
Motions – Councillor A. Iwanchuk (April 4, 2017) Neighbourhood Traffic Reviews

Recommendation

That the report of the General Manager, Transportation & Utilities Department dated May 14, 2018, be forwarded to City Council for information.

Topic and Purpose

The purpose of this report is to provide an overview of the evaluation measures used to determine the effectiveness of traffic calming measures installed through the ongoing Neighbourhood Traffic Review (NTR) process, and to comment on alternative traffic calming measures that can be considered if the existing measures are proven ineffective.

Report Highlights

1. Several factors are considered when evaluating the effectiveness of temporary traffic calming measures.
2. Alternative traffic calming measures are available if a device is deemed ineffective.

Strategic Goal

This report supports the Strategic Goal of Moving Around as it improves the safety of all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

Background

City Council, at its meeting held on August 14, 2013, approved a process within the Neighbourhood Traffic Management Program that includes a strategy to review concerns on a neighbourhood-wide basis by engaging the community and stakeholders in first identifying specific traffic issues, and secondly, developing joint recommendations that address the issues.

On June 27, 2016, City Council approved the Neighbourhood Traffic Management – Revised Guidelines and Tools. The revised guidelines included details on the Speed Management Program and Community Speed Display Board Program.

The NTRs completed from 2013 through to 2016 have made 529 recommendations, of which 427 recommendations have been implemented, leaving 83 recommendations yet to complete. These recommendations have included:

- Traffic calming;
- Signage;
- Crosswalk improvements;

- Sidewalk and accessibility ramp installations;
- Additional studies, etc.

Traffic calming measures recommended through the NTR process are installed temporarily for a period of at least one year to evaluate effectiveness. A map of temporary and permanent traffic calming measures currently installed throughout the City is included as Attachment 1.

The following motion was made by Councillor A. Iwanchuk at the meeting of City Council held on April 4, 2017:

“That the Administration be requested to do a review of the neighbourhoods which have participated in a Neighbourhood Traffic Review to determine whether or not the programs put in place to prevent speeding are working, or other alternatives should be explored.”

Report

Effectiveness Review

Several factors are used in evaluating the effectiveness of the recommendations from the NTR process including follow-up speed studies and other considerations such as improved visibility, reduced crossing distance at pedestrian crossing locations, and/or community support.

Traffic calming measures are installed temporarily for a period of at least one year to evaluate effectiveness. Most of the traffic calming measures recommended through the NTRs completed to date have been horizontal deflection devices such as median islands, curb extensions or a combination of these devices.

- Curb extensions are standard traffic calming devices with average speed reductions ranging between two and eight kph (reported by the Canadian Guide to Traffic Calming).
- Median islands are standard traffic calming devices with average speed reductions ranging between three and eight kph (reported by the Canadian Guide to Traffic Calming).

These expected speed reductions are similar to the realized speed reductions for locations that have had these traffic calming devices installed in Saskatoon. A summary of follow-up studies for locations with these traffic calming devices is included in Attachment 2.

Many speed studies have been completed through the NTR process to verify which locations warrant traffic calming devices. Follow-up studies have been completed for a few locations to assist in verifying the effectiveness of the installed devices as outlined in the table below:

No. of speed studies completed	No. of temporary devices installed	No. of follow-up speed studies leading to permanent installation	No. of follow-up speed studies leading to removal of temporary device
248	108	8	4

From a speed perspective, a device is considered effective if the 85th percentile operating speeds have been reduced to the regulatory speed limit or have dropped by two-to-five kph or more. If the device is not found to be effective and/or the speeding issue persists (85th percentile operating speeds are five kph higher than posted speed limit), alternative traffic calming measures can be considered.

Once proven effective, traffic calming devices are prioritized for permanent installation based on the following criteria:

1. Temporary traffic calming devices installed prior to the NTR;
2. Locations adjacent to schools or parks;
3. Locations addressing speeding or shortcutting issues;
4. Year of the NTR;
5. Locations that lead to a school or park; and
6. Low cost devices that fit within available funding.

Following completion of an NTR for a neighbourhood, the number of complaints received drops significantly. This, while not perhaps a quantified safety improvement, may be interpreted as a measure of perceived increase to safety by the residents.

Alternative Traffic Calming Measures

The Neighbourhood Traffic Management – Revised Guidelines and Tools 2016 provides a toolkit of traffic calming measures to be considered for reducing speeding and shortcutting on local and collector streets. The types of traffic calming measures in the toolkit include:

Device	Alternative Traffic Calming Measures
Horizontal deflection	<ul style="list-style-type: none">• Median islands• Curb extensions• Roundabouts• Pinch points• On-street parking• Curb radius reduction
Vertical deflection	<ul style="list-style-type: none">• Raised crosswalk• Raised intersection• Textured crosswalk• Speed hump• Speed table• Speed kidney• Speed cushion
Obstructions	<ul style="list-style-type: none">• Diverter• Right in/right out• Directional closure or full closure• Intersection channelization• Raised median through intersection

City Council recently approved a pilot program to test speed humps at multiple locations. These devices will be installed temporarily in the Spring of 2018 and monitored for effectiveness prior to their removal in Fall of 2018.

The Transportation Association of Canada and Canadian Institute of Transportation Engineers have recently updated the Canadian Guide to Traffic Calming (Second Edition), February 2018. The guide will be used as a reference guide for planning, design, installation, operation and maintenance of traffic calming measures. The guide also provides additional traffic calming measures which could expand the toolkit of speed reduction devices.

Options to the Recommendation

An effective approach to calming traffic is to reduce the posted speed limit on residential streets, thus lowering the average travelling speeds. This would increase the level of safety for vulnerable road users such as pedestrians and cyclists as well as motorists. This would be a complex initiative, and if City Council is interested in pursuing this option, the Administration could report back on how reduced posted limits on residential streets may be achieved, including an estimated cost, implementation strategy, and expected issues. The report back could also include a jurisdictional review documenting what other Cities are doing with regard to reduced posted speed limits, and how school zones and playground zones are being considered.

Public and/or Stakeholder Involvement

There are several opportunities for public and stakeholder engagement through the NTR process, including:

- Initial community meeting to discuss traffic issues/areas of concern.
- Community meeting to review draft traffic plan.

For neighbourhoods where the recommended traffic calming measures have proven effective, additional community engagement is not necessary.

Traffic calming measures impact all users of the roadway, including civic departments responsible for maintenance, operations, transit and emergency services. Discussions will be held with Roadways & Operations, Saskatoon Transit, Saskatoon Police Service, and Fire & Protective Services to identify the impact of alternative traffic calming measures to be considered, as necessary.

Communication Plan

Communications regarding the installation of traffic calming measures are addressed through the Neighbourhood Traffic Management Program.

Financial Implications

Overall, a large proportion of horizontal deflections have proven effective; a much smaller number of locations may require modification. Permanent installations have been proceeding dependent on the level of funding within Capital Project #1504 – Neighbourhood Traffic Review Permanent Installations. The Administration provides an annual report updating the implementation status of permanent installations.

Environmental Implications

Traffic calming measures are expected to have positive greenhouse gas emissions implications as they tend to reduce total vehicle mileage in an area by reducing speeds and improving conditions for walking, cycling and transit use. Residents in neighbourhoods with suitable street environments tend to walk and bicycle more, ride transit more, and drive less than comparable households in other areas.

Privacy Implications

There are no policy, privacy or CPTED implications or considerations.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Traffic Calming Measures Location Map
2. Median Islands Traffic Calming Device Effectiveness – Before and After Travel Speeds

Report Approval

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