

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

# Item No. 9.1.2 Transportation Standing Committee September 24, 2015

то:	Chair and Members of Transportation Standing Committee Original Signed		
SUBMITTED BY:			
	Bruce Zvaniga, P.Eng., Director, Transportation & Public Works		
DATE:	September 15 <sup>th</sup> , 2015		
SUBJECT:	Administrative Order #2015-004-OP, the Traffic Calming Administrative Order		

#### ORIGIN

Item 7.1 of the October 1, 2014 meeting of the Transportation Standing Committee:

MOVED by Councillor Watts, seconded by Councillor Mason that the Transportation Standing Committee request a staff report to prepare a policy with regard to the assessment of roadways within the Municipality for the purpose of determining need and suitability of implementing traffic calming measures, where such a policy shall outline the process for requesting that a street be traffic calmed as well as the method and criteria to be used in assessing the need and appropriateness of the implementation of traffic calming measures on a street.

MOTION PUT AND PASSED.

#### LEGISLATIVE AUTHORITY

Part I, Section 21, "Standing, Special and Advisory Committees"; and

Part XII, Section 322 (1), "Street Related Powers" of the HRM Charter: "The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality".

#### RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Regional Council approve Administrative Order #2015-004-OP, the Traffic Calming Administrative Order, as outlined in Attachment 1 of this report.

#### BACKGROUND

On April 27, 1999, Halifax Regional Council adopted a Neighbourhood Short-Cutting Policy. The policy was intended to address issues associated with the infiltration of non-local (cut through) traffic into residential neighbourhoods and to improve the overall safety of the street network for all users.

Through application of the policy, the Municipality sought to improve and maintain the liveability of residential areas by ensuring traffic volumes encountered on local, residential streets were in keeping with the intended function of the road and that neighbourhood streets were used primarily by traffic related to the neighbourhood, recognizing that some non-local traffic could be accepted (roads are public facilities after all).

The Neighbourhood Short-Cutting Policy focusses primarily on traffic volume levels and the main factor used in determining whether or not a short-cutting reduction study is undertaken is a traffic volume threshold of 3000 vehicles per day (which is considered to be the upper limit of traffic volume that a local roadway can reasonably accommodate). Although maintaining an appropriate traffic volume level is important in achieving safety and liveability of a neighbourhood, vehicle speed and operation through, and within, residential neighbourhoods is also important. The current Neighbourhood Short-Cutting Policy does not provide a mechanism or guidance for the implementation of traffic calming measures in relation to speed.

Although the policy does not directly deal with a framework for the assessment of speed related issues within residential neighbourhoods, there is recognition of the fact that vehicles in a residential area should operate in a manner consistent with the mixed use of neighbourhood streets, and reference made to the "HRM Traffic Calming Policy" which had not yet been prepared at the time of the Neighbourhood Short-Cutting Policy.

#### **DISCUSSION**

Traffic calming is the application of measures, mainly physical, with the intent to reduce the negative effects of motor vehicle use and alter driver behaviour with an aim to improving conditions for non-motorized street users as well as improve safety for all users.

A scan of jurisdictions across Canada revealed that there appears to be differing approaches to traffic calming programs. While many municipalities have official policies, others apply guidelines and still others have no official policy or guideline, but still undertake traffic calming studies. The following table identifies a sample of jurisdictions with official policies and provides some policy highlights from each:

Municipality	Policy Highlights
London, ON	<ul> <li>Applies to local roads and secondary collectors</li> <li>Initiated by resident petition</li> <li>Preliminary pre-screening process</li> <li>Study process involves community input and then community consent via survey</li> <li>Measures include passive &amp; mitigating measures, physical vertical and horizontal deflection and physical obstructions</li> <li>Point Assessment process with a minimum score required for study (also used to prioritize projects)</li> </ul>

Toronto ON	Applies to local and collector roads					
Toronto, ON	Applies to local and collector roads     Massures include vertical and herizontal deflections, obstructions and signs					
	<ul> <li>Measures include vertical and horizontal deflections, obstructions and signs</li> <li>Definition of the second second</li></ul>					
	• Preliminary requirements include a petition to initiate, assessment of safety and					
	technical requirements					
	Requires community consent via polling					
	Point system for ranking relative priority					
	Requires report to community council					
Municipality	Policy Highlights					
Calgary, AB	Residents document issues and submit reporting form and petition					
	<ul> <li>Traffic calming issues evaluated and assigned points on subjective basis</li> </ul>					
	<ul> <li>Traffic calming plan developed with community support and community consent via survey</li> </ul>					
	<ul> <li>Measures include vertical and horizontal deflections, obstructions and signage.</li> </ul>					
	Policy provides guidance on when to apply the various measures.					
Winnipeg, MB	Policy mainly deals with speed humps					
winnipeg, wib						
	<ul> <li>Policy only applies on local roads</li> <li>Petition required with at least 70% (by block) in support of installation or removal</li> </ul>					
	Installation requires satisfying one of three criterion showing that speeding exists     Traffic circles are also used (no information provided shout installation					
	• Traffic circles are also used (no information provided about installation					
Sackataan SK	policy/guidelines for these treatments)					
Saskatoon, SK	<ul> <li>Policy applied to local roads and collectors</li> <li>Measures include vertical and horizontal deflections and obstructions</li> </ul>					
	Preliminary pre-screening					
	Concerns are grouped together for a community and treated as an area-wide issue					
	<ul> <li>Evaluation of each community is done by sorting through all issues submitted which is used to prioriting paintheads</li> </ul>					
	is used to prioritize neighbourhoods					
	<ul> <li>Residents submit petition and the process involves community input and then community consent via survey</li> </ul>					
St John's NL	Policy applied to local roads and collectors within urban areas only					
	Measures include vertical and horizontal deflections, obstructions and signage					
	Review can be initiated by a single request (petition is not required)					
	• Preliminary screening occurs with each request awarded points and ranked.					
	Design is selected for Council approval					
	• Once Council approves the project, a petition is circulated for support from					
	residents					
Waterloo, ON	Measures include vertical and horizontal deflections, obstructions and signage					
,	Concerns are brought forward by residents					
	Process includes a preliminary warrant assessment					
	Survey of residents required to continue with process					
	<ul> <li>Alternatives are assessed via a staff study carried out in consultation with the public</li> </ul>					
	<ul> <li>Staff provide a recommended approach and conducts a second survey of affected</li> </ul>					
	residents for approval					

Along with the jurisdictional scan, Staff has also reviewed the "Canadian Guide to Neighbourhood Traffic Calming (1998)" produced by the Transportation Association of Canada (TAC) in conjunction with the Canadian Institute of Transportation Engineers (CITE) and the Institute of Transportation Engineers (ITE). Many of the programs and policies identified during the jurisdictional review include and mirror much of the content outlined in the TAC guide. TAC has recently initiated a project to update the Canadian Guide to Neighbourhood Traffic Calming. HRM is one of the funding partners for this project and Staff will be part of the project steering committee.

- 4 -

Given the increase in resident concerns received by Staff related to vehicle speeds within residential neighbourhoods, the inability of the current Neighbourhood Short-Cutting Policy to appropriately deal with speed related issues and the apparent intent previously identified to create a traffic calming policy (indicated in the Neighbourhood Short-Cutting Policy), Staff have developed the attached traffic calming policy.

The attached policy includes a framework for receiving requests, evaluating, and if deemed necessary and appropriate, implementing traffic calming measures as approved by the Traffic Authority. The policy is intended to be implemented alongside the Neighbourhood Short-Cutting Policy, and through the coordinated application of both policies, there is the potential to positively affect the quality and liveability of residential neighbourhoods by changing the characteristics and operation of vehicle traffic within the local, residential street system.

#### FINANCIAL IMPLICATIONS

Budget requirements associated with the implementation of the proposed traffic calming policy would be difficult to identify in advance. Financial requirements for each project would vary depending on a number of factors that could only be identified through the application of the policy itself. Some of the factors would include (but would not be limited to):

- Size of project (one or several streets);
- Type of traffic calming measure(s) selected;
- Existing infrastructure/conditions on the project street(s);
- Cost of construction materials;
- Etc.

Based on recent projects involving the installation/rehab of speed humps on residential streets, the cost to install was identified at approximately \$2000.00 per speed hump. This includes materials and labour for the speed hump only, and does not include additional costs associated with any signs, sign posts or pavement markings that would be required. Other traffic calming measures requiring installation of curb or other concrete work would incur higher costs. Estimating the cost for traffic calming measures other than speed humps (i.e. chicanes) is difficult as HRM has not undertaken their installation in many years, and in some cases not at all. Based on this, Staff recommends that an annual capital budget item be identified specifically for traffic calming projects in the amount of \$50,000, which should allow for 2 to 3 projects to be constructed per year, depending on the project area and traffic calming measure to be implemented.

#### COMMUNITY ENGAGEMENT

Community engagement was not deemed necessary at this time since one of the major contributors to the identification of a need for such a policy has been input/requests staff has received from the public.

#### **ENVIRONMENTAL IMPLICATIONS**

No environmental implications have been identified at this time.

#### **ALTERNATIVES**

There are no recommended alternatives.

#### **ATTACHMENTS**

Attachment 1 – Proposed Traffic Calming Administrative Order

A copy of this report can be obtained online at <u>http://www.halifax.ca/commcoun/index.php</u> [Transportation Standing Committee] September 24, 2015, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Roddy MacIntyre, P.Eng., Traffic Services Supervisor, 902.490.5525

## ADMINISTRATIVE ORDER NUMBER 2015-004-OP RESPECTING TRAFFIC CALMING

# **BE IT RESOLVED AS AN ADMINISTRATIVE ORDER** of the Council of the *Halifax Regional Municipality* under the authority of the *Halifax Regional Municipality Charter*

and the *Motor Vehicle Act*, as follows:

# Short Title

1. This Administrative Order may be cited as the "Traffic Calming Administrative Order".

# **Purpose**

2. The purpose of this Administrative Order is to:

(a) establish the process for residents to make requests to have a street assessed for installation of traffic calming measures;

(b) provide clear and concise criteria and method for assessing Municipal streets in order to determine the need and suitability of implementing traffic calming measures; and

(c) provide information to the Traffic Authority for consideration when assessing applications for the installation of traffic calming measures.

# **Application**

3. This Administrative Order applies only to streets owned by the Municipality that meet the following conditions:

- (a) are within residential areas;
- (b) are classified as "local streets" or "minor collector streets";
- (c) are two-lane roads;
- (d) have a posted speed limit not greater than 50 kilometres per hour;
- (e) are not part of a transit route (includes major school bus route); and
- (f) are not part of a primary emergency response route.

# **Interpretation**

4. In this Administrative Order,

(a) "85<sup>th</sup> percentile speed" means the speed at, or below which, 85 percent of vehicles on a roadway are travelling;

(b) "applicant" means a person requesting that a traffic calming assessment be carried out on a particular street;

(c) "Engineer" means the Engineer as defined in section 3(ac) of the *Halifax Regional Municipality Charter, S.N.S. 2008, c. 39*;

(d) "local street" means a street, as classified by the Municipality, in a primarily residential area, designed and constructed with the primary purpose of providing access to properties directly fronting the street;

(e) "minor collector street" means a street, as classified by the Municipality, in a primarily residential area, designed and constructed with the intended purpose of providing traffic movement into and out of an area, as well as providing access to properties directly fronting the street;

(f) "Municipality" means the Halifax Regional Municipality;

(g) "primary emergency response route" means a route identified by Fire Services staff as being the primary route used to access a particular area when responding to an emergency call;

(h) "staff" means the staff of the Municipality;

(i) "street" means a public street as defined in section 3(bu) of the *Halifax Regional Municipality Charter, S.N.S. 2008, c. 39;* 

(j) "Traffic Authority" means the Traffic Authority of the Municipality appointed by the Council pursuant to the *Halifax Regional Municipality Charter* and the *Motor Vehicle Act;* 

(k) "transit route" means a route on which public transit busses are regularly operated as identified by Halifax Transit staff and also includes routes regularly used by school busses; and

(l) "vpd" means vehicles per day.

# Initiation of Traffic Calming Assessments on Municipal Streets

5. Requests to initiate a traffic calming assessment for a street may be made by:

(a) residents who live on the street, or section thereof, for which traffic calming measures are being requested; or

(b) Councillor(s), on behalf of a resident or residents who reside on a particular street, or section thereof, for which traffic calming measures are being requested.

6. Upon initiation, the time frame to complete a full project assessment will depend on the timing of the request, availability of staff resources, complexity of the subject street(s) and project area, measures identified for implementation and available funding.

## Process for Undertaking Traffic Calming Assessments on Municipal Streets

### **Screening and Initial Assessment**

7. Upon receipt of a request, staff shall undertake a screening process in order to determine if the requested street would be eligible for consideration of traffic calming measures based on the conditions identified in Section 3, Application, of this Administrative Order.

8. (1) If, based on the screening process, it is determined that the street is not eligible for traffic calming measures, staff shall provide notification to the requestor and the process is complete.

(2) Staff may contact Police to discuss potential enforcement alternatives if deemed appropriate by staff.

9. If the request passes the screening process, an initial assessment shall be conducted by staff and shall include:

(a) identification of appropriate project limits based on the surrounding and connecting roadway network; and

(b) collection of vehicle volume and speed information. Data collection equipment shall be installed at locations within the identified project limits such that the resulting data will provide a representative indication of typical traffic conditions and shall be left in place to collect a minimum of seven (7) days of continuous data.

10. (1) If the  $85^{th}$  percentile speed identified as part of the initial assessment on the project street is equal to or below 45 km/hr, the project street does not qualify for further consideration of traffic calming measures. Notification of the results shall be provided to the requestor and the process is complete.

(2) Staff may contact Police to discuss potential enforcement alternatives if deemed appropriate by staff.

11. If the 85th percentile speed identified as part of the initial assessment on the project street is above 45 km/hr, the request shall be carried forward for a secondary assessment to be conducted by staff.

# Secondary Assessment

12. If the request passes the initial assessment, staff shall undertake a secondary assessment that shall include:

(a) consultation with staff from Traffic Management, Fire Services, Police, Road Operations & Construction, Project Planning & Design, Emergency Health Services and Halifax Transit in order to gather input and identify any specific concerns based on their operational requirements. The consultation shall provide input into traffic calming measures to be considered for implementation on the project street(s);

(b) collection of collision history for the identified project street(s) for the five year period preceding the request for traffic calming; and

- (c) identification of existing conditions and infrastructure including:
  - (i) presence or absence of sidewalk and curb;
  - (ii) alignment characteristics and potential sight obstructions, such as steep grades, sharp curves; and
  - (iii) nearby and abutting pedestrian generators such as schools, playgrounds, parks, seniors' facilities, community centres.

13. In completing the secondary assessment, staff shall identify potential traffic calming measure(s) to be considered for implementation on the project street(s) and prepare a traffic calming plan for review and approval by the Traffic Authority.

14. If Traffic Authority approval is received:

(2) staff may proceed with the process for resident acceptance of the proposed traffic calming plan; or,

(3) staff may recommend action to Council without polled support if there is a clear and demonstrated safety issue identified as a result of the completion of all assessments. Moderate speeding alone may not cause a significant safety risk under certain circumstances.

15. If Traffic Authority approval is not received, the process is complete.

# **Process for Acceptance of Traffic Calming Measures**

16. Upon completion of the secondary assessment, staff shall prepare a letter outlining:

- (2) the request;
- (3) the results of all assessments; and

(4) the approved traffic calming plan.

17. The letter and a mail-out ballot shall be sent to residents of the street(s) being considered for implementation of traffic calming measures.

18. Each civic address is entitled to one vote.

19. (1) If the number of ballots returned in favour of implementation of the proposed traffic calming measures is less than 75 percent, then the ballot is unsuccessful. The original requestor and all civic addresses included in the mail-out will be notified of the unsuccessful vote and the process is complete.

(2) Staff may contact Police to discuss potential enforcement alternatives if deemed appropriate by staff.

20. Where a project does not receive the required resident support to proceed with installation of traffic calming measures, subsequent requests for implementation of traffic calming measures shall not be considered for the project street(s) until:

(2) a period of at least five years has passed; or

(3) a significant change has occurred in or near the project area that would result in a noticeable change to traffic characteristics.

21. If the number of ballots returned in favour of implementation of the proposed traffic calming measures is equal to or greater than 75 percent, then the ballot is successful. The original requestor and all civic addresses included in the mail-out will be notified of the successful vote.

22. Successful projects shall be carried forward for ranking and approval for implementation.

### **Project Ranking and Implementation**

23. If a request passes the secondary assessment and receives a successful ballot, staff shall rank the project based on the criteria outlined in Table 1:

Table 1 – Priority Points for Ranking Traffic Calming Projects						
Criteria	Measure	Point Allocation		Point Allocation		
Speed	85 <sup>th</sup> Percentile Speed	<ul> <li>1 point for each km/h that the 85<sup>th</sup> percentile speed exceeds 45 km/h, up to 10 points.</li> <li>2 points for each km/h that the 85<sup>th</sup> percentile speed exceeds 55 km/h.</li> </ul>				
Volume	Daily Traffic Volume	<ul> <li>1 point for each 200 vpd that the daily traffic volume exceeds 3000 vpd on a local street.</li> <li>1 point for each 200 vpd that the daily</li> </ul>				

		traffic volume exceeds 5000 vpd on a minor collector street.		
Collisions	Number of Collisions	<ul> <li>1 point for each reported collision that occurred in the previous 5 years.</li> <li>1 additional point for each injury collision.</li> </ul>		
Road Alignment	Stopping Sight Distance	1 point for each alignment element (horizontal or vertical) that reduces stopping sight distance below 50 m.		
Infrastructure	Curb & Sidewalk	Local Street	1 point for each that are missing to a maximum of 2 points. (standard is sidewalk on one side)	
		Minor Collector Street	1 point for each that are missing to a maximum of 3 points. (standard is sidewalk on both sides)	
Pedestrians	Nearby Facilities	1 point for each pedestrian generator within a 500 m radius of the project area (schools, playgrounds, parks, senior's facilities, community centres, etc.)		
Construction Activity	Planned Capital Works Projects	5 points if the project area is within the limits of identified capital works approved to be undertaken within 1-2 years following successful completion of Part B of this Administrative Order.		

24. Ranked projects shall be included on a prioritized list, based on their ranking score, for implementation as part of the annual Capital Works Program to be approved by Council.

25. The number and timing of projects implemented shall be subject to capital budgets.

# **Installation and Monitoring**

26. Beginning no earlier than one month following the installation of traffic calming measures on a project street, staff shall collect additional traffic data in order to determine their effectiveness.

27. If data collection results indicate the desired vehicle speed reduction has been achieved, no further action is required and the process is completed.

28. If data collection results indicate the desired vehicle speed reduction was not achieved, staff may consider additional measures to be added. If there are no appropriate measures identified, staff may contact Police to discuss potential enforcement alternatives if deemed appropriate, and the process is complete.

# **Removal of Traffic Calming Measures**

29. The Traffic Authority or the Engineer may order the removal of any traffic calming measures if, in their opinion, the installation of such measures resulted in an unforeseen operational or safety issue not identified through the secondary assessment carried out as part of this Administrative Order.

30. If a request is received to remove traffic calming measures installed on a street as a result of a completed project carried out under this Administrative Order, removal shall be considered only:

(2) after receipt of a petition containing support for removal by a minimum of 75 percent of civic addresses within the original study area; and

(3) if there is a capital works project being undertaken by the Municipality on the street where the traffic calming features are installed.

31. If traffic calming measures are removed from a street in accordance with section 29, subsequent traffic calming requests shall not be considered for the particular street for a period not less than ten years.

Done and passed in Council this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

Mayor

Municipal Clerk

I, Cathy Mellett, Municipal Clerk of the Halifax Regional Municipality, hereby certify that the above noted Administrative Order was passed at a meeting of Halifax Regional Council held on \_\_\_\_\_\_, 2015.

Cathy Mellett, Municipal Clerk