

Report Staff Report The Corporation of the City of Brampton 2022-04-27

Date: 2022-03-25

Subject: Traffic Calming Program – City Wide (File I.AC)

Contact: Radoslaw Moryc, Traffic Operations Technologist, Road Maintenance, Operations and Fleet, Public Works and Engineering Department

Report Number: Public Works & Engineering-2022-355

Recommendations:

- That the report from Radoslaw Moryc, Traffic Operations Technologist, Road Maintenance, Operations and Fleet, Public Works and Engineering Department, dated March 25, 2022 to the Committee of Council Meeting of April 27, 2022, re: Traffic Calming Program – City Wide (File I.AC), be received; and,
- 2. That staff proceed with the development of traffic calming plans for Laurelcrest Street (from Vodden Street East to Queen Street East), and Fernforest Drive (from Countryside Drive to Sandalwood Parkway East).

Overview:

- The Neighbourhood Traffic Management Guide (NTMG) provides the framework for the deployment of mitigating measures and the installation of traffic calming devices in response to neighbourhood traffic concerns.
- Staff is currently in the process of implementing a traffic calming plan on Centre Street North from Williams Parkway to Queen Street East (Ward 1), Vodden Street West from Main Street North to Williams Parkway (Ward 5) and Royal Orchard Drive from Bovaird Drive West to Williams Parkway (Ward 5).
- The Point Assessment Priority List for the new locations reveals Laurelcrest Street from Vodden Street East to Queen Street East (Ward 7) and Fernforest Drive from Countryside Drive to Sandalwood Parkway East (Ward 9) are the top-ranked locations citywide.

 Staff recommends that the next steps of the NTMG process be executed and traffic calming plans be developed for Laurelcrest Street and Fernforest Drive.

Background:

The Neighbourhood Traffic Management Guide (NTMG) provides the City with a consolidated strategy to respond to a wide range of public concerns related to traffic in residential neighbourhoods. The strategy includes the development and ongoing maintenance of the Traffic Calming Priority List. This is a tool to quantify traffic related issues and rank locations based on current conditions. The ranking of any particular roadway is determined by taking many factors into consideration. These factors include traffic volume, speed, cut-through traffic, average number of collisions over three years, presence or absence of school frontage, parks, sidewalks and other pedestrian generators.

One of the preliminary steps in the process is to define the problem statement and study limits for priority location(s) and seek Council approval to move forward with the selected location(s).

Currently, staff are in the process of implementing a traffic calming plan on Centre Street North from Williams Parkway to Queen Street East (Ward 1), Vodden Street West from Main Street North to Williams Parkway (Ward 5) and Royal Orchard Drive from Bovaird Drive West to Williams Parkway (Ward 5)These three roadways are currently in phase four of the Neighbourhood Traffic Management Study Process (further details on the process and phases are outlined below).

Current Situation:

The NTMG provides a framework for the use of mitigating measures and the installation of traffic calming devices in response to neighbourhood traffic concerns.

The process described within the NTMG contains the following four phases:

- Phase I: Front Line Measures
- Phase II: Assessment and Prioritization
- Phase III: Plan Development and Approval
- Phase IV: Design and Implementation

A list of streets has been compiled from locations identified by Council, residents and staff. All locations included have received front line measures identified in the NTMG.

Detailed data collection at each location on the list was performed to measure current conditions. Traffic studies and observations were conducted to gather data related to vehicle speed, traffic volume, traffic infiltration, collisions and site specific characteristics such as sidewalks, schools and playgrounds.

The data collected was applied to the point assessment formula, which gives precedence to sensitive road/traffic characteristics through weighted factors. The current Point Assessment Priority List includes new locations identified over the last year and were considered in identifying the location for potential traffic calming measures as part of the new traffic calming roadway selection.

The Point Assessment Priority List reveals that Laurelcrest Street from Vodden Street East to Queen Street East and Fernforest Drive from Countryside Drive to Sandalwood Parkway East are the top-ranked locations citywide. As such, it is recommended that neighbourhood traffic calming plans be developed Laurelcrest Street and Fernforest Drive. Please see Appendix 1 and Appendix 2 attached for illustrations of the locations.

Next Steps

The following are the steps involved in the development of neighbourhood traffic calming plans for the new priority locations, as identified within the NTMG process:

Notification of Study to Residents

A notification letter will be delivered to all residences with direct frontage onto the street under investigation, with the intent to:

- Advise residents that their roadway has been selected for consideration of traffic calming measures
- Serve as the first point of contact to residents unaware of previous activity on their street
- Inform residents of Council's approval to proceed
- Give a brief description of traffic calming
- Provide an overview of the process and next steps

Develop Alternatives

Staff will determine the measures most suitable for the location based on the following considerations:

- Roadway geometric features (right-of-way / pavement widths, horizontal / vertical alignment, radii, on-street parking, etc.)
- Potential implications of diverting traffic to adjacent streets
- Capital and operating costs
- Impact on roadway maintenance activities

Select Suitable Plan

The feasibility of the proposed traffic calming measures will be evaluated based on the following:

- Adherence to City and other design standards
- Driveway and intersection locations
- Utility locations or relocations
- Sightlines and sight distances
- If limitations are identified which challenge the feasibility of the traffic calming measure, alternative measures will need to be considered

Circulate Plan to Emergency and Maintenance Services

The preferred plan will be provided to the various review agencies (i.e. Fire and Emergency Services, Brampton Transit and Accessibility Committee). Comments will be solicited and feedback with respect to potential impacts to their operations will be requested.

Public Meeting

A meeting will be held to provide the public with information about the plan, its purpose and the next steps of the implementation process. Visual aids will be available and staff will be present to answer questions and provide additional information to those in attendance.

Survey Residents

Surveys will be delivered to all residences with direct frontage onto the street under investigation. The objective of the traffic calming survey is to determine the level of support for the proposed traffic calming plan and to provide residents the opportunity to voice any opposition. To ensure public support of the proposed plan, a minimum of 51% of the surveys returned must favour the plan as proposed.

Report to Council

Staff will submit a report to Council outlining the results of the survey with recommendations on how to proceed.

Detailed Design

Following approval of the recommended plan, detailed engineering drawings are required taking into consideration, but not limited to, the following:

- Surface drainage and sub-base requirements
- Roadway slope and surface type
- Location of utilities
- Requirements for warning signs and pavement markings
- Cost considerations

Implementation, Monitoring and Evaluation

The final stage of the study involves the implementation, monitoring and evaluation of the recommended plan. The monitoring/evaluation program should be developed consistent with the data collection activities that occurred in the problem identification stage of the process. This would facilitate comparison of "before and after" data.

The monitoring and evaluation of the relevant traffic characteristics of an area after implementation should occur after a sufficient period of time has elapsed in order to allow for the desired effect to be achieved (i.e. 1 - 2 years post installation). In particular, evaluation of winter operating conditions will be included to verify that the installations operate adequately under diverse conditions.

Corporate Implications:

Financial Implications:

There are no immediate financial implications resulting from the recommendations in this report. Staff will report back to Council with recommendations and associated cost estimates at a future date. Currently, there is \$775,000 in approved Capital funding available for traffic calming initiatives. Any additional funds, if required, will be requested through the 2023 capital budget request, subject to council approval.

Other Implications:

Traffic calming measures by design restrict the flow of traffic along the subject roadways with the intent of minimizing traffic infiltration. Physical measures chosen for these particular plans will impact residents adjacent to the subject roadways. In order to minimize the impact of these measures on residents, a public consultative process (including a public meeting and resident feedback questionnaire) will allow affected residents the opportunity to assist in the design of the traffic calming plans.

Term of Council Priorities:

This report achieves the "Move & Connect" Priority of the Strategic Plan by supporting the "active transportation and cycling strategy" initiative of the plan.

Living the Mosaic – 2040 Vision:

This report directly aligns with the vision that Brampton will be a mosaic of sustainable urban places, complete neighbourhoods and safe, integrated transportation.

Council Priority – Streets for People

This report incorporates the Vision Zero framework into transportation planning, design and operations to ensure safety and well-being of our citizens.

Conclusion:

The Traffic Calming Priority List reveals that Laurelcrest Street from Vodden Street East to Queen Street East and Fernforest Drive from Countryside Drive to Sandalwood Parkway East are the top-ranked locations citywide. As such, it is recommended that neighbourhood traffic calming plans be developed for Laurelcrest Street and Fernforest Drive.

In accordance with the NTMG, the traffic calming plans for Laurelcrest Street and Fernforest Drive will meet the following specific goals of Neighbourhood Traffic Management:

- Increase the Safety of Neighbourhoods
- Improve the Liveability of Neighbourhoods
- Restore Streets to Their Intended Function
- Preserve Access and Minimize Impact to Emergency Service, Public Transit and Maintenance Providers
- Promote Public Participation and Community

Authored by:

Reviewed by:

Radoslaw Moryc, Traffic Operations Technologist, Road Maintenance, Operations and Fleet Public Works and Engineering Michael Parks, C.E.T., B.A.Leadership Director, Road Maintenance, Operations and Fleet Public Works and Engineering

Approved by:

Jason Schmidt-Shoukri, BSc. Arch Eng., MPA Commissioner Public Works and Engineering

Attachments:

Appendix 1: Laurelcrest Street Appendix 2: Fernforest Drive