



Staff Report for Committee of the Whole Meeting

Date of Meeting: November 20, 2024

Report Number: SRIES.24.007

Department: Infrastructure and Engineering Services
Division: Infrastructure Planning and Development Engineering

**Subject: SRIES.24.007 - Traffic Safety and Operations
Strategy Implementation and Monitoring Update**

Purpose:

To provide an update on the implementation, monitoring, and effectiveness of the 2024 traffic calming program, to provide updates on nine key 2024 action items from the City's Traffic Safety and Operations Strategy, and to seek approval on the recommended traffic calming locations for the 2025 traffic calming program.

Recommendation(s):

- a) That staff report SRIES.24.007 be received;
- b) That Council approve the 18 Traffic Calming locations for traffic calming in 2025, as outlined in **Attachment 2**; and
- c) That Council approve a boulevard 'Slow Down' sign pilot program as outlined in this report.

Contact Person(s):

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Report Approval:

Submitted by: Paolo Masaro, Commissioner, Infrastructure and Engineering Services

Approved by: Darlene Joslin, City Manager

All reports are electronically reviewed and/or approved by the Division Director, Treasurer (as required), City Solicitor (as required), Commissioner, and City Manager. Details of the reports approval are attached.

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Key Messages:

- Traffic Safety remains a top priority for the City of Richmond Hill. The Traffic Safety and Operations Strategy (TSOS) approved on December 13, 2023, provides a framework to improve traffic safety and operations in Richmond Hill.
- The TSOS identified nine key action items for 2024. Updates on these action items are included in this report.
- The City has evaluated the locations installed as part of the 2024 Traffic Calming Program by collecting before and after data and found an overall reduction in vehicular travel speeds between 2 to 12% and a reduction in traffic volumes between 8 and 11%.
- Modifications to the 2024 traffic calming measures are being explored based on community feedback and technical analyses. Any changes will be implemented during the 2025 construction season.
- Once finalized, staff will communicate the final traffic calming measures with the public for the proposed 2025 locations through mailouts.

Background:

The Traffic Safety and Operations Strategy (TSOS) was completed in 2023, in response to the growing priority for traffic safety in the City of Richmond Hill. The primary aim of the TSOS was to provide the City with a proactive, consistent, and implementable approach to managing traffic safety across the City.

The TSOS was brought forward to Council as part of staff report SRIES.23.005, and adopted at the December 13th, 2023, Council meeting.

A number of key priority actions for 2024 were identified in the TSOS and were brought forward to Council in March 2024, along with 18 priority traffic calming locations (as listed in **Attachment 1**) to be installed in 2024.

Several of these key actions have been completed, and a number are still currently in progress. Details with respect to the outcomes and status of these actions are provided in this report.

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Discussion:

2024 Traffic Calming Measures

Eighteen priority traffic calming locations were identified for implementation in 2024

An initial Citywide screening was conducted as part of the completion of the TSOS using existing traffic data and information available to the City at the time. Based on this screening, 18 priority locations (3 per ward) were identified to receive traffic calming measures in 2024. These locations are included in **Attachment 1** for reference. The public was consulted on these locations and the proposed improvements through 6 public education sessions (one per ward) held in early 2024.

These locations were approved by Council on March 27th, 2024, through staff report SRIES.24.003.

The majority of the traffic calming measures have been installed at 17 of the 18 locations identified for 2024. The measures on Hillsview Drive have been delayed as the City is still awaiting the installation of final coat of asphalt by the developer on this road. It is expected that these measures will be implemented during the 2025 construction season.

Staff have monitored and evaluated the effectiveness of the traffic calming measures

As part of the implementation of the traffic calming measures, staff conducted monitoring and data collection to measure and evaluate the effectiveness of the measures implemented at the priority locations identified for 2024.

Data collection was completed prior to and after traffic calming measures were installed at each priority location. The primary data that was collected and measured included vehicular speed and traffic volumes.

Data indicates that the traffic calming measures have been overall effective in reducing speeds and volumes

Initial review of the traffic data collected at the priority traffic calming locations indicates that the measures installed have been effective in reducing speeds and volumes at these locations. The findings indicate that:

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- An overall reduction in travel speeds ranging from **2 to 22% (1 to 11km/h)**.
- Locations that included speed cushions, in addition to other measures yielded higher speed reductions of up to **22% or 11km/h**.
- Locations that only included measures such as bollards, lane narrowing, and custom pavement markings still yielded speed reduction of up to **7% or 4km/h**.
- An overall reduction of **10%** in traffic volumes.
- Locations that included speed cushions, in addition to other measures yielded volume reductions of up to **11%**.
- Overall speed limit compliance improved at all locations.

It should also be noted that the City also reviewed traffic collision data at the 2024 priority traffic calming locations, and to date have not received any reported collisions at these locations.

Residents were engaged to provide feedback on the traffic calming measures that were implemented in 2024

Feedback from residents was received on the traffic calming measures that were installed in 2024 from a number of channels including email, phone calls, public education sessions, and on-line surveys.

Follow up public education sessions were held for each ward in the fall of this year. These were conducted as hybrid sessions (on-line and in-person) and were used to seek feedback on both the traffic calming measures installed in 2024 as well as the priority locations and measures being proposed for 2025.

An online survey was conducted to solicit feedback from the public with respect to traffic calming measures. This survey commenced October 10, 2024, and will remain open until November 6, 2024. To date, staff have received over 130 responses.

Modifications to existing and future traffic calming measures will be implemented based on feedback and input received from the public

In addition to the public education sessions and on-line survey, staff have also been receiving direct comments from the public through telephone calls and the traffic.inquiries@richmondhill.ca e-mail.

Overall, the response to the traffic calming measures has been positive, reflecting strong community support. Residents across all wards have shared valuable feedback, with some concerns that can be grouped into in the following themes:

- **The use of flexible bollards as edge line buffers:** A number of residents raised concerns about flexible bollards being used as edge line buffers. Bollards are placed close together (approximately every 20m) along edge lines, to help delineate the edge line to protect bike lanes and physical narrow travel lanes. Residents indicated that it was sometimes difficult to navigate these lanes and caused some motorists to traverse into the opposing lane, the bollards were

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visually unappealing and caused issues with visibility at night, and that the bollards created issues during waste collection.

- **The use of flexible bollards as curb extensions:** A number of residents raised concerns about the flexible bollards being used as curb extensions at intersections. Bollards were placed to extend the curbs at intersections to help reduce the crossing distance for pedestrians, tighten turning radii to slow vehicles down, and help narrow the roadway. Residents indicated that it was sometimes difficult to complete turning movements without traversing into the opposing lane and found navigating these curb extensions confusing and posed challenges for cyclists.
- **Parking restrictions for bicycle lanes and limited ridership of bicycle lanes:** Portions of dedicated cycling facilities were advanced at some locations as part of traffic calming measures in order to achieve contract efficiencies. As part of an effort to increase the safety of cyclists utilizing these facilities, parking prohibitions were implemented along these stretches of road. Residents expressed concerns about these parking prohibitions as they created significant inconveniences in their daily household activities and potentially lowered their property values. From their viewpoint, it was felt that these restrictions were unreasonable particularly since the cycling facilities were incomplete and that cyclist ridership was limited.
- **Traffic calming zones;** In general, residents supported the installation of traffic calming zones. However, some residents felt that the traffic calming zones should be extended further to include an entire section of roadway and/or be extended to include surrounding roadways.
- **Vehicles improperly travelling through speed cushions using the cutouts:** Residents were generally very positive about the installation of speed cushions on City roads. However, some residents expressed construction as the speed cushions are designed with cutouts between them to allow for emergency vehicles to straddle the speed cushion without slowing down. Residents indicated that vehicles were trying to avoid travelling over the speed cushions with all four and aligning their wheels with these cutouts by driving into oncoming traffic or into the marked urban shoulders.

Based on this feedback a number of modifications will be incorporated for Boake Trail, Pugsley Avenue, Springbrook Drive, and Toporowski Avenue as well as the design for future traffic calming locations. These modifications include:

- **The use of flexible bollard gateways instead of edge line buffers:** Flexible bollard gateways will be installed near the beginning, end, and sporadically throughout the traffic calming zones. These gateways will provide lane narrowing at specific points throughout the traffic calming zones but will be space further apart than the one currently used as edge line buffers (approximately every 100m to 200m instead of every 20m).

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- **Removal of flexible bollard curb extensions:** The flexible bollards utilized as curb extensions will not be reinstalled for 2025. Instead, the opportunity of installing permanent concrete curb extensions will be explored.
- **Installation of flexible bollards at speed cushions:** Staff have reviewed alternative designs for speed cushions and have determined the current design is still the preferred measure. Instead, flexible bollards will be installed in conjunction with the speed cushions (in the center and along the outer edges) in order to reduce instances of motorists trying to use the cutouts in the speed cushions.
- **Cycling facilities and parking restrictions:** Cycling facilities are an important part of the City's efforts to reduce vehicular dependency by promoting active transportation through the development of a robust active transportation network, as approved in the Transportation Master Plan. Identified cycling facilities will continue to be installed as part of traffic calming projects where the two intersect. However, for the future partially constructed facilities will function as urban shoulders, and parking will be permitted until such a time that the cycling facility has been completed to its full extent and has been deemed a designated cycling facility. Parking restrictions will be enforced/implemented when the facility is completed.

TSOS Priority Actions Status

As part of the approved TSOS, nine key actions were identified for implementation in 2024.

1. Undertake a City-Wide Traffic Calming Network Screening
2. Conduct a City-Wide Community Safety Zone Audit
3. Policy Updates and New Policy Development
4. TSOS Public Education Sessions and Social Media Campaign
5. Updates to City's Website
6. Develop a 'Slow Down' Sign Program (previously 'Slow Down' lawn sign program)
7. Expand the Pole-Mounted Radar Board Program
8. Implement Traffic Engineering Software
9. Complete Initial network screening for candidate Pedestrian Crossover (PXO) locations and for speed limit reductions

Details and the status for each of these action items is provided in the sections that follow.

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Action 1: Undertake A City-Wide Traffic Calming Network Screening For 2025

Status: Complete

An evidence based city-wide traffic calming network screening has been completed using data collected through the City's most current data collection programs. The outcome of this screening was used to identify the 18-priority traffic calming locations (3 locations per Ward) for 2025.

These locations are summarized in **Attachment 2** to this report and have been presented to the public during the 6 hybrid public education sessions (one per ward). The 2025 traffic calming locations will take into consideration the input received from the public and installations are anticipated for the spring of 2025. Notices of the finalized traffic calming plans will be sent to affected residents at each of the 18 locations prior to installation.

Key Action Item 2: Conduct a City-Wide Community Safety Zone Audit

Status: Complete

A citywide audit was completed to identify potential locations across the City that would meet the criteria for a Community Safety Zone and could benefit from this designation. From the City's perspective, these Community Safety Zones serve two purposes:

- Increases drivers' awareness that they are entering an area of special concern, and double speed related fines within these zones; and
- Supports the implementation of an Automated Speed Enforcement (ASE) program for the City of Richmond Hill, as Provincial legislation only permits the placement of ASE cameras in these designated zones.

The outcome of the audit was the identification of 86 new Community Safety Zone locations across the City. Council approved 86 locations as part of SRIES.24.003 on March 27th, 2024. Installation is underway and completion of the first 35 high priority locations is anticipated by end of 2024. The remaining locations will be installed by Summer 2025, in advance of the anticipated roll out of the Automated Speed Enforcement program in 2026.

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Key Action Item 3: Policy Updates and New Policy Development

Status: Complete

The following new or updated policies were approved by Council as part of SRIES.24.003 on March 27th, 2024:

- Traffic Calming and Traffic Calming Toolbox (Enhanced)
- Speed Limit (New)
- Pedestrian Crossover (New)
- Community Safety Zone (Enhanced)
- Crossing Guard (Enhanced)
- All-Way Stop Control (Enhanced)

The new and updated policies are currently in use and have been applied when conducting the most recent network screening, responding to in-year inquiries in 2024, and to enhance annual safety programs.

Key Action Item 4: TSOS Public Education Sessions and Social Media Campaign

Status: Anticipated to be completed by end of 2024

As reported in SRIES.24.003, six in-person public education sessions (one per ward) were held in spring of this year with respect to the 18-priority traffic calming locations identified for 2024.

Also, as noted in this report, six additional hybrid public education sessions (one per ward) were held in fall of this year to inform, educate, and seek feedback on the 18-priority traffic calming locations and proposed measures planned for 2025.

Both rounds of public education sessions were advertised through an extensive public communications plan, which included, but was not limited to, Council newsletters, social media campaigns and webpage updates. In addition, individual notices were sent to all residents who were directly affected by these priority areas.

During the sessions, in addition to discussing the identified priority traffic calming locations and measures, residents were given the opportunity to discuss and provide input on other traffic locations and concerns within the City.

Based on feedback received, and as part of an ongoing effort to involve and obtain input and feedback from affected residents, staff will be modifying the format of the Public Education Sessions that will be held in 2025 for the 2026 traffic calming program from the more formal presentation/Q&A style session to more interactive workshop style events to encourage resident participation and collaboration when selecting treatments for future priority traffic calming installations. These new workshops commence in spring of 2025.

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In addition to the public education campaign, staff have been attending public events to promote the City's ongoing traffic safety program and have been working with the communications staff to develop informational videos for the public. For 2024, these include videos on trails etiquette and traffic calming tools, the latter which will be completed by the end of the year. Additional videos are being planned for development in 2025.

Key Action Item 5: Updates to the City's Website

Status: Complete

The City's Traffic webpage has been continuously updated and enhanced throughout the year to provide more information on initiatives and programs and solicit feedback from residents with respect to the City's traffic safety initiatives. Some of these new updates/enhancements include, but are not limited to:

- Inclusion of the approved TSOS report
- Information for the 18-priority traffic calming locations planned for 2024 and 2025.
- Details on the traffic calming network screening process.
- Information about specific traffic calming measures.
Engagement through spring and fall Traffic calming surveys.
- Spring and fall public education sessions schedules and information.
- public education session presentations

The traffic inquiries email has been updated to include an automated response to residents with more information and links to other organizations as well as timing for responses. Additional information is continuously being added and updated as improvements are implemented. Staff are also working collaboratively internally to develop a more robust intake portal that will give residents more guidance to be able to efficiently submit detailed/location specific inquiries and improve staff's ability to track and respond to these.

Key Action Item 6: Develop a "Slow Down" Sign Lawn Sign Program

Status: Ongoing

Staff have been working to develop a 'Slow Down' lawn sign program in the City of Richmond Hill. Staff gathered resident feedback at the spring public education sessions with respect to this initiative and have been discussing the program with various City stakeholders and other Municipalities about their experiences.

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The primary concerns raised with respect to a “Slow Down” Lawn Sign program included:

- Actual effectiveness of the program to reduce speed.
- Concerns regarding sign proliferation in the boulevard.
- Potential impact to vehicle sightlines By-law conformance and enforcement.
- Creation of additional waste.

Taking into account these considerations, Staff are not recommending the implementation of a “Slow Down” lawn sign program for City. Instead, staff have looked at other more manageable alternatives to address some of the concerns and experiences raised by residents and stakeholders.

One alternative is the use of boulevard silhouette signage, as shown in the example from the City of Vaughan in **Figure 1**. These signs act as visual guidelines, strategically placed in areas where children are often present, prompting drivers to slow down and remain vigilant. The clear message emphasizes adherence to speed limits and responsible driving, similar to lawn signs. However, the advantages of these signs are that it would reduce sign proliferation as the City can control the number, placement and location of the signage, and ensuring adequate sight lines and visibility are maintained, while reducing waste as these signs are reusable.



Figure 1 – Sample Boulevard Silhouette Sign

Staff recommend that the City pilot a boulevard “Slow Down” sign program in 2025 and evaluate the sign’s effectiveness and acceptance from the community. Under this pilot program, City staff will identify locations, but residents can also request placement of these signs in their neighborhood. Staff will still ultimately review to determine appropriateness of locations and sign placement.

Should the pilot be successful, these signs would be deployed year-round on existing infrastructure, and would be rotated on an annual basis. The location criteria include the following considerations:

- Proximity to a sensitive land use;
- Availability of existing infrastructure for installation; and
- Ability to maintain appropriate sight lines.

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Key Action Item 7: Expand the Pole-Mounted Radar Board Program

Status: In Progress

Staff have started the process of procuring 24 additional pole-mounted radar boards to expand the existing program by an additional 12 locations, from 18 to 30 (5 per ward). These new boards include enhanced cloud-based communications and reporting capabilities.

There have been some delays procuring the equipment while ensuring that the hardware and software for these boards fully comply with the City's IT security requirements. These new boards will be deployed at the locations approved by Council in June through staff report SRIES.24.006.

The existing inventory of pole-mounted radar boards will also be upgraded to the enhanced boards, but only as they reach their end-of-life cycle.

Key Action Item 8: Implement Traffic Engineering Software (TES CLOUD)

Status: Complete

The City has partnered with York Region and True North Safety in updating our Traffic Engineering Software to TES Cloud. The upgraded software provides staff with a cloud-based enhanced collision database with increased reporting capabilities as well as access to enhance traffic safety analysis and reporting tools.

Key Action Item 9: Complete Initial network screening for candidate Pedestrian Crossover (PXO) locations and for speed limit reductions

Status: Complete

A total of six PXOs were installed in 2024, at the following locations:

1. Trans Richmond Trail at Rothbury Road
2. Avenue Road at Merrylynn Drive
3. Weldrick Road East between Yonge Street & Clarissa Drive
4. Weldrick Road East between Church Street South & Railway
5. Devonsleigh Boulevard near Luba Avenue
6. Shaw Boulevard and Okanagan Street

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Through the completed network screening completed in 2024, using the guidelines from the updated PXO policy, thirteen additional PXO locations have been identified for installation and have been included in the 2025 Capital Budget for design with construction anticipated for 2026. These new locations are:

1. Crosby Avenue at Osiris Drive
2. Alhart Crescent at Tower Hill Road
3. Kingshill Road at Maggy Avenue/Selleck Drive
4. Don Head Village Boulevard at Marsh Street
5. Farmstead Road between Shell Court and Shirley Drive
6. Toporowski Avenue at Manorheights Street
7. North Lake Road at Old Bayview Road
8. Canyon Hill Avenue at Leyburn Avenue
9. Blackforest Drive at Greyfriars Avenue
10. Jefferson Forest Drive at Wings Gate Avenue
11. Castle Rock Drive at Mayvern Crescent
12. Goode Street at Primont Drive
13. Neal Drive at McConvey Drive

In addition, speed limits at 17 locations are being recommended to Council for a speed limit reduction and have been included in staff report SRIES.24.009 Traffic Regulation Improvements (Speed Limit and Parking) as a result of the network screening.

Financial Implications:

The TSOS provided an estimate of the capital and human resource investments needed to successfully implement the key short, medium and long-term recommendations of this strategy.

A Transportation Engineer has been hired in 2024, which assisted with the delivery and completion of the TSOS traffic calming improvement and 2024 action items discussed in this report.

A Senior Traffic Analyst position is being requested through the 2025 Operating Budget process consistent with what was identified through the TSOS for 2025.

A budget of \$500,000 has also been requested through the 2025 Capital Budget process for the implementation of the traffic calming measures at the 18 priority locations identified for 2025, as well as the continuation or implementation of the TSOS programs and initiatives planned for next year.

Funding of the capital budget request will be 30% from Development Charges and 70% from tax supported reserve funds.

The financial commitments are being requested as part of the 2025 Operating and Capital Budgets.

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Relationship to Strategic Plan 2024-2027:

Relationship to Strategic Plan the recommendations of this report relate to Pillar 1, Growing a Livable, Sustainable Community, specifically, Priority 1 Manage growth in a way that enables choice and connection for the city, its residents and businesses now and in the future. The reductions in vehicular speeds through various TSOS programs assists in providing safe connections for residents.

Conclusion:

The traffic calming measures implemented as part of the 2024 traffic calming program have shown success in achieving reductions in vehicular speeds and volumes on the selected roadways in the City of Richmond Hill. The majority of key action items are complete with the remaining action item in progress.

Staff received feedback on the traffic calming locations through surveys, public education sessions and general inquiries that will result in modifications to the design of both the existing locations and 18 future priority traffic calming locations identified for 2025. These modifications will be implemented in 2025. The City will continue to monitor and evaluate the effects of the traffic calming measures and make modifications as required.

Staff will continue to work collaboratively with residents to ensure that key action items for the Traffic Safety and Operations Strategy are implemented in the City of Richmond Hill.

Attachments:

The following attached documents may include scanned images of appendixes, maps and photographs. All attachments have been reviewed and made accessible. If you require an alternative format, please call the contact person listed in this document.

- SRIES.24.007 - Attachment 1 –Traffic Calming Locations for 2024
- SRIES.24.007 – Attachment 2 – Proposed Traffic Calming Locations for 2025

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Report Approval Details

Document Title:	SRIES 24.007 Traffic Safety and Operations Strategy.docx
Attachments:	- Attachment 2 - Proposed Traffic Calming Locations for 2025.docx - Attachment 1 - Traffic Calming Locations for 2024.docx
Final Approval Date:	Nov 7, 2024

This report and all of its attachments were approved and signed as outlined below:

Dan Terzievski - Nov 6, 2024 - 10:27 AM

Gigi Li - Nov 6, 2024 - 2:57 PM

Paolo Masaro - Nov 6, 2024 - 4:01 PM

Darlene Joslin - Nov 7, 2024 - 7:40 AM