

Memorandum

Public Works & Engineering

545 Tenth Line, Box 157

Collingwood, ON L9Y 3Z5

T. 705-445-1030 | F. 705-445-1286

www.collingwood.ca

To:	Council
From:	Peggy Slama, Director of Engineering, Public Works and Environmental Services
Subject:	Speed Reduction Considerations
Date:	June 21, 2021

At the May 31st, 2021 Council Meeting, Council held discussions regarding a proposed Notice of Motion to implement a Town wide speed reduction from 50km/h to 40 km/h. Following extensive discussion, Council Referred the item to staff to return at the next Council meeting, intending to have further information on options for the scope of work and the timing.

Speed on Collingwood local roads is an important factor as we look towards implementing the vision for our community set out in our Community-based Strategic Plan (CBSP). The CBSP highlights the significance of supporting a healthy living lifestyle with safety paramount within the active transportation structure. Collisions do occur between motorists and pedestrians, cyclists and other multi modal users, and studies show that collisions that occur at lower speed result in less severe injuries and less fatalities. This vision of our community drives and shapes our technical analysis.

Traffic safety is a well-developed field of engineering, which relies heavily on many years of data and statistical measurements of the actual changes when safety improvements are installed, and this means that the results from billions of actual trips guide decisions. One of the well-accepted options is to utilize the Road Safety Management Process outlined in the US Highway Safety Manual. This includes screening the network to show where action may be warranted, diagnosing the cause of problems, selecting the appropriate action given economic considerations and prioritizing the locations for action. Our Traffic Calming Policy fills one part of this process – options for action where the specific cause diagnosed is speed.

With this type of comprehensive approach being implemented in a municipality our size, staff would want to be able to examine the potential for right-sizing the approach for cost-effectiveness and success in our municipality, however a recent request to MTO's Ontario collisions database by the Collingwood police force indicates that comprehensive collisions information is available for analysis, including almost 500 collisions in 2020.

Setting speed limits is also a specialty. Extensive research has led to the development of speed limit recommendations that are based on studies that collect free-flow traffic data and then select an appropriate speed using a statistical model. Factors such as school zones, citizen or political pressure, and perceived safety issues contribute to the fairly common practice of lowering speed limits below engineering guidelines. Studies also show that setting limits lower than engineering recommendations can produce a statistically significant decrease in fatal and injury crashes, and property-damage-only crashes. However, caution should be given as it is also believed that if the



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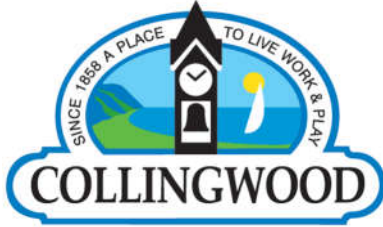
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limit is too far below the speed at which drivers perceive to be correct then more drivers do not obey it, causing a potential for greater problems with speed differentials and differing expectations. Should the Collingwood wide limit be reduced to 40 km/hr, it is not known to what extent the community's prevailing values and expectations will influence drivers' behaviour to drive more slowly at the new limit.

Quick research has shown that other Ontario municipalities, including Toronto, Hamilton, Ottawa, London, Mississauga, Waterloo, Prescott, Innisfil (Cookstown), Caledon, Orangeville, Oakville (pilot) and Kitchener (pilot) have implemented blanket speed reductions or a combination of reduced speeds on select residential streets and retaining existing speeds on select roads. However staff have not reviewed their analysis, recommendations, decisions or experiences.

The decision to support a Town-wide speed reduction should be made with knowledge of where we are today, and a determination of where we want to get to. To set these bars an extensive review of background information and existing data, collection of additional data, review of collision data, cost implications and review of implemented measures to determine if the goal was achieved and at what cost. There are different levels of this type of analysis. Staff have suggested the following options for Council's consideration, with the option to act on one or more:

1. Consult with the community, such as through Engage Collingwood, to confirm the community's desires.
2. Simply proceed, and request staff provide a cost to install the required signage to reduce speed limits to 40km/h on all local and collector roads. This could be provided in a staff report for the October committee meeting. The staff report would outline the signage requirements as per HTA, locations of signs, a summary of other municipalities that have implemented similar reductions, and how this change would be communicated to the public. If Council approval is granted, costs would be carried in the 2022 budget, installation of signage would be in spring 2022, and it is recommended that costs include an engineering assignment to benchmark current collision results and compare them to results in 2022 and 2023.
3. Hire a consultant to provide a comprehensive review report. Our brief research indicated this is the approach other municipalities take when considering a Town-wide speed reduction. Estimated cost would be included in the 2022 budget. Potential scope would include:
 - Review experience of other municipalities and whether speed limit reduction was effective
 - Review research into effectiveness of speed reductions (will drivers adhere to new limits)
 - Review of Highway Traffic Act and other regulations
 - Review standard process for setting speed limits and 85th percentile concept (TAC guidelines)



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- Conduct Town wide speed studies to gain a better understanding of actual driver behaviour.
 - Review collision history provided by MTO to identify problem locations and determine if speeding was primary factor (MTO data is not detailed so we will have to review applicability)
 - Consult with OPP to determine enforcement challenges expected with a speed limit reduction
 - Engage with the public to measure support
 - Provide recommendations as to whether speed limits should be reduced, and if they are, where. Targeted areas vs. blanket approach.
 - Provide costs to install required signage to reduce speed limits
 - Provide a summary report and presentation to Council
4. Utilize the Road Safety Management Process as outlined in the US Highway Safety Manual to determine where speed limit reductions, or other safety improvements are warranted and what to do. Consultant would be retained through an open RFP process (as opposed to engineering roster) to provide a study that would ultimately provide a list of projects that would reduce crash frequency on the Town road network. Study would follow the process in the US Highway Safety Manual:
- a. Network Screening - reviewing the Town transportation network to identify and rank sites based on the potential for reducing average crash frequency and/or crash severity
 - b. Operational Performance Review (Diagnosis) - identify the contributing factors to accidents and certain locations; crash patterns; crash types; weather; potential road or roadside, vehicle, or human factors that may be relevant for the sites under investigation
 - c. Select Countermeasures – select appropriate improvements that could address issues identified in the operational performance review
 - d. Economic Appraisal - determine whether improvement projects are economically justifiable, and determine which project or alternative is the most cost-effective
 - e. Project Prioritization (either we have a capital program, or we could address projects as opportunities exist) - review potential projects for construction/implementation and sort them based on the results of ranking and optimization processes

This is an extensive process and not typically implemented by a municipality of Collingwood's size and resources. Staff expect costs to be significant and would require further time to investigate.

Staff's recommendation would be to proceed with Option 3 and consider a level of investigation and recommendation that is based on data, draws from the experience of other municipalities, considers areas where a reduced speed will provide the most benefit and the implementation costs.



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Notice of Motion

...That Council direct staff to obtain budget estimates for a comprehensive review report of the implementation of a 40 km/h speed limit in Collingwood to be included in the 2022 budget.