Town of Whitby Policy

Policy Title:	Traffic Operational Review Policy
Policy Number:	MS 080
Reference:	Council Resolution #198-12
Date Originated:	June 28, 2012
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Review Date:	June 28, 2017
Approval:	Council
Point of Contact:	Public Works Department

Policy Statement

Public Works staff receive numerous traffic-related inquiries each year from the public regarding concerns related to speeding, traffic "short cutting", high traffic volumes, etc. As such, the primary goals of the Traffic Operational Review Policy are to improve public safety and to encourage roadways to function as intended.

In addition to defining a consistent and formal program for responding to individual requests for transportation reviews/modifications from the initial contact through data collection, assessment, evaluation, planning, design and implementation, this policy outlines when public feedback/consultation is appropriate and when matters should be brought forward to the Operations Committee/Council.

While operational/physical modifications are the subject of this policy, it is important to note that educational and enforcement programs are also key components of addressing traffic-related concerns. Educational and enforcement programs will be pursued in conjunction with the School Boards and Durham Regional Police Services.

It is also important to note that immediate safety concerns (missing stop signs, road blockages, etc.) will be dealt with immediately by the Department and will not be part of this Traffic Operational Review Policy.

Purpose

The purpose of a traffic operational review policy/program is as follows:

- Promote safe and pleasant conditions for motorists, cyclists, pedestrians and other non- motorized means of transportation.
- Improve neighbourhood liveability by mitigating the impact of vehicular traffic on residential streets.
- Create transportation networks and configurations that are compatible with the character of the neighbourhood.
- Appropriately channel public resources by prioritizing traffic mitigation requests according to documented criteria.

Scope

The following principles will be applied when reviewing traffic concerns, as well as selecting and implementing physical and operational measures. This will ensure appropriate measures are selected, that they are compatible with the community's needs and that any potential negative impacts are minimized. While each situation is unique, the 'principles' of traffic management are relevant to each situation. Application of these principles will maximize effectiveness of the recommendations.

- Identify traffic problem(s) through the appropriate field investigations and data collection surveys. It is important to identify the traffic problem(s) so the appropriate traffic measure(s) are selected.
- Quantify the problem. To select the appropriate measures, it is important to quantify the extent of the problem. This may require gathering data including, but not necessarily limited to, traffic volume counts, vehicle classification counts, speed studies, and/or collecting collision statistics. These studies will be conducted as per accepted engineering practices.
- Consider modifications to the arterial road network first. There are a number of options available to improve operations on the arterial road network (e.g. signal timing adjustments, lane designations). Prior to implementing transportation modification measures on residential roadways, where arterial road improvements are available, they will be first considered.
- Minimize impacts on adjacent residential roadways. Prior to considering modifications for a particular roadway, any potential negative impact on adjacent roadways will be considered.
- Avoid restricting neighbourhood access. Diverters, barriers and closures can restrict access for people who live or work on a particular roadway and have a significant impact on the access and response/travel times for emergency services, public transit, municipal services, etc. Such modifications may require the completion of a major area transportation study or environmental assessment prior to recommendation.
- Use self-enforcing measures. Modifications which maintain a 24-hour presence and do not require police/bylaw enforcement to ensure compliance are preferable.
- The purpose of transportation modifications is to improve travelling conditions for all road corridor users in a balanced manner. Transportation measures must be

designed to permit cyclists and pedestrians to travel safely, while managing the movement of motor vehicles through the subject and affected adjacent corridors.

- Maintain and minimize impacts on mobility for emergency services, public transit and municipal services (e.g. waste collection, winter maintenance, roadway sweeping). When selecting transportation modifications, staff will strive to balance residents concerns with the need to accommodate these services.
- Use cost-effective measures. Recognizing the importance for fiscal responsibility, staff will focus on using cost-effective measures. This will ensure that funding can be allocated appropriately.
- Ensure public and community participation, as well as emergency services support. Resident input and suggestion as to the cause of transportation concerns, and possible solutions will be encouraged. An open, public process will ensure that residents' concerns are heard and appropriate solutions are selected and implemented.
- Support other Town of Whitby strategic planning documents including, but not limited to, the Official Plan, the Transportation Master Plan, and the Cycling and Leisure Trails Plan. This will ensure that the selection and implementation of operational measures complement other Town policies.
- Monitor and follow-up. Comparable traffic volume, speed and collision data should be collected before and after implementation. Public Works Operational Services, local emergency services, or resident feedback may be solicited

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Procedure (refer to Attachment 1 for a flow chart of the Procedure)

1 Initial Request

1.1 Residents may identify a traffic-related concern by contacting Public Works staff via telephone, email, standard mail, in person, through their Councillor, through Town Council, etc. Regardless of the method of initial communication the completion of the Traffic Operational Review Form is requested (see Attachment 2). The Request for Traffic Operation Review form is available on the Town website. Information being requested on the form includes contact information, details of the concern, as well permission to provide contact information to Durham Regional Police Service, or Region of Durham staff, as needed.

1.2 Any ambiguity with the request will be further discussed with the resident to ensure staff are addressing the appropriate concern.

2 Step 1 - Initiation of Review

2.1 Once a request for Traffic Operations Review Form has been completed, a Cityworks Number will be assigned to the request, and an e-mail will be sent to the resident indicating that a review has commenced.

3 Step 2 - Prioritization of Requests

3.1 In general, requests will be processed on a first come, first serve basis. However, safety concerns warranting immediate attention (missing stop signs, road blockages, etc.) will be dealt with immediately by the Department separate from this policy. As data collection can take several months, multiple requests can be worked on simultaneously. Typical ranking for requests is provided as follows:

Priority 1 - Those issues that impact schools, Town District Parks and multi-unit seniors residences/dwellings.

Priority 2 - All remaining operational issues.

3.2 As schools, district parks, and multi-unit seniors residences/dwellings generate high volumes and concentrations of pedestrians in vulnerable age groups, traffic concerns in these areas will be given a higher priority ranking. Thus “Priority 1” Issues will be reviewed before any of the “Priority 2” Issues throughout the remaining steps of the process.

3.3 Not withstanding the above, if Town staff determine through the review process that an issue warrants higher priority based on the circumstances and findings of the assessment, these requests may be elevated in priority.

4 Step 3 - Initial Screening of Request

4.1 The initial screening will include a strategic review of the location and/or situation and may include the following:

- High level review of the subject intersection, or roadway to determine reasonableness.
- Review of available (recent and/or historical) traffic and/or collision data.
- Field investigation to review area characteristics.

4.2 The screening of the request is also an opportunity to ensure that the residents' concern is being addressed as intended. Very often a secondary concern will become apparent during the review process. Staff will strive to ensure that there is a clear understanding of what is being requested and that residents are aware of the process for analysis as well as the implementation process of any recommended modifications.

4.3 Public Works staff may also review traffic patterns on affected streets to determine the extent and nature of the problem, as well as determine the data collection requirements.

4.4 If it is determined that a potential problem may exist then recommendations for the required modification measures would be made. A listing of potential solutions can be found in **Attachment 3**. If further study is needed to support staff recommendations, the inquiry would proceed to Step 4, or be forwarded to another agency, as appropriate. Modification measures requiring bylaw amendments and/or if they are unfinanced, would proceed to Council for review and approval.

4.5 If the initial screening does not warrant further data collection or analysis, the resident will be contacted with the results, the file will be closed, and the process will not proceed. The issue would not be reviewed for at least a 2-year period unless other area factors such as new development or road network changes warrant, unless otherwise directed by Council.

5 Step 4 - Preliminary Assessment and Problem Identification

5.1 Step 4 involves the collection and assessment of transportation data, including, but not limited to, volume, speed, collision and/or classification of vehicles. Data will be collected, as needed, through Town staff and/or consultant staff.

5.2 Data Collection

Speed and classification data is generally collected through the use of automatic traffic counters, or video, over a 24 to 72 hour period. Turning movement data is typically collected for 8-hours during peak periods. If data has been collected within the previous 24 month period, and no significant changes in the surrounding land uses have occurred within that period, that data is deemed to be valid and new data will not be collected.

The current transportation data collection practice of Public Works is to gather data twice each calendar year; during the spring (May/June) and fall (October), on a typical weekday (Tuesday, Wednesday or Thursday). Data collected during this period represents "typical" conditions. However, if the concern warrants deviation from the current schedule, data may be collected outside of the normal collection period. For example, if a concern is related to summer activities adjacent to a park, data collection would be completed during the summer season.

All studies will be conducted based upon established traffic and transportation engineering practices.

5.3 Collision History

The preliminary assessment will include a review of collision trends and the determination of collision prone locations as follows:

- Critical signalized intersections will be classified as those experiencing a collision rate greater than or equal to 1.5 collisions per million vehicle entering (mve) OR experiencing a collision rate of 1.0 collision per mve over a period of three consecutive years;
- Critical unsignalized intersections will be classified as those experiencing a collision rate greater than or equal to 1.5 collisions per million vehicle entering (mve) OR experiencing a collision rate of 3.0 collision per year over a period of three consecutive years; and
- Critical road sections will be classified as those experiencing a collision rate greater than or equal to 2.0 collisions per million vehicle kilometres travel (mvkm).

Collision rates are not recommended to be the sole indicator for collision prone locations. The "frequency" of collisions should also be considered. The above is considered a guideline only and there may be special circumstances which warrant a more detailed review, even if the collision history does not satisfy the above.

Collision data is maintained by the Region of Durham and historical reports can be easily requested/obtained. However, due to the collection and data entry process the most recent collision information is not always available from the Region of Durham. Requests for collision details of a very recent collision are made through the Durham Regional Police Service Freedom of Information Unit.

5.4 Intersection Data Analysis

Intersection turning movement count data is used to determine the need for all-way stop control, or the installation of traffic signals. Once data is collected, the Province of Ontario Ministry of Transportation warrant criteria (found in the Ontario Traffic Manuals) will be applied to conclude if there is justification for installation. If an intersection fails to meet the warrant for the installation of the stop control device, the applicant will be notified. Intersections failing to meet the warrant criteria will not be recommended.

5.5 Threshold Criteria

The core threshold triggers to be considered in determining whether a potential problem exists includes the following:

- Daily volume on a Local street > 750 vpd AND/OR average speed > posted speed and/or the 85th percentile speed > 5 km/h above posted speed
- Daily volume on a Collector street > 2,000 vpd AND/OR the 85th percentile speed > 10 km/h above posted speed
- Collision history of incident(s) directly related to the inquiry
- Heavy vehicles – more than 5% of the existing daily volume on a local or collector residential road
- A pattern of at least 2 years of parking infractions related to the inquiry

Should the intersection or roadway be close to meeting one of the above thresholds, Town staff will continue to monitor the situation through additional site visits and/or data collection.

The triggers identified are not a fully inclusive list, but demonstrates the key criteria that will be considered. It is recognized that some roads may meet the volume threshold but not the speed, and therefore not qualify for traffic operational measures. In these cases, it may still be appropriate to implement other solutions, such as changes to signage.

Roadways meeting the threshold criteria, or if future study is deemed necessary, the inquiry will remain active and continue through the process. The resident will be notified of the results of the review. If recommendations for modifications are identified the process would proceed to Step 5. Those measures requiring bylaw amendments and/or if they are unfinanced, would proceed to Council for review and approval.

For roadways not meeting the criteria, the process is terminated and the applicant is advised. If a roadway fails to meet the required threshold triggers, it is recommended that the street not be considered for another review for a period of 2 years unless other area factors such as new development or network changes warrant, unless otherwise directed by Council.

6 Step 5 - Ratification of Solutions

6.1 The Traffic Management Summary Form to be used by staff in issue tracking is provided in **Attachment 4**.

6.2 Minor solutions may or may not require a staff report and Council approval (general advisory signs, minor pavement markings, minor curb/sidewalk adjustments, etc).

6.3 However, if a bylaw is required (i.e. stopping/parking restriction, stop control, etc.), additional funding is required, or if the roadway is recommended to be significantly altered, a staff report will be prepared and Council approval will be required.

6.4 In addition, major network changes, such as new intersections or roads, will require further comprehensive study and consultation, along with Council approval.

6.5 Subject to approvals to proceed with additional studies, residents would continue to be notified of the results of the review.

7 Public Consultation/Support

7.1 Where a proposed street modification could directly impact resident(s) beyond the initiator of the review (e.g. no parking restriction), public consultation/feedback will be undertaken. This may be in the form of a survey sent to all directly impacted residents identifying the proposal. While safety and residential impacts will always be predominant factors in staff's recommendations to Council, public feedback such as survey results, will be considered in the staff recommendations.

8 References and Related Documents

- Transportation Association of Canada {TAC): Neighborhood Guide to Canadian Traffic Calming
- City of Guelph Neighborhood Traffic Management Policy
- City of Hamilton Traffic Calming/Traffic Management Policy and Procedure
- City of St John's Development of Traffic Calming Policy & Warrant, Traffic Calming Policy

Appendices

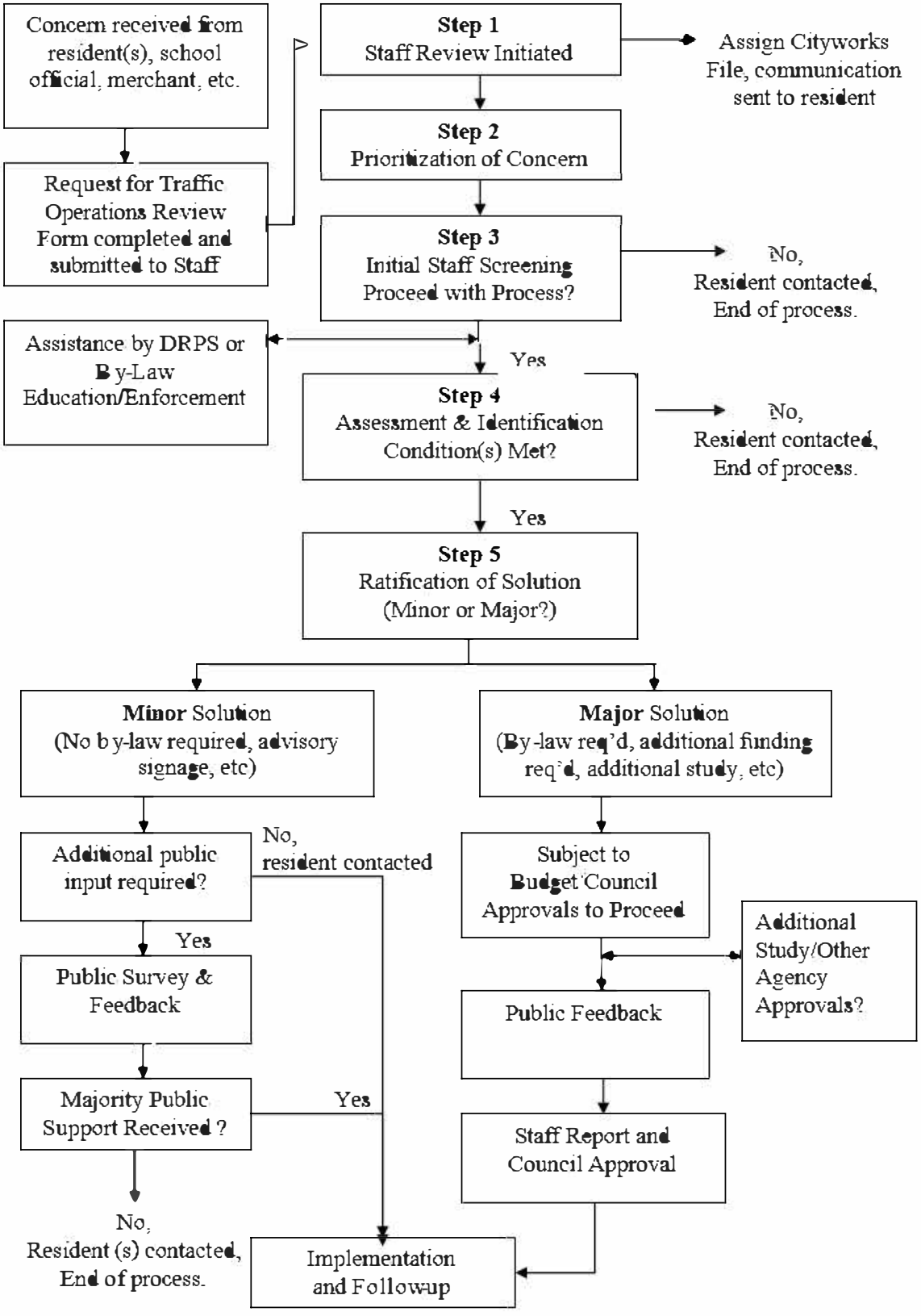
Appendix 1 Traffic Operational Review/Study Process Flowchart

Appendix 2 Request for Traffic Operational Review Form

Appendix 3 Toolkit A: Operational and Physical Solutions

Appendix 4 Traffic Operational Review Summary Sheet

This Policy is hereby approved by Council Resolution #184-11 on this 30th day of May, 2011.



Appendix 1:
TRAFFIC OPERATIONAL REVIEW POLICY FLOWCHART

REQUEST FOR TRAFFIC OPERATIONAL REVIEW FORM

Step 1: Contact Information (Mandatory)

The personal information on this form is collected under the authority of Section 11 of the Municipal Act, SO 2001 and will only be used to administer Traffic Enhancement Requests. Questions about this collection should be directed to the Records Manager, Town of Whitby, 575 Rossland Road East, Whitby, Ontario L1N 2M8.

Requestor's Name	
Requestor's Address	
Requestor's Phone	
Requestor's E-Mail	

Step 2: Provide Information Regarding Traffic Related Concern

(Use reverse side to elaborate if required)

Street, address or subject intersection of concern:

Traffic concern, day(s) /time(s) when problem(s) occur, general observations, and/or comments:

Step 3: Complete Permission (Mandatory)

By signing this request you authorize your personal information to be shared with Durham Regional Police Service (DRPS) or Regional Municipality of Durham staff, as appropriate for the purpose of investigating this request.

Requestor's Name	
Signature	
Date	

Step 4: Return Completed Form

MAIL TO: Town of Whitby, Engineering
575 Rossland Road East, Whitby ON L1N 2M8
OR E-MAIL AT: engineering@whitby.ca

Note: To address your request, traffic counts will be considered in the area indicated above; if undertaken, data collection and evaluation can take up to nine months. You will be notified of the outcome of the review.

OFFICE USE ONLY:

Appendix 2:

REQUEST FOR TRAFFIC OPERATIONAL REVIEW FORM

TOOLKIT: OPERATIONAL AND PHYSICAL MEASURES

The scope of the modification measures being considered within the context of this policy are specifically related to minor operational and physical modification measures that can be implemented in the now to five (5) year horizon period.

Longer term solutions that involve major transportation network changes or involve other agencies (e.g. Region of Durham, Ministry of Transportation), may be identified as part of the review, but will not be part of this policy's implementation strategy as further studies, approvals, and financing may be required.

Within the scope of this policy, the following operational and physical measures will be considered as potential solutions to mitigate/solve identified and confirmed transportation issues:

- Signage (i.e. Community Safety Zone, Road Watch, restricting turning movements, etc.).
- Pavement markings (i.e. painted median, painted edge line, bike lanes, etc.).
- Geometric modification such as access changes, turning lanes, radii changes, etc.
- Vertical or horizontal deflections such as patterned crosswalks or raised medians at midblock locations and intersections.
- Temporary road closures (e.g. special events, seasonal).
- Intersection control modifications including traffic signals, or roundabouts.
- Full road closures would only be considered in context with other transportation network changes and would require further study.
- Reduced speed zones in high pedestrian locations. At present, reduced speed zones within the Town are only located adjacent to elementary schools.

The following measures are not being recommended for consideration as part of the review:

- Rumble Strips – The noise and vibration caused by longitudinal rumble strips (across the roadway) can detrimentally affect the surrounding neighbourhood.
- Speed Humps/Tables – The installation of speed humps or speed tables have been found to increase the response time of emergency vehicles and typically result in new operational problems (e.g. speeding between humps to make up time) and/or the shifting of one traffic problem to another location (e.g. new "short cutting" to another adjacent street).
- Unwarranted Traffic Control – Stop signs and traffic signals are intended to regulate and alternate major and minor street volumes. They are not intended to be a speed control or traffic calming device. In many instances, unwarranted installations have been proven to result the decreased safety from a false sense of security and/or shifting a problem to another location.

Staff will develop traffic management alternatives based on residents concerns and in keeping with the goals, objectives and principles set out in this policy. Every traffic solution is unique and must consider local knowledge, as well as the technical expertise of staff. The following design, transportation and maintenance factors will be considered when developing alternatives:

- Grade, design standards, visibility
- Vehicles (e.g. trucks, emergency services, and transit)
- Vulnerable road users, including cyclists and pedestrians
- Surface drainage
- Utilities
- Waste collection
- Snow plowing
- Streetscaping

Depending on the proposed solution, implementation may be possible within the existing budget (e.g. signage improvements). However, significant improvements would require future study that may include detailed design, future budget allocation, and Council approval.

Should an all-way stop or traffic signal be warranted, based on the Ontario Traffic Manual guidelines, a report will be presented to Town Council for their consideration/approval. The design and installation would proceed following Council approval.

The installation of transportation modification measures in a temporary manner through the use of pavement markings and knock-down posts may be used on a short-term basis. This will allow staff to test measures on a temporary basis prior to considering a permanent installation. Installation of permanent measures will follow within one year of initial installation.

TRAFFIC OPERATIONAL REVIEW SUMMARY			
Step 1: Traffic Operational Review Initiated			
Date			
Contact			
Cityworks #			
Request for Traffic Operational Review Form completed	☐ yes ☐ no		
Request for	☐ Speed Review ☐ Volume Review ☐ Traffic Signal ☐ All-way stop Control ☐ Parking Restriction(s) ☐ Other – Provide Details		
Road Details			
Road Segment			
Road Classification	☐ *Local* ☐ *Collector* ☐ *Arterial* # lanes		
Speed Limit		☐ Posted	☐ Unposted
Other Details			
Step 2: Prioritization			
Priority	☐ Priority 1 – Issue affecting schools, district parks, multi-unit seniors residences/dwellings ☐ Priority 2 – Other Operational Issues ☐ Other – Immediate Safety Concern		
Step 3: Initial Screening of Request			
Available Data Review			
Field Review			
Assistance by Others?	☐ DRPS ☐ By-law ☐ School Board ☐ Other		
Other	☐ Educational need ☐ Radar Message Boards		
Initial Review	☐ Proceed ☐ End of process		

Appendix 4:
TRAFFIC MANAGEMENT REVIEW SUMMARY SHEET

Step 4: Preliminary Assessment and Problem Identification		
Field Survey		
Collision History		
Type of Count		
Date of Count	requested	completed
Daily Volume	vpd	☐ ≥ 750 vpd (local) ☐ ≥ 2,000 vpd (collector) ☐ arterial roadway
85th % speed	km/h	☐ 5 km/h above posted speed (local) ☐ 10 km/h above posted speed (collector) ☐ 15 km/h above posted speed
Average Speed	km/h	
Heavy Vehicles		
Parking		
Other/Comments		
Preliminary Assessment	☐ proceed ☐ end of process	
Step 5: Ratification of Solutions		
Traffic Control	All-way Stop ☐ warranted ☐ not warranted – end of process Traffic Signal ☐ warranted ☐ not warranted – end of process	
Traffic Management	☐ Proposed solution(s) (i.e. signage, pavement markings, etc.) ☐ Recommend major improvements (Step 6) ☐ End of process	
Comments/Notes		

Area Residents Affected by Proposed Solution - Correspondence Summary	
Houses surveyed in neighbourhood	households
Correspondence Date	
% Returned	
% Support Proposed Plan	
Proceed with implementation or Report to Operations Committee	☐ yes ☐ no
Comments/Notes	
Report to Operation Committee/Council	
Operations Committee	Date Report #
Procedure for Longer Term Major Solutions	
Details	
ADDITIONAL NOTES/COMMENTS:	

ATTACHMENT D:
TRAFFIC MANAGEMNET REVIEW SUMMARY SHEET