

Traffic Calming – Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South

Date:	April 15, 2016
To:	Etobicoke York Community Council
From:	Director, Transportation Services, Etobicoke York District
Wards:	Ward 5 – Etobicoke-Lakeshore
Reference Number:	p:\2016\Cluster B\TRA\EtobicokeYork\eycc160070-to

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

This report outlines the results of our investigation into installing speed humps on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South. The results indicate that the criteria to justify installing speed humps are not satisfied.

RECOMMENDATIONS

Transportation Services recommends that:

1. Etobicoke York Community Council not approve traffic calming on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South.

Financial Impact

Adopting the above-noted recommendation does not result in any financial impact; however, if Etobicoke York Community Council decides to approve installing traffic calming devices on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South, the following financial impact will result.

The estimated cost for installing one speed hump is \$3,000.00. This can be accommodated within funds allocated by City Council as part of the Transportation Services Capital Budget, subject to competing priorities and funding availability.

ISSUE BACKGROUND

Transportation Services received a petition from the Ward Councillor, on behalf of area residents, to investigate the feasibility of physical traffic calming measures (speed humps) on Bermuda Avenue, to address concerns with speeding vehicles. A map of the area is Attachment 1.

COMMENTS

Bermuda Avenue is a two-lane road classified in the City's Road Classification System as a "Local" road. This street operates two-way between Prince Edward Drive South and Grenview Boulevard South. The roadway has a rural cross-section (ditched) with no sidewalks on either side of the street. The roadway width is 6.1 meters. The legal speed limit on Bermuda Avenue is 40 km/h.

Study data was applied to the City of Toronto Traffic Calming Warrant, which revealed that traffic calming is not warranted on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South. The results of the speed studies are summarized in the following table:

Study Location	Speed Ranges – km/h					85 th Percentile	24 Hr Total
	1-40	41-50	51-60	61-65	>65		
Bermuda Avenue	210	1	0	0	0	30 km/h	211

The 85th percentile speed is the vehicle operating speed at or below which 85 percent of all traffic is moving. Studies show that collision rates are lowest at or around the 85th percentile speed.

We assessed the subject location according to the City of Toronto's Traffic Calming Policy. Vehicle speeds and traffic volumes are the prime criteria for installing traffic calming devices. Other environmental factors are also examined, such as road width, pedestrian facilities and grade. The proposal was evaluated under each criteria (Warrants 1, 2 and 3), with the results summarized in Appendix A.

Based on data collected and evaluated against the warrant for the installation of traffic calming measures, the installation of speed humps is not recommended. Bermuda Avenue does not satisfy the technical requirements, specifically in Warrant 3.1 – Minimum Speed and in Warrant 3.2 – Minimum and Maximum Traffic Volume.

Furthermore, it was noted that there have been no reported collisions in the preceding three year period ending December 31, 2014, where vehicle speed was identified as a contributing factor.

Should Etobicoke York Community Council decide to proceed with installing speed humps on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South, we recommend that:

1. The City Clerk (Polling Registry Services) survey eligible householders in English or any other language specified by Community Council, on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South, to determine if property owners/occupants support the installation, according to the City of Toronto Traffic Calming Policy.
2. Subject to favourable results of the poll:
 - a. The City Solicitor prepare a by-law to alter sections of the roadway on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South for traffic calming purposes, generally as shown on Drawing EY16-70.DGN, dated April, 2016 and circulate to residents during the polling process.
 - b. Transportation Services take the necessary actions to reduce the speed limit from 40 km/h to 30 km/h on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South, when the speed humps are installed.

The current City of Toronto Traffic Calming Policy requires that the City Clerk (Polling Registry Services) formally survey property owners/occupants who are directly affected by installing speed humps on Bermuda Avenue. The policy stipulates that a minimum response rate of 50% plus one of affected households/properties respond, and that 60 % of valid responses support the proposal in order to implement the plan.

Subject to approval by Etobicoke York Community Council, according to the recommendations indicated above, the City Clerk will survey property owners/occupants and report the results to Etobicoke York Community Council. If the survey supports installing speed humps on Bermuda Avenue, between Prince Edward Drive South and Grenview Boulevard South, Transportation Services staff will schedule their installation based on relative need and competing priorities.

Installing speed humps will result in slower operating speeds for all vehicles, including emergency service vehicles, and could result in increased response times in the event of an emergency.

Consultation with emergency services (Police, Fire and Emergency Medical Services) is required to ensure that the design and layout of traffic calming proposals do not negatively affect their operations. Although we generally advise emergency services of our intentions, we do not always receive a formal response; however, in the past Toronto Fire Services has provided the following general statement regarding speed hump installation.

“...Toronto Fire Service is supportive of initiatives that improve the life safety of our citizens. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area.

The vertical restrictions imposed by speed humps have a much greater effect on large fire vehicles than smaller passenger vehicles. Response time increases with every obstacle a fire vehicle encounters en route from the fire station to the incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time that could result in increased property damage, unnecessary injury or loss of life.

Speed humps are generally hard on large, heavy vehicles (fire vehicles) and increase the potential to suffer mechanical damage. This in turn can lead to a vehicle being placed out of service for considerable periods of time. Aside from the costs associated with repairs, there is a decrease in the resources available to respond to other emergency situations.”

Regardless, given the low incidence of speeding on Bermuda Avenue, the installation of speed humps or other traffic calming measures are not technically warranted at this time and, therefore, not recommended.

CONTACT

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SIGNATURE

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ATTACHMENTS

Appendix A: Traffic Calming Warrant Criteria
Attachment 1: Speed Hump Location Plan

Appendix A

Traffic Calming Warrant Criteria Bermuda Avenue between Prince Edward Drive South and Grenview Boulevard South

Warrant	Criterion	Requirement	Met/Not Met	
Warrant 1 Petition	1.1 Petition	A petition requesting traffic calming must be signed by at least 25% of households on the street. OR A direct request from the Ward Councillor in consultation with the public. Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.	Met – Petition from Councillor on behalf of area residents	
		Impacts to Adjacent Streets	No significant traffic impacts on adjacent streets	Met –there should be minimal traffic spill-over to other streets
Warrant 2 Safety Requirements	2.1 Sidewalks	Continuous sidewalks on at least one side of the street (both sides for collector streets or higher classification). OR Where there are no sidewalks, the installation of sidewalk on at least one side of the street must have first been considered.	Not Met – No continuous sidewalk on either side of Bermuda Avenue.	
	2.2 Road Grade	Road grade 5% or less. OR Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.	Met – Road grade is less than 8%	
	2.3 Emergency Response	No significant Impacts on Emergency Services (as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.	Met -General objections from Toronto Fire, Ambulance and Police.	
Warrant 3 Technical Requirements (all four criteria must be fulfilled to satisfy this warrant)	3.1 Minimum Speed	85 th percentile speed is a minimum of 10 km/h (but less than 15 km/h) over a warranted 40 km/h speed limit, and the traffic volume requirements of Warrant 3.2 must be fulfilled. OR On streets where the 85 th percentile speed exceeds a warranted 40 km/h speed limit by a minimum of 15 km/h, there is no minimum volume required in warrant 3.2.	Not Met - 30 km/h (10 km/h under the posted speed limit)	
	3.2 Min. and Max. Traffic Volume	Local Roads Traffic volume between 1,000 Veh/day and 8,000 Veh/day	Collector Roads Traffic volume between 2,500 Veh/day and 8,000 Veh/day	Not Met - Local Road 211 vpd
	3.3 Minimum Street Segment Length between stop controls	Street segment length must exceed 120 meters between stop controls (signals or stop signs)		Met 205 meters
	3.4 Transit Service	Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)		Met – No TTC service.