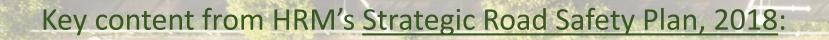
# Request for a TSC-led review of the Road Safety Framework 2018

Presentation to the Transportation Standing Committee, 23 June 2022

Martyn Williams



The Vision Zero approach requires significant cultural and legislative changes in the approach taken towards traffic and road safety, road design, enforcement, and education of road users. (page 4)

"Vision Zero acknowledges that people make mistakes and that the road system needs to protect people"

"Facilitating collaboration with other road safety stakeholders is the most important function of this Plan"

"Using an equitable approach during the implementation process will ensure that HRM's most vulnerable populations are engaged and see an improvement in road safety"

The safe system approach, summarized in Canada's national road safety strategy 2025:

#### Adopt a safe system approach

"The Safe System Approach (SSA) is a means by which many countries leading in road safety are achieving their visions of eliminating deaths and serious injuries. SSA has the following Principles:

Ethics: human life and health are paramount and take priority over mobility and other objectives of the road traffic system (i.e., life and health can never be exchanged for other benefits within the society);

Responsibility: providers and regulators of the road traffic system share responsibility with users;"

Page 4 of staff's accompanying report to the Road Safety Framework 2018:

"Action Plans

HRM has set an aggressive goal for the reduction of fatal and injury collisions over the next five years. If the current safety efforts by the HRM and its partner agencies are maintained but not altered, the likelihood that a significant reduction in either number or severity will be achieved is low."

Also see: Page 14, Road Safety Framework 2018

Where are these action plans today?

#### Stay tuned!



The municipality is currently in the process of developing the specific actions that will work towards achieving the vision and goal of this Plan. These actions will be determined through the implementation steps, outlined above, including the analysis of collision data.

The development of action plans will be an ongoing process to ensure the effectiveness of specific actions in collision reduction in HRM.

#### Key actions that prioritize vulnerable road user safety in the RSF 2018:

"Develop action plan for worst 10 types of (pedestrian) collisions. Consider rates/frequencies, consistency of collision patterns and crosswalk specific assessments." - Attachment D, Page 6 of 8, Emphasis Area 3: Pedestrian Collisions

"Create a team including all leading agencies and other stakeholders primarily committed to greater safety for all road users. Create team now and use team to more effectively deliver current programs, develop safety branding and develop safety culture. Involvement: All Participating Agencies" - Attachment D, Page 1 of 8, Initial Actions

#### HRM Collision data (downloaded 19 June 2022)

| Year | Pedestrian injury incidents | Pedestrian fatal incidents |
|------|-----------------------------|----------------------------|
| 2019 | 117                         | 4                          |
| 2021 | 124                         | 3                          |

# Intersections: Safety interventions are critical

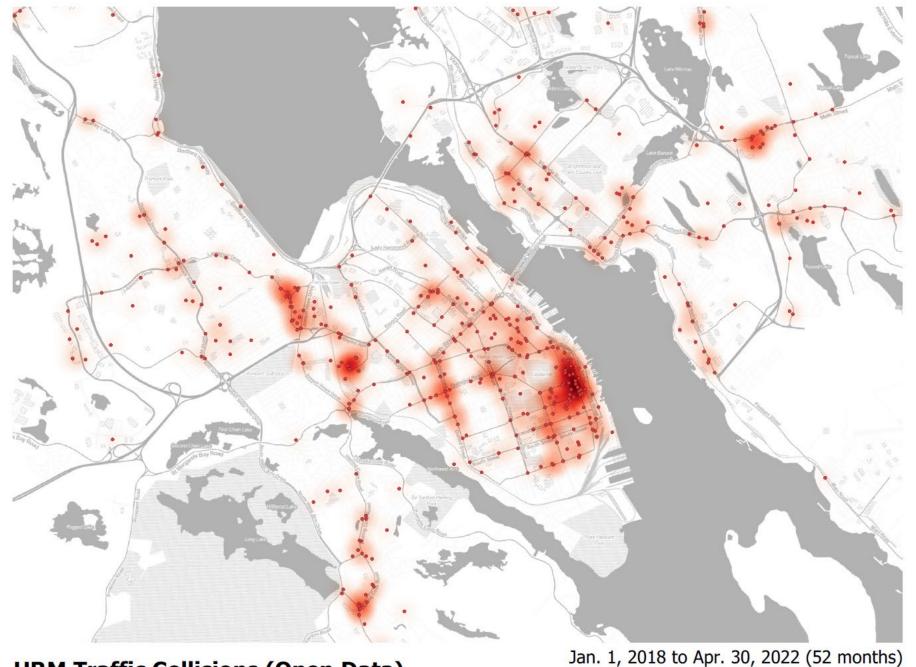
Our intersections account for:

• 72% of pedestrian incidents

• <u>65% of cyclist incidents</u>

Overall and for comparison, <u>43% of all traffic related</u> incidents occur at intersections.

(analysis from 2018 to April 2022 incident data)



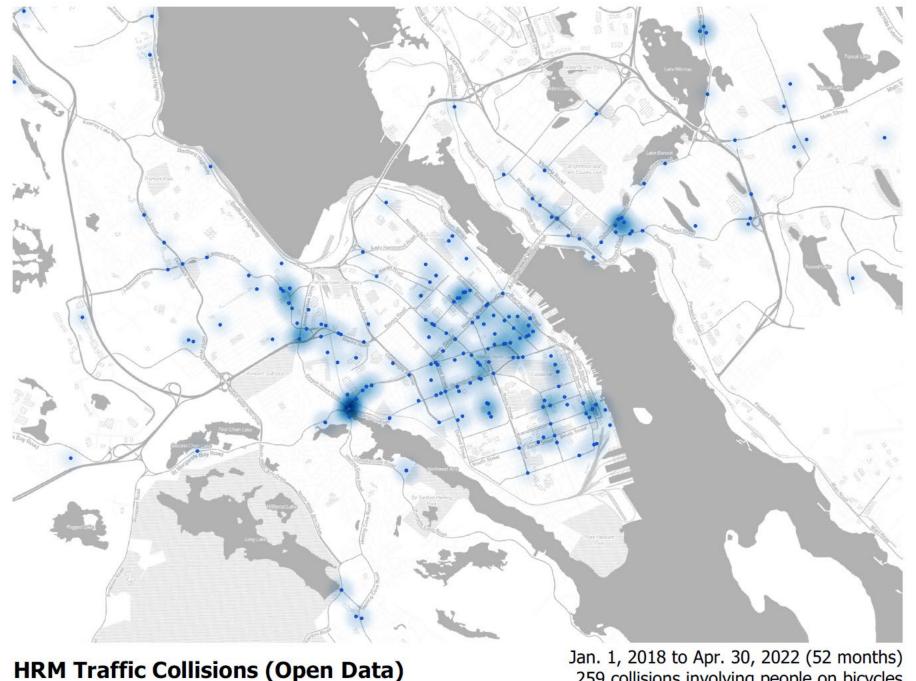
**HRM Traffic Collisions (Open Data)** 

Jan. 1, 2018 to Apr. 30, 2022 (52 months) 675 collisions involving pedestrians (incl. 13 fatal)

#### Worst intersections for people walking and wheeling – number of incidents:

- 1. 7000 Mumford Rd. a.k.a. Halifax Shopping Centre, or possibly the Mumford Transit Terminal (7)
- 2. Herring Cove Rd/Dentith Rd. (6)
- 3. Oxford/Quinpool (6)
- 4. Tower Rd/Inglis St. (5)
- 5. Albro Lake/Wyse (5)
- 6. Dutch Village/Main (5)
- 7. Albro Lake/Victoria (5)
- 8. Oxford/Jubilee (5)
- 9. Around 10 intersections with 4 pedestrian collisions each (roughly 5 of these on the peninsula)
- 10. Around 27 intersections with 3 pedestrian collisions each (roughly 15 of these on the peninsula)

313 of 675 pedestrian collisions (46%) were on the Halifax peninsula.



**HRM Traffic Collisions (Open Data)** 

Jan. 1, 2018 to Apr. 30, 2022 (52 months) 259 collisions involving people on bicycles

#### Worst intersections for people cycling – number of incidents

- 1. Armdale Roundabout (6)
- 2. Joseph Howe Drive @ Exit 0 ramp (4)
- 3. Vernon/Jubilee (3)
- 4. Around 15 other intersections with two bicycle collisions each (roughly 10 of these on the peninsula)

140 of 259 bicycle collisions (54%) were on the Halifax peninsula.

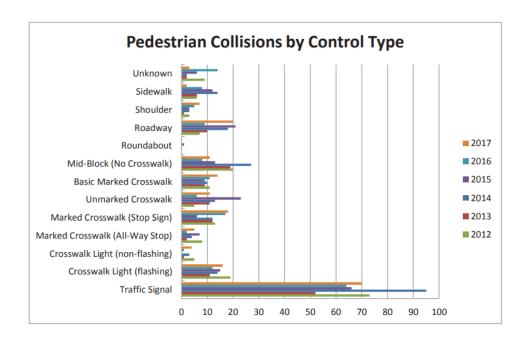
"Available pedestrian collision data from 2015 to 2019 indicates that right turn vehicle maneuvers account for approximately 9.4% of all pedestrian-related collisions at signalized intersections. This includes right turns on a red signal as well as right turns on a green signal totaling 79 collisions"

#### Staff report: Restricting Right Turns on Red Lights. 23 July 2020

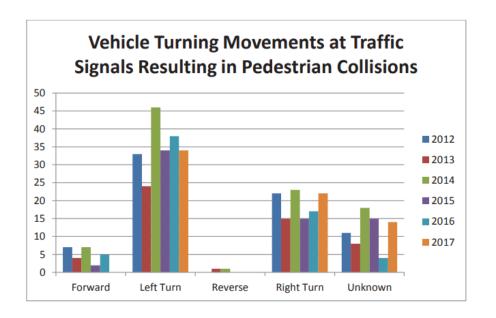
= 79 right turn collisions accounted for less than 10% of pedestrians struck at signalized intersections over five years.

Eight hundred pedestrians were struck at our 278 signalized intersections over five years? 160 per year.

# **Human Factors + no VRU safety infrastructure**: When incidents are no "accident"



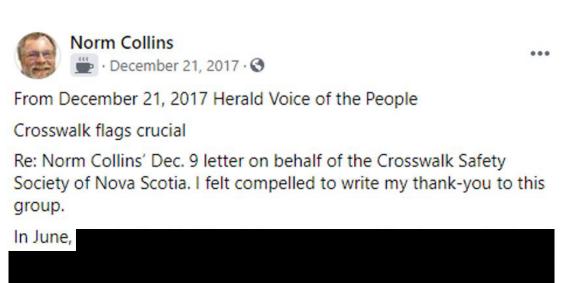




**Staff response last week:** "We do not currently have the resources to analyze each individual collision and provide a detailed breakdown by control type."

Vulnerable road user experiences are important as determiners of safety requirements: 2



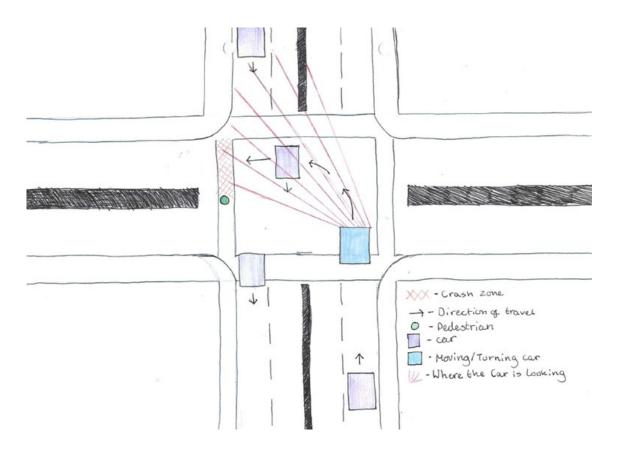


There is a crosswalk at the bottom of Central Avenue in Fairview — with orange flags! We grab our flags and head across, making eye contact with the drivers before we venture forth.

\_\_\_\_\_

#### How feasible is this task:

- For a child?
- For a senior?
- For a person with a physical or intellectual disability?





Watch for turning vehicles. Keep watching as you cross. Thank drivers with a wave and a smile.

Research on permissiveyield traffic light phasing

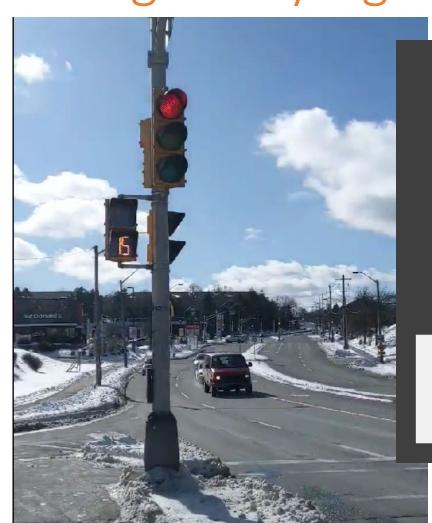
"Transportation efficiency for neither motor vehicles nor pedestrians was improved at intersections with conflicting left-turning vehicle-pedestrian traffic lights. Road engineers and policymakers should reconsider the value of conflicting left-turning vehicle-pedestrian traffic lights at road intersections.

Conflicting traffic lights cannot improve transportation efficiency, but increase risky conflicts between vehicles and pedestrians."

- Left-turning vehicle-pedestrian conflicts at signalized intersections with traffic lights: Benefit or harm?

https://www.sciencedirect.com/science/article/pii/S1008127518300853

# The simplest of safety interventions Making a very significant difference







Lack of infrastructure is also an issue at uncontrolled intersections

Safety issues due to; a) parked vehicles, b) ability for drivers to turn at speed, c) pedestrians are often outside the driver's cone of vision or in blind spots.

Adaptations suitable for implementation HRM-wide need to be identified in the pedestrian safety action plan.

### Conclusions

Will we achieve a 20% reduction in injury + fatal incidents involving pedestrians by 2023?

What data suggests this is possible?

Are we addressing key infrastructure safety deficiencies for pedestrians that were identified by 2012 - 2017 data analysis?

Unknown – no ongoing incident data analysis by control type.

What is the impact of not completing core action requirements and planning identified in the Road Safety Framework?

Unknown – needs input and evaluation by RSF stakeholders.

## Proposal

TSC Members initiate a review of the Road Safety Framework 2018 implementation and practice - alongside staff and ALL stakeholders - to evaluate:

- What has not been implemented and why?
- What resource issues are preventing critical incident data analysis? How can this necessary work can be completed and by who?
- Evaluate stakeholder roles and contributions, by their own assessment. How can they be best supported?
  - Evaluation of key RSF pillars equity, engagement, action planning how well are they being met? What needs to change to address deficiencies?

## Why a TSC-led, stakeholder involved review?

Successful Vision Zero efforts were achieved through action planning by a **collaborative task-force** formed of leadership, staff and non-governmental advocacy groups – see <u>Hobokon</u> (zero traffic fatalities for <u>four years</u>)

The Road Safety Framework 2018: The road safety task-force must involve all stakeholders - "the most important function of this plan"

A review can help to facilitate necessary all-stakeholder collaboration on action planning, key aims and objectives, etc