



Transportation Master Plan Update

Appendix E – Transportation Policies

Town of East Gwillimbury
Final Report

March 2024



Traffic Policy Resolution Process

PURPOSE:

The purpose of traffic policies is to provide guidelines for the resolution of various traffic complaints or requests received by the Town of East Gwillimbury.

CRITERIA:

- All requests received from residents or any party will be considered.
- All requests will be accepted by email.
- Phone requests will be required to be sent via email or mail

LOG INTO SYSTEM:

- A service request will be created on CityWide for all requests by Town staff (Customer Service and/or Engineering and Public Works staff)
- A work order will be created on CityWide for requests that are required investigation and technical work i.e. traffic studies, pedestrian counts etc.
- A correspondence (email or mail) will be sent to the complainant/requestor with the number of the service request and/or work order for reference and follow up.

TECHNICAL STUDIES:

- Staff conduct studies as outlined in the traffic policies
 - If study warrants change:
 - Report to Council created
 - Upon approval, by-law created and GIS updated
 - Work/installation is carried pending budget approval
 - If study doesn't warrant change:
 - Request denied

Engineering and Public Works

Policy #:	60-2800-CP-001
Branch:	Traffic and Transportation
Effective Date:	
MINIMUM WARRANTS FOR INSTALLATION OF ALL-WAY STOP SIGNS	

PURPOSE:

Procedures to be followed when considering the installation of all-way stop sign control.

POLICY:

All way stop sign control will be considered upon a request from Council, resident(s), or staff.

The following basic steps will be followed upon receiving said request:

- Respond to the requestor outlining the steps and expected timetable to completing the evaluation and reporting;
- Complete the required data collection and technical assessment;
- Prepare a report to Council with staff recommendations;
- Follow-up with requestor regarding the outcome and Council report timetable.

Field Investigation

The main items in the field study are:

- Records of recent (36 months) accidents;
- Vehicular and pedestrian volumes entering the intersection (8-hour counts);
- Sightline review considering horizontal and vertical curvature of the roads, trees, parked cars, and any other obstructions;
- Interim measures – traffic signals are warranted but not yet available.

The above criteria are detailed in **Attachment 1** for collector and local roads. The warrant is met under the following compliance conditions:

- Warrant 1, Warrant 2, or Warrant 5 may be met independently without requiring the need for Warrants 3 or 4 to be met; and,
- Warrant 3 and Warrant 4 must both be met simultaneously. If Warrant 3 and Warrant 4 are both met, Warrants 1, 2 and 5 are not required.

Attachment 2 indicates situations in which all-way stop sign control should not be installed.

Attachment 1 (Collector Roads)

DATE: _____

LOCATION: _____

<u>WARRANT</u>	<u>DESCRIPTION</u>	<u>MINIMUM REQUIREMENT</u> <u>(a)</u>	<u>COMPLIANCE MEASURED %</u> <u>(b)</u> [b/a (%)]	
1. Sightlines	<p>Under some circumstances, sufficient sight distance is not available for traffic exiting the stop-controlled approaches of a two-way stop intersection, based on geometric design requirements. If all efforts to improve the sight distance have been exhausted and the sight distance cannot be brought up to the guidelines, conversion of the intersection to all-way stop control may be considered. Special advance warning or overhead flashing lights may be necessary to augment the control if vertical or horizontal alignment is a factor.</p> <p>Note: This warrant is met if the sightline is insufficient (i.e. the compliance % is less than 100%).</p>	<p>As per TAC Guidelines</p> <p>_____ metres</p>	_____ metres	
2. Accident Hazard	<p>Minimum of total reported accidents of types susceptible to correction by all-way stop installation, per year, over a three year period. Only those collisions susceptible to improvement through multi-way stop control must be considered (i.e., right angle and turning type collisions).</p>	<p>3 per year (9 over a 3 year period)</p>	Collisions per year	
3. Vehicular and Pedestrian Volume	<p>a) The total vehicle volume on all intersection approaches exceeds 375 vehicles per hour for each of the highest <u>eight</u> hours of the day.</p>	<p>375</p>	Vehicles per hour	

<u>WARRANT</u>	<u>DESCRIPTION</u>	<u>MINIMUM REQUIREMENT</u> (a)	<u>COMPLIANCE MEASURED %</u> (b) [b/a (%)]	
	<p>AND</p> <p>b) The combined vehicle and pedestrian volume on the minor street exceeds 150 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of <u>the same eight hours</u> as the total volume; OR the combined vehicle and pedestrian volume on the minor street exceeds 120 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of <u>the same eight hours</u> as the total volume, with an average delay to all minor street traffic (vehicles and pedestrians) of greater than 30 seconds for the entire eight hour period.</p>	<p>150 (or 120, with delay criteria met)</p>	<p>Vehicles and Pedestrians Combined</p> <p>_____</p>	
<p>4. Volume Split</p>	<p>a) Minor Approach 8-hr Volume / b) Major Road 8-hr Volume</p> <p>Where: a) Minor Approach Volume includes vehicles and pedestrians wishing to cross the major roadway; and, b) Major Approach Volume includes vehicles entering the intersection.</p> <p>Note: The minor approach volume must not be less than 30% or 25% of the total volume entering the intersection. based on the same eight hour volume</p>	<p>30/70 (4-leg intersections)</p> <p>25/75 (3-leg intersections)</p>	<p>a) _____ / b) _____</p>	
<p>5. Interim Measure</p>	<p>Are traffic signals warranted but not yet available?</p>	<p>Traffic Signal Warrant Compliance</p>		<p>N/A</p>
<p><u>COMMENTS</u></p> <p>Study Carried Out By: _____ Analysis Carried Out By: _____</p>				

Attachment 1 (Local Roads)

DATE: _____

LOCATION: _____

<u>WARRANT</u>	<u>DESCRIPTION</u>	<u>MINIMUM REQUIREMENT</u> <u>(a)</u>	<u>COMPLIANCE MEASURED %</u> <u>(b)</u> [b/a (%)]	
1. Sightlines	<p>Under some circumstances, sufficient sight distance is not available for traffic exiting the stop-controlled approaches of a two-way stop intersection, based on geometric design requirements. If all efforts to improve the sight distance have been exhausted and the sight distance cannot be brought up to the guidelines, conversion of the intersection to all-way stop control may be considered. Special advance warning or overhead flashing lights may be necessary to augment the control if vertical or horizontal alignment is a factor.</p> <p>Note: This warrant is met if the sightline is insufficient (i.e. the compliance % is less than 100%).</p>	<p>As per TAC Guidelines</p> <p>_____ metres</p>	_____ metres	
2. Accident Hazard	<p>Minimum of total reported accidents of types susceptible to correction by all-way stop installation, per year, over a three year period. Only those collisions susceptible to improvement through multi-way stop control must be considered (i.e., right angle and turning type collisions).</p>	<p>3 per year (9 over a 3 year period)</p>	Collisions per year	
3. Vehicular and Pedestrian Volume	<p>a) The total vehicle volume on all intersection approaches exceeds 200 vehicles per hour for each of the highest <u>four</u> hours of the day.</p>	<p>200</p>	Vehicles per hour	

<u>WARRANT</u>	<u>DESCRIPTION</u>	<u>MINIMUM</u>	<u>COMPLIANCE</u>	
		<u>REQUIREMENT</u>	<u>MEASURED %</u>	<u>[b/a (%)]</u>
		<u>(a)</u>	<u>(b)</u>	
	<p>AND</p> <p>b) The combined vehicle and pedestrian volume on the minor street exceeds 75 units per hour (all vehicles plus pedestrians wishing to enter the intersection) for each of <u>the same four hours</u> as the total volume.</p>	75	Vehicles and Pedestrians Combined	
4. Volume Split	<p>a) Minor Approach 4-hr Volume / b) Major Road 4-hr Volume</p> <p>Where:</p> <p>a) Minor Approach Volume includes vehicles and pedestrians wishing to cross the major roadway; and,</p> <p>b) Major Approach Volume includes vehicles entering the intersection.</p> <p>Note: The minor approach volume must not be less than 30% or 25% of the total volume entering the intersection, based on the same four hour volume.</p>	<p>30/70 (4-leg intersections)</p> <p>25/75 (3-leg intersections)</p>	<p>a) _____</p> <p>/</p> <p>b) _____</p>	
5. Interim Measure	Are traffic signals warranted but not yet available?	Traffic Signal Warrant Compliance		N/A

COMMENTS

Study Carried Out By: _____ Analysis Carried Out By: _____

Attachment 2

Multi-way stop sign controls should not be used under the following conditions:

1. Where the protection of pedestrians, school children in particular, is a prime concern. This concern can usually be addressed by other means;
2. As a speed control device;
3. On roads where progressive signal timing exists;
4. On roads within urban areas having a posted speed limit in excess of 60 km/h;
5. At intersections that are not roundabouts having less than three, or more than four, approaches;
6. At intersections that are offset, poorly defined or geometrically substandard;
7. On truck or bus routes, except in an industrial area or where two such routes cross;
8. On multi-lane approaches where a parked or stopped vehicle on the right will obscure the STOP sign;
9. Where traffic would be required to stop on grades;
10. As a means of deterring the movement of through traffic in a residential area;
11. Where visibility of the sign is hampered by curves or grades, and insufficient safe stopping distance exists even with the implementation of advance warning; or
12. Where any other traffic device controlling right-of-way is permanently in place within 250 metres, with the exception of a YIELD sign.

<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-001		
MINIMUM WARRANTS FOR INSTALLATION OF ALL-WAY STOP SIGNS			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:	Signature		

Engineering and Public Works

Policy #:	60-2800-CP-002
Branch:	Traffic and Transportation
Effective Date:	
CROSSING GUARD SERVICE	

PURPOSE:

To set guidelines for the implementation of school crossing guard(s) at a specified road crossing in the Town of East Gwillimbury.

POLICY:

1. **Attachment 1** outlines procedures that are based on a warrant analysis in accordance with the School Crossing Guard Guide (SSGG) published by the Ontario Traffic Council in 2023.
2. The time periods for gap studies shall be during AM drop off and PM pick up times and between 12:00 noon – 1:00 p.m. These times are subject to change and consideration of local conditions (i.e. time shifting of school start times).
3. Gap studies and exposure index studies are not to be completed on days having “inclement” weather, on days directly before or after holidays, on days near the beginning or end of the school year, or on any other atypical days with higher or lower crossing volumes, including special event days, due to the obvious opportunity for criticism of the data contained in the report.
4. School crossing guard locations will be identified through proactive review of pedestrian safety on school walking routes and through community and school board (benefitting school) engagement.
5. Staff will identify and recommend the number and location of crossing guards based on the most appropriate engineering analysis in accordance with the SCGG published by the Ontario Traffic Council and in compliance with the Highway Traffic Act.
6. Where a request for a crossing guard is received from the public and the engineering analysis indicates that the specified warrants are not met, Council may implement a school crossing guard on an interim or permanent basis in consideration of other factors deemed reasonable by Council.

Attachment 1

Requests for School Crossing Guards

Existing Schools

- Request(s) for a new school crossing guard location or for the placement of an additional guard at a previously approved location may be submitted to the Town from any member of the public. The written requests may be supported by resolutions or meeting minutes from the School Council or other community organization.
- A warrant study shall be conducted in accordance with the School Crossing Guard Guide and the findings of the study shall be reported to Council with recommendations.
- Staff will report to Council within a reasonable time of receiving the initial request and provide recommendation(s) based on the warrant analysis and other considerations.
- Relocation of an existing crossing guard location to a new location in the same area due to changes in operations and traffic/pedestrian flow, can be undertaken by staff and does not require further Council Approval. A written memorandum to Mayor and Council advising of the proposed school crossing relocation must be provided prior to the relocation taking effect. Relocation should ideally be implemented during the summer break and not during the school year.

New Schools

- Prior to a new school opening, staff shall inspect the school site and vicinity; consult with the school board and the principal of the new school; and review input from residents. Staff will present information with recommendations to Council to either implements or not implement a temporary school crossing guard(s) for the new school.
- If a temporary crossing guard is implemented, then a school crossing warrant study in accordance with the School Crossing Guard Guide shall be conducted within two (2) months following the school opening.
- Results of the school crossing warrant study shall be reported to Council with recommendations to implement a permanent school crossing at the temporary location or relocate the school crossing or remove the school crossing and temporary crossing guard.

Selection of Locations Proximity to a School

In general, school crossing guards should be deployed at crossing facilities where the subject school to be served is visible or in close proximity. In addition, the site inspection process should verify which route students prefer to take.

Minimum Student Crossing Volume

The minimum number of students crossing during the school peak periods is set at a threshold of 20 students.

Traffic Safety Analysis and Warrants

The recommended practice for determining a school crossing guard warrant combines traffic engineering principles and site inspection (observations).

Based on a best practice review of several municipalities within Ontario, the SCGG recommends two methods to determine if a crossing guard is warranted at any location:

1. Exposure Index Method: a warrant methodology suitable for controlled crossing facilities (signalized intersection, all-way stop controlled, pedestrian crossovers, and minor street with stop controls) that have conflicting movements between vehicular and student volumes; or
2. Gap Study Method: warrant methodology suitable for minor street stop controlled intersections or mid-block uncontrolled crossing locations. The Gap Study method may also be used to evaluate some controlled crossing facilities.

Site Inspection

The purpose of the inspection is to study and observe hazards at a potential school crossing location. The inspection would capture the overall operation and road geometrics at the potential school crossing such as number of students crossing, sign visibility, road grade, presence of sidewalks, on-street parking, proximity to school, posted speed limit, presence of traffic control devices, road conditions, etc.

Exposure Index Method

The Exposure Index establishes the 85th percentile threshold of student crossings and conflicting vehicular movement volumes at existing crossing locations. The 85th percentile threshold is then used as the existing service level to evaluate the level of conflicting vehicular and student volumes at potential school crossing guard locations.

The Exposure Index Method can also be used as a prioritization tool because it allows for an easy comparison of the level of conflicting movements between different school crossing guard locations.

The OTC provides a spreadsheet analysis tool to collect and plot the Exposure Index Information. This spreadsheet tool will be utilized for the analysis by staff of engineering consultants. The Exposure Index must be established for each type of crossing using onsite data.

Exposure Index Study Warrants

Staff will input the conflicting vehicular volume and student crossing volume to the appropriate table of the Exposure Index template. If the resulting point on the graph that corresponds to the location being evaluated is located above the 85th percentile line, then the Exposure Index warrant is met. If the resulting point is plotted below the 85th percentile line, then the signalized intersection being evaluated does not meet the Exposure Index threshold for requiring school crossing guards.

GAP Study

The GAP Study is a measure of the number of safe gaps in the traffic recorded in five minute intervals. In addition, the volume of traffic passing through the crossing in five minute intervals and number of students crossing are recorded and any observed pedestrian/vehicular conflicts documented.

GAP Study Warrants

In accordance with the SCGG a location subject to a GAP Study analysis meets the warrant for a school crossing guard if:

1. There are less than four (4) safe gaps in traffic in fifty percent of the five minute timed intervals on a road having a posted speed limit of not more than 60 km/h; and,
2. The number of students crossing meets or exceeds the minimum number previously established in the Policy (20).

OR

3. Student/vehicle conflict is observed or documented, or the potential for conflict is high due to poor crossing sight lines because of the road geometrics, high volume of traffic or the lack of a logical crossing point resulting in students crossing at various locations.

Note that safe gaps should be calculated as per the SCGG using default values presented in Appendix D, unless adjustments to the default values are appropriate, according to engineering judgement.

Warrants at Roundabouts

The SCGG recommends that the Exposure Index Method and the GAP Study Method be used to evaluate the need for school crossing guards at a roundabout. It is recommended that additional studies be done to monitor the need for school crossing guards at roundabouts. The following aspects should be considered when completing a warrant:

Exposure Method: Determine conflicting vehicular volume to the student crossing volume, the initial phase is to develop an Exposure Index for roundabouts. The second phase is to use the Exposure Index Method to evaluate candidate roundabouts as to the need for school crossing guards. The conflicting movements on a leg of a roundabout would be those that travel through the crosswalk.

GAP Study Method: Calculate the safe gap time for the leg that is being evaluated for a school crossing guard then the frequency and length of gaps present for pedestrians to cross the leg would have to be surveyed. Any time a vehicle enters or exits the roundabout past the leg that is being evaluated, the measurement for a gap would be reset.

Where possible, school crossings should not be established at roundabouts with high traffic volumes. Staff will review the desired travel lines within the community and will recommend the most appropriate location for a school crossing relative to the location of the roundabout.

Where required, fully signed Pedestrian Crossovers as described in the Ontario Traffic Manual Book 15 (Level 2 Type B) may be required at roundabouts. Staff will assess these types of pedestrian cross-over treatments and make recommendations to Council.

Warrants for Lunch Time Crossing Guards

Lunch time crossings should be considered based on the proximity to the school, school policies for allowing students to leave the premises during school hours and the above warrants. If a lunch time guard is requested, a warrant study shall be conducted in accordance with the School Crossing Guard Guide and the findings of the study brought back to Council with recommendations.

<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-002		
CROSSING GUARD SERVICE			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:	Signature		

Engineering and Public Works

Policy #:	60-2800-CP-003
Branch:	Traffic and Transportation
Effective Date:	
INSTALLATION OF PEDESTRIAN CROSSOVERS	

PURPOSE:

To establish a consistent approach in determining if pedestrian crossovers are warranted at specific intersections or mid-block locations on the Town of East Gwillimbury public right-of-way.

POLICY:

Pedestrian crossover installation requests will be investigated upon a request from Council, resident or staff.

The following basic steps will be followed upon receiving said request:

- Respond to the requestor outlining the steps and expected timetable to completing the evaluation and reporting;
- Complete the required data collection and technical assessment;
- Prepare a report to Council with staff recommendations;
- Follow-up with requestor regarding the outcome and Council report timetable.

The pedestrian crossover assessment will follow the steps outlined in the Ontario Traffic Manual (OTM) Book 15 – Pedestrian Crossing Treatments, as summarized below.

Field Investigation

1. Before considering any form of pedestrian crossing, a field investigation must be performed to assess whether or not there is adequate stopping sight distance at the location according to the Transportation Association of Canada Geometric Design Guidelines for Canadian Roads; and,
2. Confirmation that the distance from other traffic control devices is at least 200 metres.

Desktop Review

1. If it is found that there is adequate sight distance and the distance to the nearest traffic control device is at least 200 metres, vehicle and pedestrian counts should be performed along with pedestrian delay documented for the peak 8 hours during the day. The data should be collected and used in accordance with the Ontario Traffic Manual Book 12 – Justification 6. The Justification 6 charts are provided in **Attachment 1**. Note that pedestrian volumes should be adjusted to account for assisted users as per OTM Book 15.
2. If traffic signals are not warranted for pedestrians, the OTM Book 15 Decision Support Tool shall be used. The Decision Support Tool is shown in **Attachment 2**. If the site is a candidate for pedestrian crossovers, continue to step 3 below.
3. In accordance with Ontario Traffic Manual (MTO) Book 15, pedestrian crossover warrants are based on **Attachment 3** – Pedestrian Crossover Selection Matrix.

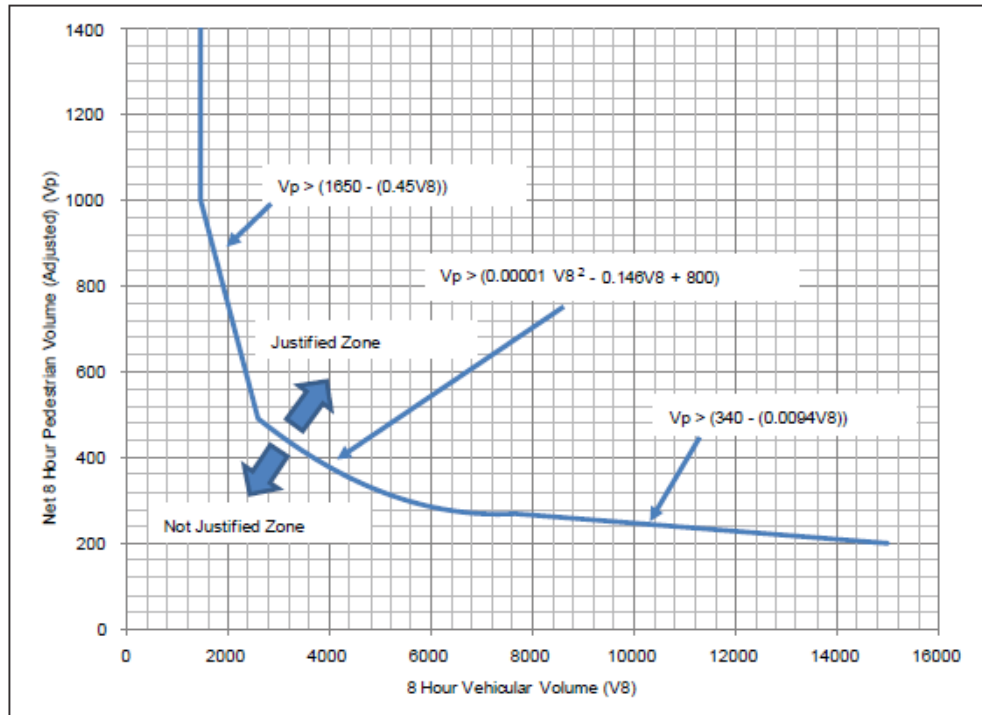
Other Considerations

According to Section 4.9 of OTM Book 12:

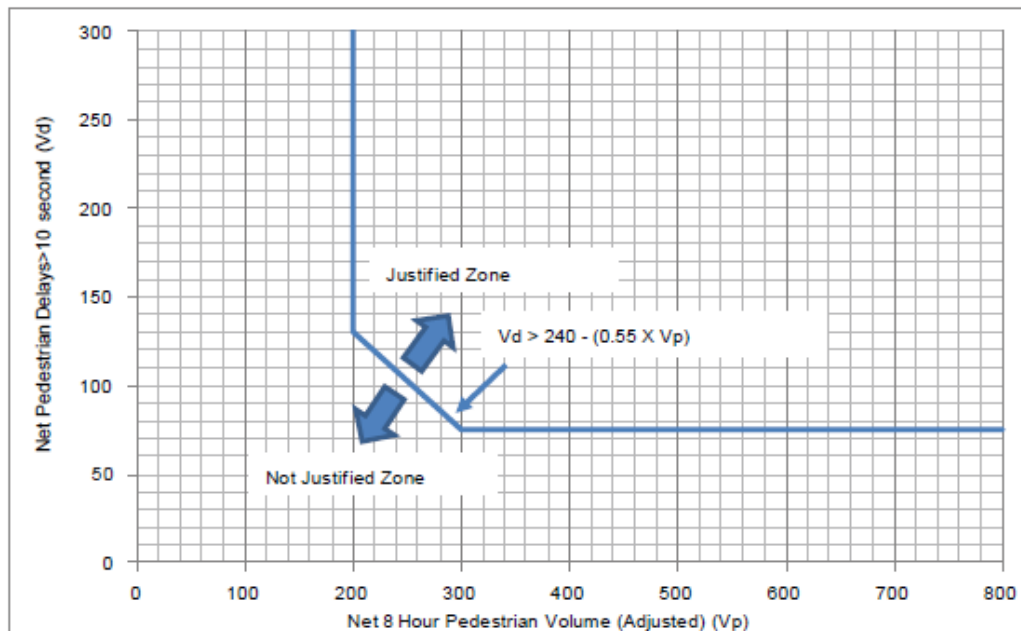
- A PXO can be installed on roadways with a maximum of 4 lanes of two-way traffic or 3 lanes of one-way traffic;
- Vehicular traffic volumes are collected during the 8 hours with the highest pedestrian volumes;
- A PXO must not be used where the road volume exceeds 35,000 ADT; and,
- PXOs should not be installed within 200 m of other signal-protected pedestrian crossings.

Attachment 1

OTM Book 12 Justification 6 – Pedestrian Volume

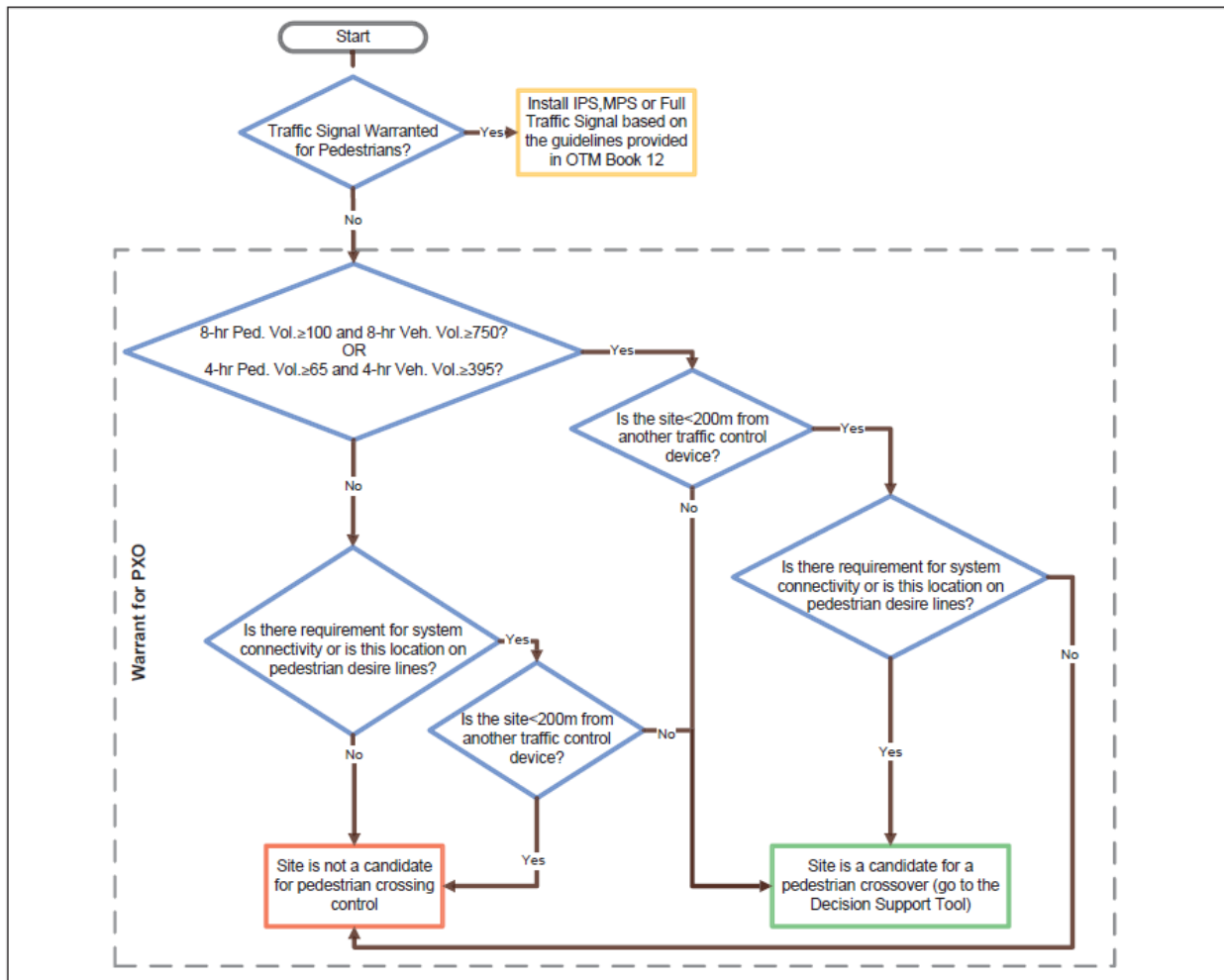


OTM Book 12 Justification 6 – Pedestrian Delay



Attachment 2

Ontario Traffic Manual Book 15 Decision Support Tool



Attachment 3

Ontario Traffic Manual Book 15 Pedestrian Crossover Selection Matrix

Book 15 • Pedestrian Crossing Treatments

Table 7: Pedestrian Crossover Selection Matrix

Two-way Vehicular Volume			Posted Speed Limit (km/h)	Total Number of Lanes for the Roadway Cross Section ¹			
Time Period	Lower Bound	Upper Bound		1 or 2 Lanes	3 lanes	4 lanes w/raised refuge	4 lanes w/o raised refuge
8 Hour	750	2,250	≤50	Level 2 Type D	Level 2 Type C ³	Level 2 Type D ²	Level 2 Type B
4 Hour	395	1,185					
8 Hour	750	2,250	60	Level 2 Type C	Level 2 Type B	Level 2 Type C ²	Level 2 Type B
4 Hour	395	1,185					
8 Hour	2,250	4,500	≤50	Level 2 Type D	Level 2 Type B	Level 2 Type D ²	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	2,250	4,500	60	Level 2 Type C	Level 2 Type B	Level 2 Type C ²	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	4,500	6,000	≤50	Level 2 Type C	Level 2 Type B	Level 2 Type C ²	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	4,500	6,000	60	Level 2 Type B	Level 2 Type B	Level 2 Type C ²	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	6,000	7,500	≤50	Level 2 Type B	Level 2 Type B	Level 2 Type C ²	Level 1 Type A
4 Hour	3,155	3,950					
8 Hour	6,000	7,500	60	Level 2 Type B	Level 2 Type B	Hatched	Hatched
4 Hour	3,155	3,950					
8 Hour	7,500	17,500	≤50	Level 2 Type B	Level 2 Type B	Hatched	Hatched
4 Hour	3,950	9,215					
8 Hour	7,500	17,500	60	Level 2 Type B	Hatched	Hatched	Hatched
4 Hour	3,950	9,215					

Type A
 Type B
 Type C
 Type D

Approaches to roundabouts should be considered a separate roadways.

¹The total number of lanes is representative of crossing distance. The width of these lanes is assumed to be between 3.0 m and 3.75 m according to MTO Geometric Design Standards for Ontario Highways (Chapter D.2). A cross sectional feature (e.g. bike lane or on-street parking) may extend the average crossing distance beyond this range of lane widths.

²Use of two sets of side mounted signs for each direction (one on the right side and one on the median)

³Use Level 2 Type B PXO up to 3 lanes total, cross section one-way.

The hatched cells in this table show that a PXO is not recommended for sites with these traffic and geometric conditions. Generally a traffic signal is warranted for such conditions.

<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-003		
INSTALLATION OF PEDESTRIAN CROSSOVERS			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:	Signature		

Engineering and Public Works

Policy #:	60-2800-CP-004
Branch:	Traffic and Transportation
Effective Date:	
RADAR MESSAGE SPEED BOARD	

PURPOSE:

To establish a guideline for the placement of the radar message speed board on Town roads.

POLICY:

Engineering and Public Works staff will receive and approve requests from Council and residents for the use of the radar message speed board system. The speed boards are deployed at one location for one to two months before being assigned to other locations. The rotation allows for maximum road coverage and equal use of the speed boards across the Town. In this regard, it is desirable to use a standard form to direct Engineering and Public Works on the utilization of the system. The radar message speed board installation procedures are detailed in **Attachment 1**.

Engineering and Public Works will install, secure, endeavor to monitor, replace and recharge the batteries and relocate the radar message speed board as directed. The radar message speed board will generally not be available for placement during winter road maintenance period (November to April) unless directed by the General Manager of Engineering and Public Works.

Engineering and Public Works staff are to maintain a log of all placements with the relevant information for follow-up by the Road Watch Committee or Council.

Attachment 1

Radar Message Speed Board Installation Procedure

- Add new request, including requesters contact information to List;
- Staff examine any existing speed studies and/or carry out a pneumatic speed study and determine:

Installation Determination

1. If the 85th percentile speed exceeds the posted speed limit by 25% or more and the ADT (both directions combined) is 500 or greater, installation of the sign is warranted without further study. Timing of the installation of locations meeting this condition will coincide with the timing of the request. Sign installation in locations meeting these conditions will take precedence over locations meeting the conditions in section 2.
2. If the 85th percentile speed exceeds the posted speed limit by 16% to 24% and the ADT (both directions combined) is 500 or greater, installation of the sign is warranted pending the following assessments:
 - Proximity to the following (i.e. vehicular access or pedestrian crossing locations associated with the following uses are located within 100 metres of the location where speeds were measured):
 - Schools
 - Parks
 - Retirement homes
 - School bus stops
 - Road Geometrics (i.e. substandard geometrics within 100 metres of the location where speeds were measured):
 - Vertical and Horizontal Curves
 - Stopping Sight Distance
 - Intersection Sight Distance
 - Lane Width
 - Shoulder and ditch alignment (rural environment)
3. If the 85th percentile speed exceeds the posted speed limit by 15% or less, sign installation is not warranted.

Notes:

- At the time requests are made, residents will be notified of the existence and use of the Road Watch Program.
- All requests from residents will be sent to York Regional Police (YRP).
- Traffic reports produced with data collected by the Radar signs will be sent to YRP.
- Any requested location may be given preference over other requested locations if there are extraordinary conditions such as high accident frequency or if noted as a complaint area by YRP.
- Town staff can establish sign locations without the need for a resident request.
- Lowering of 40 km/h speed limits will not be considered.
- Except in extenuating circumstances lowering of 50 km/h speed limits will only be considered in school or park zones as per the Speed Limit Warrant Policy.

<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-004		
RADAR MESSAGE SPEED BOARD			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:			



Signature

Engineering and Public Works

Policy #:	60-2800-CP-005
Branch:	Traffic and Transportation
Effective Date:	
SIDEWALK INSTALLATION	

PURPOSE:

To establish a policy for the installation of sidewalks on roads within the Town of East Gwillimbury to promote pedestrian safety and an accessible connection to community services such as schools, parks, businesses, and places of work. All sidewalks will continue to comply with AODA (Accessibility for Ontarians with Disabilities Act) requirements.

POLICY:

To ensure connectivity, safety, and convenient sidewalks for pedestrian traffic in new development and existing areas.

Engineering and Public Works staff review sidewalk installation candidates every year as part of our capital budget planning. Project recommendations are generally identified through the Town's Transportation Master Plan. In addition, requests are received from staff, Council, and the public. Sidewalk installations outside of the Town's urban boundary are generally not recommended.

For projects that are recommended, staff consider coordination between other capital projects within our 10-year capital plan, as well as capital projects planned through York Region. In this regard, it is desirable that staff utilize the sidewalk installation policy process outlined below.

NEW DEVELOPMENT AREAS

- Arterial Roads:
 - Sidewalks shall be constructed on both sides of the roadway.
- Collector Roads/Industrial Collector Roads:
 - Sidewalks shall be constructed on both sides of the roadway when the road is constructed.

- Local Roads:
 - Sidewalks shall be constructed on one side of the roadway with the following exceptions:
 - Sidewalks are not required for cul-de-sacs with 15 units or less, unless the paths or walkways are within the cul-de-sac;
 - Sidewalks shall be on the same side if adjacent to high pedestrian generators like schools, institutional or commercial uses;
 - All public walkways are required to connect to a sidewalk.
 - **EXISTING AREAS** Arterial & Collector Roads: Sidewalks shall be constructed on both sides of the street.
 - The road is classified as arterial, or collector based on the Town's Official Plan.

If site conditions do not permit for a sidewalk on both sides, a sidewalk on one side will be constructed.

- Local Roads:
 - Sidewalks shall be constructed on one side of the street.

Sidewalk Feasibility:

Sidewalk candidates need to be reviewed against a number of factors before being recommended, the following is a partial list of reasoning for why a sidewalk installation may not be feasible:

- Insufficient road allowance space;
- Zoning constraints;
- Requires private land acquisition and/or expropriation;
- Severe geometrics or grading issues;
- Utility conflicts
- Significant project costs;
- Tree impact and/or tree removals
- Limited pedestrian usage anticipated
- Outside of the Town's urban boundary
- Not recommended in the Town's Transportation Master Plan

SIDEWALK DESIGN AND LOCATION

- Site conditions may dictate the locations and design of sidewalks. Proper engineering design and safety constraints shall be paramount when locating and designing sidewalks. As well, new and replacement sidewalks including ramps must be designed to ensure pedestrian accessibility.
- Sidewalks shall be designed and constructed as per the Town's Engineering Standards and Design Criteria.
- A boulevard area between the sidewalk and curb should be constructed to a preferred minimum of 2.0 metres. However, boulevard area widths for existing streets will be determined on an individual basis due to existing constraints such as driveway lengths and utility locations.
- For sidewalk alignments, the side of the street shall be dictated by, but not limited to, factors such as: cost, streetlights, utility locations, geometric constraints (driveway slopes), connectivity of the sidewalk system, topographical constraints (land grades), and physical constraints (road allowance).

AODA REQUIREMENTS

- Sidewalks shall be designed and constructed to comply with the latest AODA requirements.

FUNDING AND IMPLEMENTATION

The sidewalk implementation will be based on a priority list and pending Council budget approval.

The Town will monitor its construction schedule for sidewalk installation triggers, as cost savings can be realized when a sidewalk installation is included as a part of an existing construction project or where developers will install sidewalks as a part of their development approval.

PUBLIC CONSULTATION

- For approved sidewalk installation projects, the Town generally holds a public information centre to consult with the public about project recommendations and details.
- Property owners may choose to initiate a Local Improvement through a petition following the Municipal Act and fund the project costs through fronting property owners. Details for this are covered in the Ontario Municipal Act, you may reach out to the Town for questions relating to Local Improvements.

<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-005		
SIDEWALK INSTALLATION			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:	Signature		

Engineering and Public Works

Policy #:	60-2800-CP-006
Branch:	Traffic and Transportation
Effective Date:	
SPEED LIMIT REDUCTION WARRANT POLICY	

PURPOSE:

To establish a process for modifying of speed limits on Town of East Gwillimbury roads.

POLICY:

Engineering and Public Works staff will receive requests to review posted speed limit and report on all requests from Council, and from residents for review posted speed limit on Town roads. In this regard, it is desirable that the Engineering and Public Works will utilise the speed limit reduction warrant policy as outlined in **Attachment 1**.

Attachment 1

Basic Speed Limits

The following speed limits shall generally be adhered to:

- Community Safety Zones, School and Park Zones 40 km/h;
- Local Roads 50 km/h;
- Collector Roads 50 and 60 km/h;
- Arterial Roads 50 to 80 km/h.

Note: In Rural Areas, speed limit reduction requests in School and Park Zones will be assessed on an individual basis.

Speed Limit Study

Procedure

1. Upon receipt of a written request for a speed limit reduction, staff will carry out a preliminary review and, if possible, resolve the issue without further study. The person making the request will be notified of the results by Town staff.
2. If the preliminary review indicates that a speed limit reduction is technically warranted without further study, staff will proceed with a report to Council to amend the Consolidated Traffic and Parking By-Law accordingly. The person making the request will be notified of the results by Town staff.
3. If the preliminary review indicates that the request warrants further investigation, staff will proceed to carry out a detailed speed limit study. Upon completion of the study, staff will determine if a speed limit reduction is warranted and will inform the person making the request of the outcome. If warranted, a report to Council will be prepared and the Uniform Traffic By-Law will be revised accordingly.
4. If the preliminary review or detailed speed limit study indicates that a speed limit reduction is not warranted, staff will notify the person making the request accordingly. If they want to pursue the request, they will be advised that they can do so by providing a “Successful Petition” accompanied by supporting information to the Engineering Department.

5. “Successful Petition”

- In the event that a speed limit reduction request has been denied, the proponent will be required to submit a “Successful Petition” from residents of the affected area (as determined by the General Manager of Engineering and Public Works) before additional studies will commence. They will also be required to provide additional information supporting the need to reassess the original request.
 - A “Successful Petition” requires that at least 65% of the residents in the affected area have signed in favor of the requested speed limit reduction.
6. Upon receipt of a “Successful Petition”, staff will carry out a more detailed speed limit study within the pre-defined affected area and subsequently report back to Council.
 7. The proponent of the petition will be notified of the resulting recommendations.
 8. The affected area is defined as the road section(s) directly affected by a change in speed limit.
 9. Staff will implement any necessary changes as directed by Council.

Establishing Speed Limits

1. Speed limits should be set in accordance with the most favourable environmental and traffic conditions.
2. Speed limits should comply with the Highway Traffic Act.
3. Speed limits should not exceed the design speed of the roadway, and should generally be between 10 km/h and 20 km/h below the design speed, except for constrained urban conditions where the speed limit may approach or be equal to the design speed.
4. Isolated speed adjustments may be made with advisory speed signage without amending the Uniform Traffic By-Law.
5. Speed limits should be set as close as possible to the 85th percentile speed of free flowing traffic unless other technical criteria noted herein warrant a further reduction.

6. A speed limit reduction from the 85th percentile speed may be considered if one or more of the following criteria can be applied:
 - i. Where separation from curb face to sidewalk is less than 1.8m.
 - ii. Where there are sensitive land uses (i.e. with high proportion of vulnerable users), based on the judgment of Town staff.
 - iii. If the driveways on any one side of the road exceed 13/km.
7. Speed limits in school and park zones on local or collector roads should not exceed 40 km/h and 40 to 60 km/h on arterial roads unless a speed study can show otherwise. Speed limits in school zones may be higher during times 30 minutes before or after the school is not occupied by school children, and appropriately signed. A school zone speed reduction should be limited to a maximum 20 km/h below the regular posted speed limit.
8. The desired length of a speed zone shall be:
 - i. Rural Areas – 2000 metres (with 1000 metres being the minimum)
 - ii. Urban Areas – 1000 metres (with 500 metres being the minimum)
 - iii. School Zones and Park Zones – a minimum of 150 metres beyond school property. Consideration may be given to extending this to the closest intersections or compatible adjacent speed zones.
9. Speed related collision experiences may be a factor in determining speed limits.
10. The General Manager of Engineering and Public Works, using sound engineering principles, may exercise his discretion in establishing speed limits.



<u>Town of East Gwillimbury</u>			
Policy #:	60-2800-CP-006		
SPEED LIMIT REDUCTION WARRANT POLICY			
Date Reviewed:		Revision #:	1.0
Date Revised:		Prepared By:	
Approved By:	Signature		

Engineering and Public Works

Policy #:	
Branch:	
Effective Date:	
Proposed Road Ecology Policy	

Road ecology addresses the impacts of road construction to the environment with an emphasis on potential barrier impacts for wildlife migration and habitat fragmentation considering all species from herptiles to large mammals. When negative impacts are mitigated through the planning, design, assessment and construction of new roads, and the retrofitting of existing roads, the benefits are received by both humans and the environment. The principle of maintaining and enhancing wildlife movement corridors is also supported through provincial legislation such as the Lake Simcoe Protection Plan.

It is the policy of the Town to require that road ecology practices be incorporated into Capital Road Projects when passing through a road mortality hotspot, as identified in the LSRCA Mapping Potential Road Mortality Hotspots for Amphibians and Reptiles in the Lake Simcoe Watershed (2015), as amended. This includes the expansion and replacement of existing road infrastructure, while exempting pavement preservation techniques and operational and maintenance activities of existing roads. The Town will conduct further study through subsequent phases of the municipal class EA process to investigate noise, air, hydrological, hydrogeological and natural environment impacts for each prescribed project, as required.

Road ecology practices, including but not limited to the following, shall be implemented through processes associated with Planning Act, Environmental Assessment Act and Conservation Authorities Act as part of transportation projects.

- Areas of significant wildlife movement and/or mortality should be identified and avoided. Where avoidance is not possible, appropriate mitigation shall be implemented.
- Fragmentation of natural heritage corridors with roads and infrastructure should be avoided, where possible.

- The movement of wildlife should be facilitated between natural areas to provide corridors and connect natural areas. Wildlife corridors such as key natural heritage features and key hydrologic features should be maintained and where possible, improved or restored.
- Where appropriate, new and replacement watercourse crossings shall be designed to facilitate the movement of appropriate native wildlife.
- In rural areas, roadside plantings to discourage wildlife habitat and movement immediately adjacent to infrastructure should be considered.
- Roadside warning signs should be placed in areas of significant wildlife movement.
- Temporary or seasonal speed limits should be implemented in high wildlife mortality zones.
- A roadway directional lighting strategy should be implemented that avoids too much lighting in environmentally vulnerable sites.