

# REPORT

# **COMMUNITY SERVICES COMMITTEE**

MEETING DATE: APRIL 25, 2016

**FROM:** Engineering and Construction Department

**DATE:** April 4, 2016

SUBJECT: Speed Limit Review

**LOCATION:** Town wide **WARD:** Town wide

Town wide Page 1

### **RECOMMENDATION:**

1. That the *Speed Limit Review*, as detailed in the staff report from the Engineering and Construction Department dated April 4, 2016, be received;

- That the posted speed limit of 50 km/h remain the default speed limit for all roadways under jurisdiction of the Town of Oakville and the Minister of Transportation of Ontario be advised of this;
- 3. That a plan to expand the use of 40 km/hr speed reduction zones throughout Oakville as detailed in the report dated April 4, 2016 from the Engineering and Construction department be approved; and
- 4. That staff report back to the Budget Committee to address a plan to fund and implement the recommendations of the report dated April 4, 2016 from the Engineering and Construction department.

### **KEY FACTS:**

The following are the key points for consideration with respect to this report:

- The Highway Traffic Act (HTA) in Ontario prescribes the default traffic speed limit within a local municipality or within a built-up area to be 50 km/hr, unless otherwise posted by the local authority.
- The Ministry of Transportation of Ontario (MTO) carried out a public consultation process in 2015 to determine support for the potential reduction in the default posted speed limit; no official findings have been released to date
- Town staff conducted research on the issue of traffic speeds, including:
  - Review of Pedestrian Collisions by Ontario Chief Coroner
  - The MTO's Consultation of Default Speed Limits
  - Nova Scotia's Review of Speed Limits

Date: April 4, 2016

Subject: Speed Limit Review

Page 2

What other Canadian and Halton Area Municipalities have done

- Town staff conducted Traffic Calming and Speed Limit Survey of Oakville residents; 862 residents participated in the survey
- Staff reviewed 2 options to address speed limit reduction:
  - Reducing the speed limit to a default 40 km/hr on all local class residential roads
  - An expansion of the current 40 km/hr speed reduction zones
- Staff are recommending an expansion of the current 40 km/hr speed reduction zones
- The estimated costs to implement the recommendations of this report are \$126,000; staff will report back to Budget Committee to address a plan to fund and implement the recommendations of this report.

## **BACKGROUND:**

At its meeting of June 29, 2015, town Council provided the following direction to staff:

That staff report back to Council on opportunities to lower speed limits in residential areas, where feasible, to provide greater safety for pedestrians, motorists and cyclists.

This report has been prepared in conjunction with the Traffic Calming Update Report which is appearing on the same agenda.

The Highway Traffic Act (HTA) in Ontario prescribes the default traffic speed limit within a local municipality or within a built-up area to be 50 km/hr, unless otherwise posted by the local authority. It also specifies that local municipalities have the ability to prescribe a rate of speed that is different (higher or lower) from the default limit on a roadway or a highway within its jurisdiction, as long as it does not exceed 100 km/hr.

As per the HTA, all roads within Oakville have a 50 km/h speed limit unless signs are posted advising a different limit. There are several higher order roads in Oakville where the speed limit is higher than 50 km/h (two examples are Royal Windsor Drive and Cornwall Road east of Cross Avenue). Roadways posted at lower limits (i.e. 40 km/hr) have been limited to local and collector roads primarily along elementary schools zones. School zones are typically defined as the length of roadway 150 metres from either side of the school property frontage.

There are also three (3) examples where the town has implemented time-of-day 40 km/hr speed limits along arterial roads (signs with flashing beacons); these are located along Rebecca Street adjacent to elementary and secondary schools for specific school arrival and dismissal times.

Date: April 4, 2016

Subject: Speed Limit Review

Page 3

#### **COMMENTS:**

# **STAFF RESEARCH:**

# Review of Pedestrian Collisions by Ontario Chief Coroner and Ministry of Transportation Consultations of the Default Speed Limit

In 2010, a review of all accidental pedestrian deaths in Ontario was conducted by the Ontario Chief Coroner. The purpose of this review was to examine the circumstances of 95 deaths that occurred form January 1<sup>st</sup> to December 31<sup>st</sup>, 2010 and make recommendations to help prevent future deaths. The coroner's report indicated that the lower the vehicle speed at the time of a collision with a pedestrian/cyclist, the lower the likelihood of injury to the pedestrian/cyclist.

As a result of this coroner's report, a recommendation was made to the Ministry of Transportation (MTO) to amend the Highway Traffic Act to allow local municipalities to lower the unsigned default speed limit to 40 km/h unless otherwise posted.

In 2015, the Ministry of Transportation (MTO) undertook a process to gather stakeholder input regarding the reduction of the current default speed limit to 40 km/h on local roads in urban areas. There were four (4) options being considered by the MTO:

- 1. Maintain current default speed limit of 50 km/h;
- 2. Through legislation, reduce the default speed limit from 50 km/h to 40 km/h;
- 3. Through legislation, permit municipalities to set a default speed limit of 50 km/h or 40 km/h inside municipal boundaries, and require the posting of signs at each entry point of the municipality/neighbourhood;
- 4. Through legislation, permit municipalities to set a different default speed limit inside municipality boundaries or neighbourhoods, and require the posting of signs at each entry point of the municipality/neighbourhood.

The consultation has concluded and MTO staff have prepared a detailed report and a summary of the stakeholder consultations; the report has been submitted to the Minister for review and is currently under review by the Minister – there have been no changes to legislation proposed as of the writing of this report.

### Other Jurisdictions Review of Speed Limits:

# Nova Scotia:

In 2013, Nova Scotia Transportation and Infrastructure Renewal (TIR), retained Dillon Consulting to undertake a *Lower Posted Speed Limit Study* to determine if posted speed limits below 50 km/h should be considered and if so, to outline best application practices. The following elements were examined around posted speed limits:

Physical road environment,

#### COMMUNITY SERVICES COMMITTEE

From: Engineering and Construction Department

Date: April 4, 2016

Subject: Speed Limit Review

Page 4

Issue of safety versus security,

Effect of posting lower speed limit signs on traffic speeds,

The study also included a survey of Canadian municipalities to understand their approach in setting speed limits and their experiences with posting speed limits lower than 50 km/h.

Below are the key findings from the Nova Scotia study.

- The physical environment (ex. lane width, curvature, lane markings) is the key driver in determining the most appropriate travel speed for a roadway
- Posting lower speed limit signs as a sole measure to decrease operating speeds will have no effect on driver behavior and may in fact decrease overall safety (e.g. creates a false sense of security)
- It is critical that road authorities apply posted speed limits consistently backed up by solid engineering analysis. Speeds that are set individually for political reasons and are not related to the physical environment will result in disregard for the limits by drivers
- Implementation of lower speed limit signs in absence of commensurate changes to the physical environment will have no effect on vehicle operating speeds
- Application of area-wide speed reductions without other controls produce limited change and general apathy towards posted speed limits
- The method for setting speed limits varies significantly between municipalities; however, a survey by Burlington, ON found that 42% of responding municipalities have adopted the "Canadian Guidelines for Establishing Posted Speed Limits" into their processes
- The public must be reminded of their responsibilities through appropriate education and enforcement programs

The Nova Scotia study also included a posted speed limit survey of several Canadian urban areas. Survey respondents included Montreal, Mississauga, Waterloo, London, Windsor, Winnipeg and Saskatoon. Of these seven municipalities, five referenced their respective Highway Traffic Act/Motor Vehicle Act as being the main determinant for their posted speed limits. London has developed their own guidelines for posting speed limits.

Five of the seven municipalities surveyed have posted speed limits lower than 50 km/h. Waterloo and Saskatoon have lowered the speed limit in school and playground zones only. Windsor has reduced the speed limit on a few streets through individual studies.

Mississauga has lower speed limits for school zones. In addition, they have also lowered speeds on roadways where the geometric design may not support a 50 km/h speed limit. They have found that the physical environment of some roadways is such that a posted speed limit of 50 km/h is too fast for the facility.

#### **COMMUNITY SERVICES COMMITTEE**

From: Engineering and Construction Department

Date: April 4, 2016

Subject: Speed Limit Review

Page 5

Neither London nor Winnipeg have reduced speed limits below 50 km/h. London indicated that reducing the speed limit does not solve operational traffic issues and that increased enforcement would be necessary to achieve compliance. Winnipeg indicated their research has shown that lowering speed limits in isolation has a limited effect on vehicle operating speeds. The physical characteristics of the road and the traffic conditions have greater influence on vehicle speed.

Montreal reduced the speed limit on its local roads and some collectors to 40 km/h in 2009 on an area-wide basis. This was done according to the City's 2008 Transportation Plan. The 40 km/h zones are defined and the speed limit is clearly posted at all entry points in the neighbourhoods. They have acknowledged that while the reduction is speed was not significant, the residents were largely in favour of the reduction in speed limits.

# Halton Area Municipalities

A review of Halton Region area municipalities revealed the following:

# Region of Halton

Halton's *Speed Control Policy* recommends posted speed limit of 50 km/h to 70 km/h for urban road sections depending on the road classification. The posted speed limit of 40 km/h might be exercised in the following cases:

- Constrained physical characteristics of the road
- School zones
- Temporary operation in a construction zone
- Recommended speed limit is shown to be higher that the inferred design speed.

## Burlington

Burlington's procedure for setting speed limits recommends a speed limit of 40 km/h on two-lane local and collector roadways fronting schools (elementary, secondary and private) and/or parks. In addition, when the road's geometry does not support a 50 km/h operating speed, that road may be signed at a posted speed limit of 40 km/h.

## Halton Hills

Similar approach has been taken by the Town of Halton Hills where urban roads have the posted speed limit of 50 km/h. A lower speed limit of 40 km/h is implemented along elementary school zones. Halton Hills follows criteria for establishing posted speed limits based on the Northwestern University Method.

#### Milton

Milton uses the following criteria when setting speed limits on urban roadways.

- Posted speed limits on urban roadways should be set between 40 km/h and 60 km/h, in increments of 10 km/h.
- Flashing speed limits of 40 km/h should be installed along the frontage of all elementary schools during entrance, dismissal and the last nutritional break times.

Date: April 4, 2016

Subject: Speed Limit Review
Page 6

 Posted speed limit should ideally be set at or near the 85<sup>th</sup> percentile speed based on actual measurements of the operating speeds.

- The posted speed limit may be set below the recommended level when:
  - Required by physical characteristics of the road;
  - Required by adjacent land uses and associated activities;
  - Evidenced by a significantly higher than normal collision record;
  - Shown to be higher than the inferred design speed; or
  - o There is significant conflict in roadway users.

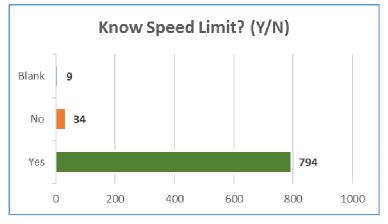
# **Town of Oakville Traffic Calming and Speed Limit Survey**

Staff undertook a *Traffic Calming and Speed Limit Survey* of Oakville residents in September of 2015. The intent of the survey was to gauge residents' opinions and preferences in future selection of traffic calming devices as well the potential for a speed limit change on town's roads. The survey was made available to the general public through various communication means such as: town's website, community centres, libraries and residents associations.

The response to the survey was excellent; 862 persons completed the survey representing approximately 1.4% of total town's households.

The speed limit section of the survey consisted of five (5) questions. The questions and their responses are outlined below:

**Q1:** Do you know that the default speed limit on many roads in the town of Oakville is 50 km/h?

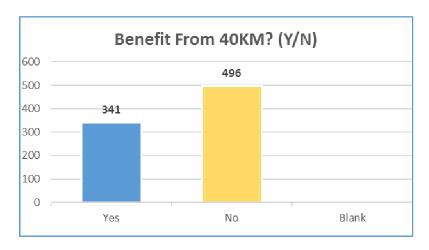


Date: April 4, 2016

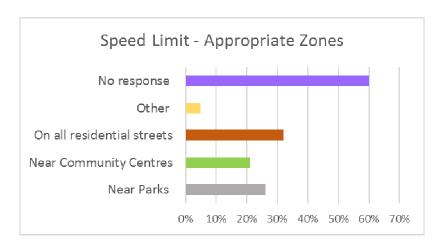
Subject: Speed Limit Review

Page 7

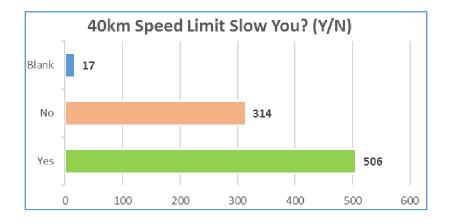
Q2: Do you feel that the Town of Oakville would benefit from more 40 km/h zones?



**Q2a:** The town already has 40 km/h per hour zone in school zones. Where else do you think 40 km/h zones would be appropriate?



Q3: Would a 40 km/h speed limit make you drive slower?

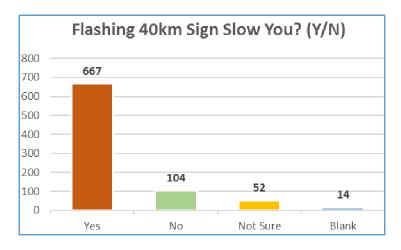


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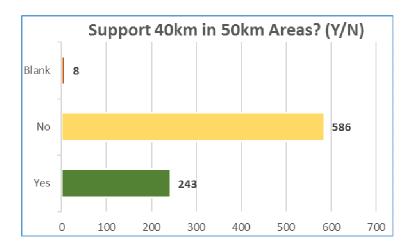
Subject: Speed Limit Review

Page 8

**Q4:** Would a flashing 40 km/h school zone sign make you drive slower?



**Q5:** Would you support a 40 km/h maximum in all current 50 km/h areas?



A map outlining responses to Q5 by geographical area is included in Appendix A.

# **Discussion: How Oakville should address Reducing the Speed Limit**

The extensive research/review that staff has carried out the issue of speed limit reductions along local classed roadways does not support moving to a 40 km/hr default speed limit.

Based on the research/review, the following are noted if the town were to consider reducing the default speed limit along all locally classed residential streets:

- Social Impacts:
  - Motorist disrespect/disregard for the modified posted speed limits

#### **COMMUNITY SERVICES COMMITTEE**

From: Engineering and Construction Department

Date: April 4, 2016

Subject: Speed Limit Review

Page 9

- Increased need for a police enforcement
- Disrespect to the lower posted speed limit in school zones
- o Increase in a number of locations requiring traffic calming measures
- Increased travel times for motorists and affected transit vehicles
- Environmental impact (vehicle emission gases instigated by longer travel times)

Speed limits set too low can produce an environment where users (especially pedestrians) feel more secure but are not actually safer; education on the difference between safety and security is critical to increasing safety for all road users.

# Other Impacts:

- The change to a lower default speed limit would result in a substantial amount changes to the existing signs.
- In addition, existing school zones currently signed at 40 km/hr speed limit would consequently need to be replaced with the lower speed limit signs (potentially 30 km/h); the town currently has 180 – 40 km/hr signs in its inventory.
- Any expectation of increased police enforcement would come at additional costs to the Halton Region Police Service – and most likely the need for additional officers to support such an endeavor.

Implementation costs to move towards a 40 km/speed limit on all local class roadways in Oakville are approximately \$80,000 and are outlined in Appendix B of this report.

# Staff do not recommend an overall town-wide reduction of the posted speed limit to 40 km/h.

An alternative to an overall town-wide reduction of the speed limit would be expanding the use of existing 40 km/hr zones to other roads with high pedestrian generators. These areas would include secondary schools, community centres/arenas, seniors centres, private schools, public libraries. This would also apply to parks abutting or within close proximity to elementary school properties.

Staff would advise Council this is a more sustainable and practical solution to address driving behaviours. A simple reduction of the speed limit will not achieve the desired result - based on research, it is evident that motorists will likely not respond to blanket sign changes and this may actually devalue the significance of existing school reduced speed zones. There may be a false sense of improved safety for pedestrians; the reality is that without sustained increased enforcement levels, this will not be a practical solution.

A summary of a plan and the estimated implementation costs to expand the use of 40 km/hr zones is presented in Appendix C of this report. Implementation costs of this plan are estimated at \$126,000.

Staff recommends the town expand the use of 40 km/h zones.

Date: April 4, 2016

Subject: Speed Limit Review

Page 10

# Specifically, staff recommends the following:

1. Introducing 40 km/hr When Flashing speed reduction zones (during school arrival and dismissal times) along town major collector and arterial class roadways along the frontage of all schools (secondary, elementary and private)

- Introducing a 40 km/hr reduction speed zone (at all times) along Sheridan Garden Drive (west of Ford Drive) in support of John Knox Christian School and Wildwood Academy.
- 3. Introducing 40 km/hr reduction speed zones (at all times) along the frontage of all parks bordering or in close proximity to elementary school properties
- 4. Introducing 40 km/hr reduction speed zones (at all times) at Community, Senior Centres and Public Libraries along local and minor collector roads:
  - Bridge Road at Queen Elizabeth Park Community and Cultural Centre)
  - Old Lakeshore Road at Sir John Colborne Centre
  - Kerr Street along the frontage of the Kerr Street Senior Centre
  - Woodside Drive along the frontage of the Woodside Public Library

Future requests for lowering the speed limit on any roadway within the town may be reviewed on a request basis and by applying criteria and warrants outlined in the Transportation Association of Canada Canadian Guidelines for Establishing Posted Speed Limits.

# **Funding and Implementation:**

Should Council approve the recommendations of this report, staff will report back to Budget Committee in the autumn of 2016 to address a plan to fund and implement the expansion of the 40 km/hr. speed reduction zones. The ultimate implementation schedule would be contingent on budget approval. Should Budget Committee and Council approve the required funding, staff would commence implementing the recommendations in the spring of 2017.

#### **CONSIDERATIONS:**

# (A) PUBLIC

A public consultation regarding the posted speed limit in the town has been conducted via speed limit and traffic calming survey issued in September 2015. The survey has been published through the various communication means such as: town's website, community centres, libraries and residents associations.

Respondents to the Town of Oakville Speed Survey and other stakeholders who have previously expressed an interest on the issue of speed limit reductions have been notified about this report.

Date: April 4, 2016

Subject: **Speed Limit Review** 

Page 11

# (B) FINANCIAL

The cost associated with the implementation of the expansion of the 40 km/hr speed zones is approximately \$126,000; this cost would be considered as an operation expense. Staff will be reporting back to Budget Committee in the autumn of 2016 to address a plan to fund and implement the expansion of the 40 km/hr. speed reduction zones. The ultimate implementation schedule would be contingent on budget approval.

### (C) IMPACT ON OTHER DEPARTMENTS & USERS

Roads and Works Department would be responsible for implementation of the 40 km/h signs and flashing beacons throughout the various locations in town.

# (D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- continuously improve our programs and services
- · be accountable in everything we do

# (E) COMMUNITY SUSTAINABILITY

The safe operation of our intersections and roadways is an important facet to the social pillar of community sustainability.

## **APPENDICES:**

- A. Geographical Distribution: Responses to Question 5, Town of Oakville Speed Limit Survey
- B. Implementation Costs Reduction to 40 km/hr Default Speed Limit
- C. Summary and Implementation Costs Expand use of 40 km/hr Zones

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