# M TORONTO

# **REPORT FOR ACTION**

# **Updates on Vision Zero Road Safety Plan**

Date: November 14, 2024To: Infrastructure and Environment CommitteeFrom: General Manager, Transportation ServicesWards: All

#### SUMMARY

Since Vision Zero was first adopted by the City in 2016, it has incrementally grown to provide extensive, proactive, systemic and directed initiatives, informed by data and targeted to ensure that serious injuries and fatalities are eliminated on Toronto's streets. This report provides an update on the Vision Zero Road Safety Plan and outlines continued and new programs, initiatives, and countermeasures.

This report provides status updates and recommended improvements to various components of the Vision Zero Road Safety Plan in the following areas:

**1. Trends in Serious Injuries and Fatalities:** describing changes over time for each emphasis area of the Vision Zero Road Safety Plan as well as comparison to other leading jurisdictions;

**2. Speed Management Initiatives:** providing updates on various ongoing and upcoming programs and initiatives under the speed management strategy that help address the frequency and/or outcome of relevant collision scenarios, including recommendations for a number of Community Safety Zones;

**3. Improving Crossings for Pedestrians:** providing updates on measures to address pedestrian crossing protection and recommendations to improve visibility at Pedestrian Crossovers;

**4. Improving Intersection Safety:** providing updates on measures to address safety of all road users at intersections; and

**5. Other Updates:** describing other enforcement measures, progress on other complementary City initiatives and an update on the School Safety Zone program.

This report recommends enacting 20 new or extended Community Safety Zones to support installation of Automated Speed Enforcement cameras focused on improving safety for older adults as well as expanding one existing location in Ward 16 as requested by the local Councillor that staff have reviewed and support. This report also recommends revising stopping prohibitions around Pedestrian Crossovers to meet current Provincial guidance.

Since 2016, the Vision Zero annual budget and spend rate has increased incrementally reflecting the demand for improved road safety as well as the capacity to deliver. The 2025 proposed budget of \$99.1 million - \$31.7 million in capital and \$67.4 million in operating - is the largest annual budget for the Plan since inception and further demonstrates the importance of this initiative and Transportation Services' ability to deliver the varied aspects of the work.

#### RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. City Council designate Community Safety Zones at the locations set out in Attachment 1 to the report (November 13, 2024) from the General Manager, Transportation Services.

2. City Council delete Subsection (3) of §950-400B of City of Toronto Municipal Code Chapter 950, Traffic and Parking, and insert a new Subsection (3) generally as follows:

"(3) (a) Within 15 metres of a pedestrian crossover on the approach side to a pedestrian crossover;

(b) Within 10 metres of a pedestrian crossover beyond the crossover; or (c) Where authorized signs are otherwise posted on the approach side of a pedestrian crossover or beyond a pedestrian crossover, within the area designated as no stopping by the authorized signs."

3. City Council delete Subsection (4) of §903-6A of City of Toronto Municipal Code Chapter 903, Parking for Persons with Disabilities, and insert a new Subsection (4) generally as follows:

"(4) (a) Within 15 metres of a pedestrian crossover on the approach side to a pedestrian crossover;

(b) Within 10 metres of a pedestrian crossover beyond the crossover; or (c) Where authorized signs are otherwise posted on the approach side of a pedestrian crossover or beyond a pedestrian crossover, within the area designated as no stopping by the authorized signs."

4. City Council establish new offences and establish new associated penalties and amend City of Toronto Municipal Code Chapter 610, Penalties, Administration of, generally as follows:

a. By deleting from Schedule A, Table 10: Chapter 950, Traffic and Parking, the following:

Column 1	Column 2	Column 3
Designated Part	Short Form Wording	Penalty Amount
of Chapter		

§ 950-400B(3)(b)	Stop – Within 9 metres of	\$75.00
	Pedestrian Crossover –	
	beyond crossover	

b. By inserting in Schedule A, Table 10: Chapter 950, Traffic and Parking, the following:

Column 1 Designated Part of Chapter	Column 2 Short Form Wording	Column 3 Penalty Amount	
§ 950-400B(3)(b)	Stop – Within 10 metres of Pedestrian Crossover – beyond crossover	\$75.00	
§ 950-400B(3)(c)	Stop – Signed highway - Pedestrian Crossover (approach side/beyond crossover)	\$75.00	

5. City Council authorize that the amendments in Recommendations 2, 3, and 4 be implemented effective February 10, 2025.

6. City Council authorize the City Solicitor to introduce the necessary bills to give effect to City Council's decision and City Council authorize the City Solicitor to make any necessary clarifications, refinements, minor modifications, technical amendments, or by-law amendments as may be identified by the City Solicitor or General Manager, Transportation Services, in order to give effect to Recommendations 1 to 5, inclusive, above.

# **FINANCIAL IMPACT**

This report seeks approval to implement a number of enhancements to the Counciladopted Vision Zero Road Safety Plan. Since the inception of the Vision Zero Road Safety Plan in 2016, multiple Council decisions have amended the initial \$80.0 million budget in order to accelerate delivery of this key Council priority. The 2024 Vision Zero Road Safety Plan budget of \$79.8 million comprised of \$28.3 million in capital and \$51.5 million in operating, represents the largest budget for any one year on the Vision Zero Road Safety Plan. Furthermore, it is anticipated that the 2024 Road Safety Plan budget will be fully spent. The Annual Vision Zero Road Safety Plan budget amounts shown in Attachment 2 demonstrate the steady growth in both the budget and capacity to deliver since the Plan began implementation in 2017. The proposed 2025 budget of \$99.1 million, \$31.7 million in capital and \$67.4 million in operating further demonstrates the sustained growth of this critical program.

Council's adoption of prior year budgets has consistently secured sufficient capital funding for the roll out of the Vision Zero Road Safety Plan up to and including 2024. The estimated capital funding required to continue with sustained advancement of the Vision Zero Road Safety Plan between 2025-2029 is approximately \$157.1million gross

(\$121.9 million debt) of which, within the same time frame 65.5 million is available within the current 2024-2033 Capital Budget & Plan for Transportation Services. The incremental funding of \$91.6 million gross (\$71.3 million debt) is included for consideration as part of the 2025 Budget Process.

The estimated operating funding required to continue with sustained advancement of the Vision Zero Road Safety Plan is approximately \$67.4 million gross in 2025 and is included for consideration in the 2025 Budget process.

These incremental funding of 15.5 million has been included in the budget to account for operating needs and inflationary pressures as well as to meet increased demands for various sub-programs and initiatives of the Vision Zero Road Safety Plan. The greatest financial impacts are in the areas of geometric safety improvements, traffic calming treatments, protected crossings, and expansion of both the Automated Speed Enforcement and Red Light Camera program.

Future capital requirements and future operating impacts of capital investments in infrastructure developments associated with the Vision Zero Road Safety Plan will be reviewed further and requested as part of the future budget processes.

The Chief Financial Officer and Treasurer has been advised of the financial impacts associated with the Vision Zero Road Safety Plan to be considered along with other priorities in future budget processes.

# **EQUITY IMPACT**

The Vision Zero Road Safety Plan plays a critical part in building a safe and inclusive city. The plan puts particular emphasis on prioritizing safety for vulnerable road users – pedestrians, people cycling, and people on motorcycles, as well as older adults, school children, and persons with a disability – as they are disproportionately impacted by collisions and face a higher risk of a fatality or serious injury in that event.

A fundamental principle of Vision Zero is to leverage data to inform decision making. The data-driven approach helps to recognize that the concentration of safety problems is not accidental, but it is rather partly due to patterns of disinvestment and underinvestment in equity-deserving communities, such as people with disabilities, vulnerable road users and geographic areas of the City. Accordingly, these communities deserve more than equal attention and resources, which means moving past the default approach of using geographic equality in allocating transportation resources or relying on communities to request investments in transportation safety.

Transportation Services collects and analyzes data to identify communities experiencing disparities in roadway fatalities and serious injuries. This is accomplished by engaging representatives to understand their transportation safety needs, implementing improvements in project design and delivery to eliminate disparities, and monitoring outcomes to continuously improve safety. Such equity-informed decision making allows Transportation Services to focus resources on countermeasures and interventions in communities and locations where they will make the most difference.

One of the components of a successful Vision Zero Road Safety program is utilizing enforcement strategies to deter unsafe driving behaviours. However, significant concerns have been raised about how the increased use of officer-initiated enforcement could have a disproportionate impact on equity-deserving communities.

The most effective way to prevent unintentional bias in speed enforcement is the use of automated speed enforcement (ASE) and adherence to rigorous guidelines for placement and operation of ASE units. While the use of ASE and other automated enforcement tools such as Red Light Cameras mitigates the risk of bias in officer-initiated traffic stops, equity-related concerns remain with regards to unintentionally targeting geographic areas of the city that have historically suffered from post-war suburban land-use planning and consequently higher speed arterials. Transportation Services considers how this approach should be integrated in the prioritization criteria for ASE, while also acknowledging that resulting fines may be excessively burdensome in lower income neighbourhoods despite the resulting in safer streets for all road users.

# **DECISION HISTORY**

At its meeting of October 9 and 10, 2024, City Council considered 2024.E16.3 Administrative Penalty System for Red Light Camera and Automated Speed Enforcement Violations - Revised Implementation Date, and amended the effective date for the administrative penalty system from November 1, 2024 to December 9, 2024. <u>https://secure.toronto.ca/council/agenda-item.do?item=2024.IE16.3</u>

At its meeting of February 6 and 7, 2024, City Council considered 2024.IE10.1 Administrative Penalty System for Red Light Camera and Automated Speed Enforcement Violations, and City Council approved the governance and administrative requirements to establish an expanded Administrative Penalty System that includes Red Light Camera and Automated Speed Enforcement violations. https://secure.toronto.ca/council/agenda-item.do?item=2024.IE10.1

At its meeting of November 8 and 9, 2023, City Council considered 2023.IE7.4 Updates on Vision Zero Road Safety Initiatives - New Traffic Calming Policy, Community Safety Zone Criteria, Zebra Marking Policy, Approach to Area-Based Speed Limit Reductions and Related Council Requests, and adopted updates to the traffic calming policy, updates to criteria for establishing community safety zones, and inclusion of collector roads in areas speed limits. City Council also directed the General Manager, Transportation Services to evaluate crossing warrants to satisfy the collision hazard warrant is satisfied if at least one potentially preventable collision classified as a KSI ("Killed or Seriously Injured"), and to report annually on a) progress on Toronto's air quality, climate, public health and congestion goals in relation to the Vision Zero Road Safety Plan and b) for every location on the public right of way where a vulnerable road user was killed by the driver of a motor vehicle, a summary of potential contributing factors that resulted in the fatality and recommendations for safety improvements in the area, as well as identification of trends and recommendations for system-wide improvements.

https://secure.toronto.ca/council/agenda-item.do?item=2023.IE7.4

At its meeting of City Council on March 29, 30 and 31, 2023, City Council considered 2023.IE2.11 Senior Safety Zones - Increasing Speeding Fines, and City Council requested the General Manager, Transportation Services, in consultation with the City Solicitor, to report to the Infrastructure and Environment Committee on options for enhanced safety measures in Senior Safety zones, including but not limited to the feasibility for doubling fines for speeding, reducing the speed limit, and creating larger signage in Senior Safety Zones. <u>https://secure.toronto.ca/council/agenda-item.do?item=2023.IE2.11</u>

At its meeting of March 29, 30 and 31, 2023, City Council considered 2023.MM5.25 Improving Road Safety by Expanding the Number of Automated Speed Enforcement Cameras and Operational Hours, and directed the General Manager, Transportation Services, the Director, Court Services, and the City Solicitor, to investigate all available procurement options to acquire and implement 75 additional Automated Speed Enforcement Cameras and to report back on the feasibility of improving the program further, including operational enhancements such as permanent installations. <u>https://secure.toronto.ca/council/agenda-item.do?item=2023.MM5.25</u>

At its meeting of July 19, 20, 21 and 22, 2022, City Council considered 2022.IE31.18 Updating the Traffic Calming Policy to Reflect the Speed Limits on Local Roads, and directed the General Manager, Transportation Services to update the 2002 Traffic Calming Policy so that the warrant for minimum speed is measured against the posted speed limit and not the current standard of 40 kilometres per hour. https://secure.toronto.ca/council/agenda-item.do?item=2022.IE31.18

At its meeting of July 19, 20, 21 and 22, 2022, City Council considered 2022.MM47.45 Continuing Progress on the Road to Vision Zero, and requested the General Manager, Transportation Services report to City Council on a plan to update the warrants/considerations used to evaluate the need for All-Way Stop Control, Pedestrian Crossovers and Traffic Control Signals include a required number of potentially preventable collisions that is no greater than one; and report back on safe street improvements that could be implemented as of right during regular maintenance, and a pathway for how identified measures could be implemented as by default during maintenance projects, road reconstruction, or State of Good Repair works. https://secure.toronto.ca/council/agenda-item.do?item=2022.MM47.45

At its meeting of July 16, 17 and 18, 2019, City Council considered 2019.IE6.8 Vision Zero 2.0 - Road Safety Plan Update and approved the Vision Zero 2.0 - Road Safety Plan Update.

https://secure.toronto.ca/council/agenda-item.do?item=2019.IE6.8

At its meeting of July 12, 13, 14 and 15, 2016, City Council considered 2016.PW14.1 Road Safety Plan 2017-2021, endorsed the Road Safety Plan (2017-2021), and endorsed in principle the countermeasures and enhanced Road Safety Plan identified within the supplementary report (July 11, 2016) https://secure.toronto.ca/council/agenda-item.do?item=2016.PW14.1 At its meeting of March 5, 6 and 7, 2012, City Council considered PW12.4 - Enhancing Pedestrian Safety - Stopping Prohibition within 15 metres of Pedestrian Crossovers (PXOs) on Collector and Local Streets, and approved a prohibition on stopping within 15 metres on the approach of all pedestrian crossovers. https://secure.toronto.ca/council/agenda-item.do?item=2012.PW12.4

At its meeting of May 11 and 12, 2010, City Council considered PW32.6 Prohibition of Stopping at all Times Within 15 Metres on the Approach to a Pedestrian Crossover (PXO), and approved a prohibition on stopping within 15 metres on the approach of a pedestrian crossovers with higher speeds and poor visibility. https://secure.toronto.ca/council/agenda-item.do?item=2010.PW32.6

# COMMENTS

This report provides an update on the Vision Zero Road Safety Plan, outlines a strategy to continue with existing programs and initiatives, and develop new countermeasures, programs and initiatives to advance the goal of eliminating traffic fatalities and serious injuries.

The goal of the City's Vision Zero Road Safety Plan is to eliminate traffic related fatalities and serious injuries. To achieve this goal, similar to other major Vision Zero cities, the Division uses the Safe System Approach. This approach is a process to improve the safety of the transportation system through safe land use planning, safe speeds, safe road design, safe vehicles, safe road users, and post-crash care. This shifts the responsibility to the system rather than only the road user.

The City's Vision Zero Road Safety Plan was adopted in 2016. The 2019 Vision Zero 2.0 Road Safety Plan update represents the City's renewed commitment to the Safe Systems Approach. Vision Zero 2.0 adopts a set of extensive, proactive and targeted initiatives, informed by data and aimed at eliminating serious injury and fatalities on Toronto's roads. The plan focuses on what was working from the original plan as well as a renewed focus on a set of the most effective actions including:

- A holistic speed management strategy;
- Road design improvements;
- Proactively addressing high-risk mid-block crossings;
- Proactively addressing turning collisions at signalized intersections; and,
- An education and engagement plan.

Figure 1 illustrates the evolution and growth of the Vision Zero Road Safety Plan and its many programs and initiatives since its inception in 2016.

#### Figure 1: Growth of Vision Zero Initiatives



Improvement in road design is one of the most effective ways to address road safety and systemic application of safety countermeasures in road design is key in maximizing their impact. This is achieved through development of technical guidelines and standards that allow for widespread application of safety countermeasures in ongoing capital projects. This effort started with Curb Radii Design Guidelines in 2016 (see Figure 2 for an illustration on reductions in near-miss conflicts as well as additional pedestrian waiting space as a result of adjustment to the curb radius). The approach has since expanded to include new and updated guidelines, standards, and application criteria for measures such as lane widths, curb extensions, raised crossings and truck aprons. Staff will continue focusing their efforts in priority areas of speed management, intersection design, and high-risk mid-block crossings and any other priorities as they arise.

Figure 2: Example of Change in Near-Miss Conflicts as a Result of Curb Radius Adjustment at Davenport Road and Christie Street



36-Hour Conflicts Before: 58

36-Hour Conflicts After: 11

# 1. Trends in Serious Injuries and Fatalities

The Vision Zero Road Safety Plan was adopted in 2016, a year in which Toronto had the highest number of traffic fatalities since 2002. Since then, and despite increasing population, there has been a moderate downward trend in traffic fatalities (see Figure 3), likely influenced by many factors, including efforts through the Vision Zero Road Safety Plan as well as external factors such as a change in transportation patterns in 2020 and 2021 as a result of the pandemic.

Since 2017, in addition to the immediate safety audit that is completed within days of every traffic fatality, Transportation Services conducts site reviews for every fatality involving a vulnerable road user. The intention is to understand potential contributing factors within the broader context in which the fatality occurred as well as any opportunities to improve local safety conditions. This approach helps staff to identify any systemic safety concerns and make recommendations on how to prevent similar incidents in the future.

Based on collision data between 2019 and 2023, pedestrians overwhelmingly make up the largest proportion of serious injuries and fatalities (43%) in Toronto, followed by automobile occupants (32%), people on motorcycles (15%) and people cycling (11%). Furthermore, compared to automobile occupants, in 2023, pedestrians, people on motorcycles and people cycling were 150 times, 120 times and 40 times more likely to be killed or seriously injured when involved in a traffic collision, respectively, given they are not protected by a structural frame and airbag system. At the same time, in the past five years, there has been an annual average of 102 automobile occupants that are fatally or seriously injured despite protection by a structural frame and airbag system. These injuries and fatalities are usually the result of high speed, high impact crashes. The five-year annual average number of pedestrian fatalities 28 per year (2019-2023), has declined since 2019, when the 5-year average annual pedestrian fatality rate was at its highest at 40.

In 2024 to-date, six people cycling have lost their lives in traffic collisions in Toronto. This is a significant increase from the previous two to three fatalities per year for the past decade and clearly a cause for concern. At the same time, the number of serious injuries and fatalities for people cycling has generally been decreasing since 2012, despite the fact that the overall number of bicycle trips in the city has increased. The latest available data shows a 50% increase in share of trips made by bicycle between 2011 and 2016 (at this time staff are waiting for the release of the 2022 Transportation Tomorrow Survey results which will provide updated statistics on cycling mode share). While data beyond 2016 is not yet available, it is anticipated that this growth has continued. Using data from the Bike Share Toronto program as a proxy, bicycle trips using the program nearly doubled between 2020 and 2023.

It is possible that Toronto will continue to see fluctuations, and at times, increases in the year-over-year number of serious injuries and fatalities in the short term. This could be influenced by external forces, such as variability in weather or changes in number of SUVs and pick-up trucks. Experience from other jurisdictions points to the fact that a longer period of time is required for the effects of various Vision Zero Road Safety Plan initiatives to be realized and that meaningful change is only possible after several years of sustained and focused commitment.



#### Figure 3: Annual Serious Injuries and Fatalities on Toronto's Road (2000-2024)

The 20-year trend for serious injuries and fatalities for each mode and for school-aged children and seniors is shown in Attachment 3. While there are short-term fluctuations, the long-term trend for a combined count of serious injuries and fatalities shows some level of reduction for all travel modes, including school-aged children and seniors, with the exception of people on motorcycles. The greatest continuous reduction is for motor vehicle occupants likely as a result of improvements in vehicle safety features for vehicle occupants.

Additional information, including serious injury and fatality trends and most common killed and serious injury collision types by mode and overall is also noted in Attachment 3. These common collision types are referenced in various sections of this report along with their targeted countermeasures.

At 1.79 traffic fatalities per 100,000 inhabitants (2019-2023 annual average), Toronto is comparable to the more successful North American cities that have adopted Vision Zero. That said, comparable European cities have had lower fatality rates than Toronto during the same period. While some cities such as Portland, Oregon and Edmonton have seen a general increasing trend in fatality rates over the past five years, other cities have seen fluctuations over the same period. Fatality rates in Toronto have mostly had a downward trend over the same period. No loss of life on roads is acceptable and staff continue to refine and expand the plan to achieve more dramatic reductions towards the target of zero fatalities and serious injuries. Figure 4 below provides a comparison in traffic fatalities between Toronto and other comparable cities.



Figure 4: Traffic Fatalities per 100,000 Inhabitants in Toronto and Comparable Cities (2019-2023)

# Request for Annual Review of Vulnerable Road User Fatalities

A motion from City Council (Item 2023.IE7.4) requested an annual report that includes a summary of potential collision contributing factors and recommendations for safety improvements in the area of every fatality involving a vulnerable road user. The motion also requested an annual report identifying trends and recommendations for system-wide improvements.

This report contains trend analysis for collisions involving fatalities and serious injury collisions, along with recommendations for related countermeasures and system-wide improvements. In response to the motion for an annual report on individual vulnerable road user fatalities, Transportation Services is working towards providing such summaries on an ongoing basis on the City's Vision Zero Road Safety Plan website.

# 2. Speed Management Initiatives

Speed management is the use of tools to set appropriate speed limits and reduce occurrences of motor vehicle operators travelling above the posted speed limit. Higher

speeds contribute to higher risk of serious injuries and fatalities in compounding ways; they reduce reaction time for people driving and increase the vehicle stopping distance, making it less likely to be able to avoid a collision. Furthermore, when collisions occur at higher speeds, the impact force has a high likelihood of causing a serious injury and fatality. Figure 5 illustrates the relationship between speed, the ability to avoid a collision and the likelihood of a fatality in the event of a collision.



Figure 5: Impact of Speed on Collision Outcome

Lower vehicle speeds improve safety for all road users. They specifically have the greatest impact on reducing the frequency and/or severity of:

- Rear-end, head-on, and t-bone collisions between motor vehicles which make up 47% of serious injuries and fatalities for motor vehicle occupants;
- Pedestrians hit at midblock locations and by motor vehicles driving straight at intersections which make up 52% of serious injuries and fatalities for pedestrians; and
- Sideswipe, rear end, and left turning bicycles hit by through vehicles which make up 32% of serious injuries and fatalities for people cycling.

Police enforcement is an integral part of the speed management strategy and helps to ensure a safer transportation system. The initiative targets the behaviour of people driving who will only obey traffic regulations if they perceive a credible threat of detection and punishment for noncompliance. The Toronto Police Services Vision Zero Enforcement Team is funded with \$3.5 million annually from the Transportation Services Operating Budget. The unit focuses on enforcement of aggressive driving, distracted driving, impaired driving, and speeding, with officers deployed to road segments based on a data-driven process. Year-to-date, the Vision Zero Enforcement Team has issued 42,929 tickets consisting of 18,593 tickets for speeding, 3,429 tickets for aggressive driving, and 16,973 tickets for other infractions.

In order to change the behaviour of people driving more effectively, speed limit reductions are coupled with targeted public education campaigns. These campaigns help to increase public awareness of speeding as a traffic safety issue, encourage responsible driving habits, and promote a positive road safety culture. In 2023,

Transportation Services and Strategic Public and Employee Communications initiated a broadly-reaching public education campaign titled the Dangers of Speeding campaign.



Figure 6: Dangers of Speeding Campaign

This campaign (see Figure 6) was tested with a focus group amongst a diverse group of Toronto residents, and the findings indicated the campaign was eye-catching and clear in delivering the main message. The campaign was implemented across various advertising platforms in Fall 2023 and Fall 2024.

While police enforcement and road user education are some of the tools to address speed, speed management is a multi-pronged strategy. The following subsections provide an overview of various ongoing and upcoming programs and initiatives under the speed management strategy that help address the frequency and/or outcome of the above noted collision scenarios. These include:

- Automated Speed Enforcement (page 13);
- Community Safety Zones (page 14);
- Area Local Road Speed Limit Reductions (page 15);
- Traffic Calming Program (page 16);
- Mobile Watch Your Speed (page 17);
- In-Road Flexible Speed Signs (page 18); and
- Lane Width Design with Road Projects (page 18).

#### **Automated Speed Enforcement**

Automated Speed Enforcement (ASE) is an automated system that uses a camera and a speed measurement device to detect and capture images of vehicles traveling in excess of the posted speed limit and has been operating in select Toronto locations since 2020. In accordance with Provincial legislation, ASE cameras can only be placed in Community Safety Zones and/or School Zones designated by by-law. Locations are selected through a data-driven approach that considers vehicle speed and collision data. ASE reduces speeding and raises public awareness of adherence to posted speed limits, through enforcement and signage. There are currently 75 ASE cameras that are distributed equally among the City's wards. The cameras are either permanent pole-mounted systems or mobile units that are moved to different locations twice a year.

Starting in the first quarter of 2025, Transportation Services will be implementing 75 new ASE cameras for a total of 150 ASE cameras. Staff will consider implementation of up to 25 of those new cameras as permanent pole-mounted systems, to address vandalism and reduce resources required to change locations.

The 75 new ASE cameras will be installed across the city using a data-driven approach that considers vehicle speed and collision history city-wide rather than evenly distributed between wards. This will provide an opportunity to target locations in the city with the most problematic vehicle speeds and provide the greatest safety benefit.

While it is often difficult to find multiple locations in some wards suitable for ASE installation, particularly in the downtown core, due to the availability of space required to accommodate ASE equipment, and the presence of traffic calming and on-street parking where parked vehicles can block the camera and planned/ongoing construction work, a minimum of three cameras will be maintained in each ward as per the current allocation. Staff have started the site selection process for the new ASE cameras and have begun installing warning signs at the planned locations. As required by the Province, warning signs must be posted at least 90 days prior to beginning enforcement at an ASE site.

ASE cameras have proven to be more effective the longer they remain in place. Once the new ASE cameras are implemented, staff will consider if modifications are needed to the current approach to rotation frequency for all of the mobile cameras to ensure the ASE program continues to achieve its desired outcome of altering the behaviour of people driving to decrease speeding and increase safety. It does require considerable time and resources to relocate ASE cameras, so initial location evaluation time is wellspent.

#### **Community Safety Zones**

In March 2023, City Council directed the General Manager, Transportation Services to report back on options for enhanced safety measures in Senior Safety Zones, including but not limited to the feasibility for doubling fines for speeding, reducing the speed limit, and creating larger signage.

Council designated 62 road segments as Senior Safety Zones in 2017 and 2018 as one of the initial initiatives under the Vision Zero Road Safety Plan. In addition to warning signs indicating presence of a Senior Safety Zone, these zones received enhanced pavement markings at protected pedestrian crossings, and increased crossing times for pedestrians at signalized crossings.

The Senior Safety Zone program was developed in early days of the Vision Zero Road Safety Plan and was targeted to locations where activities by older adults were anticipated to be greater. The Vision Zero Road Safety Plan has evolved and several new and enhanced countermeasures, programs, and initiatives have been implemented (see Figure 1), focusing more broadly and systemically on older adults as well as other vulnerable road users. Furthermore, older adults are active in most areas of the city, not just within marked Senior Safety Zones. As such, targeting safety improvements city-wide and using a data driven approach is a more effective approach to provide for the safety of all vulnerable road users.

Certain Highway Traffic Act fines (including speeding) are doubled in Community Safety Zones (CSZ). The CSZ designation allows for ASE cameras to be placed within the designated road segments, supporting reduced speeds and improved safety for all road users, including older adults. In 2023, City Council adopted the framework and expanded criteria for establishing CSZs. To that end, this report proposes the designation of 20 new or extended CSZ (outlined in Attachment 1), proactively identified to target older adult safety using an improved data-driven approach to target the most vulnerable locations and Senior Safety Zones. Future recommendations for additional CSZs will be brought to City Council or Community Council, as appropriate, in 2025.

This report also proposes the expansion of one existing CSZ in Ward 16 at the request of the local Councillor. This proposed CSZ expansion, outlined in Attachment 1, has been reviewed by staff and meets the criteria for establishing CSZs.

#### Area Local Road Speed Limit Reductions

Area Speed Limit Reductions are the area-based reductions of speed limits on local roads to 30 km/h. To date, Area Speed Limit Reductions on local roads have been completed in 15 wards, with Ward 24 and Ward 8 currently in progress and seven wards in queue to receive them on local roads. Staff are forecasting that all planned local road speed limits will be reduced to 30km/h by 2028, based on the estimated completion years in the table below. This is a multi-year, data-driven effort that is being rolled out on a systematic, ward-by-ward basis, with priority going to wards with higher rates of pedestrian and cyclist collisions. Depending on the size of the ward, implementation typically takes 4 to 6 months to complete as it involves installation of approximately 500 to 1000 signs per ward. Staff will continue to revise speed limit areas to include existing 30km/h collector roads. This will minimize sign clutter and create a seamless experience for people driving between 30 km/h local roads and collector roads with the same speed limit.

Year	2024	2025	2026	2027	2028
Ward	24	8, 3	20, 17	2, 15	22, 25

Table 1: Planned wards for areas speed limit reductions by completion year

To complement the roll-out of this initiative, Transportation Services and Strategic Public and Employee Communications initiated a public education campaign titled "The Reason for 30" campaign (see Figure 7). The campaign aims to provide public awareness about the speed limit reductions and foster a stronger sense of community between people using local roads during their daily life. The campaign was implemented across various advertising platforms, both city-wide and geo-targeted to wards where speed limit reductions are in progress. In addition to the campaign, a communication package is shared with each ward Councillor in advance of speed limit reduction implementation in their ward. This package provides FAQs, visuals and communication material for their newsletters and responses to common questions from constituents.



Figure 7: The Reason for 30 Campaign

# **Traffic Calming Program**

The Traffic Calming program consists of speed humps, speed cushions and speed bumps on neighborhood roadways. Traffic calming is implemented on local roads, collector roads, and lane ways, with speed humps and speed cushions designed for vehicle speeds up to 30km/h and speed bumps designed for speeds up to 15 km/h. City Council approved an updated Traffic Calming Policy in Fall 2023.

As a result of changes to the Traffic Calming Policy in 2023, the number of traffic calming installations in upcoming years is projected to increase. While the number of service requests received through 311 for traffic calming has not shown an increase in the first year since the approval of the updated Policy, staff experience indicates that about 90% of requests now meet the warrant and are recommended for installation. Other contributing factors to the projected increase in installations in the coming years include increasing popularity for speed humps and speed cushions amongst residents, and the new Neighborhood Streets Program, which is capturing some latent demand for traffic calming. There were 219 speed humps installed in 2023, with 355 projected to be completed in 2024, 735 in 2025, and 810 in 2026.

As efforts to reduce the speed limits of all local roads to 30km/h continue through the Area Speed Limit Reductions program, it is imperative that the physical environment on those roads be modified with measures such as speed humps, in order to achieve the

posted operating speeds approved by City Council. As such, an increase in budget and delivery capacity for the program is included in the proposed 2025 to 2030 Vision Zero Road Safety Plan budget for Transportation Services.

With the removal of the requirement for polling to approve traffic calming the onus has shifted to the local Councillor to gauge community support prior to warrant investigations being completed. Councillors are asked to forward requested traffic calming locations to staff for investigation, after gauging community support. Staff will prepare a report to Community Councils for all investigated traffic calming requests that satisfy the warrant criteria.

#### Speed Cushions

In the past, the use of speed humps as a vertical traffic calming measure has been limited to roadways without TTC transit service because of the impact on transit passenger experience. Speed cushions are modified speed humps that have channels cut ("gaps") into them, at approximately the width of the wheelbase of large vehicles, such as a bus, fire truck or ambulance. These cuts allow such large vehicles to straddle the raised sections to pass over them without slowing down, while regular passenger vehicles with narrower wheelbases are slowed down by the change in elevation. Speed cushions were added as a traffic calming measure as part of the update to the Council approved traffic calming policy in 2023.

Transportation Services recently piloted speed cushions in coordination with the TTC on Tandridge Crescent in Ward 1 (Etobicoke North), where the TTC currently operates Route 118. Transportation Services evaluated two speed cushion designs (i.e., twocushion and three-cushion designs). Due to the gaps in the speed cushions, it was verified through field testing that passengers on buses did not feel any impact within the bus. Unlike speed humps, the benefit of the gaps in speed cushions for buses and emergency response vehicles is that there is not a sudden jolt to the vehicles and sudden jostling of their passengers and equipment.

The TTC has expressed their support for the use of speed cushions more broadly on City streets that have TTC bus routes. As well, snow clearing operations have not experienced any challenges at the pilot locations. Each candidate location may pose its own challenge and consideration will need to be given on the appropriate number of cushions at any location. This will depend on factors such as road geometry, horizontal curves, proximity to street parking and other obstacles, to ensure the final placement of speed cushions does not negatively impact the operation of the vehicle by an operator.

#### **Mobile Watch Your Speed**

Mobile Watch Your Speed signs are used to measure and display the speed of oncoming vehicles. These signs have been shown to reduce traffic speeds by up to 34% and reduce excessive speeding by up to 18%. There are 188 mobile signs in Toronto that are installed for three weeks at a time. Most locations are selected using a proactive approach that considers factors such as historical collisions, operating speeds, and signal spacing. Councillors and the public also request mobile signs that are installed when locations meet the site selection criteria. The mobile Watch Your Speed program has been in place since 2017.

# In-Road Flexible Speed Signs

In-road flexible speed signs are installed in the centre of the road between opposing traffic lanes and are designed to withstand impacts from vehicles, and avert damage to vehicles if struck, by collapsing and rebounding. The signs serve as both a visual reminder of the posted speed limit and a physical device to slow motor vehicle speeds as they pass the sign. The signs can have a narrowing effect which can give people driving the perception of the need to slow down. The signs are installed on two-way roads with one lane in each direction with a posted speed limit not exceeding 40km/h. Following the conclusion of the pilot program in 2021, there have been 349 signs installed since 2022.

## Lane Width Design with Road Projects

Appropriately sized motor vehicle lane widths that are not excessively wide result in slower vehicle speeds, lower incidences of speeding, reduced pedestrian crossing distances, and provide more space for accommodation of people cycling. Lane widths have been redesigned as part of all road reconstruction and road resurfacing projects since 2016.

## 3. Improving Crossings for Pedestrians

Pedestrians are exposed to vehicular traffic every time they cross a roadway and are even more exposed when crossing at locations without crossing protection. Protected crossings include traffic control signals, pedestrian crossovers (PXOs), stop signs, yield signs and school crossing guards. Among collisions resulting in serious injuries and fatalities to pedestrians, 29% occur when pedestrians are crossing at locations without crossing protection. There are many roads in the city with infrequent crossing opportunities.

The following subsections discuss measures to address pedestrian crossing protection. These include:

- New Types of Pedestrian Crossing Protection (page 18);
- Changes to the "Collision Hazard" Component of Traffic Control Warrants (page 19);
- Improving Pedestrian Safety at Mid-Block Transit Stops (page 19); and
- Improving Visibility at Pedestrian Crossovers (page 20).

#### **New Types of Pedestrian Crossing Protection**

Transportation Services receives approximately 600 requests per year for new pedestrian crossings or upgraded Pedestrian Crossing Protection, including All-Way Stop Control, Pedestrian Crossovers (PXOs), and Traffic Control Signals. In investigating these requests currently staff are limited to the following measures: All Way Stop Control (AWSC), Level 1 Type A PXOs, and either Mid-Block Pedestrian Signals (MPS) or full intersection Traffic Control Signals.

Transportation Services is currently in the process of updating policies and guidelines to expand opportunities for the application of two new types of traffic control for use: Level 2 Pedestrian Crossovers (PXO) and Intersection Pedestrian Signals (IPS), also known as Half Signals. A summary of each of these types of traffic control devices is included as Attachment 4.

Transportation Services implemented eight Level 2 PXOs and seven IPSs over the past several years to evaluate their effectiveness and have observed positive outcomes. To that end, staff are currently developing Toronto-specific guidelines for the evaluation and installation of Level 2 PXOs and IPSs. These new guidelines will be applied as part revised process that will apply to all types of Pedestrian Crossing Protection evaluations, in alignment with the Ontario Traffic Manual (OTM) Book 15 on Pedestrian Crossing Facilities. A report on the new tools and the revised process is forthcoming in a report to Infrastructure and Environment Committee in the first half of 2025.

#### Changes to the "Collision Experience" Component of Traffic Control Warrants

In November 2023, City Council directed the General Manager, Transportation Services to amend the Traffic Control Warrants used to evaluate the need for All-Way Stop Control, Pedestrian Crossovers and Traffic Control Signals so that the "Collision Hazard" (also known as "Collision Experience") Warrant is satisfied if there has been at least one potentially preventable collision classified as a "Killed or Seriously Injured" collision. Currently, the warrant condition is satisfied at varying levels depending on crossing protection type and location characteristics. Examples include a minimum of five preventable collisions per year for Traffic Control Signals and a minimum of two preventable collisions per year for All-Way Stop Control on local roads.

A thorough review of the warrants for traffic control measures was performed in 2019 and included as part of the Vision Zero 2.0 – Road Safety Plan Update. Updates included:

- Doubling pedestrian counts for All-Way Stop Control (AWSC) assessments in order to increase the weight of observed pedestrian demand and be consistent with other traffic control measure warrants; and
- Development of a checklist that takes site conditions and local context into account as part of all traffic signal investigations.

As a component of the forthcoming revised process for Pedestrian Crossing Protection evaluations, the criteria will consider locations where one potentially preventable pedestrian collision that resulted in a serious injury or fatality has occurred over a 12-month period, as well as a history of pedestrian-involved collisions that resulted in minor injuries. This will prioritize locations with a history of serious collisions for investigations but does not automatically satisfy the warrant for a Pedestrian Crossing Protection.

Given the review in 2019, and ongoing work on the development of a revised process for Pedestrian Crossing Protection evaluations, Transportation Services does not recommend additional changes to the Pedestrian Crossing Protection warrants until the development of a revised process is complete.

#### Improving Pedestrian Safety at Mid-Block Transit Stops

As noted above, about 29% of serious injuries and fatalities involving pedestrians occur while pedestrians are crossing at locations without a traffic signal, Pedestrian Crossover, or other control. The presence of transit stops at mid-block locations makes this a potential safety concern. While these crossings are legal, on arterial roads with multiple lanes they are risky. A third of TTC transit stops (approximately 2800 stops) are mid-block stops, located away from signals or other protected crossings.

The TTC reviews existing transit stop locations with the goal of relocating them to a nearby signal or other protected crossing. They inform this evaluation using existing, Service Standards, TTC Technical Criteria for the Placement of Stops, general industry guidelines, and communication with the local Councillor. The intent is to reduce the motivation for pedestrians to cross unsafely at uncontrolled crossings. TTC staff are acutely aware of the challenges posed by removing or relocating a transit stop that may result in an increased walking distance for local residents. This is especially impactful to people with physical limitations, such as older adults and people with disabilities.

To support these reviews by TTC staff, Transportation Services conducted a networkwide review of arterial and collector roadways to proactively identify mid-block segments that are prone to high-risk mid-bock collisions involving vulnerable road users. The results of this review is now used by TTC staff to identify priority mid-block stops and develop a phased approach for moving stops that fall into the high-risk category. TTC engages with community representatives to solicit feedback on major changes to stop locations. Transportation Services continues to work with the TTC to review the highest risk road segments and identify options for a new protected crossing opportunities or other safety measures.

TTC staff will be communicating the results of these collaborative efforts to the TTC Board in 2025. In parallel, individual recommendations for new traffic control devices will be presented by Transportation Services to Community Councils starting in early 2025, and on an ongoing basis. In anticipation of the need to build these additional protected crossing opportunities, an increase in budget and delivery capacity for new traffic control devices is included in the proposed 2025 to 2030 Vision Zero Road Safety Plan budget for Transportation Services.

#### Improving Visibility at Pedestrian Crossovers

Over the past five years, an average of two pedestrians annually have been seriously injured while crossing with the right-of-way at Pedestrian Crossovers. When people driving have greater visibility of pedestrians at Pedestrian Crossovers, they are much more likely to yield or stop so that the pedestrian can cross safely. To that end, Transportation Services is proposing further stopping and parking restrictions at Pedestrian Crossovers to make people crossing more visible in time for people driving to react appropriately.

Currently, stopping is prohibited within 15 metres of the approach of all Pedestrian Crossovers and 9 metres beyond. To bring the City of Toronto in alignment with the current 2016 edition of OTM Book 15 - Pedestrian Crossing Treatments, Transportation Services is proposing to increase the distance of the statutory authority for stopping prohibition at pedestrian crossovers. **The Division recommends that the existing stopping prohibition be amended to maintain the stopping prohibition within 15 metres on the approach side to a pedestrian crossover, extend the stopping prohibition from 9 metres to 10 metres beyond a pedestrian crossover. In addition, the Division recommends delegated authority to the General Manager of Transportation Services to prohibit stopping where authorized signs are otherwise posted near a pedestrian crossover.** The existing stopping prohibitions, the guidance from OTM, and the Division's recommendations are in Table 2 below. Table 2: Existing Approach, OTM Guidance and Recommended Approach for StoppingProhibitions at Pedestrian Crossovers

	Existing Approach		OTM Guidance		Recommended Approach	
	Approach	Beyond	Approach	Approach	Beyond	Approach
Level 1 PXO	15 metres	9 metres	30 metres required	15 metres required*	Minimum 15 metres or up to OTM desired distance when signed	Minimum 10 metres or up to OTM desired distance when signed
Level 2 PXO			15 metres required, 30 metres desired	10 metres required, 15 metres desired		

\*Interpreted from OTM Guidance

Stopping prohibitions beyond 15 metres on the approach and 10 metres beyond a pedestrian crossover would only apply where signed. The decision to sign the new prohibitions will be based on an assessment of site conditions such as road geometry and operating speed, as well as type of Pedestrian Crossover. This assessment will be completed at the time of design of any new Pedestrian Crossovers and over the next two years for all 319 existing PXOs.

Initial estimates indicate that 135 TTC bus stops within the new limits should be assessed as part of this work with the likely outcome that some will be recommended, through engagement with local Councillors, for relocation or modification.

The TTC has advised the estimated cost to relocate all 135 stops to be approximately \$7.3 million in 2024 dollars, funding for which is not identified within the TTC budget. This cost estimate is based on the modifications necessary to relocate the stops including construction of new accessible concrete bus pads, low retaining walls, and potential tree removals. Alternative solutions for addressing pedestrian visibility and safety, such as geometric modifications, will be considered and assessed first to minimize the number of stop relocations. Future funding requirements for the transit stop relocations will be considered by TTC and Transportation Services as part of future budget submissions once the number and timing of stop relocations is determined.

Subject to approval of this approach from City Council, and assessment of necessary changes to stopping prohibitions and transit stops at individual locations, there would also be some minimal impact to permit parking and Pay and Display curbside parking at about 280 PXOs.

#### 4. Improving Intersection Safety

Among collisions resulting in serious injuries or fatalities in Toronto, 63% occur at intersections, with 42% occurring at signalized intersections. Motor vehicle turning movements pose safety concerns, particularly when they are not fully protected (i.e., separated by time from other movements and other modes at an intersection). The driver of a turning vehicle must be aware of oncoming traffic, cross traffic, people

cycling, and pedestrians, creating a high mental workload. Left-turning motor vehicles are involved in 27% of serious injury and fatalities among pedestrians and 23% of serious injuries and fatalities among people cycling. Right-turning motor vehicles are involved in 9% of serious injury and fatalities among pedestrians and 20% of serious injuries and fatalities among people cycling. The following is an overview of various ongoing and upcoming programs and initiatives intended to address these collision types:

- Red Light Camera Program (Page 22);
- Raised Crossings (Page 22);
- Enhanced Crosswalk Markings (Page 22);
- Pedestrian and Bicycle Heads Start Signals (Page 23);
- Curb Radii Adjustments and Truck Aprons (Page 23);
- Left-Turn Calming (Page 23);
- Fully Protected Left-Turn Signal Phasing (Page 24); and
- Protected Intersections (Page 24).

#### Red Light Camera Program

The Red Light Camera (RLC) program has been in place since 2000. The technology involves an automated system that detects and captures images of vehicles entering an intersection in spite of the traffic signal indicating red. Installations are prioritized using a data-driven approach which considers a history of angle collisions, and those involving pedestrians and people cycling at each location. There are currently 299 red light cameras across the city and a recent evaluation of the program has shown a 37% decrease in angle injury collisions when RLCs are present.

Given the effectiveness of this safety countermeasure, staff intend to expand the program by 51 new cameras beginning in January 2027, the anticipated date for the start of the next contract.

#### **Raised Crossings**

Raised crossings consist of raised crosswalks and intersections. A raised crosswalk surface is elevated from the adjacent roadway at approximately the elevation of the sidewalk. Raised crossings encourage people driving to slow down when driving across crosswalks. In addition, raised crossings minimize ponding of water and slush in the area on the road pavement in front of the crosswalk ramp, further improving the pedestrian experience. Raised crossings are typically constructed in school zones when roads are reconstructed. There are currently 26 raised intersections and 20 raised crosswalks built across the city with an additional 35 locations to be constructed by the end of 2024, and 67 more locations planned for the coming years. The City's Raised Crosswalks and Intersections Guideline was published in January 2020.

#### **Enhanced Crosswalk Markings**

Enhanced crosswalk markings include zebra crosswalk markings which are wide lines painted parallel to the direction of motor vehicle traffic. Zebra crosswalk markings increase visibility of the pedestrian crosswalk area for people driving and pedestrians during both the daytime and nighttime. Currently, zebra crosswalk markings are implemented at signalized intersections as part of all road reconstruction and resurfacing projects, for new traffic control signal installations, at raised crossings and at stop-controlled intersections within School Safety Zones. Transportation Services is initiating a program to proactively install zebra crosswalk markings at all signalized intersections, with approximately 75 intersections programmed for each year.

#### Pedestrian and Bicycle Head Start Signals

Pedestrian head start signals (also known as leading pedestrian intervals) are a feature of traffic control signals that begin the pedestrian walk signal in advance of the green light for vehicles, giving pedestrians a "head start" on their crossing. The head start allows pedestrians to establish a presence in the crosswalk, which increases their visibility to people driving. It also increases the pedestrian's ability to move beyond the path of a turning vehicle while the vehicle is still stopped at the intersection. A recent review of collision data in Toronto between turning motor vehicles and pedestrians in crosswalks shows that pedestrian head start signals are associated with a reduction of 20% for all injury collisions and 30% for serious injury and fatal collisions. There have been 1,405 pedestrian head start signals installed since the start of the program in 2018, and 150 intersections each year going forward. The widespread application of this safety countermeasure makes Toronto a leader amongst Vision Zero cities.

Bicycle head start signals (also known as leading bicycle intervals) are a similar feature as a pedestrian head start signal but designed for people cycling. The implementation of bicycle head start signals requires dedicated bicycle signal heads and cycling infrastructure. Bicycle head start signals are implemented by default when new bicycle signals are installed. There are currently 39 intersections with this feature.

#### Curb Radii Adjustments and Truck Aprons

A curb radius is the curved section of an intersection corner and guides right-turning vehicles. Smaller curb radii result in slower vehicle turning speeds in addition to improved visibility of pedestrians. Historically, curb radii in Toronto were designed for the largest vehicle type, resulting in large radii that facilitate higher turning speeds for smaller vehicles, thereby increasing risks for vulnerable road users. To address this safety concern, guidance developed in 2016 requires curb radii to be designed for the largest frequent vehicle type, while still accommodating larger vehicles. Curb radii have been redesigned using this guidance at hundreds of intersections in the city, as part of all road reconstruction since 2016 and many road resurfacing projects since 2017, where feasible without significant engineering challenges.

A truck apron consists of a semi-mountable curb that guides smaller right-turning vehicles around a smaller radius, while larger vehicles and trucks are able to mount the semi-mountable curb and are guided around the corner by a larger radius. Truck aprons have smaller radii for passenger vehicles, while accommodating larger vehicles and trucks, resulting in slower right-turning speeds for all vehicles. Transportation Services has been implementing truck aprons at intersection corners since the guidance was developed in 2021. To date 26 intersection corners have received this treatment, with 26 more under construction this year and a 65 intersection corners planned in the coming years.

#### Left-Turn Calming

Left-turn calming is the addition of temporary or permanent bumps used to enhance the roadway centreline. These treatments encourage left-turning drivers to approach a

crosswalk at a more acute angle, resulting in slower vehicle turning speeds and greater visibility of pedestrians in the crosswalk and people cycling. The initial phase of the implementation started in 2021 with 8 locations and evaluation of these locations showed promising results in reductions in both turning speed and frequency of conflicts between turning vehicles and pedestrians. The second phase of implementation will conclude in 2024. This countermeasure has been installed at 11 locations using temporary surface mounted materials. Six additional locations will receive the treatment using permanent materials by the end of 2024. Transportation Services is currently developing technical guidelines and implementation criteria and plans to expand application of this countermeasure.

## Fully Protected Left-Turn Signal Phasing

Fully protected left-turns are left-turning movements that are controlled by a traffic signal where the left-turn movement can only be made when a left-turn signal is green. All conflicting movements including oncoming vehicular/bicycle traffic and pedestrians are stopped from proceeding at the same time as the conflicting left-turn movement, reducing the risk of a collision. Though fully protected left-turns are currently used in the city at approximately 96 signalized intersections left-turn movements, Transportation Services is developing additional guidance for their use at more locations to improve safety for pedestrians and people cycling.

#### **Protected Intersections**

A protected intersection is an intersection treatment for locations where cycling facilities intersect. They provide more physical separation and protection for people cycling through the intersection by minimizing crossing distances, and for turning movements of people cycling by providing a physically separated location for queuing. People driving have increased visibility of people cycling while waiting at a red light. Transportation Services has focused on enhancing intersection design to improve safety for people cycling where most serious and fatal collisions occur and is in the process of implementing over 20 protected intersections.

# 5. Other Updates

#### **Other Enforcement Activities**

Illegal obstructions in bike lanes can result in people cycling having to merge with motor vehicle traffic, increasing the likelihood of a collision. Transportation Standards Officers (TSOs) started daily patrols of bike lanes in October 2024, with a focus on identifying bike lane obstructions. TSOs are able to issue Notices of Violations or fines for the illegal occupation of bike lanes. In addition, Toronto Police Services are investigating use of automated enforcement for parking violations, including illegal parking in bike lanes.

Transportation Services is exploring the opportunity for the use of automated enforcement (AE) applied to moving violations under the Highway Traffic Act such as prohibited intersection movements, blockage of signalized intersections, and illegal use of dedicated public transit lanes, in collaboration with the TTC. In a forthcoming Transportation Innovation Challenge planned for the first quarter of 2025, innovators will demonstrate their AE technologies on City streets, without issuing tickets, to enable learning and assessment of this potential technology. New authorities from the provincial government would be required to apply AE technologies to these types of violations.

The TTC is examining the use of automated camera enforcement to improve streetcar customer safety. The objective is to fine offending motorists that drive past streetcars at a stop. In 2021 and 2022, the Province enacted legislation (Moving Ontarians More Safely Act, 2021) and regulations (O. Reg 354/22 and 355/22) to allow the TTC to implement camera enforcement. The TTC is developing a pilot project to test the efficacy of this technology and to build a better understanding on the scale of the problem. The pilot will bring on a vendor(s) to work to test and implement camera enforcement on a limited number of streetcars. No tickets will be issued during the pilot period, but this process will help the TTC understand the requirements for a potential full rollout. The vendor partner(s) is expected to come on-board by early 2025, and actual in-field testing is anticipated to take place by the second quarter of 2026.

#### Progress of Air Quality, Climate, Public Health and Congestion Management Goals in Relation to Vision Zero Road Safety Plan

In response to a motion from City Council (item 2023.IE7.4) requesting an annual report on progress on Toronto's air quality, climate, public health and congestion goals in relation to the Vision Zero Road Safety Plan, Transportation Services has consulted a number of partner divisions and agencies, namely Toronto Public Health (TPH) and Environment & Climate Division.

As Toronto Public Health has emerged from the pandemic response, its new strategic plan is guiding work in key priority areas, including work to promote personal health and well-being. Advocating for healthy social, natural, and built environments, and collaborating with partners on initiatives that advance these goals, is an important approach to TPH's efforts to make walking and cycling safer, particularly for vulnerable road users. TPH will be reporting annually to the Board of Health on progress on the goals set out in the new strategic plan in relation to collaborative initiatives to promote health and well-being, such as active transportation.

As a part of the modelling work in support of TransformTO, the City's climate action plan, Environment and Climate Division has developed Local Emissions for Net Zero (LENZ) modelling suite as a decision-making tool to test actions and policies that would help the City reach its net zero greenhouse gas (GHG) emission target by 2040. The tool is currently being utilized to model GHG emissions of various scenarios such as implementation of the Cycling Network Plan, the Bike Share Toronto program, and application of the Complete Streets Guidelines. Although the Vision Zero Road Safety Plan targets are different from emission reduction targets, safe and comfortable conditions for pedestrians and people cycling are necessary to increase the mode share for active transportation and consequently reduce emissions.

In the Congestion Management Plan (CMP) 2023-2026 – Fall Update report to September 27, 2024 Infrastructure and Environment Committee, Transportation Services provided updates on various initiatives which have direct implications for public safety. These include:

expansion of the Traffic Agent Program, which is able to reduce the number of 'nearmisses' between cars and vulnerable road users at intersections; increased fines for 'Don't Block the Box' offences, which is expected to reduce instances of vehicles blocking pedestrian crosswalks and cycling infrastructure; and improved wayfinding in construction zones - through this initiative, the Transportation Services Work Zone Coordination team will be working with constructors on the rightof-way to implement wayfinding signage and to require them to provide paths that are free of tripping hazards and other obstructions. Additionally, in consultation with the accessibility community, Transportation Services will implement QR codes on construction signage that will allow the public to access updated information regarding respective construction closures.

Further details on the above noted initiatives can be found in the <u>Congestion</u> <u>Management Plan 2023 - 2026 - Fall Update</u> approved by City Council in October 2024.

#### **School Safety Zones**

School aged children are particularly vulnerable due to their smaller stature limiting their visibility, and developing brains required for sound judgment and risk assessment. School aged children (age 4 to 19) account for 9% of all serious injuries and fatalities, of which 4% represents children as pedestrians.

A School Safety Zone is a designated stretch of roadway which includes a combination of School Safety Zone signs with flashing beacons, school zone pavement stencils, radar speed display signs, and zebra markings at crosswalks. School Safety Zones increase awareness of schools, school aged children, and pedestrian crossings; and reduce vehicle speeds. There have been 574 School Safety Zones installed since the start of the program in 2017 with approximately 230 School Safety Zones outstanding. Approximately 80 School Safety Zones are installed per year with all School Safety Zones anticipated to be completed by end of 2027.

#### **Next Steps**

This report provides an update on the Vision Zero Road Safety Plan and illustrates the wide range of programs and initiatives that have contributed to the growth and expansion of the Vision Zero Road Safety Plan since its inception in 2016.

As noted in various updates provided in this report, staff will continue to report on several aspects of the Vision Zero Road Safety Plan, including changes in trends in serious injury and fatal collisions, expansion of the Red Light Camera program, a revised process for evaluation of new and existing types of Pedestrian Crossing Protection, location-specific new or upgraded protected crossing opportunities, additional Community Safety Zones in support of the Automated Speed Enforcement program, and future budget submissions to accommodate future growth.

The 2025 proposed budget of \$99.1 million, the largest annual budget for the Plan to date, is illustrative of the continued demand for new tools and ongoing implementation of existing programs and initiatives to eliminate all road safety fatalities and serious injuries.

# CONTACT

Jacquelyn Hayward Director, Planning, Design & Management Transportation Services 416-392-5348 Jacquelyn.Hayward@toronto.ca

Roger Browne Director, Traffic Management Transportation Services 416-392-5372 Roger.Browne@toronto.ca

Antonia Markos Director, Permits and Enforcement Transportation Services 416-392-5209 Antonia.Markos@toronto.ca

# SIGNATURE

Barbara Gray General Manager, Transportation Services

#### ATTACHMENTS

Attachment 1 – Amendments to Toronto Municipal Code Chapter 950, Traffic and Parking

Attachment 2 – Annual Vision Zero Road Safety Plan Spends (2017-2024) and Proposed 2025 Budget

Attachment 3 – Trends in Serious Injuries and Fatalities

Attachment 4 – Summary of Traffic Control Devices for Providing Pedestrian Crossing Protection