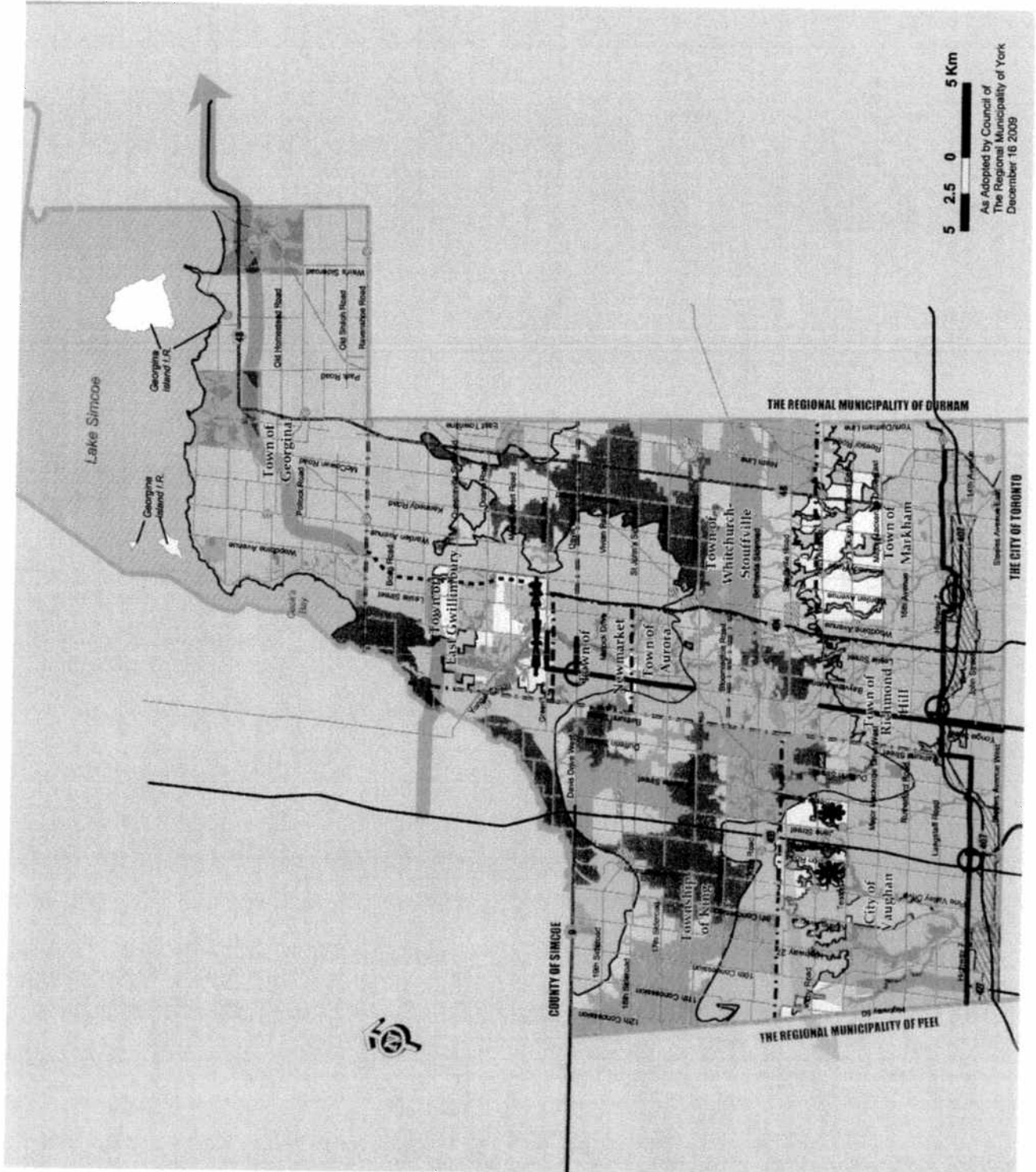
MAP 1

REGIONAL STRUCTURE

-  Regional Centre
-  Regional Corridor
-  Subway Extension
-  Urban Area
-  Potential Urban Expansions
-  Location, Size and Phasing to be Determined
-  Towns and Villages
-  Regional Greenlands System (Schematic, See Map 2)
-  Oak Ridges Moraine Conservation Plan
-  Oak Ridges Moraine Boundary
-  Natural Core Area Designation
-  Natural Linkage Area Designation
-  Countryside Area Designation / Hamlet
-  Greenbelt Plan
-  Greenbelt Plan Area Boundary
-  Greenbelt Protected Countryside / Hamlet
-  Holland Marsh Specialty Crop Area
-  Parkway Belt West Plan
-  Ministers Decision on ORMCP Designation Deferred
-  Provincial Highways
-  Existing
-  Controlled Access Highway
-  Under Construction
-  Proposed
-  Conceptual - Alignment Not Defined
-  Municipal Boundary
-  Regional Boundary



Produced by Geomatics
 Planning and Development Services Department
 © Copyright, The Regional Municipality of York, December, 2008
 © Copyright, The Regional Municipality of Durham
 © Copyright, The Regional Municipality of Peel
 © Copyright, The Regional Municipality of Halton
 © Copyright, The Regional Municipality of Wellington
 © Copyright, The Regional Municipality of Waterloo
 and Oak Ridges Moraine Boundaries and Water Features



5 2.5 0 5 Km
 As Adopted by Council of
 The Regional Municipality of York
 December 16 2008

SPEED LIMIT POLICIES – OTHER JURISDICTIONS

13

Jurisdiction	Category	Method
Ontario		
Region of Durham	Engineering approach	Engineering surveys to analyze roadway conditions, collision history and vehicle operating speeds. A safe and reasonable speed limit is usually set at or below the speed at which 85% of drivers travel.
Region of Halton	Engineering approach	Set the speed limit at or near the 85th percentile speed and adjust according to physical characteristics of the road, adjacent land uses and associated activities, sensitive areas such as a school zone, frequency or severity of accidents attributable to excessive speeds, and roadway design speed.
City of Hamilton	Engineering approach	For rural areas, includes a reference table with prescribed speed limits for various conditions based on a set of six criteria. The speed which corresponds to most criteria is the selected speed limit. For urban areas, Highway Traffic Act prescribes maximum speeds on arterials and non-arterial roads.
City of Mississauga	Engineering approach	Speed limits are determined by: vehicle operating speeds, adjacent development, collision history, pedestrian activity, driveway spacing and the location of signalized intersections. City policy reserves the use of 40 km/h speed limits for roads in front of elementary schools and for roadways whose geometric design cannot support a 50 km/h or higher limit. On major roads where elementary schools are present, a 40 km/h when flashing speed limit may be considered
City of Ottawa	Engineering approach	Policy based on the Northwestern University model with consideration of various factors (i.e., an engineering approach). A 40km/h residential speed limit warrant based on City of Toronto guidelines is also in use.
County of Simcoe	Engineering approach	Staff conduct engineering and traffic studies necessary for establishment of speed zones, including prevailing speed studies, collision history investigations, and investigation of highway, traffic, and roadside conditions not readily apparent to the driver.
City of Toronto	Engineering approach	Includes a warrant to implement 40km/h max speed limit on local, collector and minor arterials, and a checklist for distinguishing between 60 and 50km/h on arterial roads.
Province of Ontario	Engineering approach	Currently using the 85th percentile speed as the main determinant, but will likely adopt the new TAC guidelines.

SPEED LIMIT POLICIES – OTHER JURISDICTIONS

Jurisdiction	Category	Method
Canadian Jurisdictions Outside of Ontario		
Province of Alberta	Engineering approach	Based on 85th percentile speed and adjusted for various factors (similar to the ITE recommended guidelines).
Province of Manitoba	Engineering approach	Speed limits are based on an engineering study which purport that the speed limit should not be below the median speed of the 15km/h pace and changes in the current speed zone should not be recommended if the 85th percentile speed is within +/- 5km/h of the posted speed.
Province of New Brunswick	Engineering approach	Thirteen criteria are included in the evaluation. Choose from a range of points under each criteria (corresponding to different conditions) to obtain a combined score, then refer to the range of scores that would fall under a specific speed limit ranging from 50 to 100 km/h.
Province of Nova Scotia	Engineering approach	Conduct an engineering study that considers various factors.
City of Kelowna (BC)	Engineering approach	A "base" speed limit is established based on land use and road classification and adjusted according to various factors.
City of Calgary (AB)	Engineering approach	A preliminary speed limit is first selected from a reference table with prescribed speed limits for various conditions. Field measurements are used to verify appropriate speed limits. Suggested guidelines for urban thoroughfares based on road design elements and TAC classifications are also available.
City of Winnipeg (MB)	Engineering approach	Conduct an engineering study that considers various factors.
City of St. John's (NL)	Engineering approach	Conduct an engineering study that considers various factors.
Countries		
Australia	Engineering approach but the Australians are expected to move to an injury minimization approach in keeping with their strong commitment to road safety	Expert system that is based primarily on an engineering approach to setting speed limits. Typical input parameters are: density of surrounding development, frequency of access points, road function, road characteristics (paved/unpaved, lane widths, shoulders, etc.), highway conditions, operating speeds, adjoining speed limits, and unfavourable geometry.
Canada (National guidelines)	Engineering approach	TAC has released guidelines that use an engineering approach to setting speed limits

SPEED LIMIT POLICIES – OTHER JURISDICTIONS

Jurisdiction	Category	Method
The Netherlands	Injury minimization	Speeds are set to ensure that no road user will be exposed to crash forces that can either kill or seriously injure him/her.
New Zealand	Quasi-engineering approach	Setting speed limits in New Zealand is largely based on frontage development (land use) and roadway classification. Speed limits are currently not based on 85th percentile operating speeds but take into account roadway design and traffic mix.
Sweden	Injury minimization	Speeds are set to ensure that no road user will be exposed to crash forces that can either kill or seriously injure him/her.
United Kingdom	Hybrid of injury minimization and engineering methods (very similar to the proposed York Region policy)	<p>Urban areas: The national speed limit in urban areas is 30 mph (50 km/h). Speed limits of 20 mph (30 km/h) are encouraged and supported where there is a particular risk to vulnerable road users, and higher quality suburban roads (generally on the outskirts of urban areas where there is little development) may have a 40 mph (65 km/h) limit.</p> <p>Rural areas: The speed limit on rural roads should take into account traffic and road user mix, the road's geometry and general characteristics, its surroundings, and the potential safety and environmental impacts.</p>
United States	Engineering approach	The United States has relatively recently developed their own version of an expert system that is based on the Australian version of the same system. In practice though, most jurisdictions continue to use the 85th percentile speed as the basis for establishing speed limits.

STATUS

Council Approved

N

N

CAO Approved:

N

N

<p>TITLE: ESTABLISHING SPEED LIMITS ON REGIONAL ROADS</p>	<p>NO.: Effective Date: Latest Revision Date:</p>
--	--

POLICY STATEMENT:

A policy to establish speed limits on the Regional road network that is supportive of Council’s sustainable transportation objectives and goals, and provides consistent speed limits to promote voluntary compliance.

APPLICATION:

To all Regional Transportation Services staff

PURPOSE:

The speed limit is the *maximum* speed that one can legally travel along a section of road during favourable conditions. Speed limits are set on Regional roads in order to:

- Respond to community safety concerns
- Provide safety equity among road users
- Provide consistency among similar road sections

This policy supports achieving the broad transportation objectives and goals of safe movement, minimum delay and environmental protection. As such, the speed limit policy supports the following York Regional objectives (in order from highest priority to lowest):

- Maximize road safety (minimizing crash risk);
- Promote active transportation;
- Prioritize transit;
- Ensure movement of goods;

In short, maximum speeds set by this policy consider *all expected road users* and road uses, and do not sacrifice safety for the sake of mobility or roadway aesthetics.

In addition to aligning with the above initiatives, the purpose of setting speed limits according to this policy is to establish speed limits that are consistent and promote motorist compliance.

DEFINITIONS:

The road definitions below are based on adjacent land use and form of development, not on road cross section or design

Urban Road

A road that is located within either an Urban area or a Town and Village area as shown on Map 5 of the Regional Official Plan.

Urban Edge Road

A road that is located along the border of an Urban or a Town of Village area and a Rural area as shown on Map 5 of the Regional Official Plan (i.e., a road that forms an urban/rural boundary).

Rural Hamlet Road

A road located within a rural hamlet area. A hamlet is an area that must be specified in the local Official Plan, and is a grouping of houses, businesses and public uses where development may be permitted with limited growth, but not to exceed a population of 500.

Rural Road

A road that is located in a rural area as shown on Map 5 of the Regional Official Plan, excluding “rural hamlet roads” and “urban edge roads”.

School Zone

The section of any Regional road that is contiguous to a school with a minimum of 200 registered students.

Engineering Study

A review of the traffic and infrastructure data for a particular facility with a view to determining the appropriate speed limit. This study will apply the Canadian Guidelines for Establishing Posted Speed Limits as produced by the Transportation Association of Canada. This approach considers setting, access density, roadway alignment, lane widths, pedestrian and cyclist activity, pavement condition, etc.

DESCRIPTION:

The method of establishing maximum speed limits on Regional roads is based on the surrounding land use as designated in the Regional Official Plan, and on good engineering practice. Land use is representative of user types that are expected to be encountered, and activities that are taking place in the road, and as such is a primary consideration in determining appropriate speeds for delivering a safe road. Engineering principles are also applied that link speed of travel, traffic and infrastructure data, and known collision mechanisms to minimize collision risk.

The method of establishing speed limits on Regional roads is described below.

URBAN ROADS AND RURAL HAMLET ROADS

The default speed limit for **urban roads** and **rural hamlet roads** is 60 kilometres per hour.

Urban roads that are controlled access and physically divided by a non-traversable median may be posted at 70 kilometres per hour or 80 kilometres per hour as determined by an Engineering Study.

Speed limits of 50 kilometres per hour or less will be considered on **urban roads** and **rural hamlet roads** as determined by an Engineering Study.

Urban roads and **rural hamlet roads** that are contiguous to a school are subject to the provisions of **school zone** speed limits.

Urban roads and **rural hamlet roads** that do not have contiguous development, and visually present as **rural roads** to the motorist may be posted at 70 kilometres per hour until such time as development or pedestrian/cyclist activity warrants a speed reduction.

URBAN EDGE ROADS

The default speed limit on **urban edge roads** shall be 70 kilometres per hour.

Speed limits of 60 kilometres per hour or less will be considered on **urban edge roads** as determined by an Engineering Study.

Urban edge roads that are contiguous to a school are subject to the provisions of **school zone** speed limits.

RURAL ROADS

In no case shall the posted speed of a **rural road** exceed 80 kilometres per hour.

Rural roads shall be posted at the speed as determined by an Engineering Study.

Rural roads that are contiguous to a school are subject to the provisions of **school zone** speed limits.

SCHOOL ZONES

All **school zones** will have a 40 kilometres per hour time-limited speed limit. The **school zone** speed limit will be applicable to the section of road that is contiguous to the school and for 150

metres along the road on either side of the school property. The lowered speed limit may be extended if it results in an adjacent speed limit zone that is too short to adequately enforce. The **school zone** speed limit shall be in effect during the times of the day that students are walking to and from school, as prescribed by municipal bylaw.

The maximum speed limit, at times of the day when the 40 kilometres per hour is not in effect, will be determined using the remainder of this policy.

CONTACT:

Director, Traffic Management and Intelligent Transportation Systems, Transportation Services Department

APPROVAL INFORMATION

CAO Approval Date:

Committee:

Clause:

Report No:

Council Approval:

Minute No.

Page:

Date:

PROPOSED SPEED POLICY – SAMPLE IMPACTS

21

Roadway	Limits of Regulation	Current Speed Limit *	Proposed Speed Limit
Town of Aurora			
Bayview Avenue (Y.R. 34)	The south limit of Stone Road North to 250 metres south of the south limit of Mulock Drive (Y.R. 74)	70 km/h 60 km/h	60 km/h
Leslie Street (Y.R. 12)	The south limit of Wellington Street (Y.R. 15) to 536 metres north of Green Lane East (Y.R. 19)	60 km/h 80 km/h 70 km/h 60 km/h	60 km/h
Wellington Street East (Y.R. 15)	The east limit of the 404 northbound off ramp to the east limit of Bayview Avenue (Y.R. 34)	80 km/h	60 km/h
Yonge Street (Y.R. 1)	800 metres south of the south limit of St. John's Sideroad (Y.R. 26) to 200 metres north of the north limit of Green Lane (Y.R. 19)	60 km/h 70 km/h 60 km/h	60 km/h
Town of East Gwillimbury			
Green Lane (Y.R. 19)	500 metres east of Yonge Street (Y.R. 1) to 500 metres west of Yonge Street (Y.R. 1)	80 km/h	70 km/h
McCowan Road (Y.R. 67)	The north limit of Mill Road to the north limit of Doane Road	50 km/h 60 km/h	60 km/h
Mount Albert Road (Y.R. 13)	285 metres west of the west limit of Birchard Boulevard to the east limit of Highway 48	50 km/h 40 km/h	60 km/h
Yonge Street (Y.R. 1)	800 metres south of the south limit of St. John's Sideroad (Y.R. 26) to 200 metres north of the north limit of Green Lane (Y.R. 19)	60 km/h 70 km/h 60 km/h	60 km/h
Town of Georgina			
Glenwoods Drive (Y.R. 33)	The west limit of Woodbine Avenue (Y.R. 8) to 1068 metres east of the east limit of The Queensway (Y.R. 12)	80 km/h 50 km/h	60 km/h
Morton Avenue (Y.R. 78)	The west limit of Woodbine Avenue to the east limit of The Queensway (Y.R. 12)	70 km/h	60 km/h
Old Homestead Road (Y.R. 79)	500 metres west of the west limit of Warden Avenue to the east limit of Woodbine Avenue (Y.R. 8)	60 km/h 70 km/h	70 km/h
Park Road (Y.R. 18)	The south limit of Black River Road to the north limit of Park Road (Y.R. 18)	70 km/h	60 km/h
Pefferlaw Road (Y.R. 21)	229 metres west of the west limit of Florence Drive and the south limit of King's Highway No. 48	70 km/h	60 km/h
The Queensway (Y.R. 12)	The south limit of Ravenshoe Road (Y.R. 32) to 100 metres south of Glenwoods Drive	70 km/h 60 km/h	60 km/h
Township of King			
Highway 27 (Y.R. 27)	535 metres south of the north limit of King Road (Y.R. 11) to 315 metres south of the north limit of King Road (Y.R. 11)	80 km/h 50 km/h	60 km/h

PROPOSED SPEED POLICY – SAMPLE IMPACTS

Roadway	Limits of Regulation	Current Speed Limit *	Proposed Speed Limit
King Road (Y.R. 11)	688 metres west of the west limit of Charles Street to Jane Street	70 km/h	60 km/h
King Road (Y.R. 11)	The east limit of Dufferin Street (Y.R. 53) to 458 metres east of the east limit of William Street / Banner Lane	70 km/h	60 km/h
King Road (Y.R. 11)	688 metres west of the west limit of Charles Street to the west limit of Jane Street (Y.R. 55)	50 km/h 70 km/h	60 km/h
Town of Markham			
16 th Avenue (Y.R. 73)	The east limit of Donald Cousens Parkway (Y.R.48) to 450 metres east of the east limit of Bayview Avenue (Y.R. 34)	60 km/h 50 km/h 70 km/h 60 km/h 70 km/h	60 km/h
Highway 7 (Y.R. 7)	The west limit of the Bayview Avenue Ramp to 40 metres west of the west limit of Sciberras Road	80 km/h	60 km/h
Highway 7 (Y.R. 7)	200 metres east of the east limit of Main Street (Old Kennedy Road) to 100 metres west of the west limit of McCowan Road (Y.R. 67)	50 km/h	60 km/h
Highway 7 (Y.R. 7)	100 metres east of Wideman Street to the east limit of Donald Cousens Parkway (Y.R. 48)	70 km/h 80 km/h	60 km/h
Kennedy Road (Y.R. 3)	The north limit of Steeles Avenue to 300 metres north of the north limit of Major Mackenzie Drive East (Y.R. 25)	60 km/h 70 km/h	60 km/h
Leslie Street (Y.R. 12)	The north limit of John Street to 250 metres south of the east leg of 19th Avenue	60 km/h 70 km/h 60 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	The west limit of Woodbine Avenue (Y.R. 8) to the west limit of Bayview Avenue (Y.R. 34)	70 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	The west limit of Woodbine Avenue (Y.R. 8) to the west limit of Ninth Line (Y.R. 69)	70 km/h 80 km/h 70 km/h	70 km/h
Markham Road (Y.R. 68)	The north limit of Steeles Avenue and 670 metres north of the north limit of 14th Avenue (Y.R. 71)	60 km/h 70 km/h	60 km/h
McCowan Road (Y.R. 67)	The north limit of Steeles Avenue to the north limit of Major Mackenzie Drive East (Y.R. 25)	70 km/h 60 km/h 70 km/h	60 km/h
16 th Avenue (Y.R. 73)	The east limit of Donald Cousens Parkway (Y.R.48) to 450 metres east of the east limit of Bayview Avenue (Y.R. 34)	60 km/h 50 km/h 70 km/h 60 km/h 70 km/h	60 km/h

Roadway	Limits of Regulation	Current Speed Limit *	Proposed Speed Limit
Warden Avenue (Y.R. 65)	The north limit of Steeles Avenue to 244 metres north of the north limit of Major Mackenzie Drive (Y.R. 25)	70 km/h 60 km/h 70 km/h	60 km/h
Woodbine Avenue (Y.R. 8)	The north limit of Steeles Avenue and 392 metres north of the north limit of Elgin Mills Road East (Y.R. 49)	60 km/h 70 km/h 60 km/h	60 km/h
Town of Newmarket			
Bayview Avenue (Y.R. 34)	The south limit of Stone Road North to 250 metres south of the south limit of Mulock Drive (Y.R. 74)	70 km/h 60 km/h	60 km/h
Leslie Street (Y.R. 12)	The south limit of Wellington Street (Y.R. 15) to 536 metres north of Green Lane East (Y.R. 19)	60 km/h 80 km/h 70 km/h 60 km/h	60 km/h
Mulock Drive (Y.R. 74)	The east limit of Woodbine Avenue (Y.R. 8) to the east limit of Bathurst Street (Y.R. 38)	70 km/h 60 km/h 70 km/h	60 km/h
Yonge Street (Y.R. 1)	800 metres south of the south limit of St. John's Sideroad (Y.R. 26) to 200 metres north of the north limit of Green Lane (Y.R. 19)	60 km/h 70 km/h 60 km/h	60 km/h
Town of Richmond Hill			
Bathurst Street (Y.R. 38)	The north limit of Steeles Avenue and the north limit of Elgin Mills Road (Y.R. 49)	60 km/h 70 km/h	60 km/h
Bayview Avenue (Y.R. 34)	1079 metres north of the north limit of Stouffville Road (Y.R. 14) to north limit of Bloomington Road (Y.R. 40)	70 km/h 60 km/h 70 km/h	60 km/h
Bayview Avenue (Y.R. 34)	1500 metres north of the north limit of Elgin Mills Road (Y.R. 49) to 1079 metres north of the north limit of Stouffville Road (Y.R. 14)	60 km/h 70 km/h	70 km/h
Elgin Mills Road (Y.R. 49)	The west limit of Woodbine Avenue (Y.R. 8) and the east limit of Yonge Street (Y.R. 1)	60 km/h 70 km/h 60 km/h	60 km/h
King Road (Y.R. 11)	The west limit of Yonge Street (Y.R. 1) and the west limit of Bathurst Street (Y.R. 38)	60 km/h 70 km/h	60 km/h
Leslie Street (Y.R. 12)	The north limit of John Street to 250 metres south of the east leg of 19th Avenue	60 km/h 70 km/h 60 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	The west limit of Woodbine Avenue (Y.R. 8) to the west limit of Bayview Avenue (Y.R. 34)	70 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	92 metres west of the west limit of Arnold Street to the east limit of Hill Street	60 km/h 70 km/h 50 km/h	60 km/h

PROPOSED SPEED POLICY – SAMPLE IMPACTS

Roadway	Limits of Regulation	Current Speed Limit *	Proposed Speed Limit
16 th Avenue (Y.R. 73)	The east limit of Donald Cousens Parkway (Y.R.48) to 450 metres east of the east limit of Bayview Avenue (Y.R. 34)	60 km/h 50 km/h 70 km/h 60 km/h 70 km/h	60 km/h
Yonge Street (Y.R. 1)	The north limit of Elgin Mills Road (Y.R. 49) to 185 metres north of the north limit of Industrial Parkway	60 km/h 70 km/h 80 km/h 60 km/h	60 km/h
City of Vaughan			
Bathurst Street (Y.R. 38)	The north limit of Steeles Avenue and the north limit of Elgin Mills Road (Y.R. 49)	60 km/h 70 km/h	60 km/h
Dufferin Street (Y.R. 53)	The north limit of Steeles Avenue to the north limit of Major Mackenzie Drive (Y.R. 25)	60 km/h 70 km/h 60 km/h	60 km/h
Highway 7 (Y.R. 7)	The west limit of Highway 27 to the east limit of Centre Street (Y.R. 71)	80 km/h 70 km/h	60 km/h
Highway 27 (Y.R. 27)	The north limit of Steeles Avenue to the north limit of Rutherford Road (Y.R. 73)	70 km/h	60 km/h
Highway 27 (Y.R. 27)	From the north limit of Rutherford Road (Y.R. 73) to the north limit of Kirby Road	80 km/h	70 km/h
Islington Avenue (Y.R. 17)	150 metres south of the south limit of Langstaff Road (Y.R. 72) to the south limit of Major Mackenzie Drive (Y.R. 25)	50 km/h 60 km/h 70 km/h	60 km/h
Jane Street (Y.R. 55)	The north limit of Steeles Avenue to 671 metres north of the north limit of Teston Road (Y.R. 49)	70 km/h 60 km/h	60 km/h
Keele Street (Y.R. 6)	The north limit of Steeles Avenue and 200 metres south of the south limit of Alberta Drive	60 km/h 70 km/h	60 km/h
Keele Street (Y.R. 6)	490 metres north of the north limit of McNaughton Road to 100 metres north of Teston Road (Y.R. 49)	70 km/h 80 km/h	60 km/h
Langstaff Road (Y.R. 72)	The north limit of Highway No. 7 and the east limit of Keele Street (Y.R. 6)	60 km/h 70 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	92 metres west of the west limit of Arnold Street to the east limit of Hill Street	60 km/h 70 km/h 50 km/h	60 km/h
Major Mackenzie Drive East (Y.R. 25)	The west limit of Jane Street (Y.R. 55) to the West limit of Pine Valley Drive (Y.R. 57)	60 km/h 70 km/h	60 km/h

PROPOSED SPEED POLICY – SAMPLE IMPACTS

Roadway	Limits of Regulation	Current Speed Limit *	Proposed Speed Limit
Pine Valley Drive (Y.R. 57)	The north limit of Rutherford Road (Y.R. 73) to the north limit of Teston Road (Y.R. 49)	60 km/h 70 km/h	60 km/h
Rutherford Road (Y.R. 73)	The west limit of Bathurst Street (Y.R. 38) 1000 metres east of the east limit of Highway 27	60 km/h 70 km/h 60 km/h 70 km/h 60 km/h	60 km/h
Weston Road (Y.R. 56)	The north limit of Steeles Avenue to the north limit of Teston Road (Y.R. 49)	60 km/h 70 km/h 80 km/h	60 km/h
Town of Whitchurch-Stouffville			
Mulock Drive (Y.R. 74)	The east limit of Woodbine Avenue (Y.R. 8) to the east limit of Bathurst Street (Y.R. 38)	70 km/h 60 km/h 70 km/h	60 km/h
Ninth Line (Y.R. 69)	250 metres north of the north limit of Millard Street and a point approximately 973 metres north of the north limit of Millard Street	70 km/h	60 km/h
Ninth Line (Y.R. 69)	973 metres north of the north limit of Millard Street and a point approximately 564 metres south of the south limit of Bloomington Road (Y.R. 40)	70 km/h	70 km/h

* Where more than one speed limit is listed, the speed limit changes from south to north or east to west.