

MEMORANDUM

TO: Transportation Services Committee

FROM: Kathleen Llewellyn-Thomas, P.Eng.
Commissioner of Transportation and Community Planning

DATE: October 3, 2012

RE: **Pedestrian Death Review, Office of the Chief Coroner of Ontario**

Background

On September 19, 2012, the Office of the Chief Coroner of Ontario released a report titled "Pedestrian Death Review". The Coroner's review was initiated following a tragic sequence of events where 14 pedestrian deaths occurred in a period of 14 days in the Greater Toronto Area in January of 2010. Two of these 14 pedestrian deaths occurred within York Region.

Since 2010, Regional Council has approved safety policies and tactics to help protect the safety of our most vulnerable road users

Protection of our most vulnerable road users continues to be a major area of focus for the Transportation and Community Planning Department. Recent initiatives to improve pedestrian safety on Regional Roads have positioned York Region as a municipal leader in this area. A new Speed Limit Policy which lowers speed limits in urban areas, pedestrian countdown indications, zebra crosswalk markings, audible crossing signals, Community Safety Zones and public education/outreach are all important components of our continued effort to provide a safe and comfortable walking environment on Regional roads within York Region.

Ten of the 95 pedestrian deaths explored in the review took place in York Region, with seven occurring on Regional Roads and three on local municipal roads

The review explored the details of 95 pedestrian deaths that took place in the province of Ontario between January 1 and December 31, 2010.

The Coroner's review of the 95 pedestrian deaths in 2010 produced a number of conclusions including:

- Pedestrians over the age of 65 were over-represented accounting for 36% of fatalities and 13.2% of the population

- It was dark or twilight for 57% of fatal pedestrian collisions
- 76% of pedestrian fatalities occurred in urban areas
- Five pedestrian circumstances accounted for 70% of the deaths:
 - Pedestrians hit at mid-block uncontrolled locations while crossing (31%)
 - Pedestrians hit on the sidewalk or shoulder of the roadway (14%)
 - Vehicle going straight through a controlled intersection while a pedestrian crossed without the right-of-way (11%)
 - Vehicle making left-turn while pedestrian crossed with the right-of-way (7%)
 - Vehicle making right-turn while pedestrian crossed with the right-of-way (7%)

The report identified several areas which stood out as causal in the 95 deaths that were under review:

- **Vehicle Speed:** 67% of the deaths occurred on roads with posted speeds beyond 50 km/hr
- **Distractions:** Approximately 20% of pedestrians may have had some form of distraction (eg. headphones/music player or cell-phone)
- **Failure to Yield by the Driver:** in 21% of all pedestrian deaths, the driver failed to yield the right-of-way to a pedestrian legally crossing within an intersection
- **Crossing Against the Signal:** Fatalities occurred involving a pedestrian crossing against the signal in 12% of the deaths
- **Mid-block Crossing:** 31% of pedestrians who were struck were crossing at mid-block locations at uncontrolled crossings where pedestrians must wait for safe gaps in traffic to cross the roadway
- **Pedestrian Disabilities:** 10% of those involved in pedestrian fatalities were utilizing assistive devices employed by the elderly and the disabled, such as canes, walkers, crutches and wheelchairs
- **Driver Inattention:** 14% of pedestrians were hit on a sidewalk or shoulder of the road, which may be due to loss of control of the vehicle. Inattention may occur when drivers utilize personal communication devices, computers and music in their vehicles which can lead to loss of control. The use of such communication devices by drivers could not be quantified during the study
- **Alcohol and/or Drugs in Drivers:** There was evidence of alcohol and/or drug use observed in 7% of drivers involved in fatal pedestrian collisions
- **Alcohol and/or Drugs in Pedestrians:** In 28% of the pedestrians, toxicology was positive for drugs, alcohol or both

The report tabled 26 recommendations to improve pedestrian safety including:

- Adopt a complete streets approach when designing new roadways and communities to accommodate all road users
- Proactively review collision statistics on road sections and identify opportunities to improve safety for pedestrians
- Implement speed reduction strategies
- Implement changes to traffic signals including countdown timers, leading pedestrian intervals, longer crossing times and audible crossing signals

October 3, 2012

Pedestrian Death Review, Office of the Chief Coroner of Ontario

- Mandatory side-guards on heavy trucks
- Improved roadway lighting
- Provide more pedestrian crossing opportunities
- Improved education (particularly for adults and seniors)
- Targeted enforcement to reduce red light running

Many of the Chief Coroner's recommendations have been implemented as standard practice within York Region

York Region is a municipal leader in pedestrian safety, implementing a number of Council-approved policies and tactics that help protect vulnerable road users.

Transportation and Community planning staff will review some of the Chief Coroner's additional recommendations to determine what, if any, enhancements or changes may be appropriate to further improve pedestrian safety in York Region. **Attachment 1** provides a complete list of all 26 recommendations as well as York Region's current practice in each area.

ATTACHMENT 1
PEDESTRIAN DEATH REVIEW
OFFICE OF THE CHIEF CORONER – RECOMMENDATIONS

	Chief Coroner's Recommendation	Recommendation To	York Regional Council Action To Date
LEADERSHIP			
1	A “complete streets” approach should be adopted to guide the development of new communities and the re-development of existing communities in Ontario.	Ministry of Transportation Ministry of Municipal Affairs and Housing Infrastructure Ontario Association of Municipalities of Ontario All Municipalities in Ontario	Current best practice. All new Regional road projects always consider the needs of pedestrians.
2	a) The Province of Ontario should develop a <i>Walking Strategy for Ontarians</i> . b) As a component, municipalities should be encouraged to develop policies, practices, and plans for safe and convenient pedestrian conditions for transportation including road safety, recreation and health; in essence, creating their own individual walking strategies.	Ministry of Municipal Affairs Association of Municipalities of Ontario All Municipalities in Ontario	Council approved the Pedestrian and Cycling Master Plan and the Transportation and Community Planning Department recently created an office of cycling and pedestrian infrastructure.
3	Infrastructure Canada and Infrastructure Ontario should identify funding specific to pedestrian facilities within municipal infrastructure and stimulus funding programs.	Infrastructure Canada Infrastructure Ontario	N/A – Provincial and Federal matter.

4	The creation of the <i>Walking Strategy for Ontarians</i> should be led by the Ministry of Municipal Affairs and Housing.	Ministry of Municipal Affairs and Housing	N/A – Provincial matter.
5	The <i>Walking Strategy for Ontarians</i> should seek to eliminate all preventable pedestrian deaths in the long term, and in the short term to reduce preventable pedestrian fatalities 50% in the Province of Ontario by 2022, using the benchmark of the 95 fatalities from this report.	Ministry of Municipal Affairs and Housing	N/A – Provincial matter.
6	The <i>Walking Strategy for Ontarians</i> should consider and recognize vulnerable road using pedestrians in its development with the rationale that if roadways are safe for vulnerable road users, they will be safe for everyone. Vulnerable pedestrians include: • Senior citizens greater than 65 years of age • Pedestrians with disabilities • Children	Ministry of Municipal Affairs and Housing	N/A – Provincial matter.
7	The <i>Walking Strategy for Ontarians</i> should become a component of the current review of the Provincial Policy Statement 2005 (PPS) under “transportation planning”	Ministry of Municipal Affairs and Housing	N/A – Provincial matter.
LEGISLATION			
8	The Ministry of Transportation (MTO), as a stakeholder in developing the <i>Walking Strategy for Ontarians</i> , should solicit feedback from municipalities and other stakeholders on the potential opportunities and barriers in its own policies and legislation, such as the <i>Highway Traffic Act</i> , to support and improve pedestrian safety in Ontario.	Ministry of Transportation Ministry of Municipal Affairs and Housing Association of Municipalities of Ontario	N/A – Provincial matter.

9	The MTO should amend the <i>Highway Traffic Act</i> , to allow local municipalities to set the unsigned default speed limit at 40 kilometres an hour on residential streets, a decrease from the current 50 kilometres an hour.	Ministry of Transportation Ministry of Municipal Affairs and Housing Association of Municipalities of Ontario	N/A – Provincial matter.
10	The Ministry of Transportation should amend the Highway Traffic Act, to allow for municipality by-laws to provide for the erection of non-signalized pedestrian crossings for mid-block crossings in residential areas.	Ministry of Transportation	N/A – Provincial matter.
11	Transport Canada should make side-guards mandatory on heavy trucks in Canada. In addition, consideration should be given to requiring additional equipment (such as blind spot mirrors and blind spot warning signs) to make pedestrians more visible to trucks and decrease the change of a collision, especially during right-hand turns.	Transport Canada	N/A –Federal matter.
ENGINEERING			
12	All municipalities in the Province of Ontario should undertake an annual forensic review of all pedestrian deaths that occurred within their jurisdictions to identify collision-prone areas. They should seek to understand the root causes of the deaths with a view to implementing engineering changes that may support enhanced safety for pedestrians and avoid future deaths. Analyzing collision patterns can assist in guiding the development of remedial or preventive measures.	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	In York Region, every fatality is reviewed by York Regional Police Collision Reconstruction Unit and the Traffic Safety Team of Transportation and Community Planning Department and reported to Council bi-annually in the Transportation Fact Book.
13	All municipalities in the Province of Ontario should review the collision history of a road and proactively seek to improve pedestrian safety as a component of capital planning for road reconstruction and resurfacing projects.	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Existing best practice.

14	Municipalities should consider the introduction of speed reduction strategies where speed has been implicated in the death(s) of pedestrians and in areas where there are large populations of pedestrians utilizing the roadway including school areas, senior's homes, community and recreation centres and hospitals.	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	New Speed Limit Policy approved by Council in April 2011 and Community Safety Zones Policy in June 2012.
15	Municipalities in developing their complete streets approach should consider reducing speed limits to 30 km/hr on residential streets. In addition municipalities should adopt speed limits of 40 km/hr on other streets, unless otherwise posted, or as required by the <i>Highway Traffic Act</i> .	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Not applicable to Regional Roads.
16	Municipalities in developing their complete streets approach should consider installing leading pedestrian signal intervals (LPI) in intersections where there have been collisions or where a high occurrence of potential collisions between vehicles and pedestrians might occur. The WALK sign, turned on 3-5 seconds before the green light ensures that the vehicle intending to turn right or left has improved visibility and time to yield to pedestrians that have begun to cross.	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Requires further investigation and review. A report to Council is scheduled in the future.

17	Municipalities in developing their complete streets approach to pedestrians, should consider strategies to benefit all pedestrians, particularly senior citizens and those with disabilities by including: • Pedestrians lights with longer countdowns and walking times (reduce walking speed assumptions from 1.2 m/sec to 0.73 m./sec) • Auditory signals at pedestrian/traffic lights • Shorter crossing distances • Pedestrian countdown signal timers • Additional lighting at intersections with high night-time pedestrian demand • Widened sidewalks to accommodate mobility aids • Removal of snow and ice as priority • Pedestrian crossing islands • Marked crosswalks at all four legs of an intersection	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Currently reducing design walk speed from 1.2m/s to 1.0m/s at all regional signalized intersection. Further reduction to 0.73m/s would require further investigation and review to assess benefits and impacts. Pedestrian countdown signals and auditory signals already in use.
18	Municipalities in developing their complete streets approach to pedestrians, should consider strategies to prevent collisions occurring at mid-block uncontrolled crossings by incorporating pedestrian crossing islands on roads with four or more lanes where pedestrians are commonly crossing at mid-block and/or pedestrian/vehicle collisions have occurred.	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Further review required.

19	Municipalities in developing their complete streets approach to pedestrians should consider strategies to prevent collisions occurring where pedestrians are walking along the road. Some of these strategies might include: • Developing new communities that provide sidewalks • Adding sidewalks in existing communities • Building roads with paved shoulders a minimum of 4 feet (1.8m) wide • Building communities with continuous and connected sidewalks along both sides of the street • Ensuring that sidewalks continue through driveways which are prohibited from being blocked • Providing double-sided lighting along both sides of arterial streets	Association of Municipalities of Ontario All Municipalities in Ontario Ministry of Municipal Affairs and Housing	Sidewalks are local municipality jurisdiction. Paved shoulders are existing best practice on all new rural road projects. Midblock lighting is local municipal jurisdiction. Double-sided lighting is not necessarily “brighter” than single sided or median lighting.
EDUCATION			
20	The Ministry of Transportation should create an educational body with representatives from both governmental and non-governmental organizations to assist with the creation and delivery of educational programs targeting safety for pedestrians in Ontario.	Ministry of Transportation	N/A – Provincial matter.
21	The Ministry of Transportation should create an educational program to senior citizens and other adult pedestrians stressing the need for navigating streets safely, particularly when exposed to arterial streets and high risk corridors.	Ministry of Transportation	N/A – Provincial matter.

22	The Ministry of Transportation should create an educational program for drivers stressing the need to: • Watching for pedestrians at all times • No alcohol and/or drugs before driving • No distracted driving • Yield to pedestrians at cross walks • Yield to pedestrians when making turns, both right and left • Drive within posted speed limits, and consider the significant risk of fatality to pedestrians when struck at incrementally increasing rates of speed • Reduce speeds in inclement weather • Be aware that, when driving in roads with more than one lane, one should never pass a car which is stopped for a pedestrian • Exercise great caution and awareness of pedestrians entering/existing or trying to catch public transit vehicles • Be vigilant and cautious around young children, including: ○ Performing a circle check by walking around the vehicle to check for any obstacles before leaving a parking spot; and ○ Parking the vehicle by backing in to ensure the driver knows the path is clear when leaving	Ministry of Transportation	N/A – Provincial matter.
----	--	----------------------------	--------------------------

23	The Ministry of Transportation, in educating future drivers (who are also pedestrians), should update the <i>Official MTO Driver's Handbook</i> to include a chapter which clarifies those traffic scenarios in which motorists are most likely to be involved in a collision with a pedestrian. In this way, young and new drivers taking beginning drivers education course, might acquire a heightened awareness of situations in which pedestrians and drivers are most at risk for collisions.	Ministry of Transportation	N/A – Provincial matter.
24	The Ministry of Education and the Ministry of Transportation should make road safety and pedestrian safety information mandatory in the junior kindergarten through grade eight curriculum, targeting children 5-14 years of age on a yearly basis. The focus should be on navigating streets safely, particularly when exposed to arterial streets and high risk corridors.	Ministry of Education Ministry of Transportation	N/A – Provincial matter.
25	The Ministry of Education and the Ministry of Transportation should ensure that public education and safety campaigns for both pedestrians and drivers should promote awareness of pedestrian safety at night, given that most fatalities occurred at twilight or in the dark. All pedestrians should be encouraged to wear bright or retro-reflective clothing when walking in the evening or at night.	Ministry of Education Ministry of Transportation	N/A – Provincial matter.

ENFORCEMENT			
26	Police Services in Ontario should develop strong traffic law enforcement programs consisting of notification of the community, public awareness and education as well as officer training. Targeted driving behaviours might include: • Speeding • Failing to yield to pedestrians • Running red lights and stop signs • Distracted driving • Failing to yield when making a right or left turn Targeted pedestrian behaviours might include: • Crossing the road when distracted • Crossing at an unfavourable location • Crossing against the traffic signal	Ontario Association of Chiefs of Police	Red Light Camera program under consideration in 2013 budget process.