Traffic Calming - Empire Avenue

Date: May 18, 2017
To: Toronto and East York Community Council
From: Acting Director, Transportation Services, Toronto and East York District
Wards: Ward 30, Toronto-Danforth

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City policy or by-laws.

Transportation Services staff have reviewed the need for traffic calming on Empire Avenue, between Eastern Avenue and Queen Street East, to address residents' concerns regarding vehicle speeds. Our assessment indicates the criteria as set out in the traffic calming policy has not been satisfied on this roadway. Therefore, traffic calming should not be installed on Empire Avenue, between Eastern Avenue and Queen Street East.

RECOMMENDATIONS

The Acting Director, Transportation Services, Toronto and East York District, recommends that:

1. Toronto and East York Community Council deny the installation of traffic calming measures on Empire Avenue, between Eastern Avenue and Queen Street East.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendations in this report.

DECISION HISTORY

This report addresses a new initiative.
Existing Conditions

Empire Avenue, between Eastern Avenue and Queen Street East, is a local roadway which operates one-way, northbound, with a posted speed limit of 30 km/h and a daily traffic volume of about 403 vehicles. The pavement width is about 7.47 metres and sidewalks are provided on both sides. There is no TTC service provided on Empire Avenue. The following parking regulations are currently in effect on Empire Avenue, between Eastern Avenue and Queen Street East:

East Side
- Parking is permitted for a maximum period of one hour from 9:30 a.m. to 2:00 p.m. and 4:00 p.m. to 6:00 p.m., Monday to Friday; and,
- Parking by permit only from 10:00 p.m. of one day to 9:30 a.m. of the next following day and 2:00 p.m. to 4:00 p.m., Monday to Friday, 12:01 a.m. to 7:00 a.m. Saturday and Sunday.

West Side
- Parking prohibited at all times from December 1 of one year to March 31 of the next following year except by permit only from April 1 to November 30.

Analysis

Transportation Services conducted three days of mid-block speed and volume studies on Empire Avenue, between Eastern Avenue and Queen Street East, in November 2015. It should be noted that the study is based on the warranted speed limit of 40 km/h.

The study findings were assessed against the City of Toronto's traffic calming policy and it was found that Empire Avenue, between Eastern Avenue and Queen Street East does not satisfy the installation of traffic calming devices. More specifically:

- The operating speed of 45 km/h is less than the required minimum of 10 km/h over the warranted speed limit to satisfy the traffic calming installation criteria; and
- The daily volume of 403 vehicles is less than the minimum 1,000 vehicles per day requirement.

Therefore, the installation of traffic calming on Empire Avenue, between Eastern Avenue and Queen Street East, is not warranted.

A review of Toronto Police Service collision records for a three-year period ending December 31, 2016 did not disclose any reported collisions on the subject section of Empire Avenue attributed to speeding.

Appendix A entitled "Table 1: Traffic Calming Warrant Criteria - Empire Avenue" outlines the results of the assessment.
Alternate Recommendations
If, despite the findings above, Toronto and East York Community Council determines that installing speed humps on Empire Avenue, between Eastern Avenue and Queen Street East, would be beneficial, it may approve the following:

"That the Toronto and East York Community Council direct:

1. The Acting Director of Transportation Services, Toronto and East York District request the City Clerk to poll eligible householders on Empire Avenue, between Eastern Avenue and Queen Street East, to determine whether residents support the installation of traffic calming, in accordance with the City of Toronto Traffic Calming Policy.

2. Subject to favourable results of the poll, the City Solicitor prepare a by-law to alter sections of the roadway on Empire Avenue, between Eastern Avenue and Queen Street East, for traffic calming purposes, generally as shown on the copy of Drawing No. 421G-2488, dated May 2017, attached to the report entitled 'Traffic Calming – Empire Avenue' from the Acting Director, Transportation Services, Toronto and East York District."

The estimated cost for installing four speed humps on Empire Avenue, between Eastern Avenue and Queen Street East is $12,800.00. The installation of speed humps on Empire Avenue would be subject to availability in Transportation Services 2018 Capital Funding estimates and competing priorities.

Conduct Poll
The City of Toronto's traffic calming policy stipulates that residents who would be directly affected by installing speed humps on Empire Avenue, between Eastern Avenue and Queen Street East, be formally polled. A minimum response of 50 percent plus one ballot is required, of which at least 60 percent of the respondents must support installing speed humps in order to proceed with the installation. Should Toronto and East York Community Council approve the recommendations outlined above, Transportation Services would request a poll of eligible residents on Empire Avenue, between Eastern Avenue and Queen Street East. If the poll supports speed humps, Transportation Services would schedule installation based on relative need, competing priorities and funding availability.

Relative Priority and Other Impacts
Relative need and priority of speed hump installation is based on a technical assessment of traffic volume, vehicle speed percentages, speed-related collisions, and the presence of schools, parks, seniors’ residences or bicycle routes. Empire Avenue, between Eastern Avenue and Queen Street East, scored 3 ranking points out of a possible 100.

No alterations to parking regulations are required, nor would the number of parking spaces be affected by the installation of speed humps. Installation of speed humps will have minimal effect on winter services, street cleaning and garbage collection.
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.

Emergency Services Comments
Consultation with emergency services (Police, Fire and Paramedic Services) is required to ensure that the design and layout of a traffic calming proposal does not unduly affect their operations. Toronto Fire Services provided their comments in the attached letter, dated April 26, 2017 (Appendix B). Toronto Paramedic Services provided their comments in the attached letter, dated May 18, 2017 (Appendix C). Comments have not yet been received from Toronto Police Services.

Councillor Paula Fletcher has been advised of the recommendations of this staff report.

CONTACT

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SIGNATURE

Dave Twaddle, C.E.T.
Acting Director, Transportation Services
Toronto and East York District

ATTACHMENTS

1. Drawing No. 421G-2488, dated May 2017
2. Appendix A - Table 1: Traffic Calming Warrant Criteria
3. Appendix B - Letter from Toronto Fire Services, dated April 26, 2017
4. Appendix C - Letter from Toronto Paramedic Services, dated May 18, 2017
# Table 1: Traffic Calming Warrant Criteria

**Empire Avenue between Eastern Avenue and Queen Street East**

<table>
<thead>
<tr>
<th>Warrant</th>
<th>Criterion</th>
<th>Requirement</th>
<th>Met/Not Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrant 1</td>
<td>1.1 Petition</td>
<td>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. Warrants #2 and #3 will not be considered until Warrant #1 is satisfied.</td>
<td>Met – Request to investigate by Councillor Fletcher (SR# 715254)</td>
</tr>
<tr>
<td>Impacts to Adjacent Streets</td>
<td></td>
<td>No significant traffic impacts on adjacent streets</td>
<td>Met – There should be no traffic spill over to adjacent streets</td>
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<tr>
<td>Warrant 2</td>
<td>2.1 Sidewalks</td>
<td>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.</td>
<td>Met – There are sidewalks present on both sides of the road</td>
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<td>Safety Requirements</td>
<td>2.2 Road Grade</td>
<td>Road grade 5% or less OR Between 5% and 8% road grade may be considered. Investigation must determine installation to be safe.</td>
<td>Met – The road grade on Empire Avenue is less than 5%</td>
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<td></td>
<td>(all three criteria must be fulfilled to satisfy this Warrant)</td>
<td>No significant impacts on Emergency Services - as determined in consultation with Emergency Services (Fire, Ambulance and Police) staff.</td>
<td>Comments requested from Police, Fire and Paramedic Services: Fire Services re: fire on 04/26/2017</td>
</tr>
<tr>
<td>Warrant 3</td>
<td>3.1 Minimum Speed</td>
<td>85th %ile 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 85th %ile 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.</td>
<td>Not Met – Speed studies on Empire Avenue show an 85% percentile speed of 45 km/h from Eastern Avenue to Queen Street East.</td>
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<td>Technical Requirements</td>
<td>3.2 Min. and Max. traffic volume</td>
<td>Local Roads: Traffic volume between 1,000 Veh/day and 6,000 Veh/day Collector Roads: Traffic volume between 2,500 Veh/day and 8,000 Veh/day</td>
<td>Not Met – Local road with approximately 403 vehicles total daily volume from Eastern Avenue to Queen Street East.</td>
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<td></td>
<td>(all four criteria must be fulfilled to satisfy this warrant)</td>
<td>Minimum Street Segment Length between stop controls</td>
<td>Met – Empire Avenue, between Eastern Avenue and Queen Street East, is about 290 metres in length</td>
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<td>Traffic volume between 1,000 Veh/day and 6,000 Veh/day</td>
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<td>Street segment length must exceed 120 metres between stop controls (signals or stop signs)</td>
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<td>Impacts on regularly scheduled Toronto Transit Commission (TTC) services will not be significant (as determined in consultation with TTC staff)</td>
<td>Met – No TTC services on Empire Avenue between Eastern Avenue and Queen Street East</td>
</tr>
</tbody>
</table>
April 26, 2017

Christopher Chahil
Engineering Technologist
Transportation Services
Toronto & East District

Attention: Dennis Gravador

RE: Empire Avenue, between Eastern Avenue and Queen Street East – Evaluation for installation of traffic calming devices.

I am in receipt of the proposal for installation of traffic calming measures (speed humps) and provide the following comments.

Toronto Fire Services is supportive of initiatives that will improve the life safety for citizens of, and visitors to the City of Toronto. Our concern is that the physical calming measures being proposed may negatively impact emergency response to the area.

Fire Services is opposed to this speed hump installation as they would slow our responding vehicles and affect the delivery of service in the quickest possible manner. The effectiveness of our services is greatly impacted by time. The vertical restrictions imposed by speed humps have a much greater effect on large fire vehicles than smaller passenger vehicles. Response time increase with every obstacle a fire vehicle encounters on route to an emergency incident. Although the increase at each hump may only be seconds, the cumulative effect can be a significant amount of time. A thirty-second response delay (3 to 4 humps) is enough to potentially affect the outcome of an emergency incident.

It is imperative that the individuals directly affected by this installation be made fully aware of the potential negative effects of the proposed calming device. Careful consideration must be given to accepting delays of emergency response vehicles as a compromise to combat the risks presented by all vehicular traffic.

Fire Services recommends that non-physical measures (speed limits or prohibited turns) be implemented and evaluated before physical forms are considered. Desired results may be obtained without imposing a physical obstruction to emergency vehicles.

 Regards,

Terry Bruining
Captain, Emergency Management
Toronto Fire Services
May 18, 2017

Dennis Gravador
Traffic Operations
Transportation Services

Re: Traffic Calming Measures – on Empire Avenue between Eastern Avenue and Queen Street East –
Evaluation for the installation of traffic calming measures (i.e. Speed Humps).

Dear Mr. Gravador,

I have received and reviewed the proposal for installation of speed humps on Empire Avenue between Eastern Avenue and Queen Street East. I have the following comments:

Toronto Paramedic Services is supportive of community initiatives that improve the safety of all citizens of, and visitors to, the City of Toronto. Traffic and pedestrian safety are key components of a healthy neighborhood and we endeavor to support the wishes of the community to implement measures to improve upon these components.

As documented in the Traffic Calming Policy, Toronto Paramedic Services has concerns regarding the usage of traffic calming measures, specifically vertical obstacle measures such as speed humps. These have a negative impact on emergency call response times, travel times to hospital and on patient comfort during transport. This delay is cumulative with each obstacle and can directly impact patient outcome.

In addition to concern for patient outcome and safety it is noted that this proposal does not meet the Warrant Criteria as set out in the Policy. Therefore, Toronto Paramedic Services is opposed to the installation of traffic calming devices on Empire Avenue between Eastern Avenue and Queen Street East. It is important that the applicant fully understands the potential for delay in emergency response and that alternatives to vertical measures be considered and evaluated.

Yours truly,

Dawn Ainsworth
Superintendent, Toronto Paramedic Services
Planning, Special Events & Emergency Management