TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 9, 2017
FROM:	KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	VISION ZERO – LONDON ROAD SAFETY STRATEGY

RECOMMENDATION

That, on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to Vision Zero and the City of London Road Safety Strategy:

- a) the Vision Zero Principles described herein BE ADOPTED; and,
- the 2016 Status Report for the London Road Safety Strategy BE RECEIVED for information.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- Civic Works Committee March 18, 2013 Traffic Calming Policy
- Civic Works Committee March 3, 2014 London Road Safety Strategy
- Civic Works Committee January 5, 2016 Red Light Camera Program Implementation
- Civic Works Committee April 25, 2016 School Zone Speed Limit Policy
- Civic Works Committee November 29, 2016 Making Communities and School Zones Safer
- Civic Works Committee April 24, 2017 Rail Safety Week

COUNCIL'S 2015-19 STRATEGIC PLAN

The following report supports the Strategic Plan through the strategic focus areas of *Strengthening Our Community* and *Building a Sustainable City* by improving safety for all road users in the city.

BACKGROUND

Purpose

On December 6, 2016 Council passed a resolution stating "That the Civic Administration BE DIRECTED to investigate and report back on a potential educational campaign for the purpose of influencing specific driving behaviours in London, including the costs associated with such a campaign with the aim of reducing the demand for expensive traffic calming measures".

On January 1, 2017, the Red Light Camera Agreement was established between the Ontario Ministry of Transportation and the City of London. Under Article 15 – Promotional Material, Item 15.3 Public Awareness states the following:

"The Municipality shall include a red light running component in its public awareness campaign and promotion activities on road safety. The public awareness and promotional activities may include promotions in the media in the form of radio advertisements, posters, public service announcements, television advertisements, and joint road safety promotional activity with municipal police forces. The Municipality shall provide to MTO a copy of each publication (a script in the case of television and radio announcements) or any other documentation to be used in the public awareness campaign, which mentions red light running, and shall also provide MTO, if so requested by MTO, a written report, on the number and manner of promotional activities conducted within the Municipality to date".

On March 21, 2017 Council passed a resolution stating "That the following actions be taken with respect to a Zipper Merging Policy Proposal":

- a) The Civic Administration BE REQUESTED to include information about zipper merging in the London Road Safety Plan public education campaign; and,
- b) The Civic Administration BE REQUESTED to pilot a project to include signage with respect to using a zipper merge where/near signage indicating a merge ahead sign would be present.

This report requests endorsement from Committee and Council of Vision Zero principles. In support of Vision Zero and the Road Safety Strategy, this report introduces an awareness and education campaign that includes the components listed below:

- Red light running public awareness campaign;
- Educational campaign for the purpose of influencing driving behaviors on City streets with the goal of reducing speeds on residential streets; and,
- Information and educational plan on zipper merging.

The report also provides a status report on the London Road Safety Strategy that is implementing actions to achieve targets in support of Vision Zero objectives.

DISCUSSION

Vision Zero

Vision Zero is a global movement dedicated to the elimination of traffic deaths and injuries caused by vehicular collisions while increasing safe, healthy equitable mobility for all.

Vision Zero began in Sweden in 1997 and that country now has the lowest rate of traffic fatalities in the world. More recently, Vision Zero has been adopted by those considered to be leaders in traffic safety including countries such as Australia and England, and numerous major cities in the United States. In January 2016, Canada adopted Vision Zero as a federal strategy through Canada's Road Safety Strategy 2025.

According to the World Health Organization, traffic crashes claim 1.25 million lives annually and are the leading cause of death for individuals aged 15 to 29 years. This toll also includes 50 million injuries annually. Progress will only happen by way of substantial changes in attitude and public policy.

Central to Vision Zero is the shared responsibility between road users, designers, maintainers and operators of the transportation system. It also includes the adoption of

a safe systems approach that does not ignore risk-taking behaviour but acknowledges human fallibility and the need to greater allowances for human error.

Vision Zero Principles:

- No loss of life is acceptable
- Traffic fatalities and serious injuries are preventable
- All make mistakes
- Are physically vulnerable when involved in motor vehicle collisions
- Eliminating fatalities and serious injuries is a shared responsibility between road users and those who design and maintain our roadways

Those who have embraced Vision Zero recognize that striving towards zero traffic fatalities and serious injuries is the only ethical goal that makes sense for our citizens.

Vision Zero is a long-term strategy using a Safe System Approach. Making changes to infrastructure and traffic-safety culture takes time. The Safe System Approach is an evidence based decision making framework that allows us to assess, guide and improve traffic safety by taking into account the interaction of all aspects of the transportation system.

Vision Zero represents a culture shift that relies on a holistic approach. This is consistent with recent work undertaken for the creation of the London Road Safety Strategy that was founded on the 4 Es – engineering, enforcement, education and empathy. Many actions are currently underway as formulated during the Strategy. Adoption of Vision Zero will provide a framework to shift assumptions and thinking for City staff, partner agencies and the public.

In response to the specific Council directions in the aforementioned resolutions and municipal obligations under the Red Light Camera program agreement, a public outreach and awareness plan has been created using Vision Zero as a guiding principle. This plan creates opportunities to help Londoners understand their role in Vision Zero and in reducing the number of motor vehicle collisions in our city.



The primary goal of the communication plan is to introduce Vision Zero and encourage residents to shift their assumptions associated with how they travel. Individuals recognizing and modifying their own unsafe and aggressive behaviours and protecting others from unsafe and aggressive behaviours is a key objective. Creating a climate of concern while encouraging shared social norms for safety will be a measure of success.

Key messages that will form the foundation of the public outreach campaign will include:

- We all make mistakes.
- Everyone has a role to play in reducing the number of crashes.

 The decisions we make on the roads can have profound effects on ourselves and others.

The following road safety themes will be positioned within the campaign throughout 2017:

- Red light running
- Excessive speed on residential streets
- Pedestrian crossovers
- Reduced speed limits in school zones
- Cycling
- Zipper merge

The communication plan includes awareness, education and engagement and anticipates using the following communications tools: the City's social media channels, the City's website, community and commercial television and radio and other mediums. Execution of the plan will benefit from the assistance of many community partners, especially those involved with the London Middlesex Road Safety Committee, elected officials, special interest and advisory groups.

The one-year campaign will begin in May when Vision Zero is first introduced, followed by a slow launch to the public over the following weeks and months. An early awareness item will be the commencement of the Red Light Camera enforcement program.

Communication Campaign Estimated Cost

A preliminary estimate of the cost of the communication campaign as described above is in the order of \$55,000. Various accounts that contribute to road safety include amounts for these engagement and awareness components. Contributions toward this communications plan are currently anticipated to come from the Red Light Camera program with funds up to \$40,000. The Road Safety Strategy and the Cycling Master Plan accounts will also provide funding in the order of \$15,000.

London Road Safety Strategy Update

Consistent with the aspirational goal identified by Vision Zero, the London Road Safety Strategy outlines a path to a safer road environment for all transportation users in London with identified actions and measurable targets. Led by the City of London, and in collaboration with members of the London Middlesex Road Safety Committee (including the Middlesex London Health Unit, Middlesex County, London Police Service and other partners) a strategic road safety program for London was completed in 2014 to guide the City and its partners in creating safer roads.

The London Road Safety Strategy (LRSS) identified the most important traffic safety issues in the City and surrounding areas. The program is structured to address target areas which are identified by groupings of collisions presenting the largest numbers of serious collisions and are therefore the best opportunity to address road safety. The top priority target areas that were identified in the Strategy were:

- Intersections
- Aggressive/Distracted Drivers
- Young Drivers
- Pedestrians
- Cyclists
- Red Light Running

For each of the above target areas, a number of countermeasures to reduce and prevent future fatal and injury collisions were identified. The countermeasures were developed for the categories of Engineering, Enforcement, Education and Empathy with

the specific focus on prevention of future fatal and injury collisions. Lead agencies including partners such as London Police and Middlesex London Health Unit were identified for each target area and action.

On March 18, 2014 Council directed the Civic Administration to begin development and implementation of the City-led road safety countermeasure action items as identified in the Road Safety Strategy 2014-2019.

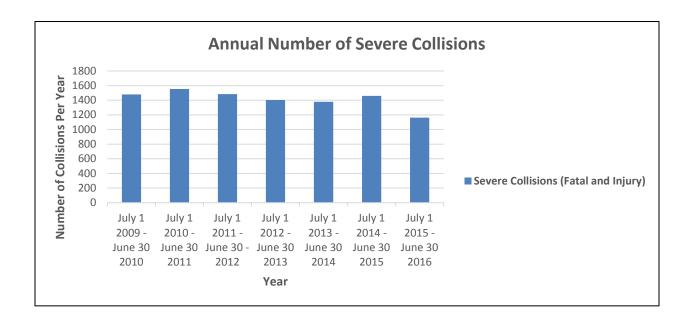
The adoption of the Vision Zero principle will continue to build on efforts that the City and its partners have been undertaking as part of the London Road Safety Strategy Implementation Plan. Implementation of the communications campaign will further the actions under the Education category of the Strategy.

2016 Status Report

The City and its partner members have commenced the action phase of the project with a broad and innovative set of actions directed at the target areas from multiple approaches. The implementation of the selected countermeasures was comprised of new actions and expansion of existing programs in the city and county. Actions underway in the city are identified in the appended Status Report and include the introduction of pedestrian crossovers, reduced school speed limit zones, signage and pavement marking improvements, network safety reviews and intersection safety audits, new cycling and walking infrastructure, red light cameras and associated awareness campaigns. The various action plans making up the program were initiated by the program members starting in late 2014 and are planned to continue for the five year term of the Road Safety Strategy.

The status report attached as Appendix A has been prepared to review the initial preliminary impact of implementing the road safety strategy countermeasures in reducing collisions. The measurement of results is important and the status report commences this aspect of the plan. However, it is early in the life of the plan and only one year of post-countermeasure collision data is available so results are preliminary and only an indicator of trends.

The preliminary outcomes, in terms of changes in collision frequencies, were calculated for each of the target areas as well as the totals. The Road Safety Strategy target is focussed on severe (fatal and injury) collisions. This measure indicates a promising trend. The average number of severe collisions in the five-year period before the Strategy (mid-2009 to mid-2014) was 1460 per year. This number reduced to 1162 in the first 12 month period after the implementation of the first phase of countermeasures (mid-2015 to mid-2016). This represents a 20% reduction in severe collisions when compared to the five year period or a 16% reduction if compared to the most recent one-year period as displayed in the chart below.



The comparison of total annual traffic collisions for the same before/after periods also indicates a positive but less dramatic improvement. The total annual traffic collisions from the period before the Strategy (mid-2009 to mid-2014) averages approximately 7,120 per year. This number decreased to 6,846 in the first 12-month period after the implementation of the first phase of countermeasures (mid-2015 to mid-2016). This represents a 4% decrease both compared to the five-year "before" and the one-year "before" condition.

With respect to each target area, the status report shows that there were decreases in Intersection collisions, Aggressive Driving collisions, Young Driver collisions, Red Light Running Collisions and Cyclist Collisions and neutral to negative outcomes for Pedestrian collisions and Distracted Driving collisions. The full report can be found in Appendix A.

While these preliminary numbers indicate some promising trends, the current analyses is limited to only one year of data after initiation of the countermeasures. A short "after" period such as this is generally not viewed as strong evidence statistically and results can easily be affected by factors other than the LRSS. The results after three years following initiation of the road safety strategy program, will be much more reliable indications.

SUMMARY

Vision Zero promotes a culture shift and questions current attitudes toward road fatalities and injuries. Vision Zero states that no fatalities and serious injuries are acceptable. Achieving the aspirational goal requires a shared responsibilities from road operators and users.

Vision Zero requires a holistic approach including education and awareness and the communication plan is proposed as a key component. The primary goals of the communication plan are to introduce and encourage residents to embrace Vision Zero in London; encourage road users to recognize and reduce their own unsafe behaviours, and help to bring about a climate of concern while encouraging shared social norms for safety. The relevant capital budget accounts include the funds necessary to commence the communication plan.

The mission and goal of the 2014 - 2019 London Road Safety Strategy is to save lives and reduce serious injuries. The short term target is a 10% reduction in fatal and injury traffic collisions within five years. Initial collision statistics suggest the actions resulting from the plan are achieving the desired objective. The road safety strategy actions are aligned with the aspirational goal of Vision Zero.

Acknowledgements

The report was reviewed by Sergeant Amanda Pfeffer of the London Police Service. The London Police Service expresses support for the Vision Zero initiative and the long-term goal of zero traffic fatality and serious injury collisions within the City of London. By embracing the holistic approach of Vision Zero the London Police Service can support the City of London in supplementing the existing London Road Safety Strategy.

This report was prepared with the assistance of Maged Elmadhoon, Traffic Planning Engineer of the Transportation Planning & Design Division and Shane Maguire, Manager of Roadway Lighting & Traffic Control with input from Rob Andrusevich and Glynis Tucker of the Communication Division.

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Attach: Appendix A: 2016 Status Report – Road Safety Strategy

c: Transportation Advisory Committee Sergeant Amanda Pfeffer, London Police Service

London Middlesex Road Safety Committee