

The Corporation of the City of Kawartha Lakes

Council Report

Report Number ENG2018-001

Date: January 30, 2018
Time: 2:00 p.m.
Place: Council Chambers

Ward Community Identifier: 15

Subject: Request for Speed Limit – Cottingham Road, Meadowview Road, and Hayes Line

Author Name and Title: Joseph Kelly, Senior Engineering Tech

Recommendation(s):

RESOLVED THAT Report ENG2018-001 **Request for Speed Limit – Cottingham Road, Meadowview Road, and Hayes Line** be received;

THAT staff proceed with the preferred option (Option Two), as outlined in Report ENG2018-001, to install warning signs and temporary electronic speed boards.

Department Head:_____

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

Background:

Staff received a request to investigate the feasibility of posting speed limits on roads in the south end of the geographic area of Emily. Safety concerns were raised to Council for Cottingham Road, Meadowview Road, and Hayes Line.

Rationale:

Cottingham Road, Meadowview Road, and Hayes Line are similar roads in that they are local, low volume, hard top roads with a narrow platform (standard lane width plus narrow or no shoulder/recoverable slopes). The approximate 10 km from Highway 7 to Mount Nebo Road are hilly and relatively straight for all three roads. The surrounding land use is mainly large farm acreages mixed with severed lots and sporadic rural developments. Key maps can be found in Appendix A.

Speed counts were performed from July 20 to July 23, 2015 and show high 85th percentile speeds. A summary of the findings are in Figure 1, full reports can be found in Appendix B.

Road	Counter Location	Average Daily Traffic	85 th Percentile Speeds
Cottingham Rd	210 Cottingham Rd	323	92.5 km/h
Meadowview Rd	431 Meadowview Rd	107	82.8 km/h
Hayes Line	817 Hayes Line	135	99.7 km/h

Figure 1 Speed study results showing 85th percentile speeds and volumes

Staff performed site investigations, speed studies and road risk audits under the Transportation Association of Canada's (TAC) "Guidelines for Establishing Posted Speed Limits" as part of CKL's formal speed reduction warrant process for all sections of roads. The TAC guide recommends a road risk method to determine appropriate speed limit according to road engineering characteristics,

geometry, roadside environment, classification, land use, access/intersection density, and vulnerable road users.

Under the TAC Speed Guidelines all rural, local roads have a recommended speed limit of 60 km/h (Appendix C). However, it should be noted that drivers drive by feel based on surrounding conditions. It is proven that unrealistic speed limits will be ignored without aggressive enforcement. In addition, creating a large speed gap between law abiders (60 km/h) and drivers who continue to drive by feel could create a hazard on these hilly roads.

The following options were considered:

Option One – Post 60 km/h Speed Limit

The TAC guidelines of posting rural, local roads at 60 km/h allow room for good engineering judgment. In addition to the TAC guidelines, staff also considers the following criteria not within the scope of the TAC guidelines when determining speeds on rural, local roads:

- If traffic volumes are sufficiently high
- If collision rate are higher than similar roads
- If change in use present new conflict potential (pedestrian/cyclist use increase)
- If public demand from users of the road is sufficiently high

Through this rationale it does not appear the volumes would meet any meaningful threshold, a demand for pedestrian use on this road has not been expressed, and staff has not received any petitions for the posting of the speed. Staff understands that Council has received requests. Council may wish to consider if public demand is sufficient enough.

Collision rates were calculated using 15 years of available collision data. Collision rates allow for comparing collisions on different roads while accounting for length, time, and traffic volumes. According to best practiced methods, rates less than 1.6 collisions per million vehicle kilometer are considered low risk. All three roads have a collision rate under 0.7 collisions per million vehicle kilometer. Appendix D shows the calculations.

Hayes Line is a boundary road. This option would require coordination with Peterborough County.

Costs: OTM requires speed signs in 60 zones every 600m. There is 25.8 km of road. Therefore approximately 43 locations will require signs on both sides of the street. This would also require aggressive enforcement and use of the electronic speed board.

86 signs x \$400 = \$34 000

Option Two – Post Warning Signs and Temporary Speed Board (Preferred Option)

Post warning signs for steep hills, keep right, advisory speed (non-regulatory), share the road and/or custom signage at key points. These signs would be intended to bring awareness to sections of these roads where visibility and platform widths are reduced where the speed is unposted.

It is also advisable to deploy the electronic speed board at various locations along the roads through a scheduled program in 2018. Collected information with regards to speeding will be shared with the local OPP detachment for enforcement purposes.

Costs: approximately three to six locations per road

9 to 18 signs x \$400 = \$3600 to \$7200

Option Three – Do Nothing

Outside of the settled areas and arterial roads the majority of the City's road system is unposted. When unposted the speed on these roads is assumed to be 80 km/h as per the Provincial Highway Traffic Act. Where these rural roads do not meet the requirements for speed reduction they should remain unposted maintaining their rural, local roads status within the City's road system and sparing the Municipality the cost of installing and maintaining signs.

Other Alternatives Considered:

These roads could remain unposted/as-is due to their low volume. Posting a speed limit may have limited success and/or put undue burden on enforcement.

Financial/Operation Impacts:

Cost of sign installation to bring By-law into effect.

Relationship of Recommendation(s) To The 2016-2019 Strategic Plan:

Providing life safety and protection, while considering rural road use for pedestrians and cyclists enjoyment is a priority objective of the City under the Council Adopted Strategic Plan Goal of An Exceptional Quality of Life.

Consultations:

Mike Farquhar, Supervisor, Engineering – Technical Services

Attachments:

Appendix A – Key Map



ENG2018-001-Appendix A.pdf

Appendix B – Speed Studies



ENG2018-001-Appendix B.pdf

Appendix C – TAC Speed Limit Guidelines



ENG2018-001-Appendix C.pdf

Appendix D – Collision Rate Calculations



ENG2018-001-Appendix D.pdf

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Department Head: Juan Rojas, Director of Engineering & Corporate Assets

Department File: Engineering