



Report of the Commissioner of Public Works **York Region Vision Zero Traveller Safety Plan**

1. Recommendations

1. Council approve York Region Vision Zero Traveller Safety Plan, included as Attachment 1.
2. The Regional Clerk circulate this report to Clerks of the local municipalities, York Regional Police, York Region school boards and Ministry of Transportation of Ontario.

2. Purpose

This report seeks Council approval of the multi-year York Region Vision Zero Traveller Safety Plan (Plan) to reduce severe collisions and create a safer traveller experience. The Plan was developed through a data driven approach, best practice review and stakeholder engagement.

Key Points:

- Total combined collisions for both Regional and Local roads are increasing and about one in four are severe; more needs to be done to improve traveller safety and change behaviours
- The Plan is driven by [Vision Zero](#) (an international initiative) and developed using international road safety best practices to reduce severe collisions defined as collisions resulting in injury or death
- Emphasis areas are identified in the Plan with recommended countermeasures including engineering and technology solutions, public engagement, education and heightened enforcement to reduce risk of collision
- A short-term target of the Plan is to reduce severe collisions by 10% between 2024 and 2028 with an aspirational goal of ending all severe collisions on our roads

- Success of the Plan requires on-going collaboration, resources, monitoring, analysis and evaluation
- The Region’s Plan is one of Ontario’s first multi-tier road safety plans and enables the Region and local partners to work seamlessly alongside other partners to enhance traveller safety

3. Background

Annual Traveller Safety reports provide information to support safety on Regional roads

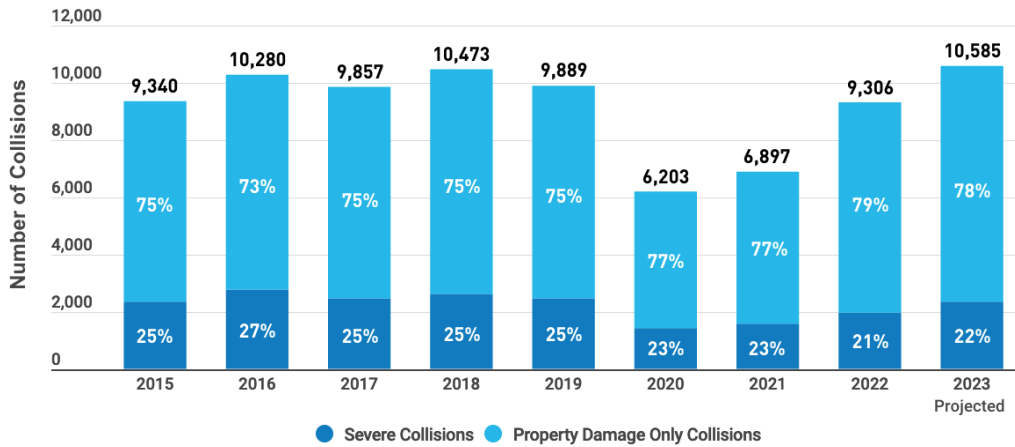
The Annual Traveller Safety Report, first published in 2015, provides collision analysis on Regional roads. Motor vehicle collision reports from York Regional Police, Ministry of Transportation of Ontario and other data such as traffic volume, weather and population information were analyzed to identify trends that may indicate larger issues. Reports supported planning and execution of coordinated police enforcement and development of programs including public education campaigns for travellers to improve road safety. Annual Traveller Safety Reports are available at york.ca/trafficsafety.

Collisions are increasing and about one in four are severe; more needs to be done to improve traveller safety and change behaviours

Between 2015 and 2023 throughout York Region, both total collisions and traffic volumes rose by about 13%. Existing implemented safety measures and advancements in vehicle safety devices, like collision avoidance technology, have helped maintain the current course. However, more needs to be done to eliminate severe collisions. Over the same period, severe collisions remained constant at approximately 25%.

In 2020, collisions fell to about 6,200 due to traffic volumes dropping sharply during pandemic-related closures in the Region, similar to other jurisdictions in Ontario. When restrictions eased in 2021 and traffic volumes increased, collisions increased from just under 7,000 to a projected 10,500 in 2023. Even when accounting for reduced traffic during the height of the COVID-19 pandemic is considered, the upward trend continues (Figure 1).

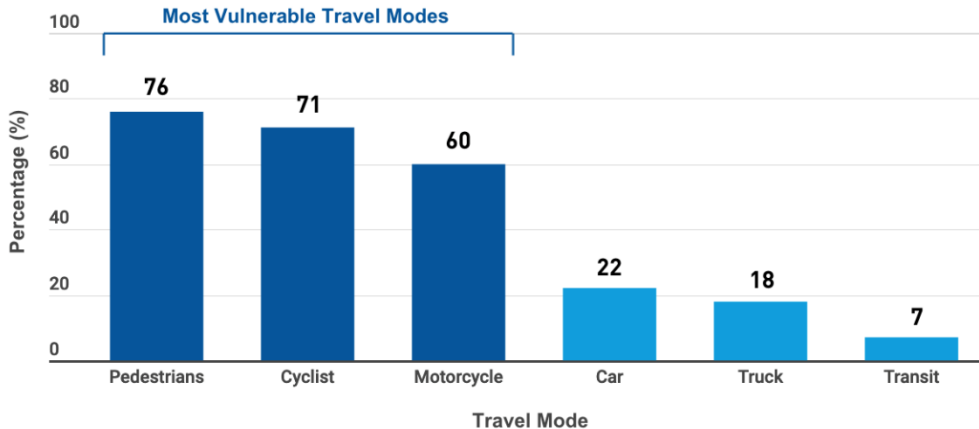
Figure 1
Collisions in York Region from 2015 to 2023



Vulnerable road users sustain the highest percentage of injuries in a collision

Vehicle trips continue to grow by an average of 2% a year; active transportation trips such as walking and cycling are rising at twice that rate. Protecting vulnerable road users (pedestrians, cyclists, elderly residents, children and motorcyclists) is crucial, as these travellers are more likely to sustain severe injury or death when involved in a collision. For example, 76% of collisions involving a pedestrian result in injury or death. While 7% of transit collisions result in injury or death. Cars, trucks and transit have a lower risk due to protection provided by the vehicle. The most vulnerable road users, pedestrians, cyclists and motorcyclists, are shown in dark blue in Figure 2.

Figure 2
Proportion of Severe Collisions by Travel Mode on Regional Roads (2015 to 2023)



Implemented safety measures and programs have helped improve safety in York Region

While many factors (driver behaviour, weather, lighting conditions, etc.) impact traveller safety, York Region has worked with road safety partners successfully implementing programs to make travel safer for everyone. The following safety measures have been implemented at priority site specific locations based on industry experience and supported by Regional studies:

- **Automated speed enforcement** reduced operating speed by approximately 10 km/h and more than doubled compliance with speed limits at 12 locations annually
- **Intersection improvements** such as traffic signals, crosswalks, audible pedestrian signals and count down displays improve safety for all travellers and reduced collisions up to 40% at more than 350 locations
- **Pedestrian and cycling measures** including no right turn on red, left turn signals, and pedestrian head start and warning signs reduced turning movement collisions by 75% at 12 locations
- **Pedestrian crossovers** provide a safe and controlled crossing for pedestrians and reduced collisions by about 20% at four locations
- **Red light cameras** reduced right angle collisions by more than 30% at 40 locations
- **Roundabouts** reduced severe collisions by more than 80% at four locations
- **School Zone speed reductions by time and day** help protect school children and reduced collisions by about 10% at more than 60 locations
- **Speed feedback boards** increased compliance with speed limits by about 10% at 20 locations annually

Although existing measures and programs are helping to improve safety, development of a Plan is required to achieve the Vision Zero aspirational goal to end severe collisions on roads in York Region. This comprehensive Plan will build on efforts to identify gaps in existing safety programs by comparing them with industry best practices, uses data and public input to pinpoint areas where safety should be enhanced and identifies areas for improvement.

Vision Zero aspires to eliminate injuries and death, while increasing safe, healthy, equitable mobility for all

First implemented in Sweden in the 1990s, Sweden's Vision Zero strategy attracted widespread attention by cutting its traffic deaths by half within 20 years. This success is primarily attributed to speed control and the strategy prioritizes vulnerable road users, whether they are walking or using any mobility device from bicycles to wheelchairs. Given the success in Europe, many North American cities including our Greater Toronto and Hamilton Area partners adopted Vision Zero road safety strategies. Adopting Vision Zero in a meaningful way requires a road system that is designed to ultimately eliminate traveller injuries and fatalities.

2022 Transportation Master Plan identified traveller safety as a focus area

The 2022 [Transportation Master Plan](#) identified safety for all travellers as a focus area. Focus areas require further study and additional engagement, with recommended actions and initiatives brought forward for review in the current term of Council. This focus area is being advanced through the York Region Vision Zero Traveller Safety Plan.

Interim update on Traveller Safety Plan development provided to Council in 2023

Council received an update on Plan development in [May 2023](#). At the time, several key deliverables were complete, including establishing stakeholders and a process to share collision data electronically with local municipalities using a web-based data warehouse incorporating Regional and local data. A virtual public information centre was held on February 28, 2023, which included a presentation, question and answer chat, public opinion survey and interactive online mapping tool for commenting to solicit feedback.

Safe System Approach is a design approach using international road safety best practices to reduce injuries and fatalities

The [Safe System Approach](#), provides a comprehensive framework for achieving the Vision Zero goal of zero injuries and fatalities. It emphasizes cultural and systemic changes, aiming to transform traditional road safety plans to proactively focus on preventing and eliminating severe collisions on roads, with special regard for the most vulnerable road users.

The Safe System Approach recognizes interdependence of safe system components (Safe Roads, Safe Speeds, Safe Road Users, and Safe Vehicles) and actions that can be taken to improve results across these components. Many jurisdictions around the world, including those in Canada and the United States, are applying the Safe System Approach to road safety plans.

York Regional Police Road Safety Strategy includes five strategic priorities to address road safety concerns

York Regional Police (YRP) has developed a Road Safety Strategy emphasizing education, engineering and enforcement actions in the strategic priorities of safe people, safe vehicles, safe streets and safe speeds using the Safe System Approach. Their goal is to reduce severe collisions by working with York Region Public Works, the community and partners to promote safe driving, walking and cycling. YRP efforts focus on our community's top five road safety concerns: Aggressive Driving, Distracted Driving, Impaired Driving, Speeding and Pedestrian Safety.

York Regional Police [Road Safety Strategy 2023-2025](#) aligns with the York Region Vision Zero Traveller Safety Plan. This builds on the existing relationship between YRP and Public Works, Public Health and local municipal staff on safety campaigns, such as Be Safe. Be Seen., Distracted Driving, Share-the-Road, Operation Always Be Careful, Project Lifesaver and Stay Alert. Stay Safe.

4. Analysis

Traveller Safety Plan is required to help achieve an aspirational goal to end severe collisions on roads in York Region

The Safe System Approach recognizes it is possible to prevent roadway injuries and deaths, and all parties involved have a role in making it happen. Through collaboration with stakeholders and partners, a visionary statement – to end all severe collisions on roads in York Region – was created for the Plan. To support this vision, a short-term target to reduce severe collisions by 10% within five years (2024-2028) has been set. This aspirational target requires bold action supported by our partners and YRP. This target aligns with several Ontario municipalities who have adopted Vision Zero. The Plan provides guidance to the Region and its partners to achieve the aspirational goal and target.

Traveller safety is a shared responsibility and requires broad-based collaboration and input involving multiple stakeholders

Feedback and input from road safety partners, advocacy groups and the public were vital in preparing and developing the Plan. Partners, including local municipalities, YRP and school boards, met in a series of workshops. Local municipal partners were engaged throughout the process which included obtaining information on existing road safety programs, local road data analysis and identifying hotspots. This process provided a comprehensive review of safety issues across the Region and how to build on existing efforts. To achieve the aspirational goal and target all partners expressed a strong commitment to work together to improve safety on the Regional and local road networks.

Three of four residents surveyed rated road safety in York Region as acceptable and main concerns are pedestrian, cyclist, intersection safety and speeding

People who live or work in the Region were engaged and encouraged to give their perspective on road safety through a virtual public information session held on February 28, 2023, with almost 100 participants. An online mapping tool provided opportunities to voice road safety concerns on Regional and local roads. Over 1,000 comments were received. Public opinion was collected through an online survey conducted in April 2023, which collected over 500 completed responses. Most concerns were related to the need for more traffic signals, speeding and pedestrian and cyclist safety. To date, there have been more than 20,000 views on york.ca/TravellerSafetyPlan.

The number of online survey responses was proportionate to the population of each municipality in the Region. The majority of residents surveyed responded indicating road safety in York Region is acceptable. Most common concerns identified through the public information centre and online mapping tool were cyclist/pedestrian safety, need for more traffic signals at intersections and speeding. These concerns align with emphasis areas supported by data analysis.

Data and public feedback determined five emphasis areas to improve safety and reduce severe collisions

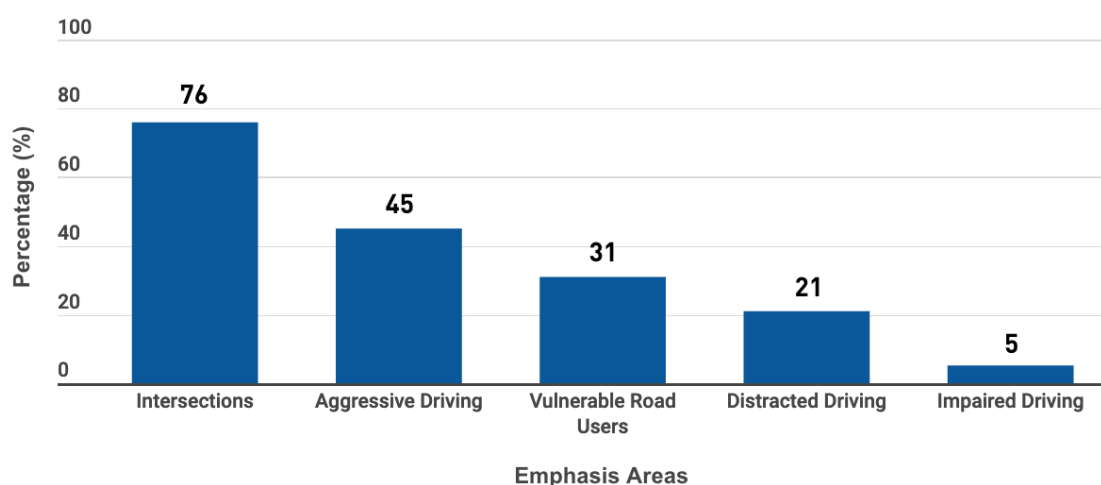
An emphasis area is a type of collision that is a priority safety concern. Emphasis areas form the foundation of achieving the aspirational goal and target by identifying the most common collisions and pinpointing where to apply resources and countermeasures most effectively.

Using Regional and local data, analysis and public input together provided a better understanding of how collisions are happening within the Region and who is involved (age groups, collision type, cause, etc.). Once the collision analysis was completed, a preliminary list of emphasis areas with the largest group of collisions was identified. As shown in Figure 3, the highest percentage (76%) of severe collisions occur at intersections, followed by aggressive driving, vulnerable road users (pedestrians, cyclists, elderly residents, children and motorcyclists) then distracted and impaired (alcohol and drugs). These emphasis areas align with Vision Zero and the York Regional Police Road Safety Strategy 2023-2025 as noted in Attachment 1.

A single collision may involve multiple emphasis areas, hence, there are overlaps among emphasis area totals. For example, if a pedestrian was involved in a collision with a vehicle whose driver was distracted at an intersection, this one collision is represented and counted in three emphasis areas: vulnerable road users, distracted driving and intersections.

Figure 3

Severe Collisions in York Region by Emphasis Area from 2015 to 2019



Plan includes countermeasures to aid reducing frequency and severity of collisions in each emphasis area

After identifying emphasis areas, a series of effective countermeasures (actions to reduce the frequency and severity of collisions) were developed based on industry experience. More than

100 selected countermeasures fall into four categories (engineering, enforcement, education and engagement) and are weighted based on how great an impact they are expected to have on increasing safety and achieving the five-year target.

More specifically, countermeasures will be prioritized based on expected safety benefit and effectiveness, feasibility, resource requirements and potential for coordinating implementation with capital programs. This will provide a balanced, effective approach to accomplish the five-year target of this Plan. Delivery of 28 initiatives is planned during 2024. Attachment 1 section six lists countermeasures for each emphasis area (for example 20 accessible intersection improvements are planned for 2024 to respond to the Vulnerable Road Users emphasis area).

A successful Plan requires resources, evaluation and program monitoring

To achieve desired outcomes, the Plan will involve targeted resources, leveraging major capital infrastructure and asset management planning by the Region and its partners. Along the way, continuous evaluation, monitoring and annual reporting to Council will ensure the Plan remains flexible and current and tracks fiscal implications. Some key performance indicators are safety performance, travel mode, trips, and cost-benefit to assist in monitoring and evaluating Plan effectiveness throughout the five years.

Plan supports Regional Council's Vision for strong, caring, safe communities

The Region's Transportation Master Plan is a long-term blueprint for the transportation network. York Region Vision Zero Traveller Safety Plan is a direct outcome of the Master Plan and reflects the Region's strategic priorities. Both plans take direction from *Vision* and the Strategic Plan.

5. Financial Considerations

Requests for capital and operating/maintenance funding to support initiatives in the Plan will be considered as part of the annual budget process. Estimated annual costs are approximately \$12 million as noted in Attachment 1. York Regional Police budget funds enforcement and portions of education and engagement in addition to the estimated annual costs.

Financial resources required to implement the countermeasures are based on implementation cost, life cycle and associated/recurring operating and maintenance costs. Larger countermeasures involving engineering changes are expected to be delivered through the Capital Roads Program and capital rehabilitation contracts. Some of these initiatives are underway and once the Plan is launched, they can be identified and reclassified accordingly to obtain a full picture of the Region's investment in safety.

While all of this requires resources, it will help to save lives, prevent severe collisions and protect our vulnerable travellers. About 90% of these costs will be included in existing capital programs by integrating best practices and industry standards. The remaining 10% will be funded by revenues from automated speed enforcement and red-light cameras to manage operating budget pressures. Costs and associated funding for the countermeasures have been included in approved 2024 Public Works Capital Plan and Operating Budget.

6. Local Impact

Development of the Plan is a collaborative effort among the Region and all nine local municipalities, York Regional Police, York Region school boards and other road safety partners. These stakeholders were engaged during four full-day technical workshops and surveyed numerous times to obtain existing road safety programs, local road data analysis and identifying hotspots. In addition, continuous updates were provided through technical memorandums and frequent meetings. The Plan is one of Ontario's first multi-tier road safety plans and enables the Region and local partners to work seamlessly alongside other partners to enhance traveller safety bringing us closer to the aspirational Vision Zero goal and target.

The Plan covers both Regional and local roads within York Region. The Region and local municipalities work collaboratively to make all roads in the Region safer for all travellers. Recommended improvements on local roads would be considered and funded by local municipalities through their budgeting process.

7. Conclusion

Collisions are increasing and approximately one in four are severe; more needs to be done to improve traveller safety and change behaviours. York Region Vision Zero Traveller Safety Plan sets out a vision to end all severe collisions on roads in York Region. Using a Safe System Approach, the Plan sets a five-year target of reducing severe collisions by 10%. The York Region Vision Zero Traveller Safety Plan adopts a Vision Zero strategy to road safety, recognizing that it is possible to eliminate severe collisions.

Traveller safety is a shared responsibility requiring collaboration with multiple safety partners to improve safety and change behaviours. To achieve desired outcomes, the Plan covers both Regional and local roads, enabling the Region and local municipalities to work seamlessly with partners including York Regional Police, to make all roads safe for everyone. For maximum effectiveness, the Plan focuses on five emphasis areas determined through a data driven approach and public feedback and sets out more than 100 of the most impactful countermeasures to address these emphasis areas.

Staff recommend Council approve the York Region Vision Zero Traveller Safety Plan to establish the Region's commitment to end severe collisions on roads in York Region.

For more information on this report, please contact Joseph Petrunaro, Director Roads, Traffic and Fleet, at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.



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Approved for Submission:

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Chief Administrative Officer

February 12, 2024

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Attachment 1 – York Region Vision Zero Traveller Safety Plan (15956590)