Traffic Calming – 2017 Ranking

The City's Traffic and Transportation Engineering Section receives numerous requests each year to install traffic calming measures such as speed humps and traffic circles to reduce speeding and improve safety on its roadways. In February, 2008, the City of Greater Sudbury retained IBI Group to develop a Traffic Calming Policy to aid staff in evaluating requests and the application of traffic calming devices. This policy was permanently adopted by City Council on May 12, 2010.

What is Traffic Calming?

The Institute of Transportation Engineering defines traffic calming as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve measures that reduce the negative effects of motor vehicle use, alter driver behaviour and improve conditions for non motorized street users".

Traffic Calming Warrant

The City's traffic calming warrant is based upon the review of the best practices of 24 jurisdictions throughout North America. In addition, public input was solicited through surveys posted on the City's website and at the Citizen Services Centres. Two (2) stakeholder workshops were also held with City departments and agencies including City Councillors, Police, Fire, EMS, Planning, Roads and Engineering.

The traffic calming warrant consists of an initial screening where a combination of requirements must be met for a site to be eligible for traffic calming. The threshold criteria and screening process can be found in the attached Exhibits "A" and "B".

Sites that pass the initial screening are then ranked against each other using a weighted point criteria based on the classification of the road. Each eligible site is awarded points based on its score for each factor, with a maximum score of 100 points. A score of 30 points has been established as a minimum threshold to qualify for traffic calming consideration. The scoring criteria for local and collector roads are outlined in the attached Exhibit "C".

Initial Screening and Ranking of City of Greater Sudbury Roads

Over the past year, residents requested four (4) locations to be evaluated for traffic calming. All four (4) locations did not meet the minimum criteria. See Exhibit "D" for the list of road segments which did not qualify.

Overall the initial screening process has been completed for 272 road segments on 169 different roads. Of the 272 road segments reviewed, 32 qualified for the ranking process and scored more than 30 points. As part of the final ranking process, any abutting road segments that scored greater than 30 points were combined into one (1) segment and assigned the highest score, resulting in a total of 29 roadways.

Final Ranking

As indicated in the attached Exhibit "E", a total of 29 roadways qualify for traffic calming. Depending on the calming devices chosen and the length of the project, the City's Annual traffic calming of \$175,000 should be enough to complete one major roadway, similar in size to Southview Drive or Attlee Avenue, or a couple of smaller projects per year.

In addition to the eligible roadways, Exhibit "E" shows the project length and indicates whether the road is a transit route or primary emergency services route. It is noted that the cost estimates may vary greatly depending on the devices preferred by the residents. For example, on a 1 km road, you could paint bike lanes for \$10,000 or construct physical devices for \$150,000. Also, roadways that are not transit routes or primary emergency service routes qualify for vertical traffic calming measures such as speed humps. Speed humps are not only effective in reducing vehicle speed but are also less expensive to construct than many other calming devices.

Also, roadways that are eligible for traffic calming and are part of the Road Capital Program will have recommended traffic calming devices incorporated as part of the design and construction. Kathleen Street is an example of where traffic calming was incorporated as part of the capital contract.

Projects

Since 2010, staff has initialized several traffic calming projects throughout the City, some of which were standalone projects and others which were part of the Capital Road Program. The April 2016 report entitled Traffic Calming - 2015 Ranking contains more information on completed projects.

Ongoing Projects

Traffic calming measures are being implemented on Southview Drive as part of the 2017 Road Capital Program. New traffic calming measures include five (5) asphalt humps, two (2) pedestrian crossovers and a bike route with edge lines. The July 2017 report Southview Traffic Calming Update contains a history of traffic calming on Southview Drive and how the new traffic calming plan was created.

Future Projects

As shown on Exhibit "E", Auger Avenue is tied for first on the traffic calming ranking. In addition, Auger Avenue is tentatively scheduled for rehabilitation in 2019. Staff will begin the public consultation process for Auger Avenue during the first quarter of 2018.

York Street has also been tentatively scheduled for rehabilitation in 2019. Since York Street ranks fifth on the traffic calming ranking, staff will also begin the public consultation process for York Street during the first quarter of 2018.

Recommendations

As indicated in the Traffic Calming Policy, approval is required for a project or series of projects prior to initiating the public support component. Staff recommends that the list ranking the eligible roadways be approved. Based on approved budget limitations, staff will initiate the public support component in the order the roadways are ranked. However, some similar projects may be selected out of order to fully utilize the available capital budget.

Many roads which did not pass the initial screening for traffic calming had 85th percentile speeds that exceeded the posted speed. City staff will compile a list of these roadways and forward it to Greater Sudbury Police Services to be considered for speed enforcement campaigns.

Resources Cited

Canadian Institute of Transportation Engineers and Transportation Association of Canada, Canadian Guide to Neighbourhood Traffic Calming, 1998

City of Greater Sudbury, *Traffic Calming Policy*, Accessed online: http://agendasonline.greatersudbury.ca/index.cfm?pg=feed&action=file&attachment=1993.pdf