Existing Road Safety Countermeasures

In a continuous effort to improve road safety in Toronto, there have been many initiatives and countermeasures implemented by the various partner agencies throughout the years that have collectively contributed to the reduction of KSI collisions. A review of existing countermeasures was conducted as part of the development of the plan to identify those that align with the 5 emphasis areas of the RSP and to identify opportunities for enhancement. The review showed that there is already a very rich complement of road safety related engineering, enforcement and education activities in the City and its partnering agencies. Below is the complete list of current countermeasures:

Pedestrians:
- Geometric safety improvement program – A capital program proactively identifies and implements safety enhancements;
- Traffic Safety Local Improvement Program (TSLIP) – A capital program for minor roadway reconstructions, such as removing unnecessary right turn channels and reducing corner radii, to correct deficiencies or increase safety;
- Accessible pedestrian signals (APS) – Installation of tactile surfaces and signal heads that emit an audible tone at signalized intersections to assist blind, visually impaired or deaf-blind in safely crossing roadways;
- "Missing Links" Program (Annual sidewalks capital program) – A capital program for the construction of new sidewalks at locations where sidewalks are missing;
- Pedestrian countdown signals – Installation of pedestrian signal heads that displays time remaining for pedestrians to safely complete their crossing at signalized intersections;
- Zebra crossing pavement markings – Installation of broader, striped pedestrian crossing pavement markings at signalized intersections to increase the visibility of the pedestrians to drivers;
- Leading pedestrian intervals – Implementation of a traffic signal control feature which displays the pedestrian "Walk" signal before the green signal for drivers, giving pedestrians a head start into the intersection to increase their visibility to drivers;
- Pedestrian crossover (PXO) enhancements – Implementation of various upgrades at PXOs, including zebra crossing pavement markings, amber beacons, reflectors, pushbuttons and additional signs;
- "March Break March Safe" – An annual March Break pedestrian safety campaign designed to promote public awareness of pedestrian safety;
- "Stay Focused Stay Safe" – A campaign by Toronto Transit Commission which addresses various pedestrian safety issues such as jaywalking and night time visibility;
- "Step Up Be Safe" – An education and enforcement campaign which coincides with Daylight Savings Time, focuses on motorists, cyclists and pedestrians who commit offences near pedestrian crossovers, crosswalks, intersections, school zones and crossing areas frequented by seniors.

School Children:
Existing Countermeasures

- School Zone Safety Strategy – A plan for improving safety around schools which includes engineering, education and enforcement components;
- School "Watch Your Speed" Pilot Program – Pilot program for using permanent speed display signs to address speeding issues in school zones;
- Adult School Crossing Guard Program – A program provides adult school crossing guard based on existing warrants review to navigate and protect children crossing streets around their schools;
- Teen Driving Safety Education Presentations – Presentations by Toronto Police Traffic Services dedicated to educating and heightening awareness amongst youth on the leading causes of traffic collisions that result in death and serious injury;
- CAA School Safety Patrol Program – A program developed to protect and educate elementary school children on safe road-crossing practices;
- "Youth in Control" (YIC) Leadership Program – A high school peer leadership program which focuses on safer partying and safer driving;
- Cycling and pedestrian safety curriculum support – Classroom skill building activities developed for schools who participate in active transportation and intended to raise awareness and recognize situations where injuries to pedestrians and non-motorized wheeled travel can be reduced;
- Bicycle helmet initiative for schools that includes activities promoting helmet use and wheel safety;
- "At Home Alone" – A family workshop for parents and children that helps prepare children to travel to and from school safely as well as being at home alone safely;
- School Travel Planning – A pilot initiative (involving 10 Toronto schools) to implement active school travel using a planning model consisting of local stakeholder engagement, travel surveys and risk assessments.

Older Adults:
- Toronto Seniors Strategy – A plan for implementing various improvements focused on senior mobility and safety needs, such as extended pedestrian crossing times at traffic control signals;
- Lower walking speeds at traffic signals – Improved standards for traffic signal timing that allows lower walking speeds to be used to provide more pedestrian walking time;
- Mid-block pedestrian crossing – Installation of pedestrian traffic signals and pedestrian crossovers (PXO) at mid-block locations to provide protected crossing opportunities for pedestrians;
- Priority Snow Removal – Increased priority for snow removal on roads and sidewalks near areas with high older adult trip generation rates as well as school zones. Keeping facilities clear of snow reduces the likelihood of weather related collisions.
- Senior Driving Education Presentations – Various presentations by Toronto Police Traffic Services aimed at improving road safety for seniors;
- Bringing an Awareness of Senior Safety Issues to the Community (B.A.S.S.I.C.) – An initiative aimed at raising awareness to senior safety issues;
YouTube Seniors Pedestrian Safety Video – YouTube video aimed at reducing pedestrian collisions by reminding pedestrians, especially seniors to cross at designated crosswalks and traffic lights, and make sure drivers can see you when you cross;

iNavigait – An education campaign targeted toward seniors which reinforces messaging about mobility, hearing and vision aids, and provides information and resources regardless of physical, intellectual, sensory, psychiatric or other medical conditions.

Cyclists:
• Cycle tracks – Installation of physically separated lanes for cyclists;
• Green cycling areas – Installation of painted conflict areas at and near intersections and driveways along bike lanes and cycle tracks to improve visibility of cyclists to drivers;
• Bike boxes – Installation of painted areas for cyclists at signalized intersections that provide a protected space to wait in front of drivers, allowing them to proceed ahead of vehicles on the green signal;
• Automated cyclist detection – Installation of automated cyclist detectors to optimize intersection operations and improve cyclist safety at high cyclist volume intersections;
• Signalized crossings for cyclists – Installation of dedicated traffic signals to facilitate cyclist crossings at intersections and across roadways;
• “Stay Safe, Stay Back” campaign – A public awareness campaign promoting safer interaction between cyclists and motorists;
• Back-To-School Campaign – An annual road safety campaign which educates drivers, parents and students with back-to-school road safety tips and targets the enforcement of unsafe drivers in school zones;
• Helmet Safety Education Videos – Videos aimed at bringing awareness to the benefits of wearing a helmet when cycling;
• SPACE to Cycle Campaign – An education and enforcement campaign to help cyclists ride safely through city streets, without fear of having car doors opened in front of them or vehicles invading their lanes;
• Toronto Cyclists Handbook which teaches inexperienced cyclists about traffic laws and safe cycling habits;

Aggressive Driving:
• Traffic calming – Installation of physical features (e.g. speed humps) on roads to address various safety and operational issues such as speeding;
• "Watch Your Speed" Program (WYSP) – A program for promoting speed limit compliance using mobile radar speed display trailers that are rotated to requested locations throughout the City;
• LED blank-out signs – Implementation of illuminated signs at signalized intersections to provide visible and clear guidance to drivers as to when turns are prohibited;
• “Please Slow Down” campaign – A public awareness campaign for encouraging drivers to slow down on residential roads using temporary lawn signs offered to residents free of charge;
Appendix 3

Existing Countermeasures

- Red light cameras – Automated enforcement of driver compliance to traffic signals at key signalized intersections;
- Aggressive Driving Campaign – A service-wide aggressive driving campaign which targets speeding, HTA violations, commercial vehicles, distracted parking etc.;
- "You Know You Shouldn't... So Don't" Gridlock Campaign – An enforcement and education campaign aimed at reducing gridlock and congestion in the City targeting prohibited turns, pedestrians stepping onto the roadway in advance of a walk signal or green light and vehicles blocking intersections;
- Operation Impact – A Canada-wide Thanksgiving long weekend enforcement campaign which targets speeding, aggressive driving, distracted driving, impaired driving and failing to wear a seatbelt;
- Canada Road Safety Week – An annual awareness campaign which focuses on behaviours that put drivers, passengers and other road users most at risk;
- Radio Program – A live, one hour radio program with a Portuguese radio station where police take the opportunity to educate the listeners about various road safety issues.

Distraction:
- "Stay Alert – Stay Safe" campaign – A public education campaign encouraging pedestrians, drivers and cyclists to be more aware of each other;
- "That Text Could End It All" campaign – A one-week safety campaign which used a hearse to pull over distracted drivers to highlighting the dangers of distracted driving.

Others:
- Complete Streets Guidelines – A technical design standard for redesigning roads to better accommodate and address the needs of all road users and abilities;
- Traffic signal enhancements – Installation of reflective backboards on traffic signal heads and uninterrupted power supply (UPS) systems to improve visibility and safety during power outages at key signalized intersections;
- Improved road maintenance standards – Improved standards for snow clearance on roads, cycling facilities, sidewalks and bus stops;
- TTC Safe Service Action Plan – Safety plan for TTC which includes a number of actions aimed at improving the safety performance of the Toronto Transit Commission fleet;