

Default Speed Limits and Traffic Safety Program Resource Update

Recommendation

That the February 26, 2020, City Operations report CR_7259, be received for information.

Previous Council/Committee Action

At the May 14, 2019, City Council meeting, the following motion was passed:

2. That Administration provide a report, concurrent with the draft bylaws, on the resources required to accomplish roadway safety goals, including traffic calming measures, speed reduction and enforcement, safe roadway crossings, and the results of research being done by Calgary Police Service and University of Calgary and our Vision Zero strategy.
3. That Administration provide high-level information on causal factors on the 711 pedestrian related collisions.

Executive Summary

This report outlines Administration's approach to identifying the resources required to accomplish Vision Zero and Edmonton's road safety goals, and summarizes the University of Calgary' research on the effect of reduced speed limits for School and Playground Zone Harmonization.

Administration undertook a review of causal factors of the 711 pedestrian injuries and fatalities that occurred within Edmonton's residential areas between 2009 to 2018. The review concluded that drivers failing to yield to pedestrians was the cause of the majority of collisions.

Report

Vision Zero Resource Requirements

As presented to Community and Public Services Committee in the December 4, 2019, City Operations report CR_7646, Safe Mobility Strategy: Draft Vision and Principles, the Safe Mobility Strategy aims to achieve Vision Zero through safe and livable streets in Edmonton. In Q4 2020, Administration will present the draft strategy and tactical plan, which will outline resource requirements for the Safe Mobility Strategy.

Calgary Research

In 2017, the University of Calgary conducted an evaluation of reduced speed limits for School and Playground Zone Harmonization. The study found that between September 2013 to August 2014, there was a 6 km/hr reduction in mean traffic speed in playground zones and the number of collisions involving pedestrians decreased from 30 to 20 collisions in the year following harmonization.

In 2016, Calgary Police Service created a Residential Traffic Safety Unit to identify problem areas and develop an operational response. The Unit is focused on enforcement, education, targeted visibility and collaboration with partners. By continuously building relationships with key traffic safety partners and taking a collaborative approach to traffic safety outside of traditional enforcement, the Unit strives to develop more permanent solutions to ongoing traffic issues. No current research on the work of this unit is available.

2009 to 2018 Collisions

The *Traffic Safety Act* requires that a traffic collision that results in death, injury or property damage of \$2,000 or more, be reported immediately to an authorized police officer. The resulting collision reports are shared with the City of Edmonton for data analysis purposes.

The table below provides a summary of Edmonton injuries and fatalities (2009 to 2018):

	All Roads	Residential Roads
Total Injuries and Fatalities	40,740	5,030
Pedestrian Injuries and Fatalities	3,177	711

The table below provides a breakdown of the severity of pedestrian injuries that occurred on residential roads (2009 to 2018):

Severity Type	Number of injuries by severity type
Fatal	13 (1.8 percent)
Major Injury	158 (22 percent)
Minor Injury	540 (76 percent)
Total	711

Causes of Collisions

Drivers failing to yield to pedestrians was reported as the cause of 67 percent of collisions in residential areas (440 collisions). The majority of these collisions (312) occurred at intersections with no pedestrian signals or pedestrian controlled amber flashers and 125 of the collisions involved people in vehicles making a turn. There were 188 collisions due to pedestrian error (28 percent), and half of these collisions involved children 15 years old or younger.

Travel speeds have a significant impact on the outcome of all collisions involving vulnerable road users. Per the 2008 World Health Organization Road Safety Manual, when vehicle speed increases above 30 km/hr, the risk of injury to pedestrians grows dramatically. Pedestrians have a 90 percent chance of survival when struck by a vehicle travelling at 30 km/hr or below, but only a 20 percent chance of surviving an impact at 50 km/hr.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is a safe city			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is a safe city	Road Safety Strategy, Fatalities	TBD (2019) 19 (2018) 27 (2017) 22 (2016)	17 (2020)
	Road Safety Strategy, Serious Injuries	TBD (2019) 319 (2018) 341 (2017) 325 (2016)	293 (2020)
	Road Safety Strategy, Collision Injuries/1,000 people	TBD (2019) 3.4 (2018) 3.9 (2017) 3.5 (2016)	3.0 (2020)
	Road Safety Strategy, Collisions at Intersections/1,000 people	TBD (2019) 13.9 (2018) 14.6 (2017) 14.4 (2016)	13.5 (2020)

Others Reviewing this Report

- M. Persson, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- B. Andriachuk, City Solicitor