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**Info item No. 3**  
**Transportation Standing Committee**  
**February 25, 2019**

**TO:** Chair and Members of Transportation Standing Committee

**Original Signed**

**SUBMITTED BY:**

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Brad Anguish, P.Eng., Director, Transportation & Public Works

**Original Signed**

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Jacques Dubé, Chief Administrative Officer

**DATE:** November 9, 2018

**SUBJECT:** **2018 Pedestrian Safety Semi-Annual Reporting**

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**INFORMATION REPORT**

**ORIGIN**

Item 14.2.3 of the May 10, 2016 session of Halifax Regional Council; MOVED by Deputy Mayor Whitman, THAT Halifax Regional Council direct staff to prepare a semi-annual report on crosswalk and pedestrian safety for the Transportation Standing Committee.

**LEGISLATIVE AUTHORITY**

Section 4(g) of the Terms of Reference for the Transportation Standing Committee provides that the duties and responsibilities of the Committee include “providing input and review of road and pedestrian safety”.

Section 12A of the Terms of Reference for the Transportation Standing Committee provides that “A report respecting crosswalk and pedestrian safety will be prepared semi-annually for consideration by the Transportation Standing Committee.”

**BACKGROUND**

The Pedestrian Safety Action Plan (PSAP) was created in 2014 to provide a review of activities carried out in promoting pedestrian safety, as well as an assessment of any trends or recurring issues impacting the safety of pedestrians on Halifax’s roadways. The document was updated annually from 2014 to 2016. Since receiving direction from Regional Council on May 10, 2016, semi-annual reports have been submitted to the Transportation Standing Committee.

## **DISCUSSION**

### ***Evaluation***

Police and Traffic Management staff work together to share vehicle-pedestrian collision information. Data shared and reviewed includes factors such as time of day, gender and age of driver and pedestrian, collision location, etc.

Statistics compiled from police reports from January to June 2018 indicate a decrease in the number of pedestrian-vehicle collisions within the public Right of Way (ROW) compared to last year. Table No. 1 provides a summary of the findings in comparison to previous years.

**Table No. 1: Pedestrian Collision History (Months of January to June)**

|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|------|------|------|------|------|------|------|
| Total Pedestrian Collisions Occurring within ROW | 89   | 56   | 89   | 70   | 65   | 87   | 72   |

As with previous trends, the most common pedestrian-vehicle collisions are occurring at traffic signals, with left turns being the predominant vehicle movement. A total of 30 pedestrian-vehicle collisions occurred at a traffic signal in the first half of 2018. Of those, 12 were related to a left turn movement.

It is common for a higher number of collisions to occur at signalized intersections, due to an increased volume in vehicles and pedestrians. Collision rates can help identify locations of greatest concern as they consider road user volumes, rather than just a total number of collision frequencies. For example, 5 collisions occurring over a 5-year time frame is more concerning at a location with 1000 vehicles per day, than a location with 10,000 vehicles per day.

As part of the Strategic Road Safety Framework, a detailed review will be conducted of all pedestrian-vehicle collisions to identify further patterns and high collision rate locations.

### ***Engineering***

HRM Traffic Management is currently involved with multiple crosswalk and pedestrian safety initiatives.

#### **Strategic Road Safety Framework (SRSF)**

The SRSF was adopted by Regional Council in July of 2018. The long-term vision of the SRSF is to move towards zero fatalities and injuries by 2038 for people using any mode of transportation. The short-term goal targets a 20% reduction of fatal and injury collisions within 5 years. Pedestrian collisions have been identified as one of seven emphasis areas to focus resources that will have the greatest impact in reducing fatalities and injuries.

Staff are currently working to obtain and implement a collision data analysis system. Collision data will be used to identify priority locations for site specific engineering countermeasures, and will also help identify topics and target audiences for education campaigns. Engineering countermeasures will include physical changes to the roadway. This could include traffic calming, traffic control and warning devices, pavement markings, regulation changes, etc.

An update on actions in the first year of the SRSF will be provided to the Transportation Standing Committee in June of 2019.

### Integrated Mobility Plan (IMP)

HRM Traffic Management has incorporated the principles brought forward through the IMP as part of their standard practice. As implementation of the IMP progresses, Traffic Management continues to provide support through various initiatives including, but not limited to: installation of several new rectangular rapid flashing beacon (RRFB) crosswalks; implementation of leading pedestrian interval phasing at some signalized intersections; and the installation of reflective strips on sign posts at basic marked crosswalks.

### Infrastructure Upgrades

Through capital and maintenance programs, infrastructure upgrades are continuously included in road design features. Common infrastructure upgrades include: installing pedestrian ramps with tactile walking surface indicators (TWSI); adding curb bump-outs or reducing curb radii to reduce pedestrian crossing distances; extending concrete pads for better access to push buttons; addition of side mounted flashing beacons; enhanced down lighting; and adjusting crosswalk controller boxes to include a pedestrian extend feature. As these upgrades occur within all operating and capital programs, it is difficult to quantify the total number of upgrades.

HRM Traffic Management reviews crosswalk installations, modifications and removals based on criteria which provide an objective basis for an evaluation. Temporary crosswalk modifications are also considered for significant construction projects to accommodate pedestrian travel adjacent to a construction zone. Currently, there are approximately 25 locations planned to be installed or modified in 2018. Only one marked crosswalk location was removed in 2018.

### Tactical Urbanism Program

Staff are currently developing a Tactical Urbanism Program intended to identify a toolbox of materials and designs that can be implemented on a temporary basis to test new infrastructure designs until permanent infrastructure can be built. This new program will directly support Actions 38 and 48 of the Integrated Mobility Plan, which state:

Action 38: Rehabilitate streets based on their intended functions and using the Complete Streets approach, with first priority given to improving safety and comfort for pedestrians through design treatments such as barrier free routes, visual and sensory cues, curb extensions, widened sidewalks, street trees, traffic calming and benches in mixed use commercial areas or adjacent parks.

Action 48: Support pilot projects for creative street uses, such as community events or temporary infrastructure to test new ideas for how streets can function.

A recent example includes the temporary bump out at Ochterloney Street and Wentworth Street with the use of concrete barriers.

### Leading Pedestrian Interval (LPI)

At signalized intersections, LPIs begin the pedestrian walk signal ahead of the corresponding vehicle green phase. This gives pedestrians a head start before the adjacent vehicle traffic is permitted to move. Depending on the intersection and signal operations, this type of signal timing can help improve driver yielding for turning vehicles as the pedestrian is able to better establish their presence in the crosswalk.

Six signalized intersections throughout the city core were chosen as initial implementation locations. The intent is to gain insight into how the LPI impacts pedestrian and driver behaviour as well as determining what impacts and constraints there are regarding the programming of the traffic signals. Depending on the existing signal configuration and/or phasing, implementation of an LPI may not be appropriate or it may require more in-depth programming changes that could have widespread impacts beyond a specific

location. Moving forward, LPIs will be considered for use at individual locations to address site specific safety concerns.

#### RA-5 Crosswalk Side Mounted Flashing Beacons

Since 2015, RA-5 crosswalk locations throughout the Municipality have been upgraded to include side mounted flashing beacons, in addition to the existing overhead flashing beacons. Work is being done through integration with other capital projects and regular maintenance activities. This allows for the upgrades to be completed within existing operating and capital budgets. Twenty two (22) locations were upgraded in 2018.

#### Rectangular Rapid Flashing Beacons (RRFB)

RRFBs are pedestrian activated crosswalk treatment systems which consist of two rapidly and alternately flashing rectangular amber beacons mounted above side mounted pedestrian signs. HRM began piloting these crosswalk treatments in 2016 and have since adopted their use as part of standard practice. One RRFB installation was completed in 2018. Construction of four additional RRFB locations started in 2018; however, completion will be extended to 2019 due to equipment delivery and weather delays.

#### Fluorescent Yellow-Green Strips at Basic Marked Crosswalks

In response to concerns received by staff to make basic marked crosswalks (locations with only four side-mounted static signs) more visible, 53 locations were equipped with vertical fluorescent yellow-green strips on the crosswalk sign posts. The approximate cost was \$32 per location which includes materials and labour. Staff will be monitoring durability of the product over the winter months. If successful, the remaining basic marked crosswalk locations with standard sign posts (158 locations) will be outfitted with the fluorescent strips in 2019. An additional 142 basic marked crosswalk locations utilize wooden/concrete poles to affix the crosswalk signage. Staff are currently exploring alternate fluorescent materials to attach to these poles as the sticker used on standard sign posts would not adhere to the wood/concrete.

#### Crosswalk Flags

At the December 12, 2017 Regional Council meeting, it was moved that Halifax Regional Council direct staff to:

1. Continue with identification and pilot testing of various products to enhance the visibility of crosswalks as part of their on-going practice.
2. Reinstate the Crosswalk Flag program to be applied at 'Basic Crosswalks' until the pilot testing of various products to enhance the visibility of crosswalks is completed, and at that time determine the next steps for the Crosswalk Flag program.

As previously noted, staff have installed fluorescent yellow-green strips at basic marked crosswalks to enhance the visibility. Feedback received thus far has been very positive. Notwithstanding the monitoring of this product over the winter months, this appears to be a viable option for making basic marked crosswalks more visible.

#### Traffic Calming

Several amendments were made to the Traffic Calming Administrative Order (AO 2015-004-OP) in 2018. Key items to note are the addition of separate evaluation criteria for school zones and the eligibility of transit routes. Additional proposed amendments to the AO are scheduled for Regional Council in March 2019. These include the reduction of speed thresholds to 40 km/h and 30 km/h within residential areas and school zones respectively. With these changes, more streets would be eligible for the implementation of traffic calming measures.

A total of 13 locations will have traffic calming measures implemented in 2018. This will be through a combination of integration with other HRM Capital projects and with an exclusive traffic calming project. The majority of treatments include the installation of speed humps. One location is included as part of a local street bikeway which implements multiple curb modifications to have a road narrowing effect.

The HRM Traffic Authority has requested that the Provincial Traffic Authority grant permission to post reduced speed limits of 40 km/h on local residential streets. If approved, the HRM Traffic Authority will develop a process for evaluation of requests and post the lower speed limit where appropriate.

### **Education**

In most recent years, crosswalk safety campaigns have been planned for the Fall with participation in Crosswalk Safety Awareness Day and the Heads Up Halifax campaign. This year a new initiative is being introduced with a public launch on Crosswalk Safety Awareness Day (November 19, 2018). "Let's put our heads together, Halifax" is about finding new ideas to promote crosswalk safety awareness and to encourage safer behaviour. The public will have an opportunity to submit proposals on how to improve crosswalk safety, with funding available to implement the best ideas. The deadline for submission is January 17, 2019. Judges will evaluate the proposals and announce the winners in March 2019. Funding for successful proposals will begin in April 2019.

### **Enforcement**

Consistent with the Nova Scotia Road Safety Calendar, Halifax Regional Police conduct targeted enforcement efforts for Intersection Safety month in January. The theme focuses on enforcement of crosswalks, traffic signal violations, and improper turning and right of way.

A total of 97 special checks were conducted during January's Intersection Safety month. These special checks not only include enforcement of the Nova Scotia Motor Vehicle Act but also perform as a proactive measure as there is increased visibility of police in these areas. As a result, there is an increase in charged violations due to targeted enforcement, and also corrective driving behaviour due to the additional presence of police.

Table No. 2 summarizes the number of tickets issued during the January 2018's Intersection Safety month.

**Table No. 2: January 2018 Intersection Safety Infractions**

| <b>Offense</b>                    | <b>No. of tickets issued</b> |
|-----------------------------------|------------------------------|
| Walk light                        | 3                            |
| Stop sign violations              | 46                           |
| Signs and signals                 | 346                          |
| Red light                         | 36                           |
| Cell phone                        | 65                           |
| Illegal turns                     | 148                          |
| Seat belt                         | 9                            |
| Crosswalk violations (vehicle)    | 12                           |
| Crosswalk violations (pedestrian) | 5                            |

### **FINANCIAL IMPLICATIONS**

There are no new financial implications associated with this report. All activities are anticipated to be carried out as part of existing capital and operating budgets.

### **COMMUNITY ENGAGEMENT**

Community engagement was not undertaken as part of this report as there are ongoing engagement initiatives with the public through education campaigns and enforcement programs.

### **ATTACHMENTS**

No attachments.

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A copy of this report can be obtained online at [halifax.ca](http://halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

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