

Updates on Vision Zero Road Safety Initiatives: Improving Crossings for Pedestrians, Updated Road Classification Criteria and Other Matters

Date: May 29, 2025

To: Infrastructure and Environment Committee

From: General Manager, Transportation Services

Wards: All

SUMMARY

Since the Vision Zero Road Safety Plan was first adopted in 2016, the City has made great strides in implementing the core tenant of Vision Zero: the design and operation of the road system should be approached through a Safe System lens to ensure that the inevitable mistakes we all make as human beings do not result in the loss or significant alteration of anyone's life due to potentially preventable collisions. The Vision Zero Road Safety Plan was developed through data-driven decision making and has incrementally grown over the past nine years to provide extensive, proactive, systemic, and directed initiatives targeted to ensure the City is making progress toward its commitment to Vision Zero.

The Vision Zero Road Safety Plan identifies pedestrians as vulnerable road users, exposed to a greater risk of injury in a collision and therefore in greater need of protection against such collisions. This report recommends updates to four policies that improve pedestrian safety:

- Pedestrian Crossing Protection Device Justification Policy;
- Traffic Control Signal Justification Policy;
- All-Way Stop Sign Control Justification Policy; and
- Crosswalk Marking Policy.

This report provides a status update on the creation of new guidelines intended to improve pedestrian crossing protection and recommends thirteen new traffic control signals to provide improved pedestrian crossing protection, one of which will be constructed as part of adjacent development. An overview of trends in pedestrian serious injuries and fatalities is also included in this report.

In addition, this report seeks approval from City Council on the following:

- Minor update to the City's Road Classification Criteria;
- Eight (8) new Community Safety Zones and updated boundaries to thirty-three (33) existing Community Safety Zones to improve safety through reduced vehicle speeds and enforced through the installation of Automated Speed Enforcement Cameras;

- Reducing the speed limit on two roadways - Forest Manor Road and Avenue Road - to ensure consistent application of speed limits across the City of Toronto; and
- Renewing funding to support the Active and Safe Routes to School program run by the Toronto District School Board and Toronto Catholic District School Board.

Since 2016, the Vision Zero annual budget and spend rate has increased incrementally, reflecting the demand for improved road safety and the capacity to deliver these improvements. The 2025 Council-adopted budget of \$99.1 million - \$31.7 million in capital and \$67.4 million in operating - is the largest annual budget for the Vision Zero Road Safety Plan since inception and further demonstrates the commitment of City Council to Vision Zero and Transportation Services' ability to deliver the varied aspects of the work.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. City Council adopt the following policies as detailed in Attachment 2 to the report (May 29, 2025) from the General Manager, Transportation Services:
 - a. Pedestrian Crossing Protection Device Justification Policy;
 - b. Crosswalk Marking Policy;
 - c. All-Way Stop Sign Control Justification Policy; and
 - d. Traffic Control Signal Justification Policy.
2. City Council authorize the installation of a traffic control signal at the following locations with existing pedestrian crossovers:
 - a. Dundas Street East and Bond Street;
 - b. Dundas Street East and George Street;
 - c. Dundas Street East and Pembroke Street;
 - d. King Street East and Ontario Street;
 - e. King Street East and Sackville Street;
 - f. Queen Street East and Ontario Street;
 - g. Bayview Avenue and Parkhurst Boulevard/Soudan Avenue;
 - h. Beecroft Road and a point 165 metres south of Park Home Avenue;

i. Warden Avenue a point approximately 396 metres north of Firvalley Court;

j. Weston Road and Oxford Drive;

k. Weston Road and Clouston Avenue; and

l. York Mills Road and Birchwood Avenue.

3. Subject to approval of Recommendation 2 above, City Council authorize removal of the existing pedestrian crossovers at the listed locations in conjunction with the installation of traffic control signals.

4. City Council authorize the installation of a traffic control signal at the intersection of Bayview Avenue and Sutherland Drive.

5. City Council approve the changes to the City of Toronto Road Classification Criteria as detailed in Attachment 4 to the report (May 29, 2025) from the General Manager, Transportation Services.

6. City Council rescind the Community Safety Zone designations and/or designate the Community Safety Zones and authorize the amendments to Schedule XXXIII to City of Toronto Municipal Code Chapter 950, Traffic and Parking, generally as set out in Attachment 5 to the report (May 29, 2025) from the General Manager, Transportation Services.

7. City Council reduce the speed limit from 50 km/h to 40 km/h on Forest Manor Road between Parkway Forest Drive (south intersection) and Parkway Forest Drive (north intersection).

8. City Council designate a 40 km/h speed limit on Avenue Road between Bloor Street West and Lonsdale Road.

9. City Council authorize the General Manager, Transportation Services, to re-negotiate, enter into, and execute agreements, as may be required, with Toronto District School Board (TDSB) and Toronto Catholic District School Board (TCDSB), to receive funding in the amount of \$320,000CAD annually for three years, from the Transportation Services operating budget, to continue the expansion of the Active and Safe Routes to School (ASRTS) program, on such terms and conditions satisfactory to the General Manager, Transportation Services and in a form satisfactory to the City Solicitor.

10. City Council authorize the General Manager, Transportation Services, to re-negotiate, enter into, and execute agreements, as may be required, with Toronto District School Board (TDSB) and Toronto Catholic District School Board (TCDSB) to amend the December 17, 2021 agreement titled FUNDING AGREEMENT FOR ACTIVE AND SAFE ROUTES TO SCHOOL PROGRAM in order to ensure unspent funds can be used to carry forward to future years, on

such terms and conditions satisfactory to the General Manager, Transportation Services and in a form satisfactory to the City Solicitor.

11. 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 the General Manager, Transportation Services in order to give effect to Parts 1 through 10, above.

EQUITY IMPACT STATEMENT

Moving as a pedestrian is a crucial mode of transportation for everyone, especially in equity deserving communities, where personal vehicle ownership is typically lower and people rely on walking or rolling (i.e. using a mobility device) for at least a portion of their trip (e.g., to access transit).

While pedestrians are diverse in terms of age, gender, and socioeconomic status, global statistics show that people in equity deserving communities tend to be at a higher risk of pedestrian injury. Children and older adults are also significantly over-represented in pedestrian collisions, especially those that result in serious injury or death.

Decades of investment in an auto-centric transportation system in North America has resulted in a system where pedestrians are significantly more at risk of death or serious injury, and the ability for pedestrians to move safely and efficiently has been restricted by high-speed roadways with multiple lanes to cross, long distances between safe crossings, and designs that further impact mobility and accessibility. In the City of Toronto, implementation of the Vision Zero Road Safety Plan has demonstrated significant progress in speed management and proactively addressing roadway design, high-risk mid-block crossings, and turning collisions at signalized intersections, all of which decrease the severity and likelihood of collisions involving pedestrians. However, the continued over-representation of pedestrians in collisions that result in death or serious injury suggest increased investment is needed.

The recommendations of this report represent a significant step towards aligning City policies, guidelines, and standards with the Vision Zero Road Safety Plan and the Safe System Approach. Implementation of these updated policies, guidelines, and standards will also increase equitable access to healthy built environments and promote our fundamental form of mobility.

ACCESSIBILITY IMPACT STATEMENT

It is the City of Toronto's policy that all individuals of varying ability should be accommodated in the design of pedestrian facilities. The ability of an individual should not preclude them from the right to use any pedestrian facilities, including crosswalks.

The City's Toronto Accessibility Design Guidelines (TADG) are a guiding standard of excellence in accessibility for building and renovating City facilities and public spaces. The TADG represents a best practice standard and describes a level of accessibility that goes beyond that of the Accessibility for Ontarians with Disabilities Act (AODA), which sets out the minimum legislative requirements for improving accessibility standards for Ontarians with differences in physical or mental abilities.

The absence of a protected crossing can often present a prohibitive barrier to people with mobility differences, and mid-block crossings for these individuals can present a higher risk of death or serious injury. While all people benefit from improved accessibility and road safety infrastructure, Transportation Services recognizes car-oriented environments create road safety risks, particularly for seniors, children, and people with differences in physical or mental abilities. Safe and accessible crossing opportunities are an important corrective measure for meeting the needs of these groups.

FINANCIAL IMPACT

Funding to continue the expansion of the Active and Safe Routes to School (ASRTS) program has already been included in the 2025 Operating Budget for Transportation Services.

With the adoption of policies as noted in recommendation No. 1, the number of new traffic signal devices to be approved and delivered per year might increase. Future funding requirements for capital infrastructure investments and the associated operating impacts arising from the implementation of the Vision Zero Road Safety Plan will be included in the future budget submission processes for Transportation Services.

The delivery of traffic control signals as noted in recommendation No. 2 and 4 are estimated at \$3.0 million and have been included in the 2025-2034 Capital Budget and Plan for Transportation Services, as identified under Health and Safety category.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting of December 17 and 18, 2024, City Council considered 2024.IE18.1 Updates on Vision Zero Road Safety Plan, and adopted updates to Chapter 950, Traffic and Parking and Chapter 903, Parking for Disabilities and established new offences and associated penalties regarding parking in the vicinity of a pedestrian crossover.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.IE18.1>

At its meeting on July 24 and 25, 2024, City Council considered 2024.MM20.34 Authorization to Release Section 37 Funds for Traffic Control Signals at Queen Street

East and Sackville Street and directed the General Manager, Transportation Services, in consultation with the Toronto Transit Commission, to review and report back to Toronto and East York Community Council by First Quarter 2025 on the traffic safety and operation of the existing pedestrian crossovers, including but not limited to, the conversion of the pedestrian crossovers to traffic control signals at ten (10) locations in Ward 13. <https://secure.toronto.ca/council/agenda-item.do?item=2024.MM20.34>

At its meeting on November 14, 2023, North York Community Council considered 2023.NY9.5 Bayview Avenue and Sutherland Drive - Traffic Control Signals and referred the item back to the Director, Project Design and Management, Transportation Services, and the Director, Traffic Management, Transportation Services and request that they report to the January 25, 2024 meeting of North York Community Council with a review of the feasibility of installing an Intersection Pedestrian Signal at the intersection of Bayview Avenue and Sutherland Drive, such report to include options to proactively prevent traffic infiltration on Sutherland Drive. <https://secure.toronto.ca/council/agenda-item.do?item=2023.NY9.5>

At its meeting on 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. City Council amended the Zebra Crosswalk Policy to include zebra crosswalks at mid-block school crossing guard locations with active guards. <https://secure.toronto.ca/council/agenda-item.do?item=2023.IE7.4>

At its meeting on 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 to include a required number of potentially preventable collisions that is no greater than one. <https://secure.toronto.ca/council/agenda-item.do?item=2022.MM47.45>

At its meeting on September 30, October 1 and 2, 2020, City Council considered 2020.IE15.7 Update on the School Crossing Guard Program and adopted the recommendation for the General Manager, Transportation Services to provide funding of \$320,000CAD per year to support the expansion of the Toronto District School Board and the Toronto Catholic District School Board school travel planning programs. <https://secure.toronto.ca/council/agenda-item.do?item=2020.IE15.7>

At its meeting on 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. City Council also adopted the recommendation that a pedestrian factor of '2' be applied to all pedestrians for the purpose of evaluating All-Way Stop Control and the recommended use of a "contextual assessment checklist" as part of all evaluations for traffic signals. City Council also amended the Zebra Crosswalk Policy to include stop-controlled intersections located within Pedestrian Safety Corridors, School Safety Zones, and Senior Safety Zones, as well as locations where safety is, in the opinion of the General Manager, Transportation Services, an issue. <https://secure.toronto.ca/council/agenda-item.do?item=2019.IE6.8>

At its meeting on September 25, 2006 City Council adopted the Proposed Zebra Crosswalk Policy (All Wards), as outlined in Report 6 of the Works Committee.
<https://www.toronto.ca/legdocs/2006/agendas/council/cc060925/wks6rpt/agendain.pdf>

City Council, at its regular meeting held on April 23, 24, 25, 26, 27 and its special meeting held on April 30, May 1 and 2, 2001 adopted Clause 6 embodied in Report No. 5 of the Works Committee, which recommended proposed harmonized warrants for installation of All-Way Stop Sign Control from the March 6, 2001 report from the Commissioner of Works and Emergency Services.
<https://www.toronto.ca/legdocs/2002/agendas/council/cc020730/wks9rpt/cl010.pdf>

City Council, at its meeting of February 29 and March 1 and 2, 2000, adopted a Road Classification System (Clause No. 1 of Report No. 4 of the Works Committee) which consolidated and replaced the various road classification systems of the former seven pre-amalgamated municipalities. When City Council adopted the current Road Classification System, it also requested that the Transportation Services Division submit a staff report seeking City Council's approval of any future changes to the system requiring a road designation of "Collector" or higher.
<https://www.toronto.ca/legdocs/2000/agendas/council/cc/cc000229/wks4rpt/cl001.pdf>

COMMENTS

The goal of the City's Vision Zero Road Safety Plan is to eliminate all fatalities and serious injuries on City streets. The Vision Zero commitment, which originated in Sweden in the 1990s and has since been adopted by hundreds of cities across the world, is based on the core principle that use of the transportation system should not result in death or serious injury. The foundational concept in Vision Zero is the Safe System Approach, which is a process to improve the safety of the transportation system in ways that are human-centred and consider the impacts of the system itself on human behaviour. While people are expected to abide by all laws and are ultimately responsible for their own choices, there is a shared responsibility amongst those who design, build, and manage the transportation system to minimize the risk presented to road users while traveling on City streets. Through adoption of the Vision Zero approach, City Council has committed to reviewing and updating policies, guidelines, and standards for safety improvements, in alignment with the Safe System Approach.

Attachment 1 illustrates the evolution and growth of the Vision Zero Road Safety Plan since its inception in 2016 and renewal in 2019.

This report provides an overview of trends in pedestrian serious injuries and fatalities, building on information shared in the November 2024 report from the General Manager, Transportation Services - Updates on Vision Zero Road Safety Plan ([2024.IE18.1](#)), focusing specifically on pedestrian-involved collisions.

The recommendations in this report are intended to improve various components of the Vision Zero Road Safety Plan in the following areas:

- **Improving Crossings for Pedestrians:**
 - Recommends adoption of four new or updated policies to improve pedestrian crossings: 1) Pedestrian Crossing Protection Device Justification Policy; 2) Traffic Control Signal Justification Policy; 3) All-Way Stop Sign Control Justification Policy; and 4) Crosswalk Marking Policy;
 - Provides updates on the development of Pedestrian Crossing Protection Guidelines; and
 - Recommends thirteen (13) new traffic control signals to provide improved pedestrian crossing protection, including six (6) locations proactively identified by Transportation Services.
- **Road Classification Updates:** recommends updates to the Road Classification Criteria in line with other City of Toronto policies;
- **Community Safety Zone Updates:** recommends eight (8) new and thirty-three (33) modified Community Safety Zones to improve safety through reduced vehicle speeds and enforced through the installation of Automated Speed Enforcement;
- **Speed Limit Reductions:** recommends amending the speed limit in two locations - sections of Forest Manor Road (Ward 17) and Avenue Road (Wards 11 & 12) - to improve consistency and safety;
- **Active and Safe Routes to School Funding:** recommends renewing funding from Transportation Services to support the Active and Safe Routes to School programs for the Toronto District School Board and Toronto Catholic District School Board.

Trends in Pedestrian Serious Injuries and Fatalities

The Vision Zero Road Safety Plan was adopted in 2016, a year in which Toronto recorded the highest number of traffic fatalities since 2002. Since then, and notwithstanding increasing population, there has been a moderate downward trend in traffic fatalities and serious injuries. While the number of pedestrians killed or seriously injured is approximately half of the number recorded in the early 2000s, pedestrians still represent about half of those killed or seriously injured every year. This is illustrated on Figure 1, which shows the twenty-year trend in collisions resulting in a fatality or serious injury, and Figure 2, which shows an annual per capita count of the fatalities recorded by mode from 2019 through 2024.

Figure 1: Annual Serious Injuries and Fatalities on Toronto's Roads (2000-2024)

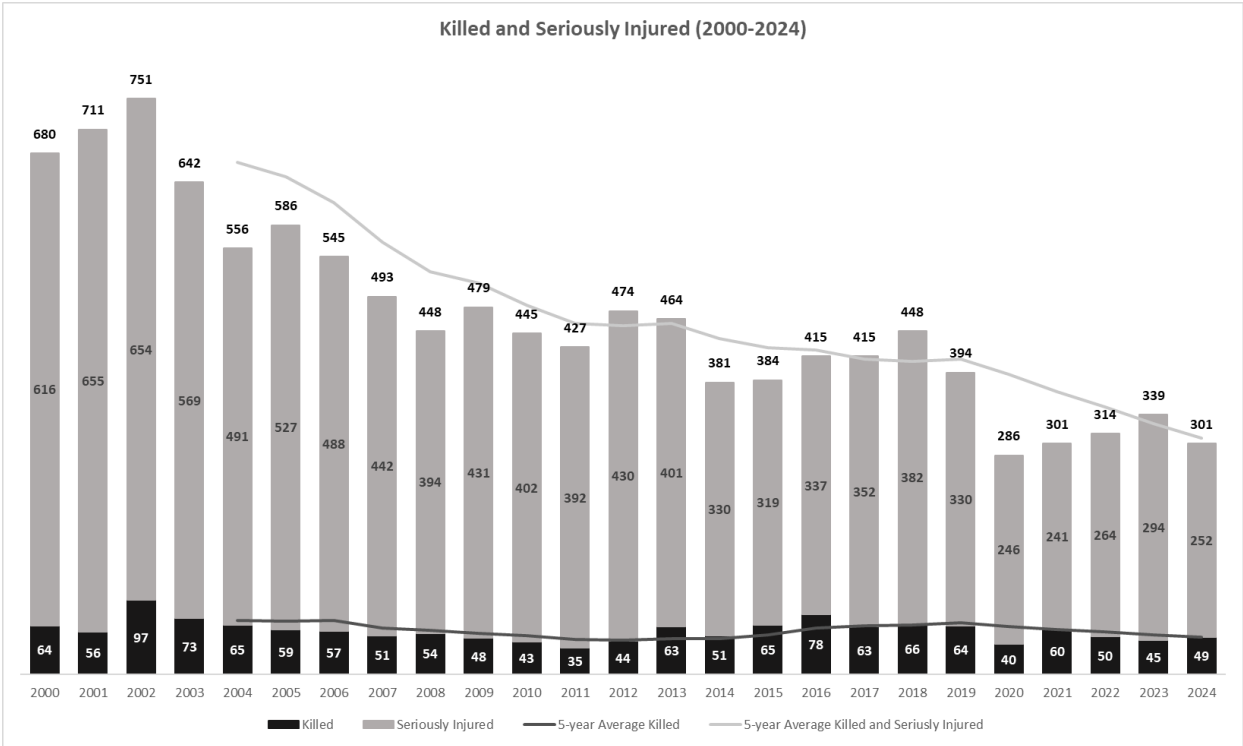
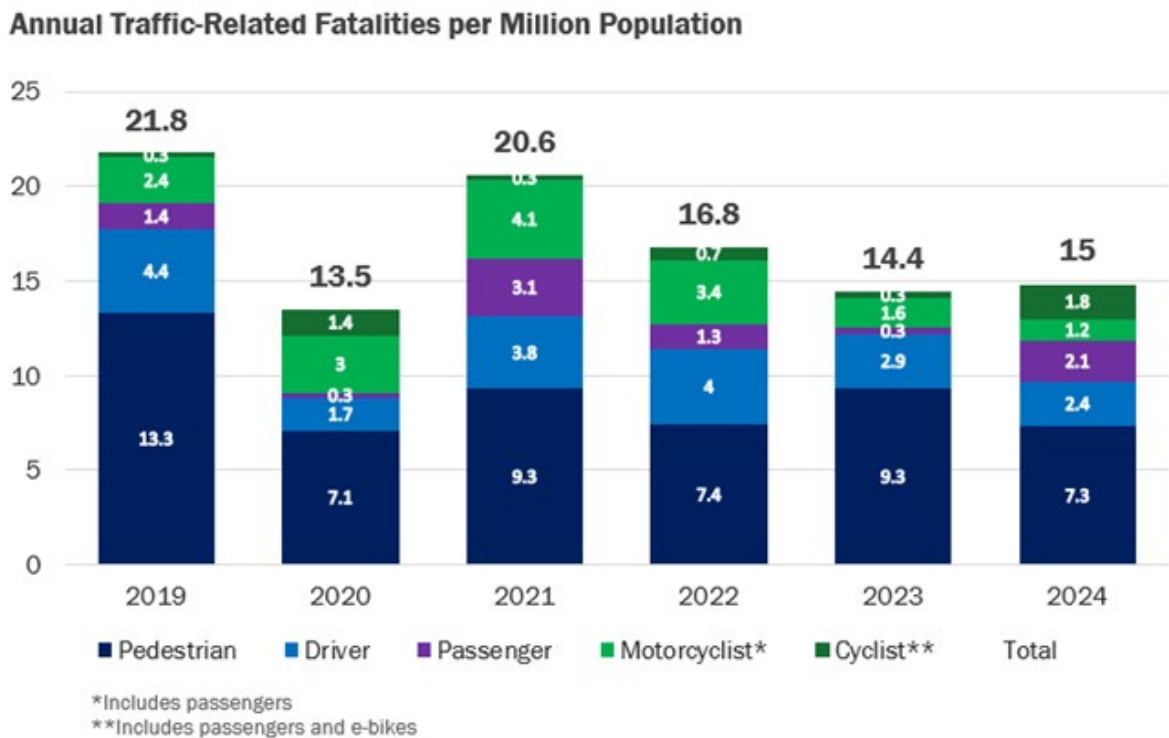


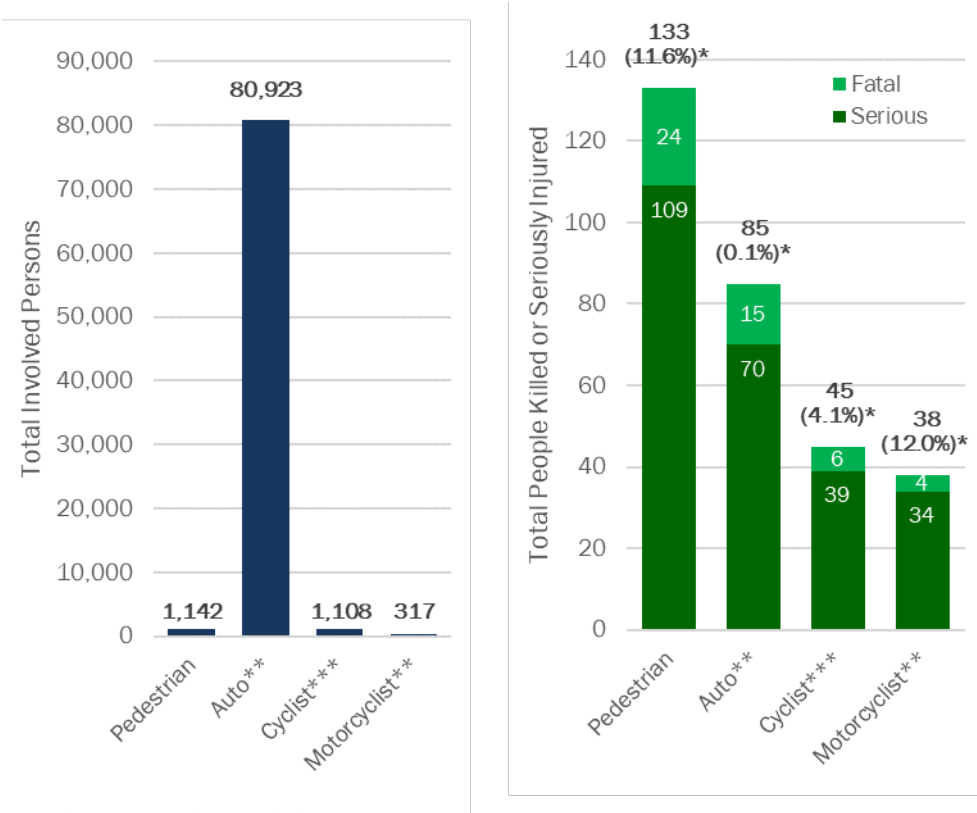
Figure 2: 2019 to 2024 Annual Traffic-Related Fatalities Per Capita by Road User



Pedestrians were involved in less than two percent of collisions in 2024 but were over 150 times more likely to be killed or seriously injured in a collision when compared to occupants of motor vehicles, as shown in Figure 3, which compares the number of people involved in a collision (left) versus the number of people killed or seriously

injured in a collision (right). Other vulnerable road users – people on bicycles, other micro-mobility devices, or motorcycles – are also significantly over-represented in collisions resulting in serious injuries and fatalities.

Figure 3: 2024 Comparison of People Involved in Collisions and People Killed or Seriously Injured in Collisions by Mode



* Killed or seriously injured as percentage of all people involved in collisions
**Includes passengers
***Includes passengers, e-bicycles, and other micro-mobility users

The overall decline in the number of people killed or seriously injured on Toronto roadways is influenced by many factors, including changes to transportation patterns in 2020 and 2021 due to the pandemic. Broadly speaking, the transportation industry across Canada and North America has made progress in reducing serious injuries and fatalities for occupants of motor vehicles through the adoption and promotion of safer vehicle designs and improvements in safety standards such as advanced driver assistance systems and driver’s license testing requirements. In the City of Toronto, implementation of the Vision Zero Road Safety Plan has demonstrated significant progress in speed management; proactively addressing roadway design, high-risk mid-block crossings, and turning collisions at signalized intersections; and education and engagement.

While the City of Toronto has seen considerable reductions in pedestrian fatalities and serious injuries, the continued over-representation of pedestrians in collisions that result in a fatality or serious injury make it clear that there are additional opportunities to further enhance efforts to improve pedestrian safety, which is the focus of this report.

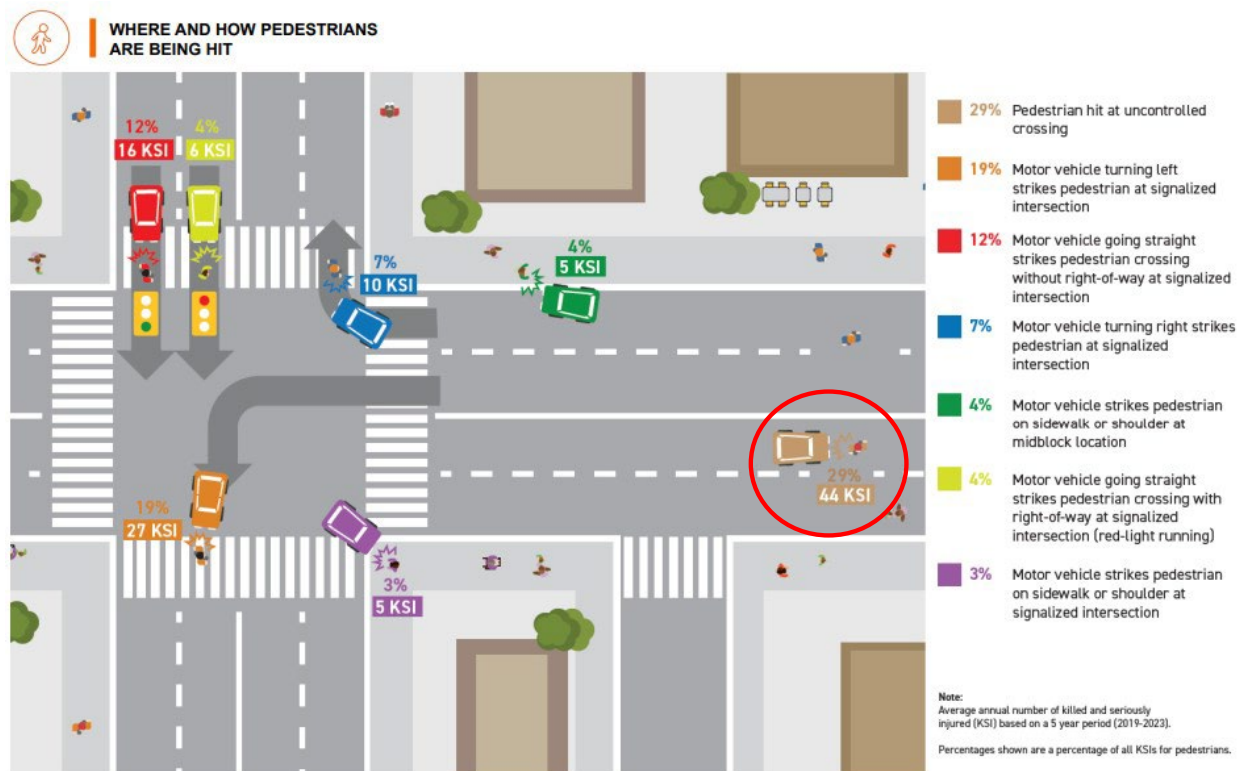
Improving Crossings for Pedestrians

The Council-endorsed Vision Zero Road Safety Plan identified pedestrians – defined as a person walking or rolling, including utilizing a mobility device or other non-motorized method of transportation – as one of the seven emphasis areas. The Vision Zero Road Safety Plan identified the following priorities for improving safety for pedestrians: reducing crossing distances, making pedestrian crossings more accessible, and reducing conflicts between pedestrian and people operating a motor vehicle.

Pedestrians are vulnerable road users as they sustain a greater risk of injury in any collision with a vehicle and are therefore in need of greater protection against such collisions. As shown in Figure 4, the most common type of pedestrian collisions that result in a death or serious injury occur at uncontrolled crossings, such as mid-block locations. Two primary factors influence the likelihood and severity of mid-block pedestrian collisions: the speed at which the vehicle is traveling at the time of the collision and the presence of pedestrian crossing protection.

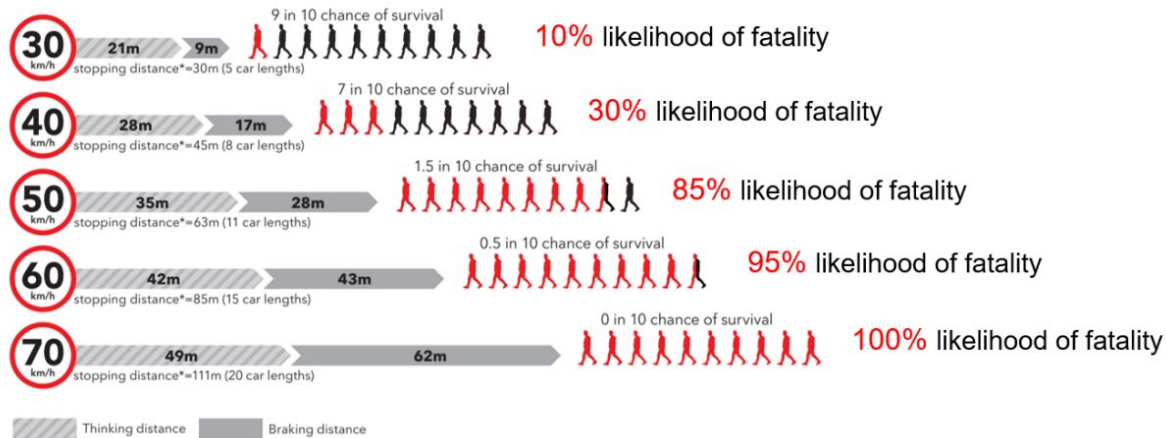
Improvements to speed management¹ measures have a significant impact on the likelihood of a collision resulting in death or serious injury, as a person struck at a higher speed is exponentially more likely to be killed when struck. Notably, the likelihood of being killed is 85% when struck at 50 km/h, compared to 10% at 30 km/h, as shown in Figure 5.

Figure 4: Pedestrians Killed or Seriously Injured by Location/Collision Type



¹ More details on Transportation Services' multi-pronged speed management strategy can be found in the November 2024 report - Updates on Vision Zero Road Safety Plan.

Figure 5: Impact of Speed on Collision Outcome



In order to enhance pedestrian crossing safety at uncontrolled and mid-block locations, Transportation Services is adding two additional forms of pedestrian crossing protection to the pedestrian safety toolkit: Level 2 Pedestrian Crossovers (PXOs) and Intersection Pedestrian Signals (IPS, also known as Half Signals), in addition to the current use of Level 1 PXOs and Mid-Block Pedestrian Signals (MPS). Transportation Services is recommending that City Council adopt updated justifications for the evaluation of Pedestrian Crossing Protection Devices including PXOs (Level 1 and Level 2) and pedestrian signals (MPS/IPS).

Two related policies are recommended for City Council adoption with updated justifications for Traffic Control Signals (TCS) and All-Way Stop Control (AWSC), as well as an updated Crosswalk Marking Policy. These policies are intended to provide the foundation of Pedestrian Crossing Protection Guidelines currently under development by Transportation Services. Transportation Services is also recommended thirteen (13) new traffic signals to improve pedestrian crossing safety.

Updated Justifications for Pedestrian Crossing Protection Devices

Pedestrian Crossovers (PXOs) have been in-use in the City of Toronto for over 50 years. With the expansion of the pedestrian safety toolkit to include Level 2 PXOs and IPS, Transportation Services is recommending that City Council adopt updated justifications for all Pedestrian Crossing Protection Devices - PXOs (Level 1 and Level 2) and Pedestrian Signals (MPS/IPS).

Transportation Services is recommending a modified justification for Pedestrian Volume and Delay that will be used to evaluate PXOs and MPS/IPS, based on Justification 6 for Pedestrian Volume and Delay from Ontario Traffic Manual Book 12 – Traffic Signals (OTM Book 12). As noted in the various OTM Books, the OTM incorporates current best practice in Ontario and is intended to cover of a broad range of traffic situations encountered in practice. Therefore, municipalities - such as the City of Toronto - may need to adopt policies that differ from the OTM to reflect local conditions. The recommended Pedestrian Crossing Protection Device Justification Policy, detailed further in Attachment 2, also incorporates guidance from OTM Book 15 - Pedestrian

Crossing Treatments, industry best practices, the Vision Zero lens, and Toronto-specific context and experience.

The numerical justification of pedestrian volume and delay over an eight-hour study period is based on Justification 6 from OTM Book 12 but lowered by approximately 40 percent. In addition, Transportation Services has developed equivalent numerical justifications for both four-hour and two-hour study periods, which are not present in OTM Book 12. These study periods are intended to be used where there is not a sustained demand over the whole day, such as near a school or bus stop - locations where there may also be a high volume of priority populations such as school children and older adults.

Two additional considerations are outlined in the Pedestrian Crossing Protection Device Justification Policy to support recommendations for pedestrian crossing protection where the numerical justification is not met but there is a need to improve pedestrian crossing safety. The first consideration addresses collision experience. As noted further in this report (page 15), Transportation Services is recommending an updated justification for Traffic Control Signals (TCS) based on collision experience. Accordingly, collision experience will be an additional consideration when evaluating new crossing locations, as directed by City Council ([2022.MM47.45](#)). Even if a location does not meet the numerical justification outlined above, the collision experience consideration means that if a pedestrian is seriously injured or killed in a collision that could have been potentially prevented through installation of a Pedestrian Crossing Protection Device, a new Pedestrian Crossing Protection Device may be recommended for installation.

The second consideration addresses locations where there is a well-defined desire for people to cross the street, but the volume of pedestrians is not high enough to meet the numerical justification. Often in current practice, staff do not have consistent guidance and must rely on engineering judgement to support installation of a Pedestrian Crossing Protection Device in locations such as those adjacent to transit stops or at mid-block trail crossings with high speeds, high traffic volumes, and/or multiple lanes of traffic to cross. These are typically blocks where there are multiple closely-spaced uncontrolled crossings or significant distances between controlled crossings, where pedestrians may choose to cross mid-block due to a lack of a controlled crossing opportunity.

Transportation Services recommends that City Council adopt the updated justifications for all Pedestrian Crossing Protection Devices detailed in Attachment 2 of this report and summarized above.

The changes recommended to the pedestrian volume and delay justification and the application of the additional considerations will improve pedestrian safety and result in a significant expansion in the ability for Transportation Services to put forth positive recommendations for new PXOs and pedestrian signals (MPS/IPS). As such, the development and application of objective factors is critical to prioritize installation of new and upgraded pedestrian crossing protection, which is outlined later in this report.

As is common practice with many operational policies, following adoption of the proposed recommendations by City Council, Transportation Services would continue to

monitor outcomes to ensure the justifications are effective and will review and recommend necessary updates to this policy in future years.

Other Associated Policies for Adoption

While developing the Pedestrian Crossing Protection Device Justification Policy, staff have identified opportunities to review other existing policies related to pedestrian safety and traffic control devices and are proposing to update them to be consistent with current standards and best practices. To that end, **Transportation Services recommends that City Council adopt the following updated policies, outlined below and detailed in Attachment 2:**

- **Traffic Control Signal Justification Policy**
- **All-Way Stop Sign Control Justification Policy**
- **Crosswalk Marking Policy**

Updated Traffic Signal Justifications - Collision Experience and Pedestrian Volume and Delay

The purpose of the Traffic Control Signal Justification Policy outlined in Attachment 2 is to provide guidance to practitioners on the technical justification to support a recommendation for installation of a full traffic signal².

The existing evaluation of new Traffic Control Signals (TCS) is based on the latest published version of the Ontario Traffic Manual Book 12 – Traffic Signals (OTM Book 12), Section 4 on “Planning and Justification”. OTM Book 12 identifies seven (7) distinct justifications: five (5) of these justifications are based on vehicular and pedestrian volumes and delay to cross traffic, one is based on collision experience, and one is based on pedestrian volume and crossing delay.

In 2019, Transportation Services developed a contextual assessment checklist to be used as part of all evaluations for TCS. This contextual assessment includes consideration of road width, posted speed limit, operating speeds, adjacent land uses (including new development in the area), pedestrian desire lines and demographics, presence of a transit stop, sight lines, and distance between existing signalized crossing opportunities. Using this checklist, staff may recommend the installation of a TCS even if none of the numerical requirements of the seven justifications provided in Book 12 are not met.

Staff have accordingly reviewed opportunities to update the technical justifications in line with the Vision Zero lens and Safe System Approach. Transportation Services is recommending that five (5) of the seven (7) justifications be based on the latest published version of OTM Book 12:

- Justification 1 - Minimum 8-Hour Vehicle Volume;
- Justification 2 - Delay to Cross Traffic;
- Justification 3 - Combination Warrant;

² The technical justification for pedestrian signals (IPS/MPS) would be based on the recommended Pedestrian Crossing Protection Device Justification Policy outlined above (pages 12-13).

- Justification 4 - Minimum 4-Hour Vehicle Volume; and
- Justification 7 - Projected Volumes.

Justification 5 - Collision Experience is recommended to be modified for the City of Toronto context, as described further below. Justification 6 - Pedestrian Volume and Delay would also be updated for the City of Toronto context as outlined in the Pedestrian Crossing Protection Device Justification Policy section of this report.

Transportation Services is recommending an updated collision experience justification for full signals to replace Justification 5 – Collision Experience from OTM Book 12, as directed by City Council ([2022.MM47.45](#)). Justification 5 from OTM Book 12 consists of flat number of potentially preventable collisions: 15 over the course of 36 months. Potentially preventable collisions are defined as those that are susceptible to reduction following installation of a traffic signal such as angle and pedestrian-involved collisions, and the justification includes the condition that other safety measures have failed to reduce the collision frequency.

In applying the Vision Zero lens and considering the Safe System Approach, Transportation Services is recommending changes to the Collision Experience justification for use in the City of Toronto. As shown in Attachment 2, the updated Collision Experience justification is based on the motor vehicle volume on the major roadway under consideration, collision severity, and either a 12- or 36-month analysis period, instead of a flat number currently used in evaluations of this justification.

The proposed recommendations would result in fewer collisions required to justify installation of a full signal at locations with a higher risk to people attempting to cross a major street or a history of collisions resulting in a fatality or serious injury. The intent is that the Collision Experience justification would seldom be used on its own but would be available for staff to consider as part of the evaluation for a full signal.

Minor Updates to All-Way Stop Sign Control Justifications

The purpose of the All-Way Stop Sign Control Justification Policy outlined in Attachment 2 is to provide guidance to practitioners on the technical justification to support a recommendation for installation of All-Way Stop Control at intersections within the City of Toronto.

The current All-Way Stop Sign Control Policy was adopted by City Council in March 2001. The 2001 Policy outlined two primary considerations for AWSC based on collision experience and traffic volumes. Two additional considerations are provided where AWSC can be installed as an interim measure where traffic signals are technically justified but cannot be implemented immediately and as a means of providing a transition period to accustom drivers to a change in intersection right-of-way control from one direction to another.

In June 2019, the All-Way Stop Sign Control Policy was amended to apply a factor of '2' to all pedestrians.

The All-Way Stop Sign Control Justification Policy recommended in this report adds an additional consideration to the current policy based on visibility to bring the City's Policy

in-line with the latest version of the Ontario Traffic Manual Book 5 – Regulatory Signs. The name of the policy has also been updated to be consistent with the other justification policies that apply to Pedestrian Crossing Protection Devices and TCS.

Crosswalk Marking Policy

The purpose of the Crosswalk Marking Policy is to compile a singular, standalone document that outlines the City's policies regarding the installation of crosswalk markings, including zebra markings. The following section outlines the existing and updated practices for marking crosswalks, as detailed in Attachment 2.

Installation of Crosswalk Markings

Crosswalks are an essential tool for helping pedestrians move safely, conveniently, and predictably across roadways. Marked crosswalks alert vehicle operators to expect crossing pedestrians and emphasize the pedestrian's presence and right-of-way. In locations with multiple potential crossing points, marked crossings direct pedestrians to the desirable, recommended crossing location. Marked crosswalks can also provide additional guidance to pedestrians with low vision, such as assisting with critical wayfinding tasks of finding the crosswalk, aligning to cross the roadway in the desired direction, and maintaining proper alignment during crossing to reach the sidewalk ramp on the opposite side of the roadway.

According to the Highway Traffic Act, the absence of crosswalk markings does not necessarily indicate whether a crosswalk is legally present, and crosswalk markings are not required to establish the pedestrian right-of-way at a controlled intersection. Crosswalks legally exist at all intersections – whether marked or unmarked – if sidewalks are present on the connecting roadways. Crosswalks can also be designated at intersection or midblock locations by the presence of signs or pavement markings, irrespective of the presence of sidewalks

It is standard Transportation Services practice to install crosswalk markings at all new controlled crossing locations – those where pedestrians have the right-of-way and vehicle movements are dictated by a stop or yield sign, PXO, traffic signal, or a School Crossing Guard where no other form of traffic control is provided when the School Crossing Guard is not present. At existing controlled crossings without crosswalk markings, crosswalks are added during roadway state-of-good-repair, or where recommended by Transportation Services to improve pedestrian safety or provide guidance to pedestrians.

Crosswalks are typically marked across all legs when an intersection is controlled by stop signs on all approaches or by a full signal. Additionally, while it is preferred that all controlled crossings are marked, it can be acceptable to not mark a crossing across a low-speed, low-volume roadway, where no significant safety concerns are present.

Uncontrolled crosswalks are not marked, with the exception of those with a School Crossing Guard and no other form of traffic control.

Types of Crosswalk Markings

The standard treatment for marked crosswalks consists of two white lines that delineate the sides of the pedestrian crossing area. The lines are placed perpendicular (or

transverse) to the direction of vehicle travel and parallel to the direction of pedestrian travel.

The installation of longitudinal stripes, in addition to the standard transverse crosswalk markings – a zebra crosswalk marking – significantly increases the visibility of a crosswalk during both day- and night-time conditions, improving pedestrian safety. In September 2006, City Council adopted the first Zebra Crosswalk Policy, which was updated in July 2019 and November 2023 to include the following locations:

- Signalized crossings;
- Pedestrian crossovers;
- Stop-controlled intersections within Pedestrian Safety Corridors, School Safety Zones, and Senior Safety Zones;
- Supervised school crossing locations (marked crosswalks controlled by a School Crossing Guard during school hours but uncontrolled at other times); and
- Locations where Transportation Services has identified a safety concern.

No changes to the requirements for zebra crosswalk markings are proposed by Transportation Services, but this report recommends that the previously-adopted Zebra Crosswalk Marking Policy be incorporated into the Crosswalk Marking Policy recommended by this report.

Installation of Crosswalks in Locations without Sidewalks

Crosswalks typically provide connections along pedestrian path of travel on sidewalks and other pathways. On collector and arterial roads, sidewalks are commonly present on both sides of the street. Local roads see the widest range of scenarios: sidewalks can be present on both sides of the street, on one side only, or not at all. In current practice, crosswalk markings are only installed across the legs of an intersection where sidewalks are present on both sides of intersection, as extension of sidewalks.

However, application of the above rationale to streets without sidewalks on either side has resulted in intersections where no crosswalk lines are present, even though pedestrians may be crossing and have the right-of-way over vehicle operators. Furthermore, various challenges with implementation of sidewalks on such roads has left pedestrians without delineated crosswalks for several years, including in some School Safety Zones and other locations where they have been requested. Transportation Services conducted a recent review of this practice, considering various factors such as the safety and visibility of road users, especially vulnerable road users, and relevant legislation, standards, and guidelines.

In accordance with the Highway Traffic Act, in the absence of sidewalks on a street, pedestrians are required to walk on the left side of the roadway, as close to the edge as possible, facing oncoming vehicular traffic. It can therefore be expected that pedestrians will be travelling on both sides of the street, depending on their direction of travel, including crossing intersecting roadways along their routes.

In addition to delineating the path for pedestrians as they cross a roadway, crosswalks also provide people driving with an additional visual cue to look out for pedestrians and,

in addition to the stop markings and signs, demarcate the setback at which they must stop their vehicles for pedestrians, thereby minimizing conflicts.

Considering these safety benefits, Transportation Services is revising its practice and including marked crosswalks on streets without sidewalks, where appropriate. Crosswalks would not be marked at all controlled crossings where sidewalks are not present; the application would vary depending on the nature of the intersection.

Accordingly, Transportation Services is also revising its practice regarding the installation of crosswalks at crossings without existing sidewalk ramps. Under existing practice, crosswalk lines are not installed at new and existing stop-controlled crosswalks until the necessary sidewalk ramp can be constructed. However, there can often be a delay between the addition of a stop sign and the construction of sidewalk ramps due to the nature of the work.

While it is preferable to install stop signs, crosswalk lines, and sidewalk ramps all at the same time, the addition of crosswalk lines, which are an important pedestrian safety device, can be considered at the time of stop sign installation. In the event that crosswalk lines are added before sidewalk ramps can be constructed, staff will attempt to minimize the time between crosswalk line and sidewalk ramp installation. Additionally, while it is preferred that sidewalk ramps be added to provide a designated space for pedestrians to wait before crossing on streets without sidewalks, the construction of sidewalk ramps will not be required before installing crosswalk lines.

Crosswalks Leading to Low-Volume Driveways

When designing and installing crosswalks in constrained locations, there may be instances where the alignment of a crosswalk is in conflict with the location of a low-volume driveway. This is most common in residential neighbourhoods across local and collector roadways but can also include other T- or offset intersections on arterial roadways. In practice, staff make best efforts to avoid leading a crosswalk into a driveway by slightly realigning the crosswalk, with consideration for the expected path of pedestrian travel.

However, for instances where avoiding a driveway would result in a crosswalk alignment that significantly diverts pedestrians from the most direct and expected path of travel, Transportation Services updated its practice in 2021 such that it can be acceptable to lead a crosswalk into a low-volume driveway. In these instances, a portion of the driveway is designed to provide the additional function of a sidewalk ramp (and maintained as such); the crosswalk leading to the driveway, as well as the parallel crosswalk on the opposite side of the intersection, are marked with zebra crosswalk markings.

Development of Pedestrian Crossing Protection Guidelines

The policies previously outlined in this report provide the foundation for new guidelines currently under development by Transportation Services. The Pedestrian Crossing Protection Guidelines are intended to provide a singular, harmonized process for evaluation of PXOs and pedestrian signals (MPS/IPS) and are based on existing and

updated City of Toronto and Transportation Services policies and guidelines, guidance from OTM Book 15 and other Provincial standards, and international best practices.

The Pedestrian Crossing Protection Guidelines will outline a four-step process to:

- 1) Determine if a new marked crossing is justified based on the Pedestrian Crossing Protection Device Justification Policy (pages 12-13);
- 2) Determine the appropriate type of traffic control based on the number of lanes of the roadway pedestrians must cross, the volume of conflicting motor vehicle traffic, and the posted speed limit;
- 3) Bundle additional measures to improve safety for pedestrians crossing such as curb extensions to prevent illegal parking that blocks visibility of crossing pedestrians and to shorten the crossing distance or a raised crosswalk to improve pedestrian accessibility and visibility; and
- 4) Prioritize the delivery order based on safety and other quantitative and qualitative factors such as the volume of pedestrians, the number of conflicts with motor vehicles, the speed of the roadway, equity-deserving communities with a high-concentration of priority populations and those that are transportation disadvantaged, and the expected presence of vulnerable road users – older adults, school children and other pedestrians, including transit riders – to prioritize locations with a higher risk of fatal and serious injury collisions.

Recommendations for New Traffic Control Signals

In July 2024 ([2024.MM20.34](#)), following a collision resulting in a woman and her unborn child being killed while crossing Queen Street East at the Pedestrian Crossover (PXO) at Sackville Street, City Council authorized upgrading this PXO to a Traffic Control Signal. In addition, City Council directed the General Manager, Transportation Services to review and report back on the safety and operation of ten (10) additional PXOs in Ward 13. The findings of this review are presented as part of this report so that the ten (10) locations could be considered for a Mid-Block or Intersection Pedestrian Signal (MPS/IPS) in accordance with the Pedestrian Crossing Protection Guidelines currently under development.

Accordingly, **Transportation Services is recommending the installation of a traffic signal (MPS or IPS as appropriate for a mid-block or intersection crossing, respectively) at the five (5) locations below in Ward 13 from the July 2024 Council direction:**

- Dundas Street East and Bond Street;
- Dundas Street East and George Street;
- Dundas Street East and Pembroke Street;
- King Street East and Ontario Street; and
- King Street East and Sackville Street.

Transportation Services is also recommending the installation of a full traffic signal at the intersection of Queen Street East and Ontario Street. Construction of a full signal has been secured as part of an adjacent development application at 261 Queen Street East.

In addition to the above, Transportation Services is proactively evaluating all existing PXOs across the City as part of the development of the Pedestrian Crossing Protection Guidelines. At the time this review began, there were 481 existing PXOs in Toronto; a preliminary evaluation identified that several of these PXOs may meet the criteria for upgrading to an MPS/IPS. Staff are presenting recommendations for locations with the highest potential risk to crossing pedestrians in this report. Recommendations for additional upgrades will be presented in future reports, as the proactive review progresses. As potential alternatives to upgrading some PXOs to MPS/IPS, staff are also evaluating operational or geometric improvements, such as speed limit reductions or a reduction in the number of motor vehicle travel lanes at the crosswalk.

Accordingly, **Transportation Services is recommending the installation of a traffic signal (MPS or IPS as appropriate for a mid-block or intersection crossing, respectively) at the following six (6) locations based on a preliminary proactive review of all PXOs across the City:**

- Bayview Avenue and Parkhurst Boulevard/Soudan Avenue (Ward 15);
- Beecroft Road and 165 metres south of Park Home Avenue (Ward 18);
- Warden Avenue and a point approximately 396 metres north of Firvalley Court (85 metres north of Bell Estate Road, Ward 20);
- Weston Road and Oxford Drive (Ward 5);
- Weston Road and Clouston Avenue (Ward 5); and
- York Mills Road and Birchwood Avenue (Ward 15).

It should be noted that while the installation of MPS/IPS at the above locations is intended to improve pedestrian safety, they will negatively impact pedestrian delay. With a PXO, pedestrians are able to cross on-demand and experience little to no delay, assuming vehicle operators yield as required by law. Following installation of an MPS/IPS, pedestrians will be required to wait for the WALK sign to appear before crossing. Additionally, installation of an MPS/IPS will require removal of parking spaces up to 30.5 metres from the intersection on the major street, in accordance with Chapter 950, as detailed in Attachment 3.

In addition to the above-noted locations, **staff are recommending installation of an IPS at the intersection of Bayview Avenue and Sutherland Drive (Ward 15).** In November 2023, the North York Community Council (NYCC) referred item [2023.NY9.5](#) back to Transportation Services for consideration of an IPS instead of a full signal as originally recommended. Staff reviewed this location using the Pedestrian Crossing Protection Device Justification Policy recommended by this report and are recommending installation of a Pedestrian Crossing Protection Device based on the additional consideration of a lack of controlled crossing opportunities at an established pedestrian desire line.

As noted in the September 2023 report to NYCC from the Director, Planning Design and Management, Transportation Services, and the Director, Traffic Management, Transportation Services, there are area conditions that create the need for a controlled crossing. Namely, the Mount Pleasant Cemetery entry point aligns with Sutherland Drive and creates a desire-line across Bayview Avenue. Public feedback from the

Leaside Neighborhood Transportation Plan identified support for a signal at this location due to the need for improved safety for vulnerable road users.

The installation of an IPS at this intersection will result in the loss of approximately twenty-one off-peak parking spaces on Bayview Avenue (approximately fifteen spaces on the west side and six spaces on the east side).

Other Matters

Road Classification Criteria Updates

In 2020, City Council adopted a new Road Classification System to consolidate and replace the various road classification systems inherited from Toronto's seven former municipalities, which is still in use today. The purpose of the Road Classification Criteria is to provide a descriptive (rather than prescriptive) set of guidelines that is used to assign classification based on best-fit principles, recognizing that street characteristics may vary along a corridor or within a segment.

Since 2000, the City has updated and adopted several new policies and guidelines including the Official Plan, Vision Zero Road Safety Plan, and Cycling Network Plan. Transportation Services has reviewed the existing Road Classification Criteria and is recommending minor updates to some characteristics to align with Council direction on these policies and current practice.

The updated Road Classification Criteria recommended by this report is provided in Attachment 4.

No changes to individual road classifications are proposed as part of this report.

Community Safety Zones

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, especially vulnerable road users such as pedestrians and priority populations such as school children and older adults. In 2023, City Council adopted the framework and expanded criteria for establishing CSZs.

This report recommends eight (8) new CSZs to be enacted to improve safety through reduced vehicle speeds and enforced through the installation of Automated Speed Enforcement (ASE) cameras.

As part of ongoing efforts to improve the effectiveness of the ASE Program, a proactive review of existing CSZs was undertaken by staff. During this review, the wording of thirty-three (33) additional CSZ by-law entries are recommended to be amended to reflect the original intent more accurately. No CSZs are proposed to be removed as a part of the recommendations in this report.

Speed Limit Recommendations

Two roads have been identified for amendments to the Speed Limits on Public Highways By-law:

- **Forest Manor Road** (Ward 17) - An amendment to the northern section between George Henry Boulevard and Parkway Forest Drive is proposed to lower the posted speed limit from 50km/h to 40 km/h. This is consistent with the existing 40 km/h posted speed limit on Forest Manor Road south of George Henry Boulevard.
- **Avenue Road** (Ward 11 & 12) - The posted speed limit is remaining unchanged at 40 km/h between Bloor Street West and Lonsdale Road with an amendment proposed to clarify the existing limits. The posted speed limit in this section was reduced to 40km/h in 2023.

These changes aim to clarify and ensure consistency with the speed limit reductions for arterial and collector roads introduced in the Vision Zero 2.0 - Road Safety Plan Update adopted by City Council in July 2019. The amendments will help ensure speed limits are applied consistently across the City of Toronto and improve public understanding of the posted speed limits.

Partnership for Expansion of Active and Safe Routes to School (ASRTS) program

In 2020, City Council authorized Transportation Services to enter into an agreement to provide funding from the Vision Zero Road Safety Plan budget to support the Active and Safe Routes to School (ASRTS) program run by the Toronto District School Board (TDSB) and Toronto Catholic District School Board (TCDSB) in order to facilitate expansion of the program to many more schools.

ASRTS is a process for promoting and identifying barriers to students walking and cycling to school and has the potential to improve safety by reducing vehicular traffic around schools, as well as provide health benefits (by increasing daily physical activity) and environmental benefits (by reducing greenhouse gas emissions and air pollution). These environmental benefits directly contribute to the TransformTO Net Zero Strategy's 2030 sector goals, aiming for 75 per cent of school/work trips under five (5) kilometres to be completed by walking, cycling, or public transit. TDSB and TCDSB provide an annual report to Transportation Services to track implementation of the ASRTS program, including the number of participating schools and the number of new school travel plans developed. Additional funding enabled the program to increase from 19 participating schools in the 2020-2021 school year before the City's contributions to 47 participating schools in the most recent 2024-2025 school year.

The program is administered by TDSB and TCDSB through the Toronto Student Transportation Group (TSTG). Transportation Services proposes to continue funding \$320,000 annually to the ASRTS program for both school boards combined. The funding support would be provided contingent on perpetuation of the boards' financial commitments toward their respective ASRTS programs.

The initial funding partnership between Transportation Services and TDSB/TCDSB was structured to support an expanded ASRTS program for three years, beginning in 2021. The agreement between the school boards and the City of Toronto was finalized in

December 2021, with program related hiring and a Request for Proposal process following. The expanded program was launched in the fall of 2023. As such, deadlines present in the original agreement for the use of funds will need to be reviewed and adjusted based on the actual launch date to achieve all deliverables and ensure continued delivery of the program.

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ATTACHMENTS

Attachment 1 - Growth of Vision Zero Initiatives

Attachment 2 - Polices Recommended for City Council Adoption

Attachment 3 - Recommended New Traffic Control Signals

Attachment 4 - Road Classification Criteria Updates

Attachment 5 - Community Safety Zone Amendments

Attachment 6 - Speed Limit Reductions