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Item No. 2
Transportation Standing Committee
May 24, 2018

TO: Chair and Member of Transportation Standing Committee

SUBMITTED BY: Original Signed

Taso Koutroulakis, P.Eng.,PTOE, Acting Director, Transportation & Public Works

Original Signed

Jacques Dubé, Chief Administrative Officer

DATE: March 15, 2018

SUBJECT: Pedestrian Safety Semi-Annual Reporting

INFORMATION REPORT

ORIGIN

Item 14.2.3 of the May 10, 2016 meeting 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 in order 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

Throughout 2017 Police and Traffic Management staff worked together to share vehicle-pedestrian collision information. Data shared and reviewed included factors such as time of day, gender and age of driver and pedestrian, collision location, etc.

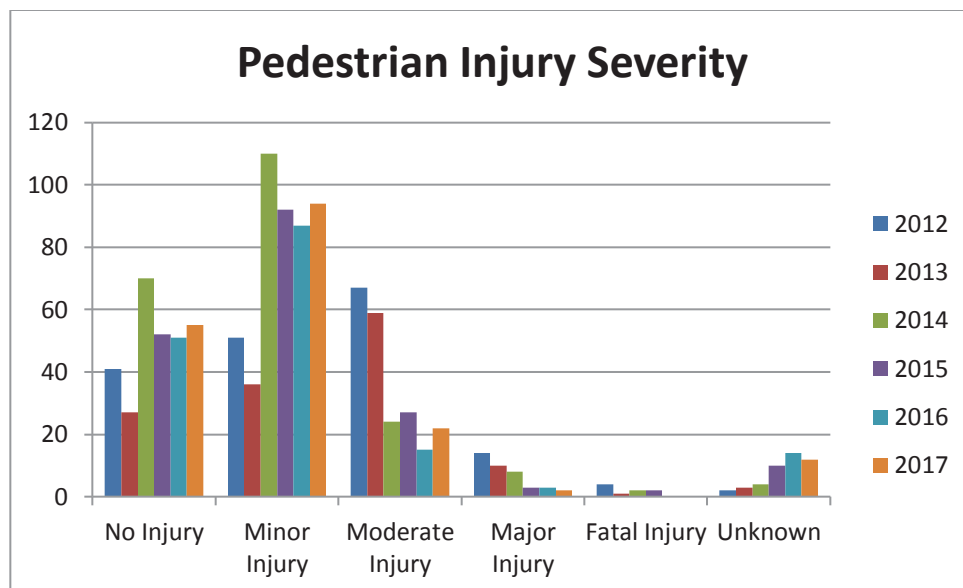
Statistics compiled from police reports from January to December 2017 indicate a small increase in the number of pedestrian-vehicle collisions within the public Right of Way (ROW) compared to those in 2016. Table No. 1 provides a summary of the findings in comparison to previous years:

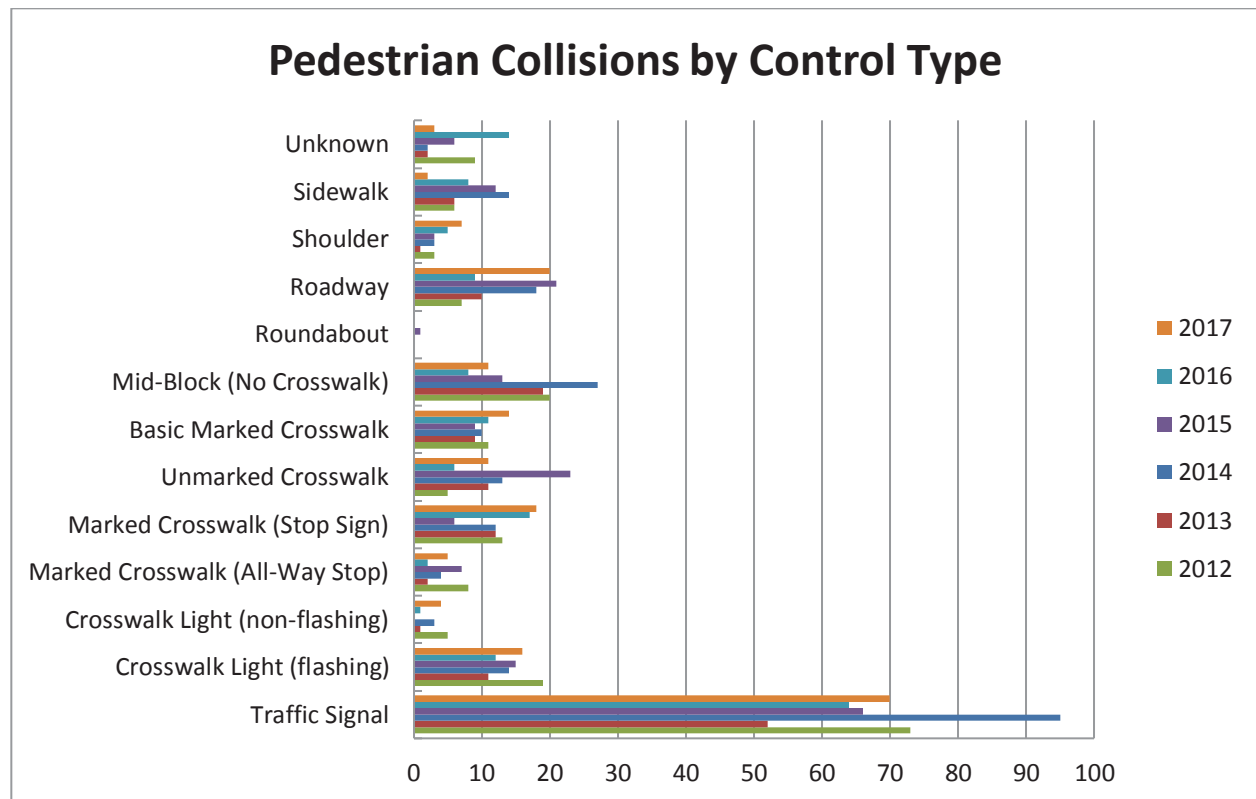
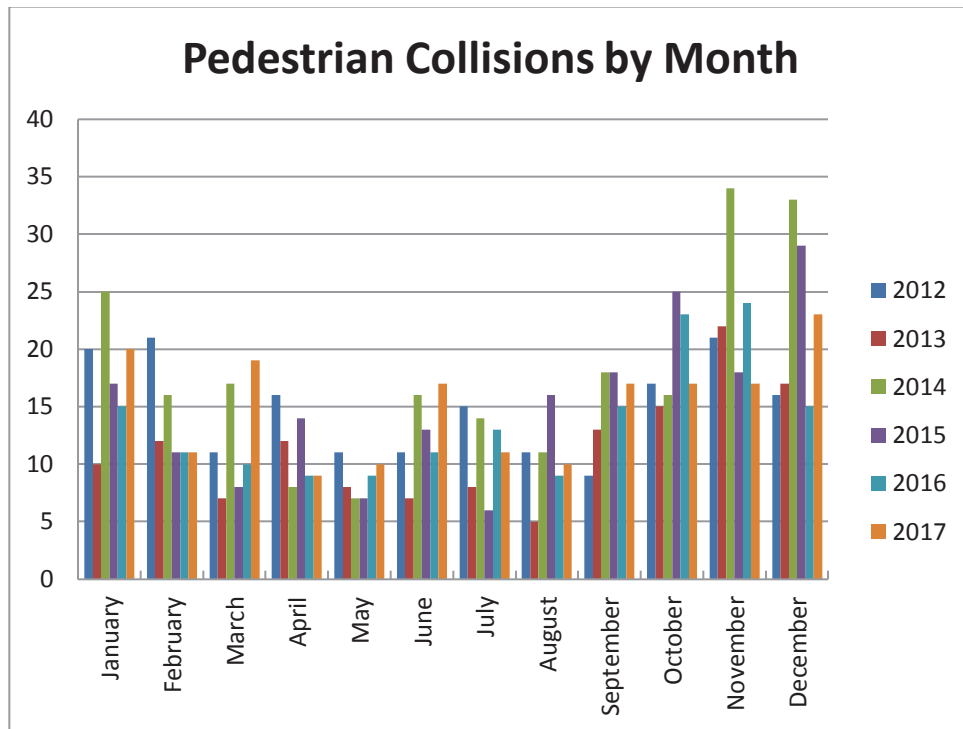
Table No. 1: Pedestrian Collisions

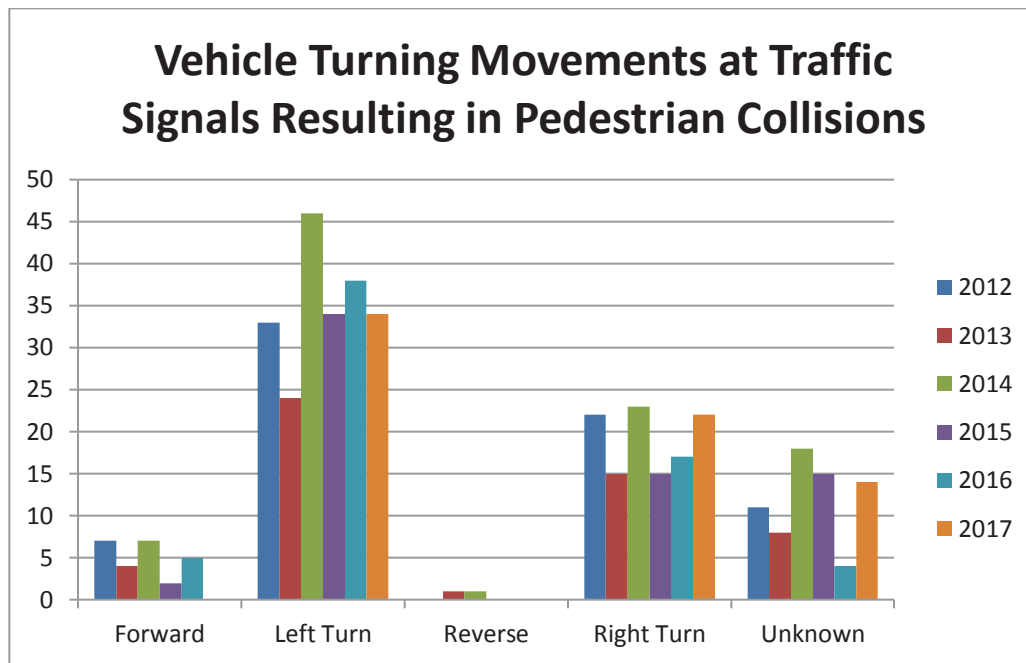
Pedestrian Collision History						
	2012	2013	2014	2015	2016	2017
Total Pedestrian Collisions Occurring within ROW	179	136	215	182	164	181

An assessment of the data compiled for 2017 shows that the most common pedestrian-vehicle collisions are occurring at traffic signals, with left hand turns being the most predominant vehicle movement. A total of 70 pedestrian-vehicle collisions occurred at a traffic signal in 2017, 34 were related to a left turn movement. This is consistent with previous years' findings.

The following four charts provide an update to the results presented in previous versions of the Pedestrian Safety Action Plan to include results from 2017:







Engineering

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

Rectangular Rapid Flashing Beacons

In 2016 a tender was awarded for the installation of Rectangular Rapid Flashing Beacons (RRFB's) at four separate pilot locations. Installation was completed between May and July 2017. Before and after installation studies were carried out at each location to compare the yielding compliance of vehicles approaching the locations to determine the effectiveness of the new crosswalk control. Post-installation studies were completed at least one month after installation to allow time for motorists and pedestrians to adjust to the new RRFB's.

As can be seen from the data below in Table No. 2, RRFB's are shown to be an effective type of crosswalk control to increase driver compliance. Staff will continue to evaluate locations for potential RRFB installations using the guidelines provided by the Transportation Association of Canada (TAC) and with engineering judgement.

Table No. 2: RRFB Compliance

Location & original crosswalk type	Yielding Compliance	
	Before	After
South Street at Wellington Street (RA-5 crosswalk, non-flashing)	77%	94%
Williams Lake Road at Ravenscraig Drive (unmarked crosswalk)	52%	98%
Maple Street at Dahlia Street (RA-5 crosswalk, flashing)	93%	97%
Basinview Drive at Bedford Hills Road (RA-5 crosswalk, flashing)	98%	100%

Strategic Road Safety Plan

The development of the Strategic Road Safety Plan (SRSP) is currently ongoing with anticipated completion in Spring 2018. The SRSP will develop goals, objectives, and action plans to guide HRM and its road safety partners towards creating safer roads and reducing the number and severity of collisions for all road users.

Fluorescent Yellow-Green Pedestrian Crosswalk Signs

HRM Traffic Management is currently working with partners in the Transportation Association of Canada (TAC) on a volunteer project to evaluate the effectiveness of fluorescent yellow-green pedestrian crosswalk signs at uncontrolled marked pedestrian crosswalks. The results will be used to determine if the yellow-green signs should be recommended for inclusion in the Manual of Uniform Traffic Control Devices for Canada (MUTCDC).

Six pilot locations were chosen as candidates to replace existing white crosswalk signs with fluorescent yellow-green pedestrian crosswalk signs. Yielding compliance studies were completed at each location before the installation of fluorescent yellow-green crosswalk signs, one month after the installation, and again three months after the installation. Permission from NSTIR was sought out to allow the use of non-standard signage at these locations for the pilot study. Results from this study will be compiled with the data collected by other jurisdictions.

Infrastructure Upgrades

HRM Traffic Management reviews crosswalk installations, modifications and removals based on criteria which provide an objective basis for an evaluation to identify where marked crosswalks are installed. Marked crosswalks are installed at locations where this evaluation has determined that a marked crosswalk is warranted, based on national guidelines.

Infrastructure upgrades include: installing pedestrian ramps, extending concrete pads for better access to push buttons, extending curb openings, adding curb bump-outs, installing brighter LED down lighting, installing side mounted flashing beacons and adjusting crosswalk controller boxes to include a pedestrian extend feature. All work is undertaken under existing operating and capital budgets.

A summary of the crosswalk modifications conducted in 2017 is presented below in Table No. 3:

Table No. 3: 2017 Crosswalk Modifications

Crosswalk Type	Addition	Change*	Rehab	Removal
All-Way Stop			5	
Marked Crosswalk with Crossing Guard			2	
Basic Marked Crosswalk	7		2	5
Crosswalk Light (both flashing and non-flashing)	1	1	60	
Rectangular Rapid Flashing Beacons	1	3		
Traffic Signal			3	
Stop Controlled			25	
Unmarked			4	
Accessible Pedestrian Signals	2		11	

* Existing crosswalk type was changed (upgrade or downgrade)

Education

Since 2014, the municipality has executed an annual crosswalk safety campaign and awareness day designed to respond to a concerning trend identified in crosswalk safety research. Specifically, surveys indicated that while 83% of residents stated they were committed to safety when travelling, more than 50% of drivers and pedestrians admitted to being distracted while travelling. Both the level of reported distraction

and the number of close calls were on the rise. Corporate Communications positioned the 2017 campaign to bring awareness to the disconnect between stated beliefs or commitments and individual behaviors that would contribute to safer crosswalks.

The initiative included a robust advertising campaign designed to increase the reach and frequency of key messages to give audiences more opportunity to see the campaign. Media included radio, transit, print, online and social media advertising, the latter of which contributed to an increase in awareness of nine percentage points from 2016.

Indeed, online media reaction reflected the strongest performance for the campaign:

- More than four million impressions;
- Generated more than 25,000 interactions including clicks and post-likes;
- Display ad click through rate of 0.44% – four times the industry benchmark of 0.11%;
- Social media engagement rate of 1.42% was within expected 1%-2% range;
- Social media generated more than 300 comments.

The creative concept for this year's advertising campaign—*Let's Do More Than Talk About Crosswalk Safety*—aimed to explore the disconnect between residents' stated beliefs that crosswalk safety is important and their frequent admission to being distracted while driving or walking. Essentially, the campaign encouraged residents to "walk the talk."

Campaign execution took the form of testimonials with fictional residents of the municipality stating their support for crosswalk safety, only to be immediately shown doing the opposite. By demonstrating that this is a widespread problem, the campaign intended to help residents recognize their own contradictory behaviors and start discussing ways to ensure safe outcomes in a crosswalk on an individual level.

The campaign also reintroduced an activation component on Crosswalk Safety Action Day. "Crosswalk Captains" and their teams of volunteers took to the streets on November 29 to promote crosswalk safety at about two dozen high profile crosswalk locations across Halifax, Dartmouth and at the Halifax airport. Volunteers leveraged the testimonial approach of the awareness campaign by providing volunteers with signs that promoted safe behaviors for pedestrians and that thanked drivers for paying attention. Volunteers gave out crosswalk safety information and Heads Up Halifax! branded toques, engaging with an estimated 5,000 residents.

Survey results for 2017 are relatively consistent with past campaigns in that most respondents consider traffic safety a key issue for the municipality, with public awareness of *any* communications relating to traffic safety notably increasing over the past year, reversing the year-over-year decline observed in 2016 (up to 61% from 52% in 2016, but still much less than the 77% of respondents in 2014).

Consistent with past findings, despite a clear discrepancy between self-reported distraction and observed distractions, most residents believe they have personally made *some* effort to make crosswalks safer for everyone. However, most activities tend to fall within the scope of standard road safety measures, such as generally paying attention, slowing down or stopping at crosswalks, and making eye contact.

Unaided recognition of the municipality's sponsorship of safety messaging continues to strengthen, with one-half of residents now associating such messaging with Halifax and far fewer this year reporting not being able to identify a source. As noted in previous surveys, the primary focus of such messaging is believed to be pedestrian safety, specifically in relation to the Heads Up campaign, the dangers of using cellphones/texting when driving/crossing the street, and the need for drivers and pedestrians to pay attention/look before entering a crosswalk area.

In terms of the campaign content, survey results show that most residents remain supportive of Halifax's sponsorship of the campaign, although the degree of support has declined for the second consecutive year, with fewer now expressing complete support. However, the main message of print and online ads was

clearly understood by residents seeing the ads to be ‘practice what you preach’ and doing more than just talk about driving and crosswalk safety.

Awareness of the #headsupalifax social media campaign increased notably over the past year, with one-third of residents now stating they had prior awareness of the campaign and generally viewed the initiative positively. However, active participation in the campaign (i.e., personally posting/sharing posts with the hashtag, entering the contest) remains minimal relative to the audience reach.

Given the many comments on social media (and some in traditional media) and the consistent year-after-year survey results, the underlying context for the Heads Up Halifax! campaign needs to be revisited. Using the perspective of drivers and pedestrians to illustrate unsafe behaviors at crosswalks and the disconnect behind their risk assessment in these situations appears to be spreading the opportunity for key audiences (drivers and pedestrians) to blame each other for collisions in crosswalks.

In 2018, Corporate Communications will undertake research to examine ways to increase crosswalk safety awareness and influence safe behaviors in crosswalks without polarizing audiences into predetermined, self-justified positions. Timing and duration of the campaign will also be examined to improve campaign recall and opportunities to promote and recognize safe crosswalk behavior with a renewed focus on engaging schools through a proactive outreach program.

Enforcement

Halifax Regional Police follow the Nova Scotia Road Safety Calendar. The calendar was developed as a joint project with the RCMP and municipal forces to serve as a guiding document for enforcement and education efforts. Intersection safety months occur in January and October of each year. The HRP Traffic Division, Community Response, and Patrol officers all target enforcement in this area.

A total of 141 special checks were conducted during January’s Intersection Safety month while 92 special checks were conducted in October. 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. 4 summarizes the number of tickets issued during the January 2017 Intersection Safety month. In addition to the infractions noted below, tickets were also issued for using a hand held cellular phone while driving, speeding in intersections and sign violations during the targeted intersection enforcement.

Table No. 4: January 2017 Intersection Safety

Offence	Total
Crosswalk	68
Approach motor vehicle in roadway	23
Intersection violations	58
Illegal turn	75
Fail to yield in intersection	36
Fail to use sidewalk	10
Stop sign violation	50
Stop on crosswalk	1
Improper lane change at intersection	2

Table No. 5 summarizes the number of tickets issued during the October 2017 Intersection Safety month. In addition to the infractions below, there were a total of 94 tickets issued for no license, no insurance, no

vehicle permit, and expired plates, stickers or safety inspections. 5 tickets were also issued for revoked or prohibited drivers.

Table No. 5: October 2017 Intersection Safety

Offence	Total
Walk light	1
Stop sign violations	53
Signs and signals	50
Red light	5
Cell Phone	79
Illegal turns	31
Seat belt	13
Crosswalk violations (vehicle)	3
Crosswalk violations (pedestrian)	2
U turn	1

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.

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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