

Neighbourhood Speeding and Traffic Safety

(K. Leibovici/A. Sohi/K. Krushell/
E. Gibbons/T. Caterina/
B. Anderson)

Recommendation:

That the September 18, 2012, Transportation Services report 2012TS9339, be received for information.

Report Summary

This report provides information on the status of developing a process to prioritize corridors for engineering measures to manage speed and also provides proposed engineering measures concept plans for five roadways with proposed costs estimates. Information on which corridors Transportation Services plans to proceed with construction on in 2013 are also summarized.

Previous Council/Committee Action

At the June 20, 2012, City Council meeting, Councillors K. Leibovici, L. Sohi, K. Krushell, E. Gibbons, T. Caterina and B. Anderson made the following inquiry:

A number of neighbourhoods are continuing to come forward with concerns of speeding and traffic safety, and although enforcement and education measures are being taken, there is a need for engineering solutions as well. While there are tools and funding strategies to address older neighbourhoods through

neighbourhood renewal programs, there are a number of neighbourhoods that have serious issues with oversized collector roadways that are not candidates for neighbourhood renewal. Examples of some of the problem areas in various parts of the city include 44 Street/44 Avenue in Burnewood, Hemmingway and Hope Road in the Hamptons, 9 and 12 Avenue in Twin Brooks and Brintnell Boulevard in Brintnell.

It is our understanding that the engineering consultant study for speed management solutions is being finalized and has a number of recommended tools for the retrofit of oversized collector roadways and that the next step would be the implementation of these measures on 3 or 4 collector roadways in the city in 2013.

We are asking Administration to prepare a report for the Transportation and Infrastructure Committee prior to the fall supplementary budget adjustment that provides the following information:

- a) Outline criteria, candidate locations and up to 4 recommended sites for the implementation of engineering solutions on collector roadways to reduce speed and improve safety
- b) Outline cost estimates and a recommended funding strategy to allow construction to take place in 2013, including consideration of use of automated enforcement revenue.

Report

Transportation Services had an external consultant complete a review of effective solutions for retrofitting road engineering measures to reduce speeds on existing neighbourhood roadways. The results of this work have been applied to a number of corridors on a priority basis with the initial criteria developed by the Office of Traffic Safety.

The external consultants review identified that a number of physical measures have been shown to reduce speeds at the point they are applied when the travel lane widths are reduced or vertical deflections are introduced. This review however, identified that sustained reductions in speed were not consistently found by only implementing roadway marking or signage changes alone. As a result, the consultant recommended that the physical engineering measures outlined in Attachment 1, be considered for implementation and that these can be supplemented with roadway marking and signage changes to further enhance their benefit when appropriate. In addition to recommending physical engineering changes, the consultant team also recommended a process for establishing target spacing between these features in a corridor to achieve a sustained speed reduction. For the collector roadways initially identified and reviewed, this resulted in a recommended spacing of approximately 150 metres between speed reduction measures.

The criteria initially established by the Office of Traffic Safety so far has been a

cursory analysis based on the following parameters:

- collector/bus route locations with a history of speeding and collisions (and associated public complaints)
- locations that will not be addressed in the short-term through other construction programs like neighbourhood reconstruction
- locations that do not fit the criteria for community transportation management programs (for which other processes are in place)
- locations that have elementary or junior high schools and playgrounds along or near the route generating school age pedestrian activity on the road in question
- locations that do not meet criteria for installation of school zones.

Applying these initial criteria lead to locations that are in suburban areas, primarily involving oversized collector roadways or collector roadways with a backing-on format. The Office of Traffic Safety identified the top three neighbourhood roadway locations in priority order:

1. Twin Brooks – 12 Avenue through to 9 Avenue west of 111 Street
2. Burnewood – 44 Avenue / 44 Street east of 50 Street to 34 Street
3. Hamptons – Hemmingway Road from 199 Street west to 62 Avenue.

In addition, to the three top locations identified, two other locations were reviewed. 38 Avenue from 50 Street to 66 Street, which was identified as a priority based on the criteria and

Brintnell Boulevard, east of 50 Street, was also reviewed given the history of concerns and this roadway being mentioned in the initial request for this report. Attachments 2 through 6 identify the proposed engineering measures and relative locations within the five corridors identified.

Through the process of developing these plans, high level conceptual cost estimates were also developed for all of the corridors as follows:

- 9 Avenue to 12 Avenue - \$1,100,000
- 44 Avenue/44 St - \$800,000
- Hemmingway Road - \$650,000
- 38 Avenue - \$250,000
- Brintnell Boulevard - \$850,000

When reviewing conceptual cost estimates, the top two locations could be brought forward for consideration as part of the 2013 operating budget discussions and future supplementary capital budget amendments, considering this proposal along with other draws on the automated enforcement funding source. It is noted that there is currently outstanding commitments to repay the capital costs invested in automated enforcement equipment and we are currently projecting 2012 revenue to be under budget. Only proceeding with the top two locations in 2013 has merit since both of these roadways are fully developed with a longer and more sustained history of issues. Both Hemmingway Road and Brintnell Boulevard roadways and neighbourhoods are both still being constructed and are not fully developed.

With the existing limitations of the budget currently available and the unknown impacts to traffic behaviours that could be influenced over time for roadways and neighbourhoods still being developed, Transportation Services is currently preparing to proceed with the top two corridors for implementation of engineering measures in 2013.

The future intent is to have the Office of Traffic Safety engage the Traffic Safety Chair at the University of Alberta for development of a more rigorous criteria process which will be used to identify other future locations and also to develop a comprehensive analysis process to identify the effectiveness of the corridor measures being constructed in 2013.

Corporate Outcomes

The Way We Move - "The City is committed to providing a safe transportation system for active modes and pursuing initiatives to improve safety".

Attachments

1. Recommended Engineering Measures
2. Proposed Engineering Measures – Twin Brooks
3. Proposed Engineering Measures – Jackson Heights
4. Proposed Engineering Measures – Hemmingway Road
5. Proposed Engineering Measures – Hillview
6. Proposed Engineering Measures – Brintnell

Others Approving this Report

- L. Rosen, Chief Financial Officer and Treasurer