



City Of Vaughan

NEIGHBOURHOOD AREA TRAFFIC CALMING POLICY, DESIGN AND SPEED MANAGEMENT PLAN

EXECUTIVE SUMMARY
WSP PROJECT NUMBER: 211-09129-00

August 2024

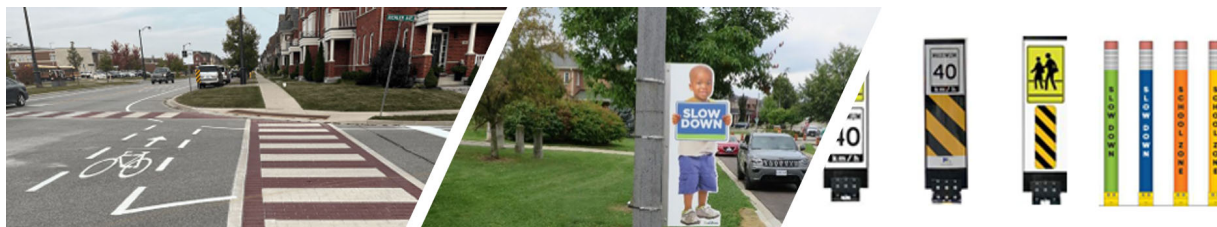


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Neighbourhood Traffic Calming Plan

Purpose

In 2021, the Vaughan Council made a significant leap forward by approving the MoveSmart Mobility Management Strategy, thus marking a pivotal moment in transforming the City's transportation landscape. This strategy comprises four programs and 29 initiatives, all aimed at establishing a transportation system that continues to advance mobility and road safety. A central element of this strategy is the Neighbourhood Area Traffic Calming Policy, Design, and Speed Management Plan.

The Neighbourhood Area Traffic Calming Policy, Design, and Speed Management Plan (hereafter referred to as the Neighbourhood Traffic Calming Plan) is poised to modernize the City's existing 2010 Traffic Calming Policies and Procedures, further aligning them with National Transportation guidelines and best practices.

This effort encompasses an expanded range of traffic calming tools, new guidelines in sync with national engineering standards and best practices, and context-specific considerations tailored to meet the city's needs. The result will be the ongoing creation of proactive processes and practices that will continue to advance road safety for all of Vaughan's residents and visitors. Vaughan is dedicated to creating an inclusive, accessible, and safer community that enhances quality of life and equitable access to transportation.

Approach

The City of Vaughan retained WSP Canada Inc. to develop the Neighbourhood Traffic Calming Plan, which commenced in late 2022. The project focused on City roads and was executed in three stages.

- Stage 1 involved analyzing existing conditions, assessing current traffic calming devices, gathering community input, and developing preliminary policies and procedures.
- Stage 2 implemented pilot projects across five wards to test these preliminary policies and procedures.
- Stage 3 updated policies and procedures based on the pilot projects' findings. A toolbox of measures and design guidelines was also created, and the City's Engineering Design Standards were updated to align with national best practices.

The Neighbourhood Traffic Calming Plan aligns with key initiatives across the City, including supporting urban growth centres, promoting sustainable transportation, creating safer, walkable streets and supporting economic growth. To fully integrate traffic calming into Vaughan's development plans, changes are advocated to better address road safety in the development review process, including strengthening policies through the Official Plan review, updating engineering design standards, enhancing traffic impact study requirements, and updating requirements for new development agreements.

What is Traffic Calming

Neighbourhood traffic calming is a key strategy to achieve the City's transportation goals and better meet community needs.

It encompasses a range of techniques and street design elements to mitigate the adverse effects of motor vehicle speed and volume, ultimately enhancing safety for all road users and improving the quality of life within communities.



The Plan Development Process

The Neighbourhood Traffic Calming Plan outlined by the City's Project Team serves as a model for municipalities aiming to continue to create calmer, safer streets. The plan was developed over five phases beginning in November 2022.

Phase 1: Research and Engagement

- Conducted extensive research and reviewed existing traffic calming assets.
- Engaged the community and both internal and external stakeholders to gather input on current conditions and potential for ongoing improvements

Phase 2: Draft Policies and Toolbox

- Developed draft policies, procedures, and a toolbox of traffic calming measures.
- Collected feedback from stakeholders to ensure alignment with community needs.

Phase 3: Pilot Testing

- Implemented pilot projects in five diverse neighbourhoods.
- Tested and refined the draft measures through real-world applications and gathered performance data.

Phase 4: Refinement and Integration

- Used pilot project insights to finalize policies and design guidelines.
- Ensured alignment with broader city planning initiatives like Complete Streets Guidelines and the Official Plan.

Phase 5: Finalization and Implementation

- Developed final policies, procedures, and a comprehensive traffic calming toolbox.

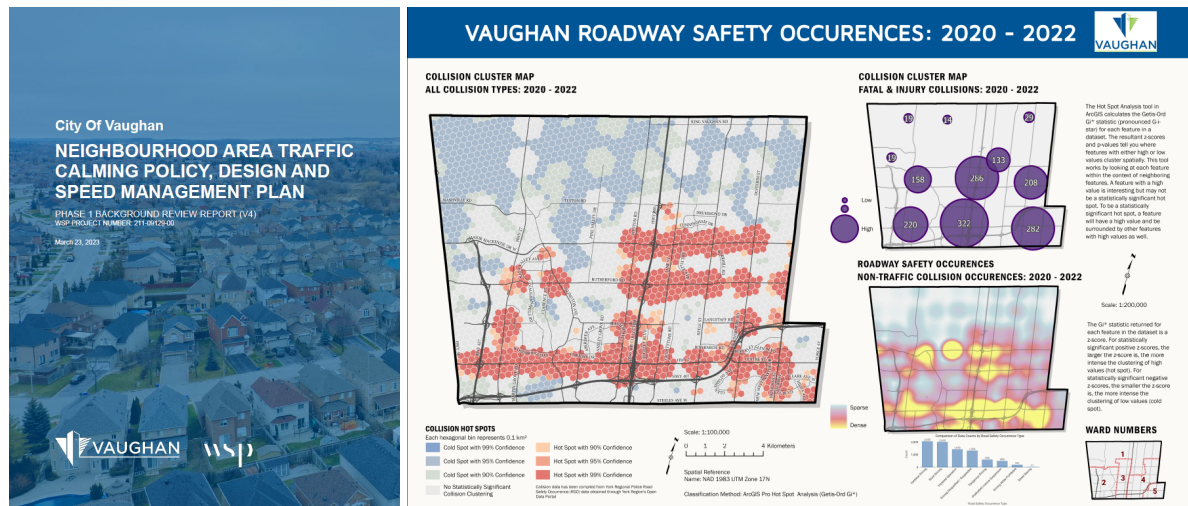
This process has equipped Vaughan with a forward-thinking, responsive framework that enhances road safety, continues to align with national and AODA standards and meets the community's diverse needs.

The 2010 Traffic Calming Policy and Procedure

Vaughan is enhancing the existing policy, passed in 2010, to address the City's evolving needs to increase transparency and equity in evaluating requests for traffic calming.

The City of Vaughan's Neighbourhood Traffic Committee Policy, established in June 2010, focuses on gathering requests from residents and stakeholders and using petitions from the local community to gather support for traffic calming. Measures are reviewed and approved by the Committee of the Whole and Council, with implementation based on traffic data collection and budget approval.

Background Review



Background Review Report

The project team conducted a high-level review of various sources of information to establish a comprehensive background for the Neighbourhood Traffic Calming Plan. The sources reviewed included:

- MoveSmart Mobility Strategy
- Vaughan Official Plan
- Vaughan Transportation Master Plan
- Vaughan Complete Streets Guideline
- Vaughan Transportation Demand Management Guideline
- Vaughan Age-Friendly Action Plan
- City of Vaughan Speed Limit Policy
- York Region policies and programs

These documents provided foundational insights into the existing frameworks, guidelines, and strategies that govern transportation and mobility in Vaughan, informing:

- Preliminary Traffic Calming and Speed Management Policy and Procedures that continue to align with Vaughan’s overall mobility and safety goals.
- Development of an internal process map for staff to receive, develop, evaluate, and respond to citizen requests for traffic calming.
- Development of traffic calming measures toolbox suitable for various road typologies. This toolbox also considered the results of the asset review in Phase 1, identifying measures that best address Vaughan’s specific needs and considerations.
- Development of a procedure for monitoring and assessing the effectiveness of traffic calming measures following their installation.
- Approaches to streamline and improve community and stakeholder engagement.

The review covered the latest publications and research findings relevant to traffic calming and speed management from the Institute of Transportation Engineers (ITE), the National Association of City Transportation Officials (NACTO), the Association of Pedestrian and Bicycle Professionals (APBP), and the TAC/CITE Canadian Guide to Traffic Calming (2018) to inform potential adjustments and improvements to the current City process.

A jurisdictional review of best practices for traffic calming programs was also conducted, focusing on nine Canadian and four international municipalities. The jurisdictional review included best practices from municipalities:

- Ottawa
- Toronto
- Kingston
- Mississauga
- Calgary
- Saskatoon
- Halifax
- New York City
- Salt Lake City
- San Francisco
- London

These cities were chosen due to their similarities with Vaughan, such as winter conditions and comparable population sizes, as well as their progressive traffic calming policies, effective implementation processes, comprehensive design toolkits, and innovative outreach approaches.

This comprehensive background review set the stage for the subsequent phases of the Neighbourhood Traffic Calming Plan, ensuring that the policies and measures developed are well-informed, contextually relevant, and aligned with the best practices in the field.

Alignment with York Region Vision Zero Traveller Safety Plan

This initiative aligns closely with the 2024-2028 York Region Vision Zero Traveller Safety Plan, a five-year strategy aimed at reducing severe collisions by 10% and ultimately eliminating them. The Vision Zero plan emphasizes a multi-faceted approach to road safety, focusing on engineering, enforcement, education, and engagement.

Collaborative Efforts and Regional Integration

The plan's alignment with the York Region Vision Zero Traveller Safety Plan underscores the importance of a coordinated regional effort to enhance road safety. By working in close collaboration with York Region, neighboring municipalities, and stakeholders such as York Regional Police, the York Region District School Board, and the York Region Catholic District School Board, Vaughan ensures that traffic calming initiatives are not only consistent across York Region but also complementary. This collaborative approach facilitates the sharing of best practices, resources, and data, which enhances the effectiveness of road safety measures.

Commitment to Continuous Improvement and Monitoring

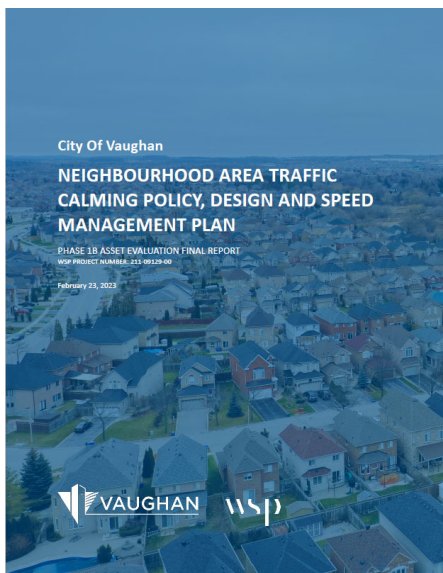
Both plans emphasize the importance of monitoring and evaluating the effectiveness of implemented measures. The Neighbourhood Traffic Calming Plan includes a robust process for tracking the impact of traffic calming interventions, gathering data on traffic speeds, volumes, and community feedback. This data-driven approach ensures that the measures are effective and can be adjusted as needed to achieve the desired outcomes. Regular reporting to Council and stakeholders maintains transparency and accountability, reinforcing the commitment to continuous improvement.

By integrating Vaughan's traffic calming measures with the broader goals of the York Region Vision Zero Traveller Safety Plan, the City of Vaughan demonstrates a strong commitment to continue to enhance road safety and improve the quality of life for all residents. This cohesive and collaborative approach ensures that Vaughan contributes significantly to the regional goal of reducing severe collisions and achieving Vision Zero.

Asset Evaluation



Using the City's asset inventory, over 400 traffic calming devices were evaluated to develop a plan for a state of good repair. The asset inventory was assessed against the CITE/TAC Canadian Guide to Traffic Calming (Second Edition), the City of Vaughan Engineering Design Criteria & Standard Drawings, and AODA requirements to ensure compliance with design standards. For devices without specific City standards, national standards were applied. This review included a jurisdictional scan and research of best practices to determine the evaluation criteria. The assessment covered the existing devices' physical condition and AODA compliance and their performance by location to address road safety considerations. Based on the findings, recommendations were made for devices requiring rehabilitation, removal, or relocation, and a prioritization plan was created. The review identified 142 devices needing repair, relocation, or replacement, assigning them a priority level for action.

The outcomes of this comprehensive review will inform the City's capital program planning over the next several years. A detailed prioritization plan has been established to guide the phased implementation of necessary repairs, relocations, and replacements of traffic calming devices. A dedicated budget and resource allocation will be required to support this implementation. This proactive approach ensures that the traffic calming measures continue to align with current standards and best practices, enhancing road safety and accessibility throughout Vaughan. Necessary budget approvals are needed to secure funding and allocate resources for successfully executing these improvements, ensuring that the updated traffic calming measures continue to meet the community's needs and regulatory requirements.



Vaughan Neighbourhood Traffic Calming | Phase 1b Asset Evaluation Report

Table 5-3: Review Summary for "High" and "Medium" Priority Traffic Calming Devices

Current Condition Picture		
Device ID	TCALM2664	TCALM2665
Device Type	AT-GRADE CROSSWALK	AT-GRADE CROSSWALK
Device Location	Netherford Road south of Naylor Street	Naylor Street west of Netherford Road
Action Recommendation	Repair	Repair
Action Priority	High	High
Action Timeline	within 5 years	within 5 years
Issue Description	Should be renamed as "Textured Crosswalk"; add TWSI; add longitudinal white lines	Should be renamed as "Textured Crosswalk"; add TWSI; add longitudinal white lines

Asset Management Report

Traffic Data Review

A comprehensive review of traffic data was conducted to understand speeding patterns in Vaughan, identify hot spots, address inequities, and inform pilot locations. WSP analyzed speed and volume data from Traffic Engineering Software (TES)(2016-2021) provided by True North Safety Group, excluding 2020 due to pandemic anomalies. This data helped identify trends, screen traffic calming requests, and pinpoint areas for pilot projects.

Collision data from TES and York Regional Police (YRP) (2020-2022) was reviewed using a crash-based safety approach to identify high-priority sites and severe collision "hot spots." Resident feedback from the City's CRM software (2019-2022) regarding traffic calming, pavement markings, signs, signals, and streetlights was analyzed for initial screening and pilot assessments.

Preliminary Policy and Procedures Considerations

Research and a review of current conditions and best practices identified opportunities for continuing to improve Vaughan's Traffic Calming Program and amending traffic calming guidelines:

- Consider different thresholds for traffic volumes related to peak period shortcutting.
- Lower or eliminate the requirement for petitions to foster a more open process.
- Initiate a program to track the performance of traffic calming devices, collecting data on traffic volumes, speeds, and community feedback.
- Collect data before and after installation to support effectiveness analysis.
- Assess the potential for traffic calming on all road types, selecting candidates based on street features rather than road type.
- Implement traffic calming plans by area rather than by street to account for network impacts.
- Develop a process for proactively identifying traffic calming needs in new neighbourhoods, whether unassumed (by providing input to the developer) or assumed by the City.
- Create a policy for assessing the need for traffic calming in new development areas during the development review and approval stages to avoid retrofits.
- Develop a score-based city-wide prioritization mechanism for new requests to optimize resources and funding.
- Add quick build and supplementary measures, including communication, education, and enforcement programs.
- Develop traffic calming measures tailored for transit and emergency service routes.
- Establish two programs based on the nature of traffic calming measures: permanent and temporary.
- Create a separate process for funded capital projects.
- Include procedures for adjusting and removing traffic calming devices as needed.

Neighborhood Traffic Calming Pilot Program and Community Feedback

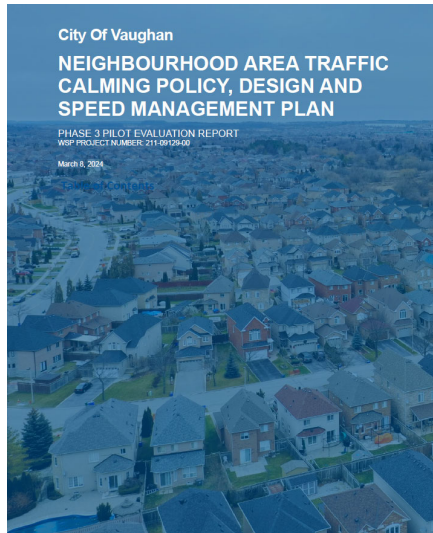
The neighbourhood traffic calming pilot program is the first of its kind in Canada, testing and evaluating new tools, technologies, refined siting and design considerations, data collection approaches, operational improvement ideas, and innovative engagement approaches. These projects tested and implemented proposed policy considerations, data collection methods, and traffic calming measures in real-world scenarios. The trials included refining existing measures through new draft guidelines, designing new measures, and introducing new technologies previously unused in Vaughan. Seasonal measures were also tested during winter to assess their effectiveness under different conditions.

The project emphasized community feedback through an app-based platform that communicated implementations to residents in real-time and included enhanced stakeholder collaboration and interdepartmental coordination. Initial pilot project design concepts were developed from available data and feedback from engaging Councillors, stakeholders, and the community. The proposed Traffic Calming Plan was developed and refined through workshops with City staff, elected officials, and public residents.

Some key measures included:

- Enhanced Crosswalks
- Bike Lane Crossings
- Curb Extensions
- Roundabout Signage
- Edge Lines
- Radar Message Boards
- Speed Cushions
- Planters
- Centreline Flex Posts
- Curbside Bollards
- Slow Down School Zone Flex Posts
- Boulevard Silhouettes

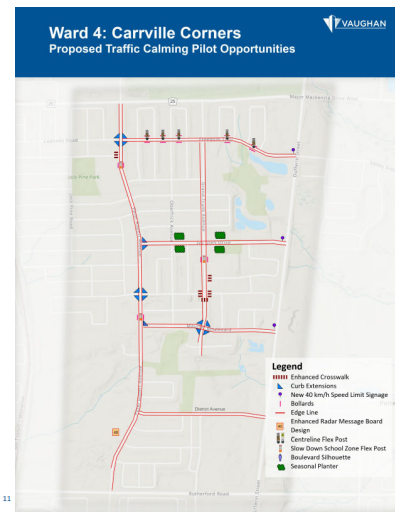
Implementation of the proposed plan began in late Summer and continued into Fall 2023, with some measures installed in Spring 2024 due to resource availability.



The following images show some of the traffic calming treatment installations.



MOVE SMART | 2023 Pilot Evaluation Report



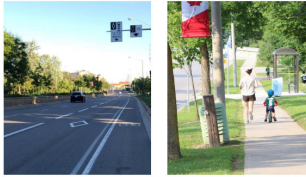
Pilot Projects Evaluation Report

The pilot projects strongly emphasize stakeholder and community engagement. This includes engaging Councillors, stakeholders, and the community through comprehensive and innovative approaches to ensure community feedback was considered during development, implementation, and evaluation. This engagement was crucial for understanding the impact on staff resources, municipal budgets, and cross-departmental integration necessary for final implementation. The pilot projects provided constructive insights and recommendations for developing and improving a new Traffic Calming Program by systematically evaluating aspects of the program from planning to implementation.

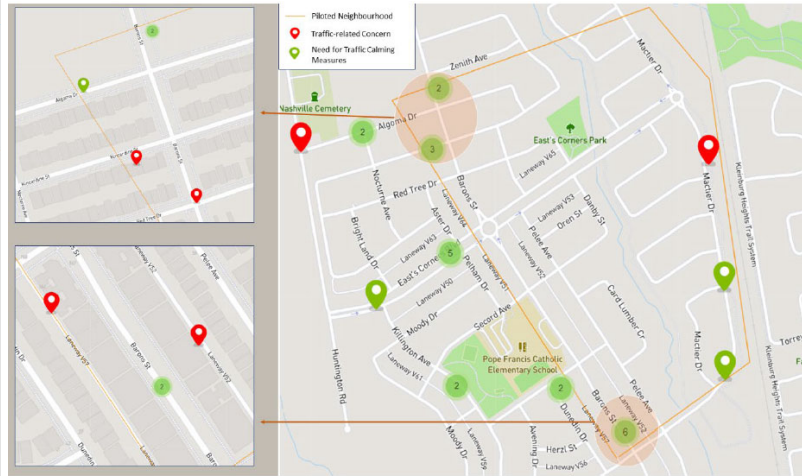
The pilot also affirmed new tools and approaches to traffic calming that have not yet been implemented in the City, including planters that enhance streetscaping, temporary speed cushions, enhanced radar message boards, and custom-designed flex posts. Data collection found positive results in speed reductions, particularly for new traffic calming tools and approaches refined through changes in siting or enhanced designs.

CITY OF VAUGHAN

NEIGHBOURHOOD AREA TRAFFIC CALMING POLICY, DESIGN AND SPEED MANAGEMENT PLAN



PHASE 3 ENGAGEMENT SUMMARY



Engagement Summary Report

The project had several engagement objectives, including:

- Educating the public about the various options available to improve road safety;
- Working with stakeholders to expand the number of tools considered to continue to improve road safety in Vaughan;
- Evaluating real-world impacts of traffic calming measures through pilot projects in neighbourhoods while assessing public levels of support and engagement techniques to inform the policy and procedures update; and
- Guiding internal and external partners at the City of Vaughan to support the implementation of traffic calming and speed management projects.

During the first round of engagement, sessions focused on identifying existing capacity and readiness for change internally at the City of Vaughan and within the community and identifying key areas of concern among residents.

During the pilot projects, the City conducted a second round of public engagement using various tools to inform the community about why their neighbourhood was selected as a pilot location and to gather feedback from residents. An online survey was launched, featuring questions to identify key themes and challenges in each neighbourhood and a mapping tool for respondents to indicate locations where traffic calming devices are needed.

Error! Reference source not found. demonstrates the engagement activities completed throughout the project.

Table 1 - Engagement Summary

Activity	When	Engagement
Online Survey	January 4, 2023 – February 13, 2023	450+ responses
Councillor Interviews	January 2023 – February 2023; September – October 2024 April – May 2024 September 2024	Regional and Ward Councillors
Stakeholder Interviews	January 2023 – February 2023	York Regional Police York Region Public Health

		PointA School Boards
City Committees	November 29, 2024 May 27, 2024 May 29, 2024 June 27, 2024	Accessibility Advisory Committee Transportation Infrastructure Advisory Committee Policy Committee Growth Management Committee
Technical Advisory Committee Meetings	October 5, 2022, January 17, 2023, April 3, 2023, Nov 27, 2023, Jan 17, 2024	Meetings with Internal City Departments and Regional Staff
In-person engagement sessions	Welcome Centre – January 19, 2023 (9:00 am – 12:00 pm) Al Pallidini Community Centre – January 21, 2023 (10:00 am – 2:00 pm) Baitul Islam Mosque – February 3, 2023 (1:00 pm – 3:00 pm) Maple Community Centre – February 4, 2023 (10:00 am – 2:00 pm) Winterfest – February 5, 2023 (10:00 am – 3:00 pm)	Dialogue with 1000+ residents in community pop-up events
Virtual engagement sessions	Feb 1, 2023 – (10:30 am -12:00 pm) Feb 6, 2023 – (7:00 pm - 8:30 pm)	200+ responses
Online Survey	Survey Period - May 3, 2023 to June 14, 2023	250+ responses
Digital Mapping Exercise	Digital Mapping Exercise Period for All Neighbourhoods: May 3, 2023 to June 14, 2023	+ 120 locations identified through the mapping tool
Virtual Community Open Houses	Ward 1 – New Kleinburg; May 23, 2023 Ward 2 – Sonoma Heights; May 23, 2023 Ward 3 – Vellore Village; May 23, 2023 Ward 4 – Carrville Corners; May 24, 2023 Ward 5 – Lakeview Estates; May 24, 2023	75+ participants
Community Walkabouts	Ward 1 – New Kleinburg; June 6, 2023 Ward 2 – Sonoma Heights; June 5, 2023 Ward 3 – Vellore Village; June 4, 2023 Ward 4 – Carrville Corners; June 4, 2023 Ward 5 – Lakeview Estates; June 5, 2023	Ward 1 – New Kleinburg: 7 participants, approximately 25 interactions Ward 2 – Sonoma Heights: 8 participants, 20 interactions Ward 3 – Vellore Village: 24 interactions, 24 interactions Ward 4 – Carville Corners: 6 participants, 12 interactions Ward 5 – Lakeview Estates: 7 participants, 5 interactions
Social Media Campaign	Social media campaigns and email correspondence	1,227 Residents Engaged

2024 Traffic Calming Policy

The Vaughan Traffic Calming Policy has been reviewed extensively to identify areas for improvement. This has resulted in several proposed amendments and new policies to enhance safety, mobility, and accessibility on city streets. The core objective is to balance transportation needs with reducing operating speeds and minimizing traffic infiltration in neighbourhoods. The purpose of the policy is to:

- Identify and implement traffic calming measures within the City of Vaughan.
- Outline the process for informing eligibility, selecting traffic calming measures, prioritizing, implementing, and removing them, and identifying and evaluating suitable locations for traffic calming.
- Prioritize the safety of all road users and improve the livability of neighbourhoods by enabling the roadway to function as intended.
- Provide a consistent and evidence-based framework for assessing, approving, and implementing traffic calming measures.

Addressing criteria for new development to limit retrofitting in the future

2024 Traffic Calming Policy

The policy emphasizes ensuring streets meet their intended function by implementing traffic calming measures that ensure mobility, safety, and access. The result of traffic calming is an improved neighbourhood environment through increased motorist awareness of other street users, through reductions in traffic volume, and vehicle speeds and conflicts. The application of Traffic Calming Procedures will be consistent and uniform, using a neighborhood-level approach to identify and evaluate locations for intervention. It will guide staff in prioritizing road segments for traffic calming and minimizing the need for traffic calming retrofits through road design that enhances safety. New developments are required to follow the Complete Streets Guide and Traffic Calming Toolbox to mitigate future retrofit needs.

A neighbourhood approach will determine the type of physical traffic calming measures to minimize adverse impacts on adjacent streets, including the potential for a corridor or traffic study. Measures will be planned in consultation with municipal service stakeholders, including emergency services and public transit, to balance slowing traffic with service delivery needs. Modifications to on-street parking will be assessed to accommodate traffic calming installations.

The City's design standards will be updated with the new traffic calming measures to reflect best practices and comply with City standards and relevant Provincial Acts. Access restrictions, such as diverters and barriers, turn restrictions, and directional and full closure, will be limited and carefully assessed to minimize impacts on essential services. The policy encourages the investigation and implementation of new and innovative traffic calming methods, with updates to the Traffic Calming Toolbox and Guide as needed. Additionally, the Traffic Calming Policy will be reviewed and updated every five years or following legislative changes.

- **Eligibility Criteria and Selection:** Eligibility criteria require that a roadway meet specific conditions, such as being a city road, having reported issues, and not overlapping with ongoing or planned capital projects. The appropriate traffic calming measure is determined using a Risk Scoring Matrix and prioritized based on various factors, including traffic speed, volumes, collision history, and pedestrian and cycling infrastructure.

- **Rehabilitation and Removal:** Existing traffic calming measures will remain until they undergo a condition assessment or lifecycle review every five years. Rehabilitation will follow applicable design and construction standards, and ineffective or unsafe measures may be removed.
- **Communications:** The City's traffic calming program will include an open, public process to ensure resident input is considered, with community notification and engagement for warranted measures. Public and stakeholder support will be assessed, especially for more significant measures, through consultations with Ward Councillors. Petitions aligned with national standards, best practices, and other municipal jurisdictions have been removed.
- **Approvals and Evaluation:** Council approval is necessary to remove significant traffic calming measures, while quick-build measures are prioritized for implementation without needing a report to the Council. An annual report to the Council will recommend more extensive measures based on budget and resource availability. After implementation, measures will be monitored for effectiveness, and results will be communicated in an Annual Report.

THE CITY OF VAUGHAN

CORPORATE POLICY

POLICY TITLE: NEIGHBOURHOOD TRAFFIC CALMING

POLICY NO.: 19.C.07

Section: Roads, Traffic & Operations

Effective Date: Click or tap to enter a date

Date of Last Review: Click or tap to enter a date

Approval Authority: Council

Policy Owner: DCM, Public Works

POLICY STATEMENT

This is a policy to identify and implement traffic calming measures within the City of Vaughan. The policy outlines the process for informing eligibility, identification, selection, prioritization, implementation, evaluation, and, if necessary, removal of traffic calming measures.

PURPOSE

To establish a comprehensive process with a consistent framework in determining the suitability of traffic calming measures across Vaughan. The policy reinforces the City's interest in enhancing road safety for all road users.

SCOPE

1. The policy applies to municipal roads with a posted speed limit of 60 km/h and lower, including public laneways and unassumed roads.
2. This policy does not cover regional roads and roads within private properties.

LEGISLATIVE REQUIREMENTS

1. Section 128 (1) of the Highway Traffic Act (HTA) R.S.O. 1990, c.H.8: Establishes regulations governing road usage in Ontario, including regulating the rate of speed on all roadways within the Province of Ontario.
2. Section 128 (6) of the HTA R.S.O. 1990, c.H.8 states that anyone exceeding the speed limit in a community safety zone faces doubled fines, calculated based on the degree of the speed limit violation.

THE CITY OF VAUGHAN

CORPORATE PROCEDURE

PROCEDURE TITLE: TRAFFIC CALMING

PROCEDURE NO.: PRC.43

Section: Roads, Traffic & Operations

Effective Date: Click or tap to enter a date

Date of Last Review: Click or tap to enter a date

Policy Parent: 19.C.07

Procedure Owner: DCM, Public Works

PROCEDURE STATEMENT

These procedures are to be followed when assessing, evaluating, approving, implementing, or removing traffic calming measures as per the Traffic Calming Policy (19.C.07).

PURPOSE

To establish a comprehensive process with a consistent framework in determining the suitability of traffic calming measures across Vaughan. This Procedure supports the Traffic Calming Policy and provides a consistent and evidence-based framework for assessing, evaluating, removing, and/or implementing effective and efficient traffic calming measures.

SCOPE

1. The policy applies to municipal roads with a posted speed limit of 60 km/h and lower, including public laneways and unassumed roads.
2. This policy does not cover regional roads and roads within private properties.

LEGISLATIVE REQUIREMENTS

1. Section 128 (1) of the Highway Traffic Act (HTA) R.S.O. 1990, c.H.8: Sets out the rules of the road in Ontario, including regulating the rate of speed on all roadways within the Province of Ontario.
2. Section 128 (6) of the HTA R.S.O. 1990, c.H.8 states that anyone exceeding the speed limit in a community safety zone faces doubled fines, calculated based on the degree of the speed limit violation.

Instructions: Use the drop-down boxes to fill out every cell highlighted in yellow. The blue boxes indicate the results of the criteria.

TABLE	Initial Screening	Response
Error Identified	The reported issue involves concerns related to speeding, traffic infiltration, or safety	Yes
Roadway Jurisdiction	City road (including public laneways and unassumed roads)	Yes
Posted Speed Limit	What is the posted speed limit of this road?	40
Previously Requested	Have at least 24 months passed since the traffic data was previously reviewed? <i>(Exception: could be reduced under signposts and/or under other circumstances (collisions, pedestrian, development expansion, and/or nuisance developers affecting changes to the site/roadway)</i>	Yes
Through Street	A through street, not a cul-de-sac	Yes
Road Grade	Enter % grade	7.5
Segment Length	50 meters or more between stop-controlled intersections	Yes
Conditioning projects (but Level 1 consideration)	Has there been confirmed that there are no potential overlapping capital projects within the calendar year?	Yes
		Meets initial screening criteria. Continue to technical assessment
TABLE	Technical Assessment	Response
Traffic Volume	Enter average daily traffic volume	250
Road Type	Select road type from drop-down menu	Local
Traffic Infiltration	Enter % of non-local traffic during peak hour	45
85th percentile speed	Enter 85th percentile speed	46
Multiple complaints	History of complaints along the corridor within last 36 months (3/4)	Yes
Collision History	Pattern of collisions along the corridor or neighbourhood within the last 36 months (3/4)	Yes
Parallel/Alternate	Would traffic calming measures potentially impact traffic patterns and divert traffic to other roads?	Does not meet warrant criteria
Multiple complaints	History of complaints in the neighbourhood within last 36 months (1/2/4)	Yes
Collision History	Pattern of collisions along the corridor or neighbourhood within the last 36 months (1/2/4)	Yes
		Does not meet warrant criteria
TABLE	Scoring Criteria	Response
Speed Distribution	Enter 85th percentile speed	87
High Speed	Enter 95th percentile speed	80
Safety	What is the Exposed Property Damage Only (EPDO) value (see Network Screening tab)?	1
	What is the Exposed Collisions value (see Speed-Related Collisions tab)?	1
	Has there a collision resulting in a serious injury in the past 36 months?	Yes
	Is there a side-sill gap (measure side sill on both sides of collector road or at least one side of local street) in Community Safety Zone?	Yes
Pedestrian Factor	What other pedestrian generator areas where sidewalks should be implemented on both sides for all street front route, within 300m of 10% within intersection area, within 300m of a school, within 300m of a place of worship or cemetery, corner site (public or local amenity (community centre, municipal office, retail centre or major entertainment/club allocation), health and beauty, or within 500m of a park or mall)?	Yes
Bicycle Factor	Type of cycling facility	Classified
		The prioritization score for this road is 73.

Policy, Procedures and Evaluation Criteria

Traffic Calming Eligibility

The policy incorporates a structured and comprehensive approach to effectively implement traffic calming measures. A comprehensive data-driven process drives eligibility.

For a roadway to be eligible for traffic calming, it must meet all of the following criteria:

- **City Road:** The roadway must be a city road, including public laneways and unassumed roads.
- **Reported Issues:** There must be reported issues related to speeding, traffic infiltration, or road safety for vulnerable road users.
- **Previous Requests:** Any previous request for traffic calming must have been received more than 24 months ago, as physical measures may take at least two years to implement, subject to budget approvals, design, and construction.
- **Through Street:** The road segment must be a through street, not a cul-de-sac.
- **Speed Limit:** The posted speed limit on the road segment must be 60 km/h or lower.
- **Road Grade:** The road grade must be lower than 8%.
- **Segment Length:** The road segment length must be greater than 150 meters between stop-controlled or signalized intersections.

- **No Overlapping Projects:** There must be no overlapping capital projects on the road segment that would affect the implementation of traffic calming measures.

By adhering to these criteria, the Neighbourhood Traffic Calming Policy ensures that traffic calming measures are applied systematically and effectively, enhancing road safety and improving the quality of life for Vaughan's residents.

2024 Traffic Calming Procedures

Effective implementation requires coordinated efforts across City departments. The Vaughan Traffic Calming Program employs a structured five-stage process to ensure effective and consistent implementation of traffic calming measures across the City: Initiation and Issue Validation, Candidate Selection, Plan Development, Plan Implementation, and Monitoring and Evaluation.

Stage 1: Initiation and Issue Validation

This stage involves identifying opportunities for traffic calming through various initiation streams. Residents can request traffic calming measures via Access Vaughan, direct contact with Traffic Services, or their Councillor's office. Additionally, staff can initiate measures based on data-driven analysis, such as network screening and bi-annual traffic data collection. Existing measures can be upgraded to higher levels if conditions are met, and new measures can be identified through safety corridor reviews, neighbourhood traffic studies, or upcoming capital projects. The review process for traffic calming measures is conducted through specific channels to ensure fairness and consistency. Councillors can also prompt investigations for rehabilitating or removing existing measures.

Stage 2: Candidate Selection

A technical assessment is first completed to confirm the locations exceed a defined daily traffic volume threshold, which varies by road classification (750+ vpd for local, 2500+ vpd for minor collector, 7500+ vpd for Major Collector, 10,000+ vpd for Arterial) and has 85th percentile speed 7 km/h or higher than the posted speed limit, or by having a high proportion of non-local cut-through traffic. Screening identifies specific locations for traffic calming based on criteria such as road type, reported issues, and the absence of overlapping capital projects. The technical assessment further evaluates road segments based on traffic volumes and speed, with a neighbourhood-level assessment determining whether the project will proceed individually or as part of a broader study. Priority is given to projects based on a scoring system that considers speed, traffic volume, safety, and pedestrian and bicycle factors.

Stage 3: Plan Development

This stage involves selecting appropriate traffic calming measures using a Risk Scoring Matrix, which considers various factors like travel speeds, traffic volumes, and pedestrian generators. Measures may be implemented alone or in combination to manage speed. Design development follows, with Level 1 measures using quick-build methods and Level 2 and 3 measures requiring more comprehensive designs and Council approval.

Stage 4: Plan Implementation

Implementation prioritizes traffic calming installations based on the prioritization score. If warranted locations cannot be accommodated within the current budget, they are deferred to the following year. Traffic Engineering Services and Road Operations implement Level 1 measures, while Level 2 and 3 measures may be incorporated into standalone or capital projects, subject to consultation, budget, and resources. Installations are verified or commissioned to ensure effectiveness.

Stage 5: Monitoring and Evaluation

Post-installation data collection for speed and traffic volume begins no sooner than four weeks after installation to allow for driver adjustment. The effectiveness of the measures is evaluated by comparing pre-and post-installation data, and results are reported annually through an Annual Report. Public feedback is also considered in the evaluation process. Post-installation monitoring is essential to assess the effectiveness of the measures and make data-driven adjustments. This ongoing evaluation ensures that our traffic calming measures continue to meet safety objectives and adapt to changing conditions.

Overall, the Vaughan Traffic Calming Program's structured approach ensures that traffic calming measures are effectively planned, implemented, and evaluated, enhancing road safety and managing traffic concerns systematically and equitably.

Project Prioritization

The Neighbourhood Traffic Calming Policy outlines a structured approach to effectively prioritize and implement traffic calming measures. This process ensures that the most critical areas are addressed first, based on a Risk Scoring Matrix, funding, and resource availability.

Public Engagement and Communications

The City of Vaughan's Traffic Calming Program prioritizes open and transparent public engagement to ensure residents' input and concerns are integrated into traffic calming solutions. This section outlines the approach to community involvement and communication for the implementation of traffic calming measures.

- **Open Public Process:** The administration of the traffic calming program will ensure an open public process, allowing residents to voice their input and feedback. Based on this feedback, appropriate solutions will be recommended and implemented.
- **Community Notification:** For warranted Level 2 measures, community notifications will be undertaken to inform and engage residents about the planned implementations.
- **Public and Stakeholder Engagement:** To assess support for warranted Level 3 measures, engagement with the public and stakeholders will be conducted. This will include individual projects, corridor reviews, or traffic area studies, with assessments done in consultation with the respective Ward Councillors.

An annual report will be presented to Council recommending implementing Level 3 traffic calming measures. This report will include estimated costs and the anticipated timing for implementation based on budget and resource availability. Upon Council approval, notice will be circulated to Infrastructure Planning and Corporate Asset Management to assess programming requirements and the Project Management Office to coordinate capital projects. The design and delivery of these measures will depend on available resources and timelines. After implementation, traffic calming measures will be monitored according to the Traffic Calming Procedures. Follow-up studies will assess the effectiveness of these measures, and results will be communicated through the Annual MoveSmart Report.

This structured approach ensures that Vaughan's Traffic Calming Program remains responsive to community needs while maintaining transparency and accountability in implementing and evaluating traffic calming measures.

Integrating Traffic Calming in New Developments

As Vaughan continues to urbanize, it is essential to integrate traffic calming measures into new developments to ensure safety, accessibility, and a comfortable pedestrian environment. This proactive approach will help create a safer, more sustainable urban environment that supports the City's growth and development objectives.

This Neighbourhood Traffic Calming Plan aligns with key initiatives across the City:

- **Integrating Traffic Calming into Vaughan's Official Plan:** Demonstrates a commitment to safety and sustainability, supporting the creation of complete streets designed to accommodate all road users safely.
- **Supporting Urban Growth Centres:** Facilitates the development of urban growth centres as envisioned in Vaughan's Official Plan, promoting dense, walkable communities.
- **Promoting Sustainable Transportation:** This policy encourages public transit and other sustainable transportation options, reducing reliance on private vehicles and lowering environmental impact.
- **Creating Safer, Walkable Streets:** Enhances street safety and walkability, contributing to the health and well-being of Vaughan's residents by encouraging more active transportation.
- **Supporting Economic Growth:** Enhances transportation infrastructure that supports economic growth and attracts businesses by creating a more accessible and connected city.

To fully integrate traffic calming into Vaughan's development plans, the following changes are advocated to better address road safety in the development review process:

Strengthen Policies through the Official Plan Review

- **Collaborate with Planning and Transportation Partners:** Engage urban planners, transportation engineers, and community stakeholders to develop and incorporate robust policies that emphasize road safety, complete streets, and speed management from the planning and design stages of new developments.
- **Policy Integration:** Ensure traffic calming and road safety policies remain consistently applied across all planning documents and development guidelines, reinforcing the City's commitment to creating safe and livable communities.
- **Regular Policy Updates:** Establish a mechanism for regularly reviewing and updating traffic calming and road safety policies to incorporate emerging best practices and innovations in urban design and transportation safety.

Update Engineering Design Standards

- **Revise Engineering Standards:** Update existing engineering design standards to include specifications for modern traffic calming measures such as speed humps, raised crosswalks, curb extensions, and roundabouts. These updates should reflect the latest safety research and urban design principles.
- **Best Practices and Innovations:** Adopt the latest best practices and innovations in traffic calming design so that new developments can continue to be built to the highest safety standards. This could include incorporating new materials, technologies, and design approaches that enhance the effectiveness of traffic calming measures.

- **Clear Guidelines and Criteria:** Develop and disseminate clear guidelines and criteria for implementing traffic calming features. These guidelines should provide detailed instructions on designing, placing, and maintaining traffic calming measures to ensure consistency and effectiveness across all new developments.

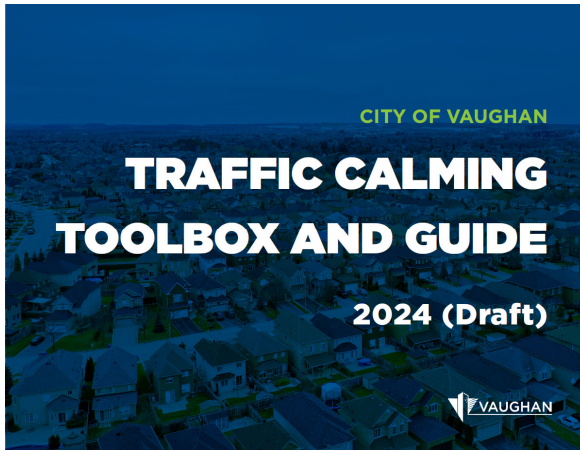
Traffic Impact Study Requirements

- **Road Safety Audits:** Integrate Road Safety Audits (RSAs) into the Traffic Impact Study requirements for new developments. RSAs involve a thorough review of road safety conditions and potential hazards, providing recommendations to mitigate risks and enhance safety. This proactive approach ensures road safety considerations are embedded in the planning process.
- **Comprehensive Safety Assessments:** Require developers to conduct comprehensive safety assessments that consider all road users, including pedestrians, cyclists, and motorists. These assessments should identify potential safety issues and propose appropriate traffic calming measures.
- **Best Practices from Other Jurisdictions:** Learn from other jurisdictions that have successfully integrated RSAs into their planning processes. Incorporate proven strategies and techniques to ensure Vaughan's approach to road safety is aligned with leading practices globally.

New Development Agreements

- **Traffic Calming Requirements:** New development agreements should include specific requirements for traffic calming measures. These requirements should mandate the inclusion of traffic calming features in the initial design and construction phases, ensuring that safety and accessibility are prioritized from the outset.
- **Developer Contributions:** Require developers to fund and maintain traffic calming measures as part of their development agreements. This could involve financial contributions, the construction of specific infrastructure, or ongoing maintenance responsibilities.
- **Regular Monitoring and Enforcement:** Continue establishing mechanisms for regularly monitoring and enforcing traffic calming requirements in new developments. Continue to ensure that developers adhere to agreed-upon standards and that traffic calming measures are effectively implemented and maintained.

Traffic Calming Toolbox



Level 3 (Engineered) Measures: Horizontal Deflection

Curb Extensions and Chokers

Effectiveness

- Speed Reduction: **High**
- Volume Reduction: **Good**
- Conflict Reduction: **Good**

Cost Range

- Design Cost: **\$5,000**
- Construction Cost: **\$3,000 – 5,000 per unit**
- CMF: N/A

A curb extension is a measure that involves extending the sidewalk or curb into the roadway to reduce the width of the street. A choker has a narrowing on both sides, creating a pinch point. By narrowing the roadway, the extension slows down traffic and makes it safer for pedestrians to cross. Curb extensions can also improve visibility at intersections, making it easier for drivers and pedestrians to see each other and physically restricting parking away from the intersection. Curb extensions can be landscaped, enhancing the aesthetic appeal and adding shade for the street.

Best Implemented In (Applicability)

- Local streets
- Collector streets
- Urban arterial streets

Road Classification

- All traffic volumes

Traffic Conditions

- Urban cross-section - curb and gutter

Advantages

- ✓ Reduces vehicle speed.
- ✓ Reduces pedestrian crossing distances in the case of a crossing.
- ✓ Enhances the appearance of the street if landscaped.

Disadvantages

- ✗ Could obstruct bike lanes, if any are implemented. Consider ramping the bike lane over and through the extension.
- ✗ Could be a sightline hazard if not properly implemented.
- ✗ Adds a level of complexity for large vehicles navigating it.
- ✗ Potential loss of on-street parking.

Considerations for Implementation

- Additional measures and implementation of multiple chokers/extensions improve effectiveness, and reducing on-street parking helps enhance pedestrians' visibility.
- Drainage and driveway access should be considered.
- Sightlines should be assessed in the presence of landscaping.
- Potential applicability would be context-specific and require more significant planning, design and capital costs that would best be implemented as part of road reconstruction projects and/or new developments.

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Toolbox and Design Guide

A Traffic Calming Toolbox and Guide were developed as part of the project to be used by City staff, developers, and consultants when planning and designing traffic calming plans. The toolbox also informs residents in conjunction with the Traffic Calming Policy. The Guide emphasizes the transportation implications of traffic calming measures and concepts, including driver and vehicle behaviour.

Some measures encourage appropriate driving speeds (such as speed cushions), others alter street access and traffic volumes (such as turn restrictions), and some encourage positive driving behaviour. Effective traffic calming implementation determines the best combination of measures that ensure a net improvement in community safety at a reasonable cost. The guide provides a variety of effective traffic calming measures that can be tailored to the unique characteristics of the City of Vaughan.

Five guiding principles have been identified:

1. **Identify and quantify the areas in need of traffic calming measures.** Quantifying the extent of the measures required is important to selecting appropriate measures. Quantifying also aids residents in understanding the nature and magnitude of their real needs.
2. **Apply traffic calming measures on a neighbourhood-wide basis, not on a localized, site-by-site basis.** Any potential effects on adjacent streets must be considered. These effects might include traffic diverted to other streets, motorists who speed up after passing a traffic calming measure, or changes in turning movements that increase delay at another intersection.
3. **Use self-enforcing measures.** Generally, measures that do not require police enforcement to be effective are preferable. Measures that can be circumvented should be avoided.
4. **Considering all services and street uses.** Input from all stakeholders should be obtained early in the process to avoid impacts on public services and avoid concerns raised by residents and stakeholders about direct and indirect effects associated with traffic calming measures.
5. **Monitor and follow up. Comparable traffic volume and speed data should be collected before and after implementation to evaluate the effectiveness of the measures and make any necessary adjustments.**

The Neighborhood Traffic Calming Policy has expanded its range of traffic calming measures, which are now organized by Levels and include 18 different tools. In addition, the toolbox includes supplementary educational and enforcement measures that can be used alone or in combination with Level 1, 2 and 3 measures.



Level 1 Quick-Build Traffic Calming

Measures: These measures use interim materials and allow rapid implementation. These include flexible signs, temporary speed cushions, planters, and specialized pavement markings.



Level 2 Engineered Traffic Calming

Measures: Physical measures involving permanent civil works that result in physical changes to streets, such as permanent speed cushions. They are typically lower in cost and have a faster planning, design, and installation timeframe than Level 3 measures. These include temporary asphalt speed cushions.



Level 3 Engineered Traffic Calming

Measures: Physical measures involving civil works are permanent and result in street changes, such as curb extensions. They typically have higher costs and require a longer planning, detailed design, and construction timeline than Level 2 measures. These include curb extensions, engineering intersection treatments, and roundabouts.



Education: Supportive education tools and programs to reinforce desired driver behaviour. These measures can be applied as standalone or combined with Level 1 to 3 measures. Measured include radar message boards, boulevard signage including silhouettes and education campaigns.



Enforcement: Enforcement programs are one of the most effective tools to address speeding. These include Automated Speed Enforcement (ASE) and York Regional Police reporting tools that reinforce responsible driver behaviour. Automated Speed Enforcement (ASE) is used in areas of excessive speed, such as school and community safety zones, to improve road and pedestrian safety.

These guidelines ensure the appropriate usage of context-sensitive tools for the roadway and minimize unintended impacts. Implementing traffic calming measures will continue to adhere to all applicable city design and construction standards and specifications.

Conclusion

This forward-thinking plan updates the 2010 Traffic Calming Policies and Procedures and continues to align them with national standards and best practices. Developed through extensive research, community engagement, and pilot projects, it delivers a cutting-edge framework tailored to Vaughan's unique needs.

This plan is crucial because it enhances safety by incorporating the latest traffic calming innovations, ensuring safer streets for pedestrians, cyclists, and drivers. It supports sustainable growth by embedding robust road safety and complete street principles in all planning documents, reinforcing Vaughan's commitment to sustainable urban development.

Moreover, the plan contributes to community well-being by continuing to create a safer, more walkable city and fostering a vibrant and connected community. Improved transportation infrastructure not only enhances the quality of life for residents but also attracts businesses and supports economic growth, making Vaughan a more desirable place to live and work.

By integrating these comprehensive strategies, Vaughan sets a new urban development and road safety standard. The Neighbourhood Traffic Calming Plan aligns with broader city initiatives and reaffirms Vaughan's ongoing commitment to creating a safer, more accessible, thriving community for all residents. This proactive approach will position Vaughan as a leader in innovative urban design, driving long-term benefits for the entire city.