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Item No. 3i
Committee of the Whole
February 23, 2016

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed by Director

Bruce Zvaniga, P.Eng, Director, Transportation & Public Works

DATE: January 28, 2016

SUBJECT: Administrative Order #2015-004-OP, The Traffic Calming Administrative Order

SUPPLEMENTARY INFORMATION REPORT

ORIGIN

Item 11.3.1 of the October 20, 2015 meeting of Halifax Regional Council:

MOVED by Councillor Watts, seconded by Councillor Craig that Regional Council refer this matter to a Committee of the Whole session. Councillors are to submit any questions to staff in advance, and staff will return with a supplementary report and provide a presentation at Committee of the Whole.

MOTION PUT AND PASSED

LEGISLATIVE AUTHORITY

Part XII, Section 322 (1), "Street Related Powers" of the HRM Charter

BACKGROUND

On October 20, 2015, Halifax Regional Council received a report from the Transportation Standing Committee containing the proposed Administrative Order #2015-004-OP, the Traffic Calming Administrative Order and associated staff report.

Council decided that it would be beneficial to have a more in depth discussion of the proposed policy than could be achieved during a regular Council session. The matter was referred to a future Committee of the Whole session giving Councillors an opportunity to submit questions in advance of the meeting. Staff would then provide a presentation on the proposed policy and address any questions submitted by Councillors.

DISCUSSION

Questions were submitted through the Municipal Clerk’s office for staff to address. In preparing a response, questions related to the same topic were grouped together considering the general theme of the query. Based on the questions received, the following themes related to the proposed administrative order will be addressed:

- Traffic Calming Measures
- Context for Traffic Calming and Resident Input
- Implementation and Review / Assessment
- Policy Criteria
- Integration with Other Policies / Initiatives/ Projects

Traffic Calming Measures

<p>1. Can more one-way streets be used to reduce shortcutting through neighbourhoods?</p>	<p>Although the implementation of traffic calming measures can sometimes result in a reduction of traffic volume, the intent of the Traffic Calming Administrative Order is to address issues specifically related to vehicle speed within residential areas. Measures that result in changes to the routes that can be taken within the roadway network, such as conversion to one-way streets, partial closures, turn restrictions, etc., are more suited to controlling vehicle volume on a street, rather than operating speed.</p>
<p>2. What are the tools we have now for traffic calming?</p> <p>3. What other tools are being used by other Municipalities and why would we use or not use them?</p> <p>4. Are tools found in 2011 Model for Living Streets Design Manual or the 2010 ITE Designing Urban Thoroughfares, A Context Sensitive Approach, able to be applied?</p> <p>5. What are the possible traffic calming measures?</p> <p>6. Can all tools for traffic calming be identified and explained so that the range of tools is available to everyone?</p> <p>7. Does the policy provide an opportunity to consider any and all design improvements in general, or only elements deemed effective to reduce speeding on residential streets?</p> <p>8. Do measures need to be according to TAC standard, or can solutions be unique to a particular street?</p>	<p>Staff recognizes there is not likely to be a “one size fits all” solution for implementing traffic calming measures within HRM. Each location would need to be assessed in order to determine what factors exist that may be contributing to the need for traffic calming, what the overall impact area would be (single street or entire neighbourhood), what features exist that impact which measures could be implemented (road geometry, street connectivity, adjacent facilities, etc.) and which measures would provide the most benefit in reducing vehicle operating speed.</p> <p>Traffic calming measures are generally “vertical” or “horizontal” measures. Vertical measures include speed humps, raised crosswalks, raised intersections, etc. Any measure that creates a vertical shift in a vehicle as it travels over. Horizontal measures include chicanes, medians, bump-outs, etc. - any measures that result in either a lateral shift or narrowing of the travel way. There are also other measures such as the introduction of street trees or on-street parking that help to provide physical as well as visual cues to drivers that can reduce operating speed. The effectiveness of any one of these or other measures, alone or in</p>

<p>9. What kind of design changes can be considered to reduce speeding on straightaways in the grid on non-arterial residential roads?</p> <p>10. It is contended that the proposed process is based on a 17-year old design manual, methodologies have come a long way. What does traffic calming look like with the most recent design manuals such as the 2011 model for Living Streets Design Manual or the 2010 ITE Designing Urban Thoroughfares, A Context Sensitive Approach?</p> <p>11. Would temporary traffic calming tools be used to test areas?</p>	<p>combination, is dependent on roadway and traffic characteristics.</p> <p>In preparing the Traffic Calming Administrative Order, staff wanted to maintain the flexibility of being able to consider any and all measures that are currently available or may be identified in the future. By not identifying a specific “menu” of traffic calming measures within the policy, new approaches could be readily incorporated if/when they are identified. This also provides the ability for staff to make use of documents such as the Living Streets Design Manual, the NACTO Urban Street Design Guide and others, as well as new documents that become available.</p>
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Policy Criteria

<p>1. Why is a tighter threshold/standard (i.e., 45 kph) being applied to consideration for traffic calming (as compared to setting posted speed limits)?</p> <p>2. Can overall speed on residential streets be reduced to 30km? Another request was for 40km?</p> <p>3. What are the impacts of reducing top allowable speed reduced from 50km/hr to 35km/hr on non-arterial streets?</p> <p>4. Should 30 km/h be considered as the threshold in 10(1)?</p> <p>5. Can roads that are above 60 kph be considered for some measure of traffic calming?</p>	<p>In determining the speed threshold to be included in the policy, staff reviewed current practices being applied by other jurisdictions across Canada as well as our experience addressing concerns related to speed in residential neighbourhoods. The jurisdictional scan identified a wide range in the speed thresholds (as low as 30 km/h up to 55 km/h) in use across the country.</p> <p>When setting the speed limit on a roadway, the 85th percentile speed is used as represents the speed that most drivers feel is reasonable for the roadway based on conditions and the surroundings. Currently, the lowest speed limit that can be posted on public roadways in Nova Scotia is 50 km/h. Past experience in Halifax and other Canadian cities indicates posting a lower speed limit (i.e., 40 km/h, 30 km/h, etc.) without making physical changes to encourage a reduction in operating speed does not change a driver’s perception of what a safe and prudent speed is for that road and typically does not lead to a change in driver behaviour. A trial of speed limits below 50 km/h was undertaken in HRM a number of years ago in the Bayview Road / Flamingo Drive area. Posted speed limits were lowered to 40 km/h but did not result in lower vehicle operating speed. The study showed that on-going enforcement was needed to maintain compliance.</p> <p>Until recently, design practices used the anticipated posted speed limit as the target for design controls. That way, the roadway design would naturally lead</p>
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	<p>drivers to compliance. However, local experience has indicated that many residents feel that, vehicles travelling at 50 km/h or greater within residential areas is too fast. There is a desire to reduce vehicle speed to a point below this. Selecting a target speed too high (at or above the current speed limit) would not achieve the impact desired by many residents. Conversely, selecting a too low target speed would impact access and mobility, create driver frustration and could lead to vehicle speeding on other as drivers try to make up for lost time. The threshold indicated in the proposed policy (45 km/h) was selected as staff considered it to be a reasonable maximum speed that would maintain an acceptable balance between safety and mobility, recognizing that the 85th percentile speed includes many drivers who are travelling below this speed. The proposed speed would also focus the implementation of traffic calming onto those streets with the greatest need.</p> <p>Local and residential minor collector streets within HRM are typically posted at 50 km/h. Roads that have higher posted speed limits (60 km/h and above) serve through traffic movement as one of their primary functions. As mentioned above, maintaining appropriate capacity to move traffic on higher order roads is beneficial to avoiding traffic infiltration into residential areas.</p>
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<p>6. Should school busses be removed from criteria to prevent a proposal since we ideally would want more traffic calming in these areas?</p> <p>7. Why limit traffic calming to bus routes and emergency vehicles where residential streets have combined traffic?</p> <p>8. Why can't citizens request a traffic calming study on a transit route? Modern traffic calming policy can accommodate calming and efficient bus and fire vehicle movement.</p> <p>9. Are there some measures of traffic calming that could be considered for bus routes and commercial areas since these can be high pedestrian volume areas?</p> <p>10. There is a model for Framework and Non-Framework streets for traffic calming, has this been considered for Halifax?</p>	<p>When considering the use of traffic calming on any street, consideration must be given to all road users. Measures intended to reduce vehicle speed can have a significant impact to emergency response and transit operations. Emergency vehicles, transit and school busses are susceptible to the impacts related to traffic calming, especially where vertical measures are used. These vehicles are heavy and less manoeuvrable than others and would be required to slow significantly in order to navigate various traffic calming measures so there is no risk of loss of vehicle control, equipment damage or injury to passengers. This can result in significant impact to emergency response times and difficulty maintaining acceptable transit schedules if primary routes are traffic calmed. The exclusion of transit and emergency response routes from traffic calming is common in similar policies from other jurisdictions.</p> <p>Major school bus routes are important to identify when considering traffic calming measures. The physical configuration of school busses (high centre of gravity, long wheelbase, frame overhang behind rear wheels, etc.) can result in significant impact to vehicle operation when encountering certain traffic calming measures. Vertical measures can create significant jostling of the vehicle which could result in injury to passengers. Careful consideration needs to be taken when implementing traffic calming measures on a street where a high number of school busses would be encountered, as this would have a more wide spread impact on overall travel times for school bus routes.</p> <p>The proposed policy is intended to be applied to local and minor collector streets in residential neighbourhoods. This approach is common among many jurisdictions and, based on past experience in HRM, these are locations/roadways where traffic calming has primarily been requested. Roadways outside residential neighbourhoods, such as commercial areas, typically include higher order roadways (major collector and arterial) that are intended to serve through traffic movement as well as property access, serve commercial/business related properties and would need to accommodate a much higher percentage of heavy vehicle use for movement of goods. In order to maintain the integrity of the overall transportation network, and minimize the potential infiltration of non-local traffic into residential areas, capacity on higher order roads should be maintained.</p>
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<p>11. Why does initial assessment by staff include only subjective criteria?</p>	<p>The initial assessment includes the following non-subjective criteria: number of lanes, posted speed and whether it is a transit route.</p> <p>As outlined in the proposed administrative order, the initial assessment conducted by staff is intended to identify the potential project limits (i.e. a single street or neighbourhood area) based on the area roadway network where the traffic calming request was made. This assessment would provide initial context for staff related to the surrounding and connected roadways in the project area. Identification of the project limits is important in determining where vehicle volume and speed data need to be collected, which is also part of the initial assessment. The process would provide both quantitative and qualitative information required in order to determine the applicability and appropriateness of traffic calming for a particular street or area.</p>
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Context for Traffic Calming and Resident Input

<ol style="list-style-type: none"> 1. Should we be looking at neighbourhood context for traffic calming? If we only do 3 streets in the whole municipality then this seems like a very slow process? Would not a neighbourhood approach work better so that it does not drive traffic off one street only to go onto an adjacent one? 2. Is there more feedback that could be asked from residents on what they are experiencing on the street – very specific request for what they see as the problem so that staff can look at options that fit the context? 3. Why can't citizens have their input into the designation of a street for traffic calming? 	<p>The original request to initiate a traffic calming assessment would be the first opportunity for residents to provide information and details that would help to establish context for staff. This would feed directly into the initial assessment and would assist with the determination of what the appropriate study area should be; a single street, a particular route or neighbourhood wide. Previous experience has shown that residents typically provide information and detail surrounding speed related concerns in their neighbourhood when contacting staff. As part of the initiation process, it is intended that staff would discuss the request with the resident(s) initiating the study to ensure all relevant information is obtained and concerns are clearly understood prior to carrying out the initial assessment. If a project proceeds beyond the initial assessment, the secondary assessment would provide staff with additional context to be used in determining the types of traffic calming measures that would be appropriate and effective for the study area.</p>
<ol style="list-style-type: none"> 4. How are households identified for distribution of ballots? 	<p>Once Traffic Authority approval has been received, ballots are sent to those residences that are on the particular street(s) that will have traffic calming measures installed and would be identified via property information contained within HRM's geographic information system. Each civic address identified would receive one ballot.</p>

<p>5. Can there be greater clarity on the 50% positive response – is it the total number of responses received or eligible to vote?</p>	<p>As currently drafted, the requirement for a successful vote would be that:</p> <p>a positive response is received from 50%, plus 1 vote of all ballots mailed out.</p> <p>For example, if 100 ballots were mailed out, the requirement to proceed would be that staff receives 51 positive responses. This level of support is considered appropriate since traffic calming measures do have an impact on access and mobility within an area and majority support should be present before imposing restrictions on any particular resident.</p>
<p>6. Why would it be necessary to poll the residents?</p>	<p>The polling of residents provides confirmation that the concerns expressed upon initiation of a project are shared by all those closely impacted. It could be that some of the criteria outlined in the policy are met, but not all residents consider them to be a concern.</p>
<p>7. If the TA has the authority to approve or deny, why would the TA require Regional Council support?</p>	<p>Where a project has progressed through the secondary assessment and a traffic calming plan is prepared, Traffic Authority approval ensures any traffic control devices (pavement markings, signs, etc.) are appropriate. As the policy was drafted, it was thought that Regional Council approval would be sought for implementation of individual, or groups of traffic calming projects. However, staff has since included a request for funds to be applied to traffic calming projects as part of the overall capital budget. This approach would provide for shorter timelines for implementation of potential projects and be more efficient from an administrative standpoint. Should Regional Council agree with this approach, staff will make the necessary amendments to the proposed administrative order. However, where the assessment has identified a clear and demonstrated safety issue (very high speeds, significant collisions, etc.), the proposed policy provides for staff to recommend action to Council without polled support. This ensures action could be taken, if deemed necessary.</p>

Integration with Other Policies / Initiatives / Projects

<ol style="list-style-type: none">1. The Regional Plan states that HRMs Transportation goals are in section 1. Implement a sustainable transportation strategy by providing a choice of integrated travel modes emphasizing public transit, active transportation, carpooling and other viable alternatives to the single occupant vehicle; and in 4 Design complete streets for all ages, abilities, and modes of travel, the shortcutting policy should be aligned with these goals. Rather than restricting the ability of a community to restrict shortcutting, the policies should be embracing making streets safer for walking, cycling, and other uses. In light of these goals, should this shortcutting policy be delayed until a full-fledged mobility plan can be developed that fully articulates how non-arterial streets should be designed and used?2. How will these shortcutting policies fit in with Road Network Functional Plan and Centre Plan?3. Traffic Calming should be a part of every mobility related Halifax initiative; a decision making principle. Use it in conjunction with a development, revitalization, utility, or maintenance project. Traffic calming in other forms (islands of refuge, bump outs) are used more often in HRM. Should traffic calmed designs be a part of the Red Book and introduced whenever a street is repaved?4. What would be the impact of narrowing residential roads to a standard below 9 meters (while maintaining parking on both sides) so traffic must proceed with caution?5. Many wide roads encourage speeding, like Devonshire. The proposed bump outs and road realignments on Devonshire associated with the bikeway will also slow cars, make pedestrians safer. Can this style of design be made standard of non-arterial roads?	<p>The primary intent of the proposed Traffic Calming Administrative Order is to provide the policy framework and process for implementing traffic calming measures, in retrofit situations, on established streets in residential areas where it is unlikely that a large scale road re-design/realignment would be reasonable or even possible.</p> <p>Traffic calming principles are integrated within complete streets and active transportation design approaches. HRM policies and initiatives such as the Regional Plan, Centre Plan, Active Transportation Plan and Complete Streets Model already incorporate traffic calming principles by virtue of the goals and design approaches within them, since they focus on providing complete streets and active and sustainable transportation modes. Similarly, projects such as the Argyle Shared Street Pilot are based on complete streets designs so traffic calming is naturally included when this type of project is undertaken in a commercial area. When designing other capital works projects (roadways, intersections, streetscape, etc.), staff seek opportunities to include features such as curb extensions, refuge islands, medians, street trees, etc., that help to improve safety and contribute to encouraging appropriate vehicle operating speed.</p> <p>Staff has begun investigating new design criteria and changes to the HRM Municipal Services Specification (Red Book), that would see traffic calming principles incorporated into the design of new subdivisions and roadways to ensure the needs of all users and uses are incorporated.</p>
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<ol style="list-style-type: none"> 6. What would be the impact of narrowing residential roads to a standard below 9 meters (while maintaining parking on both sides) so traffic must proceed with caution? 7. Many wide roads encourage speeding, like Devonshire. The proposed bump outs and road realignments on Devonshire associated with the bikeway will also slow cars, make pedestrians safer. Can this style of design be made standard of non-arterial roads? 8. What has been learned from the Argyle shared space pilot – are there new tools to consider for traffic calming in commercial areas? 9. Has there been work done on linking the Complete Street model and traffic calming? Have there been discussions with planning and traffic on how these link? 	
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Implementation and Review / Assessment

<ol style="list-style-type: none"> 1. Is there a way to evaluate whether the requirements in the Admin Order will effectively result in implementation of traffic calming? 2. Will education and enforcement be integrated with the implementation of traffic calming – how will this be done? 	<p>The policy is intended to provide an objective and consistent method to be used in determining if a demonstrated speed issue exists in an area while balancing the access needs of residents, emergency response, service vehicles and maintenance. Each request would be assessed based on the particular situation encountered. All requests would not necessarily result in encountering conditions requiring the installation of traffic calming measures.</p> <p>Where traffic calming measures will be installed, the proposed administrative order provides for notification of those residents that were included in the ballot vote. This communication would outline the results of the vote and provide residents with the information related to the plan to be implemented.</p> <p>Traffic calming measures, by their nature, should be self-enforcing. The process within the administrative order includes assessment after implementation and provision for adjustments and/or enforcement if necessary.</p>
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FINANCIAL IMPLICATIONS

Financial implications are identified in the report dated September 15, 2015.

COMMUNITY ENGAGEMENT

Community engagement was not undertaken for this report, as the direction was to provide information related to questions of Council.

For further information related to community engagement, refer to report dated September 15, 2015.

ATTACHMENTS

None

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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