CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF DECEMBER 12, 2023

Item 12, Report No. 52, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on December 12, 2023.

12. LAWFORD ROAD AND SEDGEWICK PLACE AREA TRAFFIC REVIEW

The Committee of the Whole recommends approval of the recommendations contained in the following report of the Deputy City Manager, Public Works, dated December 5, 2023:

Recommendations

- 1. That this report be received; and
- 2. That the City Clerk forward a copy of this report to the Regional Municipality of York, York Regional Police, York Region Public District School Board, York Region Catholic District School Board, and Student Transportation Services of York Region.



Committee of the Whole (2) Report

DATE: Tuesday, December 5, 2023 **WARD(S):** 3

TITLE: LAWFORD ROAD AND SEDGEWICK PLACE AREA TRAFFIC REVIEW

FROM:

Zoran Postic, Deputy City Manager, Public Works

ACTION: FOR INFORMATION

Purpose

To report on the key findings of the Lawford Road and Sedgewick Place Area Traffic Review, as directed by Council on September 28, 2022.

Report Highlights

- On September 28, 2022, Council directed staff to advance the development of an Area Traffic Review (including community engagement) for Sedgewick Place and the surrounding road network.
- As part of the Area Traffic Review, staff completed studies to assess vehicle speeds, traffic volume, and identified vulnerable road user concerns to improve traffic flow along both local and regional roads during school pick-up and drop-off hours.
- The results recommended traffic related treatments to reduce vehicle operating speeds, reduce school-related congestion, and implement measures to encourage active and sustainable travel, including pedestrian and cycling facilities.
- The plan aims to improve road safety, accessibility, and mobility for all users.
- During the study process, community involvement and education were crucial in advancing the recommendations. They included collaboration with York Region, York Region Transit, the York Region Catholic District School Board, the York Region District School Board, and school administration.

Recommendations

- 1. That this report be received; and
- 2. That the City Clerk forward a copy of this report to the Regional Municipality of York, York Regional Police, York Region Public District School Board, York Region Catholic District School Board, and Student Transportation Services of York Region.

Background

Council directed staff to undertake an Area Traffic Review for Sedgewick Place and the surrounding road network.

In 2018, the residents of Sedgewick Place expressed concerns about vehicular speeding on Sedgewick Place and the surrounding road network, resulting in several traffic measures to improve traffic operations. These measures included:

- Installation of radar message boards as part of the City's speed compliance program.
- The Installation of a "pedestrian ahead" warning sign on Sedgewick Place.
- The Instillation of larger stop signs at the intersection of Chatfield Drive and Sedgewick Place.
- Increased enforcement by York Regional Police to address speeding concerns on Sedgewick Place.

Speed management measures were also implemented along Lawford Road to support active school travel and sustainable transportation. These measures were installed as part of the City's Active School Travel (AST) pilot program to promote active school travel for students at Johnny Lombardi Public School, Guardian Angels Catholic Elementary School, and Tommy Douglas Secondary School. As part of this program, staff installed in-road flexi-signs, radar message boards, and edge line painting to improve pedestrian safety in and around school zones. Overall, these measures encouraged students to engage in healthy, active, and sustainable travel options.

In 2022, residents expressed concerns about high traffic volumes and potential traffic infiltration on Sedgewick Place. In response, Council directed staff to conduct updated studies and present additional options for consideration. They also provided direction to engage with the community to better understand their concerns and provide feedback on the recommendations.

An independent consultant was selected to undertake an Area Traffic Review.

The City retained CIMA+ as an independent consultant to conduct an Area Traffic Review. Major traffic generators in the neighbourhood include Johnny Lombardi Public

School, Guardian Angel Catholic Elementary School, Tommy Douglas Secondary School and Chatfield District Park.

The Lawford Road neighbourhood has a 40 km/h area speed limit. Lawford Road consists entirely of unsignalized intersections, except for one roundabout located at the intersection of Chatfield Drive and Lawford Road. Access to the neighbourhood is provided via Weston Road to the east and Major Mackenzie Road to the south. A study area map is included in Attachment 1.

A critical component of the study was engaging community residents in the Lawford Road area for public input.

During the study process, the Corporate and Strategic Communications department used various engagement methods to keep Vaughan residents informed about the study and to encourage participation, including those residing in the Lawford Road community. The department utilized various communication tools, such as project webpages, public service announcements, council communication packages, engagement newsletters, direct mail, social media, digital graphics, and mobile signs. The community provided input through two public engagement events, held in June 2023 and September 2023, and two online surveys.

Of the two public engagement events that were held, the first took place online and shared information about the review of the existing conditions, community surveys, and gathered community feedback on potential solutions. The second public engagement event was held in-person at Tommy Douglas Secondary School to allow for interactive feedback through information boards around the room and gathered feedback on study findings, traffic management tools, and recommendations.

Residents were also invited to complete two online surveys to provide their feedback on community issues, their vision for the corridor within the Lawford neighborhood, traffic management tools, and solutions. Top issues identified by the community included traffic congestion in the neighbourhood, speed management, school pick-up and dropoff, and staggered bell times for the three schools along Lawford Road. Traffic management tools and solutions centered around traffic calming management tools, school related countermeasures, the need for pedestrian facilities, and cycling facilities.

A focus group meeting was held in August 2022 to present preliminary recommendations for the neighbourhood. School board members, school administration, and parent council members from the three schools attended. Key points raised included the need for parking enforcement and encouraging parents to park in safe locations, traffic management tools, staggering school bell times, and encouraging active and alternative modes of transportation. The comments were considered in the development of the plan.

In total, 534 individuals were involved in these engagement efforts. These public engagement efforts successfully involved the community and gathered their input. Common concerns and suggestions were identified and plans for the study area were developed with community concerns in mind.

In addition, two stakeholder meetings were held with the City of Vaughan, York Region Transportation, York Regional Police, and the York Regional District School Board. The purpose of the first meeting was to introduce the study, share information about the review of the existing conditions and community survey, and gather feedback about the study to shape potential study solutions. Stakeholders provided their input regarding the study findings and recommended traffic management tools and solutions to inform and shape the implementation strategy.

Previous Reports/Authority

Sedgewick Place and Neighbourhood Area Traffic Review, Extract from Council Meeting of September 28, 2022 (Item 17, Report No. 36) https://pub-vaughan.escribemeetings.com/filestream.ashx?DocumentId=120498

MoveSmart Mobility Management Strategy:

https://www.vaughan.ca/about-city-vaughan/projects-and-initiatives/transportation-projects/movesmart-mobility-management-strategy

Speed Limit Policy

Vaughan Official Plan:

City of Vaughan Official Plan 2010 | City of Vaughan

Pedestrian and Cycling Master Plan:

Pedestrian and Bicycle Master Plan | City of Vaughan

Analysis and Options

The following are the Lawford Road and Sedgewick Place Area Traffic Review findings.

There is little evidence of traffic infiltration into the study area.

The findings of the origin-destination study, which analyzed traffic conditions and patterns in the neighborhood, suggest that there is limited evidence to support traffic infiltration into the Lawford Road study area from adjacent regional roads. Moreover, there is no evidence of traffic using Sedgewick Place as a shortcut by traffic outside of the study area. The vehicles noted traveling on Sedgewick Place are from the neighbourhood.

The study recommends installing "local traffic only" signs and centerline flexible signs to manage traffic through the street and address speeding concerns, considering the high

traffic volume recorded on Sedgwick Place. Additionally, traffic monitoring is suggested after the completion of any new development.

Traffic operations issues are centered around speeding, school related congestion, and the need for pedestrian and cycling facilities.

A review of the speed studies indicates higher operating speed (higher than 50km/h) occur on portions of Chatfield Drive, Stanton Avenue and Poetry Drive and speed management measures are recommended.

Arrival and dismissal bell times at three schools along Lawford Road occur at about the same time, resulting in significant congestion along Lawford Road during the time periods of 7:45am to 8:10am and 2:15pm to 2:45pm. Unsafe school pick up and drop off activities are noted at the three schools and aggressive driver behaviours and disobeying traffic controls are noted.

High pedestrian traffic is noted at several uncontrolled crossings. Several crossings meet the minimum pedestrian volume threshold to warrant a pedestrian crossover according to Provincial guidelines (Ontario Traffic Manual Book 15). There is lack of trail connection between the Lawford Neighbourhood Park and the two elementary schools (Johnny Lombardi Public School and Guardian Angels Catholic School).

With major destinations such as schools and parks along Lawford Road, and to align with the City's Pedestrian and Bicycle Master Plan, providing cycling facilities to promote active and sustainable travel is desirable to reduce car travel and to ensure travellers have alternative options.

Traffic-related treatments are recommended to reduce operating speeds, reduceschool related congestion, and to provide pedestrian and cycling facilities.

A number of traffic treatments have been identified to address the traffic operation issues outlined in Table 1.

Identified Need	Recommended treatments
A need to reduce the operating speeds on Chatfield Drive, Stanton Avenue, and Poetry Drive. A need to manage school	 Narrow travel lanes with edge line and center line markings, tightening the radius at the corner of Chatfield Drive and Poetry Drive. Install radar message boards. Place additional flex signs on Poetry Drive. Continue to work with the school administration
related congestion	 and school boards to explore shifting bell times at one or two schools. Encourage Active School Travel at Johnny Lombardi, Guardian Angels, and Tommy Douglas to reduce vehicle congestion. Providing/improving pedestrian and cycling facilities to provide travel options.
A need to discourage unsafe pick up and drop off activities at the three schools	 Reinforce existing no stopping bylaws, through flexible signs to discourage stopping in undesirable locations. Install flexible signs along with bollards and pavement stencils (on Stanton Avenue in front of Johnny Lombardi Public School and Chatfield Drive in front of Guardian Angels Catholic School).
A need to provide/improve pedestrian facilities	 Install pedestrian crossovers at key warranted locations in the neighbourhood in consideration of pedestrian and traffic movements and the lack of a nearby dedicated controlled crossing. Evaluate the feasibility of providing a dedicated path from the existing park path and the two schools. This requires collaboration with the school administration, school boards, and the City.
An opportunity to provide/improve cycling facilities	 Determine the most appropriate cycling facilities for Poetry Drive, Stanton Avenue, and Chatfield Drive through functional and detailed designs that accommodate all ages and abilities. Determine the most appropriate cycling facilities for Lawford Road, considering the presence of the two parks and three schools and the availability of land (owned by the two school boards and the City).

The proposed recommendations and more detailed illustrations of these treatments are provided in Attachment 2.

The plan encourages sustainable and active travel, improves road safety, improves connectivity and accessibility, supports mobility for all road users, and supports mobility for all age groups.

Implementation Timelines

An implementation plan identifying short-term 'quick wins', medium-term and long-term improvements have been identified for the treatments as shown in Table 2.

- Short-term any recommendations that do not require significant modifications
 to existing infrastructure. These treatments are generally implemented through
 existing City programs and contracts (such as pavement markings or signs) and
 are therefore accommodated through the department's annual budgets.
- Medium-term and Long-term any recommendations that may require the
 involvement of other authorities, additional analysis or design will be
 implemented in the medium and long term. These measures may be considered
 by staff through upcoming programs and will take longer to implement. Due to
 higher costs or planning implications, these measures will require approval from
 applicable City departments as part of their annual allocation of budgets.

Table 2 – Recommended Treatments

Short-Term (Quick-Wins)	Medium Term	Long Term
 Edge line and centre line treatment on Poetry Drive, Chatfield Drive, Stanton Avenue and Lawford Road. Other pavement marking improvements including modifications to lane markings at Lawford Road and Farooq Boulevard intersection. Reinforce No Stopping restrictions near schools (review through the Safer School Zone Plan). Flex signs and pavement markings stencils. Radar message boards. Continue communication and public awareness 	 Feasibility, design, and implementation of pedestrian crossovers. Curb radius reduction at Poetry Drive and Chatfield Drive Evaluate cycling facility on Lawford Road through functional and detailed designs. Assess the feasibility of a direct path connection to schools from the existing park. 	Evaluate cycling facilities for Poetry Drive, Chatfield Drive and Stanton Avenue.

Financial Impact

The preliminary cost estimate for the proposed recommendations is provided in Table 3. The cost for Lawford Road, Poetry Drive, Chatfield Drive and Stanton Avenue cycling facilities will need to be further evaluated based on the functional and detailed design studies.

Table 3 – Preliminary Cost Estimates

Short-term	Medium Term	Long Term
Improvements	Improvements	Improvements
Estimated Costs	Estimated Costs	Estimated Costs
\$32,000	\$3.2M to \$3.7M	\$1.5M to \$2.0M

A detailed cost breakdown of the proposed improvements is provided in Attachment 3.

Cost estimates for the proposed recommendations will continue to be further refined as projects progress. Staff will develop a work plan to implement the short-term measures. Funding for implementation will be requested through the annual budget approval process. Regardless of the implementation timeframe identified, all implementations will be subject to budget approval. Staff will also continue to explore opportunities, partnerships, and alternative funding source to help support the implementation. Subject to budget approval, the short-term treatments will be implemented in summer 2024. Medium and long-term improvements will be brought forward in future budget approval processes. Staff will assess the best method in advancing the improvements during the annual budget approval process and will align all future improvements with the capital project planning process. The on-going cost to maintain the pavement markings, signage, and infrastructure will be incorporated in future Operating Budgets through the budget process.

Operational Impact

To ensure a comprehensive and well-informed decision-making process, consultation with various city departments and agencies have taken place during the course of the study. Staff from City departments participating in the discussions included Waste Management, Road Operations, Infrastructure Planning, and Corporate Asset Management (IPCAM), Parks Infrastructure Planning and Engineering, Emergency Services, Development Engineering, Infrastructure Delivery, the Project Management Office (PMO), and Bylaw and Compliance, Licensing and Permit Services.

Staff will work with internal City departments, including but not limited to Development Engineering to monitor the development activity in the neighbourhood.

Staff will work with IPCAM, Parks Infrastructure Planning and Engineering and PMO to plan and program the treatments identified in the medium-term and long term. Design and construction will be completed by the Infrastructure Delivery department.

Broader Regional Impacts/Considerations

Partnership with external stakeholders is a key to the success of the implementation.

Implementing the recommendations outlined in this study will require ongoing collaboration between the York Region District School Board, the York Region Catholic District School Board, Student Transportation Services of York Region, and York Region.

To alleviate traffic congestion during arrival and dismissal periods, City staff have requested that the two School Boards and Student Transportation Services of York Region explore the possibility of adjusting bell times at the three schools, as these time periods coincide. The school board and transportation services have raised concerns about the feasibility of adjusting bell times due to tight schedules, the need for additional buses, and before/after school childcare. With the opening of the new Kleinburg Nashville Elementary School in 2024, the enrollment at Johnny Lombardi Public School is expected to substantially decrease. The school board anticipates this will reduce vehicle volumes in the area and staff will monitor these impacts in the Fall of 2024. The school board has indicated that they are open to conducting an assessment changing of bell times including for the schools in this area.

The successful implementation of the dedicated path from the park and the two schools will require collaboration and partnership with the school administration and the two school boards.

Continued communication with partners and the community to raise awareness of the importance of safeguarding vulnerable road users is critical. Expanding public education regarding the importance of adhering to the rules of the road and to encourage behavioural changes to achieve safety for the community are important elements. Road safety is a shared responsibility requiring all parties to come together to make our roads and communities safer.

City staff have requested that York Region should continue to monitor traffic conditions at the four Regional intersections that border the neighbourhood to ensure that traffic is flowing efficiently into and out of the neighbourhood. The four intersections are noted below:

- Major Mackenzie Drive and Poetry Drive
- Major Mackenzie Drive and Lawford Road
- Weston Road and Chatfield Drive
- Weston Road and Stanton Avenue

Conclusion

These recommendations have been developed with the aim of promoting sustainable and active travel, such as walking, cycling, and public transportation, while also enhancing road safety for all residents and visitors of the neighborhood. Additionally, the recommendations seek to improve connectivity and accessibility, and support mobility for all age groups and road users. The goal is to create a welcoming and inclusive neighbourhood that is safe and accessible for everyone.

For more information, please contact Peter Pilateris, Director of Transportation and Fleet Management Services, ext. 6141.

Attachments

- 1. Lawford Road Area Study Map
- 2. Lawford Road Area Traffic Study Executive Summary
- 3. Detailed cost breakdown of the proposed improvements

Prepared by

Sadia Khan, Traffic Specialist, extension 6178 Margie Chung, Manager, Traffic Engineering, extension 6173

In Consultation with

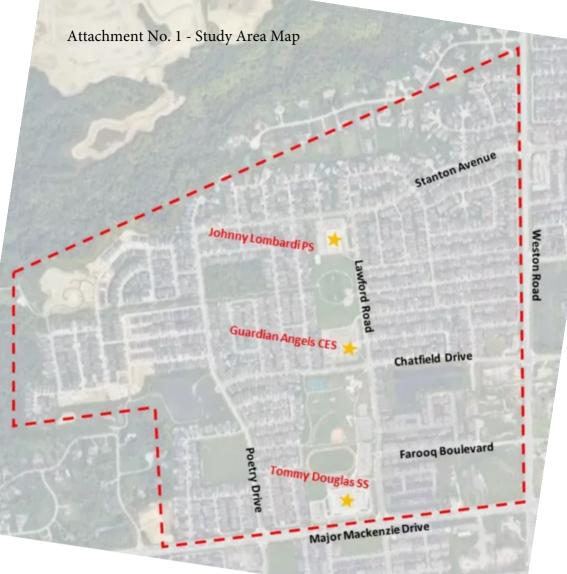
Dorothy Kowpark, Program Manager, Active and Sustainable Transportation Nancy Cronsberry, Manager, Bylaw Enforcement Services

Approved by

Reviewed by

Nick Spensieri, City Manager

Zoran Postic, Deputy City Manager Public Works



Attachment No. 2 Lawford Road Area Neighbourhood Traffic study Executive Summary

Study Area

The Lawford Road area neighbourhood Traffic Study was conducted in a relatively new residential subdivision located in the southern half of Block 40 of Ward 3. Major traffic generators include Johnny Lombardi Public School, Guardian Angel Catholic Elementary School, Tommy Douglas Secondary School and Chatfield District Park. The Lawford Road Neighbourhood is classified as a 40 km/h block under the City's Speed Limit Policy. The study area is shown in **Figure E-1**.

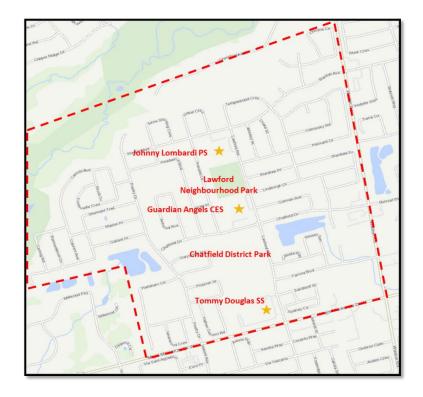


Figure E-1 Study Area

The Lawford Road neighbourhood contains all unsignalized intersections and one roundabout at Chatfield Drive and Lawford Road. Access to the neighbourhood is provided via Weston Road to the east and Major Mackenzie Road to the south. The

Regional intersections along the boundary of the neighbourhood are signalized and are as follows:

- Major Mackenzie Drive and Poetry Drive
- Major Mackenzie Drive and Lawford Road
- Weston Road and Chatfield Drive
- Weston Road and Stanton Avenue

The Lawford area has several traffic calming measures in place, including medians, bump-outs, and curb extensions. The neighbourhood is designated as a 40 km/h speed zone, and there are sidewalks along both sides of collector roads. The City has also installed flex post signs, bollards, and Slow School Zone pavement stencils near schools, as well as radar message boards and Slow Down Vaughan lawn signs for residents. Cycling routes are proposed for Poetry Drive in 2028 and Stanton Avenue in 2030.

Office Review

In 2018, residents in the area identified concerns with the traffic volume on Sedgewick Place. City traffic staff conducted a review and implemented mitigation measures to manage traffic better and improve safety. A follow-up review was to be conducted, which is the purpose of this report.

The City also proposed consultation with the York Region District School Board, the York Catholic District School Board, and the Student Transportation Services of York Region due to the bell times at the three schools occurring at the same time, creating significant congestion on Lawford Road during the period leading up to and immediately following the arrival and dismissal bells.

A significant amount of background data was reviewed for this study, consisting of collision data, ATR data (volume and speed), turning movement counts, origin-destination survey, parking data and a review of traffic impact studies in the area. This data was used to characterize traffic conditions in the neighbourhood and determine the potential need for changes to traffic control and/or pedestrian and cycling facilities. The following was noted:

 There is no evidence of an issue with traffic infiltration into the Lawford Road study area from adjacent Regional roads, nor is there any evidence of traffic using Sedgewick Place as a shortcut by traffic outside of the area bounded by Chatfield Drive, Lawford Road, Stanton Avenue and Weston Road. The higher levels of traffic on Sedgewick Place are indicative of it being the only outlet from the aforementioned area to the north of Chatfield Drive and east of Lawford Road.

- There is a high number of on-street parking in conjunction with the three schools, particularly Tommy Douglas Public School, where vehicles were noted as parking illegally on both sides of Lawford Road; the remaining collector roads (Chatfield Drive, Poetry Drive and Stanton Avenue) have relatively low demand for parking.
- Future development is planned in the southeast portion of the neighbourhood; a
 review of the traffic impact studies' recommendations indicates that the planned
 development should be accommodated within the existing road network without
 requiring any physical changes to the roadway however signal timing
 adjustments will be required at the four signalized intersections bordering the
 neighbourhood.
- A review of speeds indicates that portions of Chatfield Drive, Stanton Avenue and Poetry Drive satisfy warrants to implement mitigative measures and horizontal measures could be considered.
- No additional locations were identified for crossing guards.
- No locations (based on traffic) are warranted for an all-way Stop control.
- No locations are warranted for a traffic signal.
- Several locations are warranted for a pedestrian crossover based on pedestrian crossing volumes or pedestrian desire lines, traffic volumes and the absence of a nearby controlled crossing location – these are:
 - Stanton Avenue and Virtue Crescent (west leg)/Ironside Drive
 - Lawford Road and Lindbergh Drive (with the supervised crossing at Gorman Drive being relocated to this location)
 - Lawford Road and Chatfield Drive (roundabout)
 - o Trail Crossings at Poetry Drive, Headwind Boulevard, and Ironside Drive
- A cycling facility has been proposed on the four collector roads aligned with the City's bicycle and pedestrian master plan. There is an opportunity to provide an in-boulevard cycling facility (multi-use pathway or cycle track) on Lawford Road.
- An analysis of intersection operations indicates that all locations operate at an
 acceptable level of service, although there are brief periods of significant
 congestion in conjunction with the AM and PM peak hours lasting no more than
 approximately 15 minutes.

Overall Study Area Observations

The following summarizes overall study area observations:

- Significant congestion was observed in conjunction with the bell times at the three schools
- Road width varies between 9.0 13.0 m, in wider sections presumably allowing for parking on both sides of the roadway. In wider sections, excessive width encourages higher operating speeds.
- Lane marking inconsistencies noted at Lawford Road and Faroog Boulevard
- Limited sightlines for traffic exiting Parisienne Road onto Stanton Avenue
- Unsafe arrival and dismissal activities noted (parking and/or stopping in unsafe locations or violating signs or City bylaws)
- Opportunities to improve signs, pavement markings, and curb cuts to assist pedestrians and cyclists in the neighbourhood

Consultation Summary

Throughout the project, CIMA met with stakeholders and members of the public. Concerning the stakeholders, CIMA with the City project team had two agency meetings with stakeholders representing various internal City departments and selected external partners (Region of York, York Regional Police, York Transit), had a meeting with school board officials and transportation services and met with a focus group consisting of school board officials, principals and parent council members from the three schools. CIMA staff and the City project team also had two public engagement sessions, one in June 2023 that was virtual and one in September 2023 that was in person. In the initial meeting, the consultant team provided the results of the preliminary findings and problem identification to the public. Public input and comments were also received. The second public engagement provided the opportunity to report the study recommendations and gain further feedback from the public. Two separate online surveys were conducted during each public engagement. **Table E-1** summarizes the public and stakeholder engagement events and common themes that were identified.

Table E-1 – Public and Stakeholder Engagement Events and Common Themes

Event	Key Themes and Findings
Agency Meeting #1 – June 13 th	Regional plans for the surrounding road network, feasibility of changing bell times, plans for new schools, feasibility of providing a direct connection to the schools from Lawford Neighbourhood Park and request for pedestrian crossovers.

Event	Key Themes and Findings
Online Survey #1 – June 1 to June 22nd	 High participation rate (13%); 381 individuals completed the survey Common concerns with traffic were speeding, unsafe behaviours associated with pick up and drop off and aggressive driving Desire for the neighbourhood to be safe for pedestrians, cyclists, transit users and motorists
Public Engagement Session #1 – June 15th Meeting with Region of York	 Traffic congestion in the neighbourhood Issues with signs and pavement markings School pick-up and drop-off Concerns with illegal parking Traffic calming Additional school crossing guards Future pedestrian and cycling facilities Future developments Staggering the bell times for the three schools along Lawford Road Concerns with illegal parking Issues with changing bell times
School Board and Transportation Services – July 19th	New school to open in Kleinberg which should reduce enrollment at Johnny Lombardi Public School
Focus Group Meeting	 Need for enforcement of stopping prohibitions Infrastructure for storing bicycles and scooters at schools Educating the public on the benefits of cycling Understanding traffic infiltration on Sedgewick Place, noted as not being an issue Issues with changing the bell times Encouraging parents to park in safe locations when dropping off their children
Online Survey #2 – August 1 to September 11	 Lower participation rate (5%); 172 individuals completed the survey Higher priority should be given to traffic calming and traffic management treatments (with exception of one-way streets)
Public Engagement Session #2 – September 19	 Overall strong public sentiment for the staggering of bell times for the three schools to help disperse the simultaneous peaking in traffic Concern with reduction in parking spaces as a result of cycling facilities on street Support for pedestrian crossovers Need for education for kids on cycling on crosswalks/crossing the street Traffic congestion in the neighbourhood and on Stanton Drive and Chatfield Drive turning onto Weston Road Educating parents on where they can park Traffic calming

Identified Issues and Corresponding Recommendations

Based on the review of the study area and its characteristics, the office review (review of traffic conditions, collision history, field investigation and public consultation findings (first and second round of engagement), the following key broad issues and corresponding treatments were identified within the Lawford Road Neighbourhood.

- A need to manage school-related congestion through making a formal inquiry
 with the school boards into shifting bell times at one or two of the three schools
 and further encouraging active school travel.
- A need to reduce operating speeds by reducing the width of the travel lanes
 using edge line and centre line markings, tightening the radius at the corner of
 Chatfield Drive and Poetry Drive, radar message boards, and additional flex post
 sign installations on Poetry Drive.
- A need to provide/improve pedestrian facilities by installing pedestrian
 crossovers at key locations in the neighbourhood in consideration of pedestrian
 and traffic movements, pedestrian desire lines and the lack of a nearby dedicated
 controlled crossing and evaluating the feasibility of providing a dedicated path
 from the existing park path and the two schools
- An opportunity to provide/improve cycling facilities by investigating the feasibility of implementing dedicated cycling facilities in consideration of cross section (which varies between 9.0 13.0 metres), parking usage and adjacent residential development, parking aprons and adjacent infrastructure and investigate the feasibility of installing an in-boulevard cycling facility on the west side of Lawford Road, given the presence of the two parks and three schools and the availability of land (owned by the two school boards and the City)
- A need to discourage unsafe pick-up and drop-off activities at the three schools by encouraging active transportation as part of the Safer School Zone Strategy, reinforcing existing no-stopping bylaws, implementing stopping restrictions in undesirable locations, use of flex post signs if required to discourage further stopping restrictions in undesirable locations and flex post signs along the median with bollards and pavement stencils (on Stanton Avenue in front of Johnny Lombardi Public School and Chatfield Drive in front of Guardian Angels Catholic School)

Additional minor treatments were identified throughout the neighbourhood and specifically at the three schools.

These treatments are multi-faceted and if implemented together they will have the following benefits, as illustrated in **Figure E-2.**

Encourages sustainable and active travel

Improves road safety

Supports mobility for all road users

Improves road connectivity and accessibility

Supports mobility for all age groups

Figure E-2 Benefits of treatments

An implementation plan, illustrated in **Figure E-3**, identifying short-term 'quick wins' and medium-term and long-term time frames for the treatments.

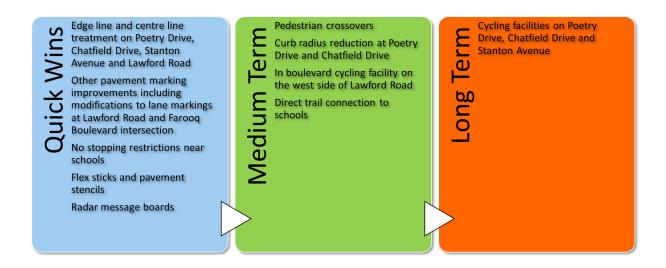


Figure E-3 Implementation Plan

Maps Of Improvements

Figure E-4 shows the traffic calming measures proposed (the number on the map corresponds to the number listed below). Traffic calming measures included:

- 1. Painted edge lines and centre lines
- 2. Curb radius reductions (flex signs)/remove median
- 3. Radar message boards
- 4. Flex signs, bollards and painted stencils (SLOW SCHOOL ZONE) added near schools
- 5. Local traffic only signs

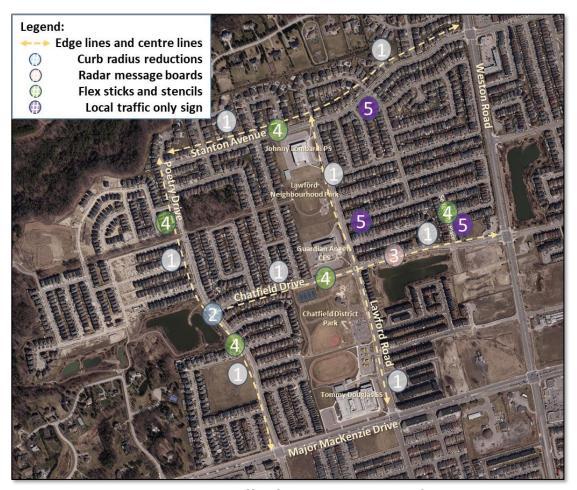


Figure E-4 Proposed Traffic Calming Measures for short-term

Figure E-5 shows the pedestrian improvements proposed (the number on the map corresponds to the number listed below). Pedestrian improvements included pedestrian crossovers at locations 1-4 and to investigate the feasibility of a park path direct connection to the schools (shown as a dashed red line).

- 1. Stanton Avenue and Ironside Drive (west leg)
- 2. Trail crossings (Poetry Drive, Headwind Boulevard and Ironside Drive)
- 3. Lindbergh Drive (south leg) relocate supervised crossing location at Gorman Drive to this location
- 4. All four entry legs to roundabout at Chatfield Drive and Lawson Drive



Figure E-5 Proposed Pedestrian Improvements for Medium term.

Note: Feasibility and design study will be conducted as part of the implementation phase. These studies will confirm the type of facility and costs. Operations and maintenance will need to be considered.

The direct path connection between the two schools and park requires coordination and partnership with the school boards and school administration. Operations and maintenance will need to be considered.

Figure E-6 shows the existing recreation trail, existing Regional cycling route, proposed future City cycling routes and a proposed in boulevard cycling facility along Lawford Road. A feasibility and design study will be required for the proposed cycling routes.

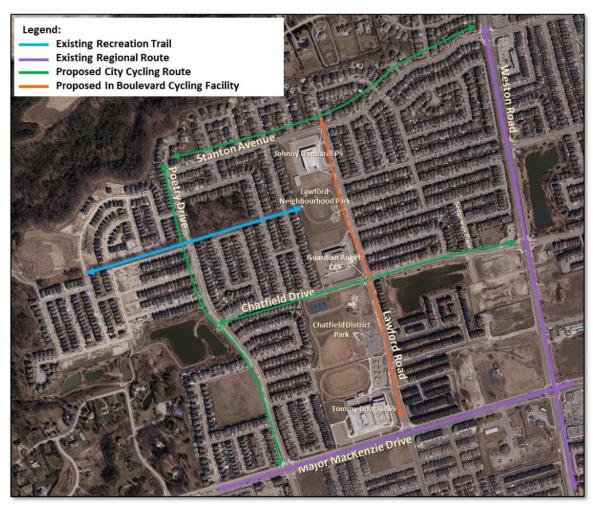


Figure E-6 Existing and Proposed Cycling Facilities for medium and long term.

Note: Feasibility and design study will be conducted as part of the implementation phase. These studies will confirm the type of facility and costs. Operations and maintenance will need to be considered.

Attachment No. 3 – Preliminary Cost Estimates in details

Preliminary Cost Estimates

Type of Measures	Estimated Costs
Short-Term Improvements (1-3 Years) *	* 4 0 0 0 0
Pavement Markings:	\$13,000
Edgeline and Centre line on Poetry Drive, Chatfield Drive,	
Stanton Avenue and Lawford Road	
Other pavement markings improvements including special	
stencils, lane modifications at Lawford Road and Farooq Blvd.	£40,000
Signage: flexi-signs, traffic signs, parking signs, speed boards at various locations	\$18,000
Education and awareness – parking brochure, roundabout education,	\$1,000
safe driving	¥ , , = = =
Total Estimated Costs for Short-Term Improvements	\$32,000
*Subject to budget approval, short term improvements will commence	, ,
in 2024.	
Medium-Term Improvements (3 to 5 years)	
Pedestrian Crossovers (PXO): Feasibility, design, and implementation	
Chatfield Drive at Lawford Road (roundabout) (PXO Type D)	\$52,000
Trail crossing at Poetry Drive, Headwind Blvd, Ironside Drive	\$40,000
(PXO Type D)	
 Stanton Avenue at Ironside Drive (PXO Type B/C) 	\$75,000
 Lawford Road at Lindbergh Drive (PXO Type B/C) 	\$75,000
Note: The PXO for Stanton Avenue at Ironside Drive and Lawford	
Road at Linbergh Drive to coordinate with the design study for the	
cycling facility on Lawford Road and Stanton Avenue.	
Evaluate Cycling facility on Lawford Road through functional and	
detailed designs:	
Functional Study	\$50,000
Detailed Design	\$200,000
Construction	\$2.5M-\$3.0M
Assess the feasibility of providing a dedicated path (about 250m) from	
the existing park and the two schools:	_
Feasibility study and Design	\$50,000
Construction	\$125,000
Note: Require Collaboration and partnership between the city, the two	
schools and school boards for implementation	
Total Estimated Cost for Medium-Term Improvements	\$3.2M to \$3.7M
Long-Term Improvements (5+ Years)	
Evaluate the feasibility for Cycling facilities on Poetry Drive, Chatfield	
Drive, and Stanton Avenue:	Ф7 Г 000
Functional Study	\$75,000 \$400,000
Detailed Design	\$400,000
Construction (5+ years)	\$1.0M - \$1.5M
Total Estimated Cost for Long-Term Improvements	\$1.5M to \$2.0M

Note: All improvements subject to budget approval process and capital project planning