Clause 2 in Report No. 12 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on September 22, 2016.

2

Annual Traffic Safety Report

Committee of the Whole recommends:

1. Receipt of the presentation by Brian Titherington, Director, Road and Traffic Operations, Transportation Services.

2. Adoption of the following recommendation contained in the report dated August 24, 2016 from the Acting Commissioner of Transportation Services:

    1. The Regional Clerk circulate this report to the local municipalities and to York Regional Police.

Report dated August 24, 2016 from the Acting Commissioner of Transportation Services now follows:

1. Recommendation

It is recommended that:

1. The Regional Clerk circulate this report to the local municipalities and to York Regional Police.

2. Purpose

This report provides Council with an overview of the 2016 Annual Traffic Safety Report and updates on Community Safety Zones, the Red Light Camera Program, and other initiatives that improve traffic safety on the Regional road network for all road users.

3. Background

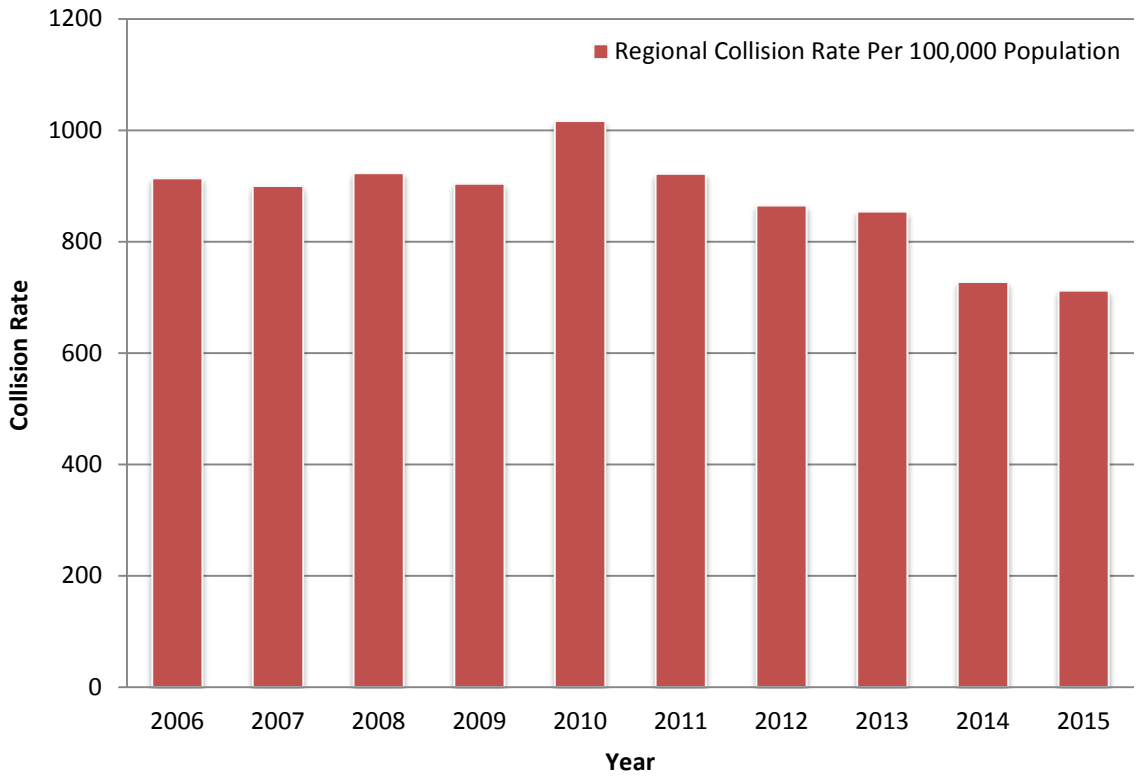
The Annual Traffic Safety Report is published annually to provide information related to traffic safety performance on Regional roads

Transportation Services works in partnership with York Regional Police to collect and assess data related to motor vehicles collisions on Regional roads. First published in 2014, the Annual Traffic Safety Report (Attachment 1) provides a detailed breakdown of the traffic safety performance of Regional roads, including maps showing areas with the highest number of collisions.

The collision rate has been declining over the past six years

Collision statistics show that the collision rate has been decreasing since 2010 in York Region. The 2015 collision rate represents a 10-year low with approximately 700 collisions per 100,000 population, or 8,000 collisions over the year. Figure 1 shows the Regional collision rates for 2006 through 2015.

Figure 1
Regional Collision Rate Statistics



The Region continues to implement initiatives and measures to improve traffic safety performance

Traffic safety performance is influenced by many factors including weather conditions, number and type of road users and level of driver skill. Advancement in vehicle safety and new technology also reduce the likelihood of collisions for motorists and passengers. More recent advancements include adaptive headlights, blind spot detection, lane departure warning and emergency brake assist.

Traffic safety performance is also influenced by initiatives which have been implemented to reduce vehicle speeds, target driver behaviours and increase awareness for pedestrians and cyclists. These initiatives include:

- Implementing Community Safety Zones
- Installing red light cameras
- Introducing pedestrian countdown signals
- Providing additional pedestrian crossing time at signalized intersections
- Installing zebra markings at intersections
- Implementing education and awareness programs

4. Analysis and Options

Community Safety Zones

Community Safety Zones have a positive effect in reducing operating speeds in school areas

The purpose of implementing Community Safety Zones is to increase the safety of all road users by reducing vehicle operating speeds in the area of schools. Studies indicate lower operating speeds reduce the severity of collisions and the risk for an injury/fatality. Reduced operating speeds are achieved by implementing increased fines in identified Community Safety Zones to encourage motorists to comply with the speed limit and exercise extra caution.

In 2012, Council designated Community Safety Zones on Regional roads adjacent to all schools. Since then, staff has been monitoring the operating speeds within and outside Community Safety Zones to better understand their

effectiveness. There are more than 50 Community Safety Zones in York Region. One location from each municipality was selected for a speed evaluation. Table 1 illustrates the change in average operating speeds and shows the average speed reduction is 4 km/h among the nine locations.

Table 1
Community Safety Zone Speed Evaluation

Municipality	Community Safety Zone (CSZ) Location	Posted Speed	Average Operating Speeds*		
			Within CSZ	Outside CSZ	Change
Town of Aurora	Wellington Street from 800 metres east of Bathurst Street to 680 metres west of Bayview Avenue	50 km/h	47 km/h	55 km/h	8 km/h
Town of East Gwillimbury	Leslie Street from 500 metres north of Green Lane to 900 metres north of Green Lane	50 km/h	47 km/h	52 km/h	5 km/h
Town of Georgina	Baseline Road from 750 metres west of Dalton Road to Dalton Road	50 km/h	46 km/h	49 km/h	3 km/h
Township of King	Highway 27 from 470 metres north of Lloydtown-Aurora Road to 940 metres north of Lloydtown-Aurora Road	70 km/h	67 km/h	70 km/h	3 km/h
City of Markham	Warden Avenue from 50 metres north of Highway 7 to 600 metres north of Highway 7	60 km/h	55 km/h	58 km/h	3 km/h
Town of Newmarket	Mulock Drive from 240 metres west of Leslie Street to 950 metres west of Leslie Street	60 km/h	57 km/h	58 km/h	1 km/h
Town of Richmond Hill	Bayview Avenue from 1070 metres north of Major Mackenzie Drive to 370 metres south of 19th Avenue	60 km/h	58 km/h	65 km/h	7 km/h
City of	Rutherford Road from	60 km/h	58 km/h	61 km/h	3 km/h

Municipality	Community Safety Zone (CSZ) Location	Posted Speed	Average Operating Speeds*		
			Within CSZ	Outside CSZ	Change
Vaughan	Islington Avenue to 800 metres east thereof				
Town of Whitchurch-Stouffville	Ninth Line from 250 metres north of Hoover Park Drive to 350 metres south of Hoover Park Drive	50 km/h	60 km/h	60 km/h	0 km/h

* Average operating speed is calculated based on 24 hours

Community Safety Zones should continue to be implemented in school areas to reduce operating speeds

Data suggests that Community Safety Zones are effective at reducing operating speeds. Eight of the nine road sections monitored in Table 1 have average operating speeds that are below the posted speed limit. The exception is Ninth Line in Whitchurch-Stouffville. It is expected that the higher average operating speed on this section of Ninth Line is a result of the April 2016 reduction in the posted speed limit from 60 km/h to 50 km/h. It is anticipated that the average operating speed on this road will decrease as drivers become familiar with the change.

Staff will continue to monitor Community Safety Zones to better understand and identify factors that influence effectiveness to help refine the Regional practice as required. Community Safety Zones will continue to be implemented in school areas to reduce operating speeds and increase awareness.

Red Light Cameras

The Region will have a total of 40 red light camera intersections in 2017

In 2017, the Region will have 40 intersections with red light cameras; 20 new red light cameras, 9 relocated red light cameras, and 11 red light cameras remaining at existing locations. A map showing the 40 locations is provided as Attachment 2 and is also included in the 2016 Annual Traffic Safety Report. A list of the 40 red light camera locations is provided in Attachment 3.

Staff has identified 20 locations for the installation of new red light cameras

In June 2015, Council approved the expansion of the Red Light Camera Program to add 20 new red light cameras at Regional intersections. The new red light cameras will be operational in 2017.

Since fall of 2013, red light cameras have been operational at 20 intersections on Regional roads. The goal of the Red Light Camera Program is to reduce the number and severity of collisions by changing driver behaviour. Red light cameras have proven to be successful in reducing right angle collisions (most severe type of collision). Right angle collision statistics have continued to show significant decreases over the two years before and after implementing the Red Light Camera Program. Right angle collisions at red light camera intersections have reduced to 56 collisions from 164 collisions.

Nine existing red light cameras will be relocated in 2017 to new intersections to provide broader Regional coverage

The effectiveness of red light cameras can diminish over time as driver behaviours change. There are also intersections that are included within road construction projects during the next five years and red light cameras are not effective in construction areas. In order to ensure that each red light camera is providing the maximum safety benefit, some existing red light cameras are being relocated to new intersections. Nine of the existing 20 cameras are being relocated from lower collision intersections or intersections included within construction projects to higher risk intersections.

Safety Enhancements at Signalized Intersections

The Region continues to implement measures to improve safety for pedestrians and cyclists at signalized intersections

The Region's Intersection Improvements Program focuses on urban intersections with higher volumes of pedestrians. In 2015, new zebra crosswalk markings were installed at 22 intersections and existing zebra crosswalk markings were refreshed at 15 intersections as part of the Pavement Rehabilitation Program.

Pedestrian countdown signals have been installed at all new and updated intersections to provide pedestrians more direct information on how much time they have to cross. Further, crossing time for pedestrians at signalized intersections has been increased to ensure all pedestrians are able to cross the street at these intersections in a safe and comfortable manner.

As part of the Accessibility for Ontarians with Disabilities Act (AODA), all newly-constructed signalized intersections or updated infrastructure are required to be compliant with AODA elements. The AODA aims to raise awareness and support implementation of accessibility standards for public spaces, including sidewalks, walkways, and stairs and curb ramps, as required by the Province. Specific AODA improvements include:

- Audible pedestrian signals that include “Cuckoo” and “Chirp” sounds, to guide pedestrians as needed at signalized intersections
- Curb ramps or depressed curbs with seamless gradual slopes and firm, stable and slip-resistant surfaces
- Tactile walking surface indicators that are inlaid into the concrete to be detectable under foot when walking to provide guidance to crosswalks

In 2015, the Region rebuilt 22 signalized intersections that are now compliant with the AODA. Figure 2 illustrates an intersection before and after the implementation of AODA elements.

Figure 2
Before and after implementation of AODA elements
Bathurst Street at Tower Hill Road

Before implementation of AODA

After implementation of AODA

Education and Awareness Programs

Pledge to Ignore Campaign is designed to target the increasing concern with distracted driving

Distracted driving is an increasingly common factor in collisions. The condition of an at-fault driver identified as inattentive driving accounted for 16 per cent of all collisions. In addition to the York Regional Police effort to conduct strict enforcement to prevent motorists from distraction behind the wheel, the Region

launched a Pledge to Ignore Campaign in June 2015. Pledge to Ignore was designed to encourage residents to ignore their cell phone while driving or walking near traffic and has received over 34,500 pledges.

Safe Cycling Campaign serves as a reminder that all road users have a part in making our roads safer

On May, 2014, York Region launched the Safe Cycling Campaign in partnership with York Regional Police and the Canadian Automobile Association; an education campaign to promote cycling safety and respect for all road users.

On June 2, 2015, the Province passed the Making Ontario's Roads Safer Act, which includes increased fines for offenses like dooring a cyclist and introduces a one metre safe passing law.

York Region also created a Cycling Handbook containing rules of the road and safety tips and a Cycling Map to help residents, visitors and cyclists plan their trips, and are aimed to minimize risks while riding and to make cycling more enjoyable. The resources can be found on the Region's website.

Staff continues to work on improving awareness at signalized intersections for all modes of travel

The collision data again shows that the majority of collisions on Regional roads occur at signalized intersections. This is true for all modes of travel. Staff continue to work on improving awareness at signalized intersections through the following initiatives:

- An article "Safety Improvements for Pedestrians" was published in the spring/summer edition of York Region Matters
- At Family Fun Day, staff set up a crosswalk and interacted with residents on the procedure for crossing the street
- A Seniors Pedestrian Safety Guide was created and distributed to seniors facilities
- In-person meetings were arranged with residents to educate them on what the pedestrian push button actually does at an intersection

The development of an educational pedestrian crossing video is underway and will be made available on the Region's website and YouTube channel later this year. Staff is also working on possible signage enhancements to clarify what is required to safely navigate signalized intersections.

Link to key Council-approved plans

This report links to the following Council-approved plans and policies:

Vision 2051

- Supports Vision 2051 and the goal area of “Interconnected Systems for Mobility” by promoting the safe and efficient movement of people and goods, and by ensuring Regional roads are context sensitive and complement adjacent land uses.

2015 to 2019 Strategic Plan

- Aligns with the priority area to support community health and well-being, and to provide responsible and efficient public service

5. Financial Implications

The Red Light Camera Program is intended to be cost recoverable. The Red Light Camera Program appears as an operating cost under Transportation Services with no revenue offset. Fine revenue is recorded under Court Services.

The additional operating costs associated with the expansion of the Red Light Camera Program are included in the outlook years of the 2016 approved operating budget. The total estimated operating cost for the Red Light Camera Program over the next ten years is approximately $9.5 million, excluding taxes.

AODA improvements have been allocated approximately $2.95 million over the next ten years as per the 2016 approved operating budget.

The various safety program costs are offset by the potential reduction in personal injuries and fatalities associated with collisions on Regional roads. Reducing collisions also decreases societal and health care costs, which impact all residents in the Region.

6. Local Municipal Impact

Staff will continue to work with local municipalities and York Regional Police to promote traffic safety. In addition, local municipalities will benefit from driver behaviour changes influenced by Community Safety Zones, the Region’s Red Light Camera Program and education and awareness programs.

7. Conclusion

Traffic safety performance data for the Region is summarized in the Annual Traffic Safety Report. In 2015, the Region experienced a ten-year low in total collisions.

Community Safety Zones will continue to be implemented in school areas to reduce operating speeds. The Region will also expand the Red Light Camera Program to 40 locations throughout the Region in 2017 and continue to implement initiatives to improve safety for all users of the Regional road network.

For more information on this report, please contact Brian Titherington, Director, Roads and Traffic Operations at extension 75901.

The Senior Management Group has reviewed this report.

August 24, 2016

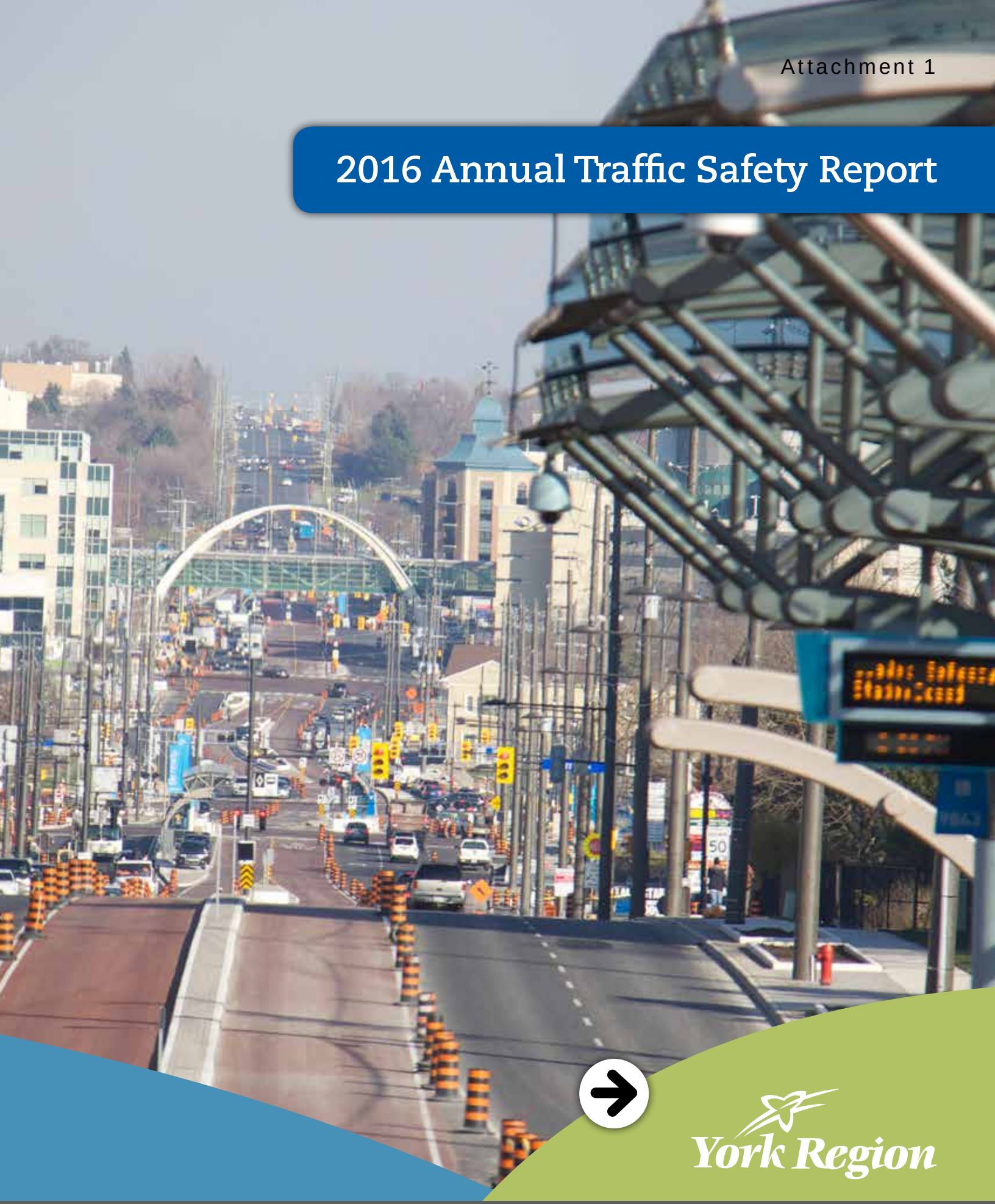
Attachments (3)

6949964

Accessible formats or communication supports are available upon request

Attachment 1

2016 Annual Traffic Safety Report



York Region

THE REGIONAL MUNICIPALITY OF YORK

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York Region

Introduction

The 3rd edition of the Traffic Safety Status Report contains collision statistics and general information that occur on York Region roads. The collision data used in the preparation of this report primarily includes data collected for the years 2013 to 2015. The collision data does not include collisions that occur on local municipal roadways, as each Municipality manages their own collision data.

This report is to provide York Region residents with an understanding of road safety trends on York Region roads. Using motor vehicle collision reports, available through York Regional Police, staff highlight and analyze collision data to identify issues for specific locations as well as trends which may be indicative of larger issues. In addition, this report supports the planning and execution of coordinated law enforcement and helps developing programs to improve road safety and public education campaigns for motorists and raise public awareness in York Region.

Please visit york.ca/trafficsafety for more information.

York Region 2015 Collision Clock

Executive Summary

The existing Regional road network consists of more than 4,100 lane-kilometres of urban and rural roads, 2,000 Regional intersections of which more than 800 are signalized. It carries more than six billion vehicle-kilometres of travel annually and approximately 3,350,000 vehicle trips daily.

A general overview of collision statistics on Regional roads between the years 2013 and 2015 confirms that collisions continue to most frequently occur on Fridays from the months of September to February, and during the evening rush hour (5 p.m. to 6 p.m.). The most common collisions are rear-end collisions at signalized intersections. Most collisions are as a result of someone's improper driving or driving inattentively. As has been the case in years past, the majority of high collision intersections are situated on high volume roads, such as Highway 7, Rutherford Road, Major Mackenzie Drive and Yonge Street. Collisions are usually complex and a result of numerous factors which are often interconnected and unique to specific events.

York Region is committed to road safety and reducing the number and severity of collisions that happen on Regional roads. In addition to many ongoing safety initiatives, we would like to highlight several recent programs and campaigns that are targeted to influence driver behaviours and reduce collisions:

- **Red Light Cameras –** Regional Council approved the expansion of the Red Light Camera Program to add 20 new red light cameras at additional locations. Combined with the relocation of nine existing red light cameras to other locations, there will be 29 new locations, plus 11 existing locations, for a total of 40 red light camera locations throughout the Region in 2017.

- **Speed Watch Program –** York Region has revised speed limits on 13 road sections across the Region since 2015 to ensure better safety and consistency. In addition, York Region has deployed speed boards along Regional roads to monitor and measure the speed of passing vehicles and display it as they pass. This encourages drivers to stay within the speed limit. York Region can also request for speed limit enforcement if there is excessive speeding in the area.

- **Pedestrian Safety Campaign –** In partnership with York Regional Police, York Region is continuing to promote our Pedestrian Safety Campaign that advocates respect between motorists and pedestrians to help reduce the number of collisions, injuries and fatalities on Regional roads. The campaign theme, "Motorists and Pedestrians … Let's work on our Relationship" was launched in 2011, and focuses on creating awareness around safety issues affecting motorist and pedestrians year round.

- **Pledge to Ignore Campaign –** Pledge to Ignore Campaign is designed to help save lives and means making a commitment not to use your cell phone while driving or walking near traffic. Each pledge represents one less distracted driver.

- **Safe Cycling Campaign –** In partnership with York Regional Police and the Canadian Automobile Association, York Region launched an educational campaign with a media event to promote cycling safety and respect for all road users in 2015. This campaign focuses on the Provincial Government Bill 31 - *Making Ontario's Roads Safer Act*, which includes increased fines for offenses like dooring a cyclist and introduces a one metre safe passing law. The campaign serves as a reminder that we all have a part to play in making our roads safe by riding and driving with care.

The following table is a comparison of collision data between the years 2013, 2014 and 2015.

Statistics	2013	2014	2015
Number of Collisions	9581	8329	8303
Number of Fatal Collisions	14	19	13
Number of Injury Collisions	2293	2194	2101
Number of Collisions Involving Pedestrians	160	165	169
Number of Collisions Involving Cyclists	104	106	98
Collision Rate Per 100,000 Population	854	728	712
Fatal Collision Rate Per 100,000 Population	1.2	1.7	1.1
Day with Highest Number of Collisions	Friday	Friday	Friday
Month with Highest Number of Collisions	September	January	February
Hour with Highest Number of Collisions	5 p.m. to 6 p.m.	5 p.m. to 6 p.m.	5 p.m. to 6 p.m
Most Common Collision Type	Rear End	Rear End	Rear End
Most Frequently Recorded Improper Driving Action	Following Too Close	Following Too Close	Following Too Close
Location with the Highest Number of Collisions	Highway 7 at Weston Road	Highway 7 at Jane Street	Major Mackenzie Drive West at Highway 400 Off-Ramp
Percentage of Collisions Occurring at Intersections	84.2%	77.6%	76.3%
Percentage of Collisions Occurring during Winter Driving Condition	7.5%	10.7%	6.4%
Number of Winter Events	76	75	33

2013-2015 YORK REGION COLLISION STATISTICS HIGHLIGHTS

- Between 2013 and 2015, York Region population grew by two per cent annually
- A review of the Region's collision statistics shows the total number of collisions remained relatively consistent as compared to 2014, which was 10-year low in collisions
- Between 2013 and 2015, total collisions have decreased by 13 per cent. During the same period, casualty (injury and fatal) collisions decreased by eight per cent
- Property damage only collisions (i.e. collisions with no injuries) account for 75 per cent of all collisions while injury and fatal collisions account for 25 per cent of all collisions. This is consistent with last year report

York Region

Collision Frequency and Severity

A review of the Region's collision statistics over the last decade shows a tale of two trends. Before 2010, statistics show a relatively consistent increasing trend in the total number of collisions, increasing by approximately three per cent annually. This is slightly more than the annual population growth of two per cent.

After an unusual spike in total collisions in 2010 where the number of total collisions increased by approximately 16 per cent as compared to 2009, the total number of collisions has become a decreasing trend despite the fact that the volume of traffic continues to increase each year. The 2015 statistics show the total number of collisions remained relatively consistent as compared to 2014, slightly over 8,000 collisions annually. The decrease in number of collisions most likely is the result of the warm winter, fewer number of winter events and the reduced precipitation that we have experience over the last two years.

Collision Frequency, Between 2006 and 2015

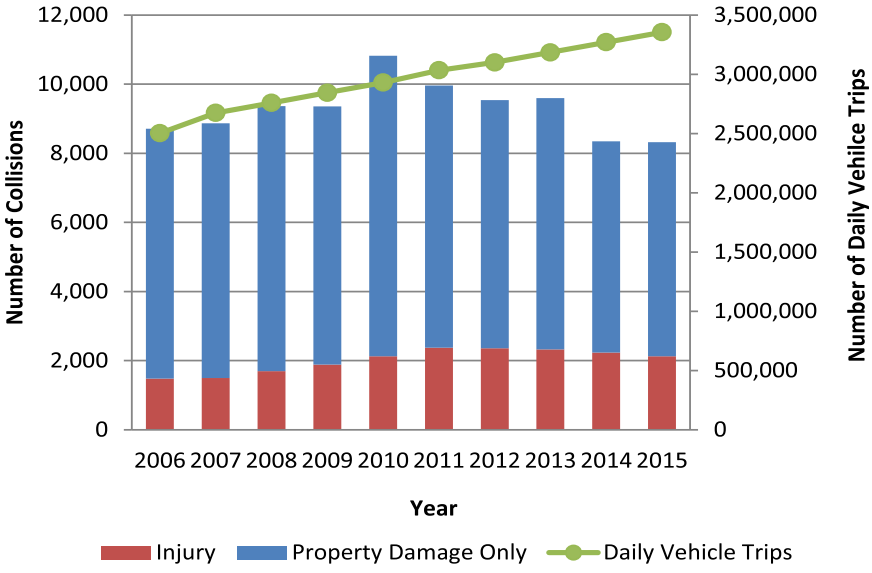


Photo: York Region EMS vehicle at an intersection.

Similar to total collision statistics, injury collision statistics over the last decade also shows two different trends. Between 2006 and 2011, the number of injury collisions increased by approximately ten per cent annually. This trend reversed, between 2011 and 2015, as the number of injury collisions has slightly decreased by two per cent annually.

While injury collision statistics have shown relatively consistent trends over time, the number of fatal collisions has fluctuated. The Region experienced a 10-year low in fatal collisions in 2015, with a total of 13 fatalities. The 2015 fatal collision locations map is illustrated on next page.

Injury and Fatal Collision Frequency, Between 2006 and 2015

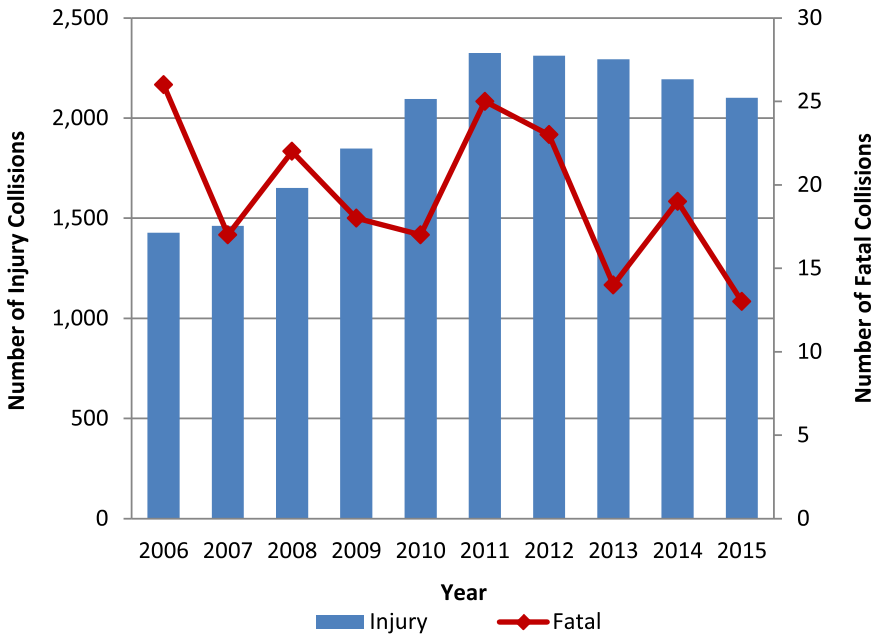
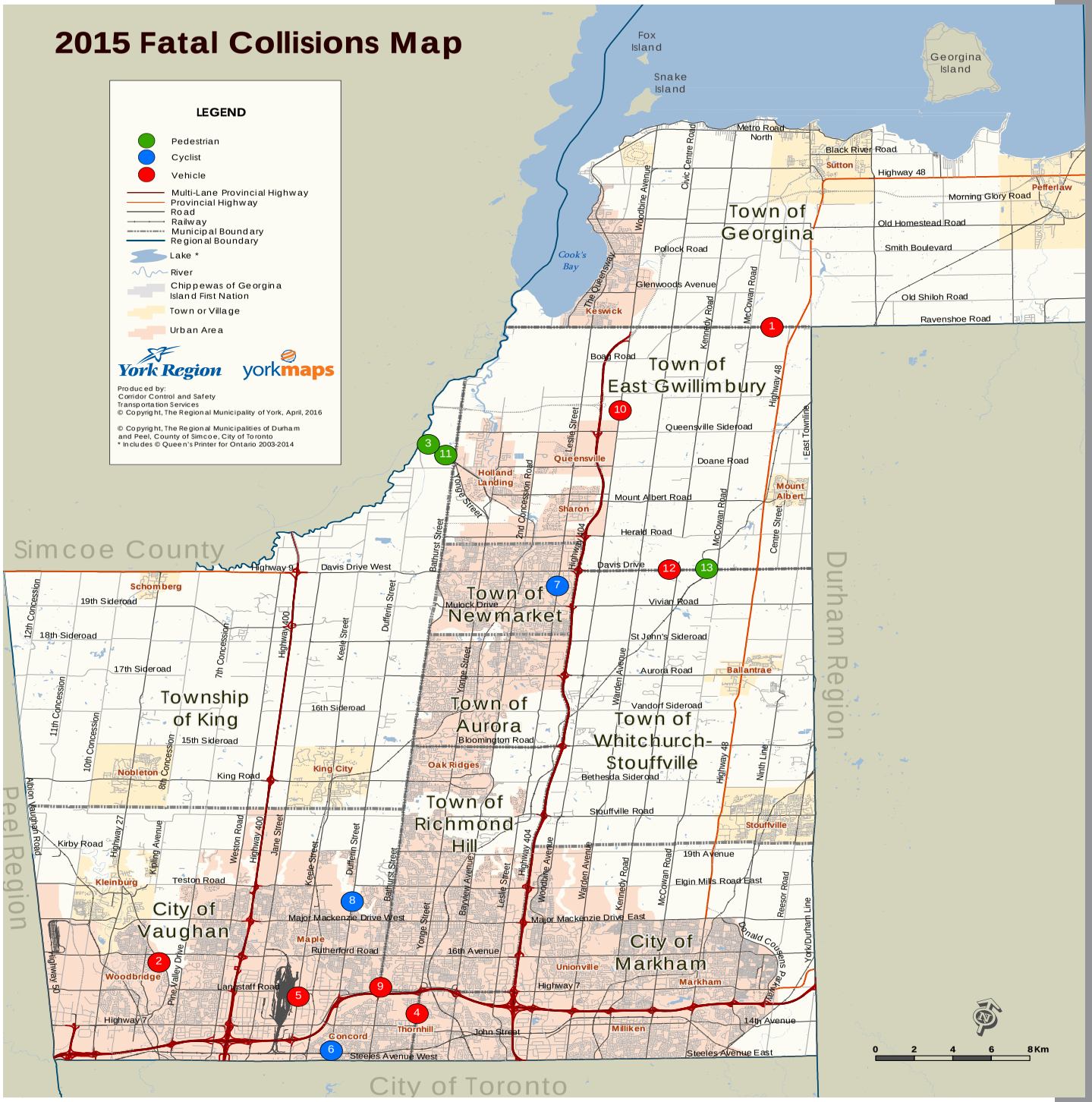


Photo: Cyclist in bike lane with traffic on Highway 7, Markham.

- **The Region experienced a 10-year low in fatal collisions in 2015, with total of 13 fatalities**
- **The number of fatal collisions has fluctuated over the past decade**
- **Of the 13 fatalities in 2015, three fatal collisions involved pedestrians and three involved cyclists**

2015 Fatal Collisions Map



Locations Map

1 Ravenshoe Road east of McCowan Road (January 29)

2 Islington Avenue and Wycliffe Gate (February 15)

3 20440 Highway 11 (March 5)

4 Yonge Street and Royal Orchard Boulevard (April 23)

5 8400 Keele Street (June 11)

6 Dufferin Street and Glen Shields Avenue (June 29)

7 Leslie Street south of Srigley Street (July 13)

8 Dufferin Road north of Major Mackenzie Drive (August 1)

9 Bathurst Street and Highway 7 (September 3)

10 21005 Woodbine Avenue (September 18)

11 Highway 11 north of Bathurst Street (November 19)

12 Davis Drive west of Kennedy Road (November 23)

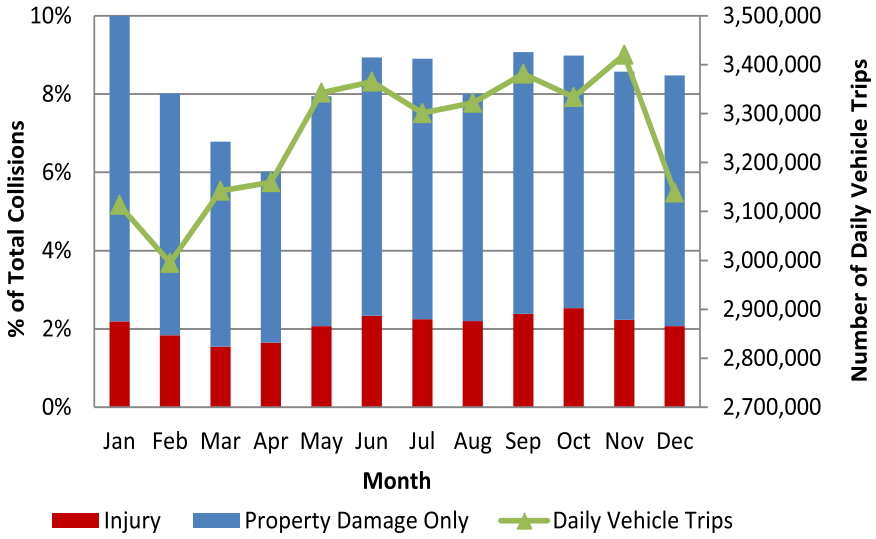
13 Davis Drive west of McCowan Road (December 9)

York Region

Collisions by Month, Day and Time

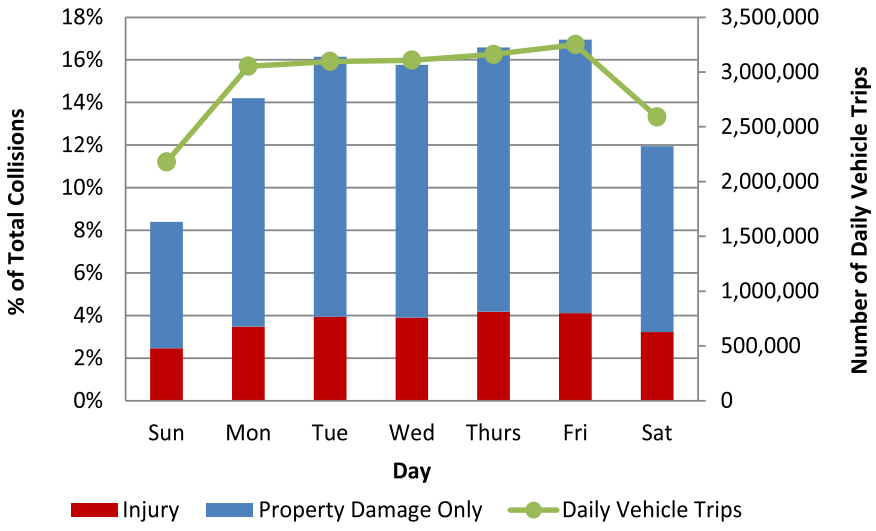
Collisions generally increase as traffic volumes increase. However, a review of collision data indicates that collisions also follow a seasonal trend with a higher number of collisions occurring during winter months in December, January and February, despite a relatively low number of daily vehicle trips. This can be attributed to inclement weather.

Collisions by Month, Three-Year Average Between 2013 and 2015



The day-of-week collision pattern correlates closely with typical day-of-week traffic volume patterns – with the highest number of collisions occurring on Fridays.

Collisions by Day-of-Week, Three-Year Average Between 2013 and 2015

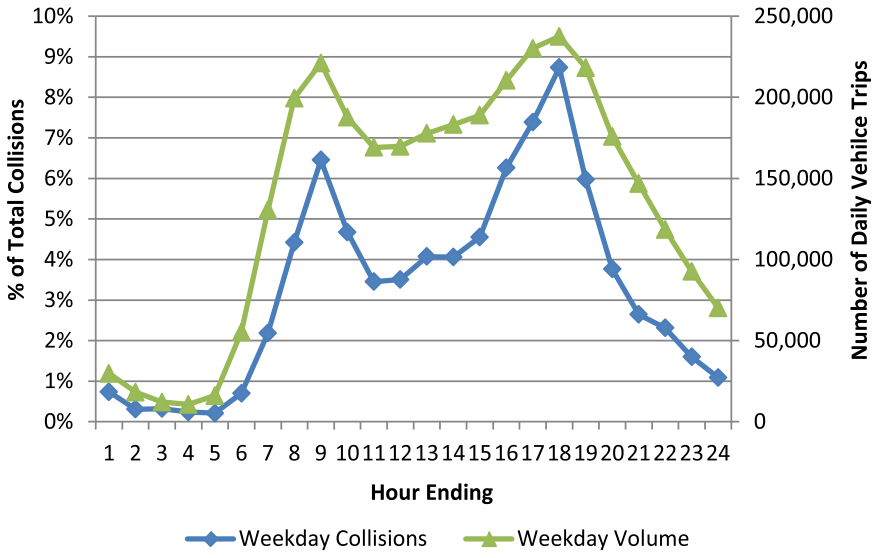


- **Based on the three-year-average between 2013 and 2015, the month of January had the highest number of collisions**
- **Injury collisions represent a consistent per cent of total collisions throughout the year**
- **The day-of-week collision pattern correlates closely with typical day-of-week traffic volume (i.e. more collisions on days when people travel more)**

- **Weekday peak periods accounted for 40 per cent of all collisions**
- **Based on the three-year average between 2013 and 2015, the highest number of collisions occurred between 5 p.m. and 6 p.m. on Fridays in January**

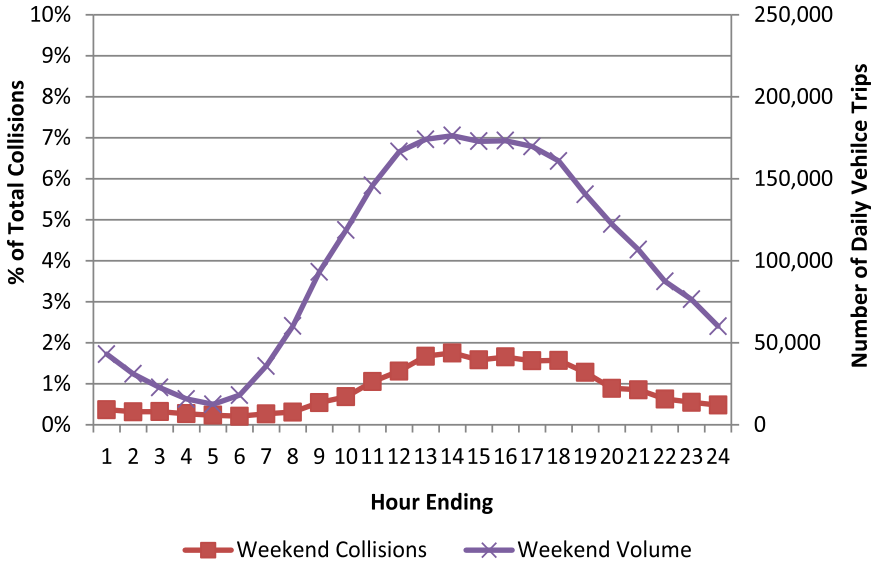
The time-of-day collision trend also correlates closely with typical daily traffic volume patterns (i.e. high numbers of collisions occur during highest traffic volume times). The highest number of collisions occurred on weekdays, between 8 a.m. and 10 a.m. and 3 p.m. and 7 p.m., accounted for 40 per cent of all collisions.

Weekday Collisions by Time-of-Day, Three-Year Average Between 2013 and 2015



Collisions were higher during the afternoon on weekends which is consistent with the number of daily vehicle trips.

Weekend Collisions by Time-of-Day, Three-Year Average Between 2013 and 2015



York Region

Collisions Involving Vulnerable Road Users

Between 2013 and 2015, the number of "pedestrian involved collisions" increased by six per cent, with approximately 169 pedestrian involved collisions in 2015. During the same time period, the number of cyclist involved collisions have decreased by six per cent to 98 cyclists involved collisions in 2015. The increase in pedestrian collisions year over year can be attributed to more active modes of transportation, mainly walking and transit riders. The Region campaign "Motorists and Pedestrians – Let's Work on our Relationship" was introduced to advocate for respect between motorists and pedestrians to help reduce the number of collisions, and focus on creating awareness around safety issues affecting motorists and pedestrians in the fall, winter and spring.

Collisions Involving a Vulnerable Road User, Between 2013 and 2015

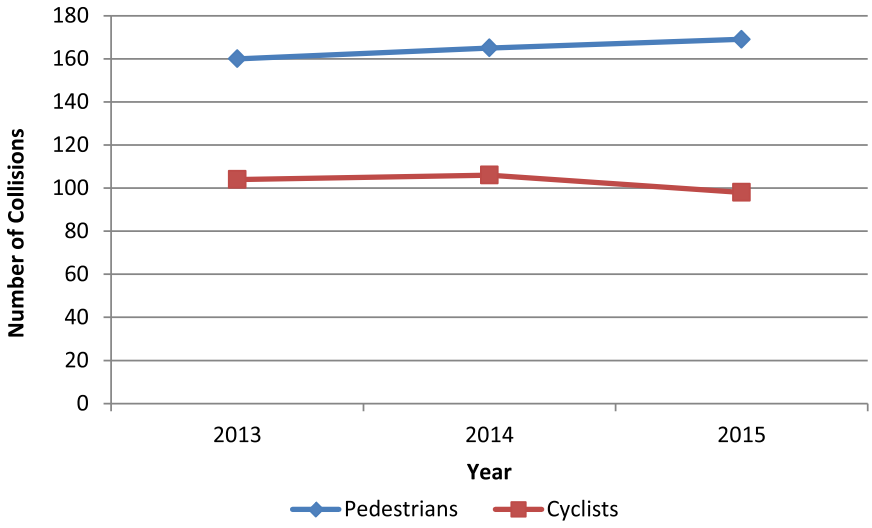


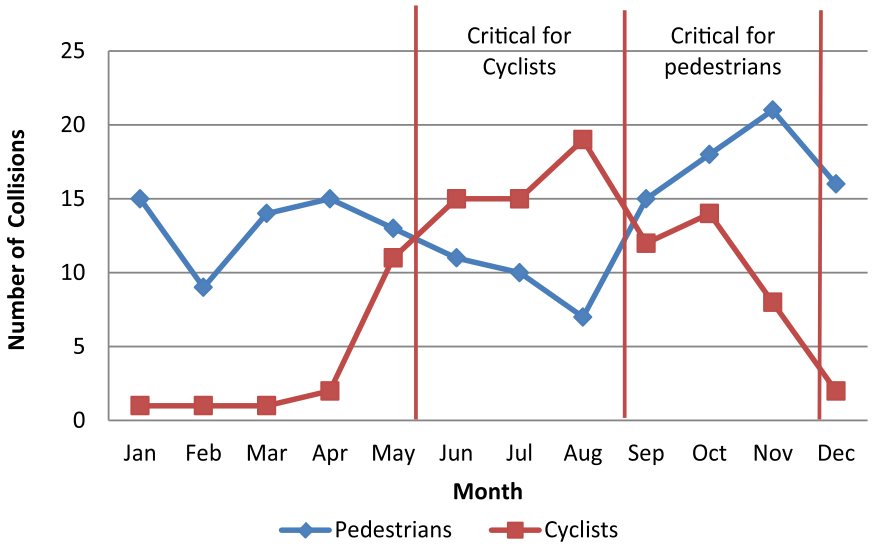
Photo: Pedestrians at Yonge Street and Wellington Street.

- **Collisions involving pedestrians have increased by six per cent over the last three years**
- **Collisions involving cyclists have decreased by six per cent over the last three years**
- **York Region continues to apply safety measures at signalized intersections, including, zebra markings, pedestrian countdown signals, and increase pedestrian crossing times**
- **Recognizing the increasing demands for cycling, the Region continues to construct bike facilities to promote active transportation**

- The month of November had the highest number of pedestrian involved collisions, likely due to the end of daylight saving time when pedestrians are not as visible in the late afternoon hours
- Each year the Region focuses on safety messages in around daylight savings time when clocks go back and the days get darker sooner
- The month of August had the highest number of cyclist involved collisions, likely due to the increased cyclist volumes over the summer months
- The highest number of pedestrian involved collisions occurred on Wednesday, while cyclist involved collisions occurred on Thursday

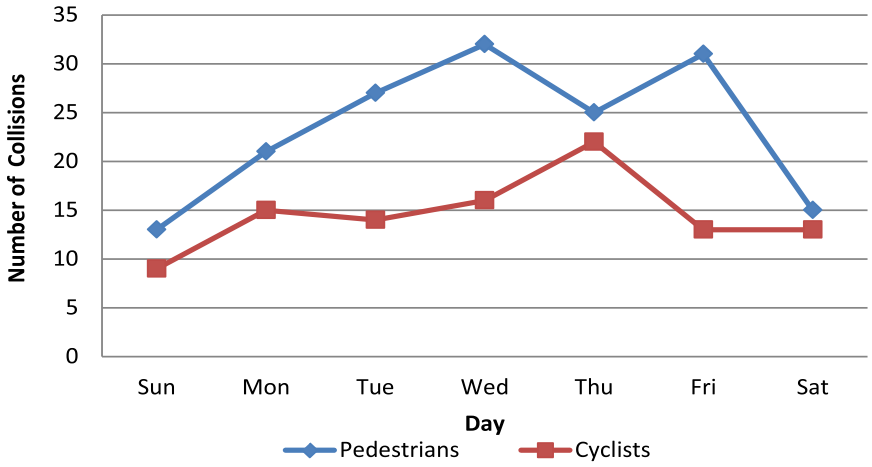
Pedestrian and cyclist involved collisions follow seasonal trends. Pedestrian involved collisions were most critical in the months of September, October and November, near to the end of daylight saving time when pedestrians are not as visible in the late afternoon hours due to less daylight and dark colored clothing. Cyclist involved collisions were most critical in the summer months between May and August, when there are more cyclist activities, creating increased potential conflicts with road users.

Collisions Involving a Vulnerable Road User by Month, Three-Year Average Between 2013 and 2015



The day-of-week collision pattern shows that the highest number of pedestrian involved collisions occurred on Wednesday, while cyclist involved collisions occurred on Thursday.

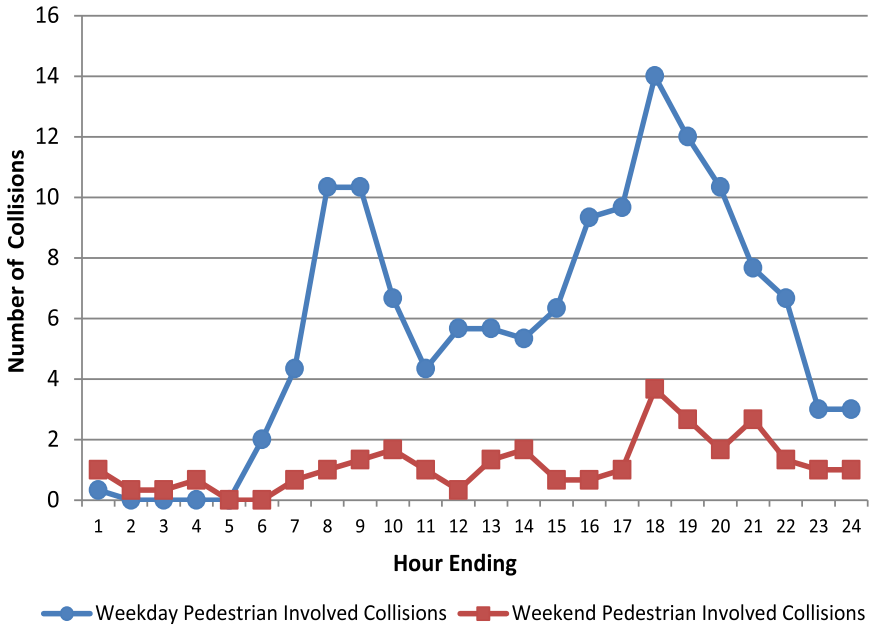
Collisions Involving a Vulnerable Road User by Day-of-Week, Three-Year Average Between 2013 and 2015



York Region

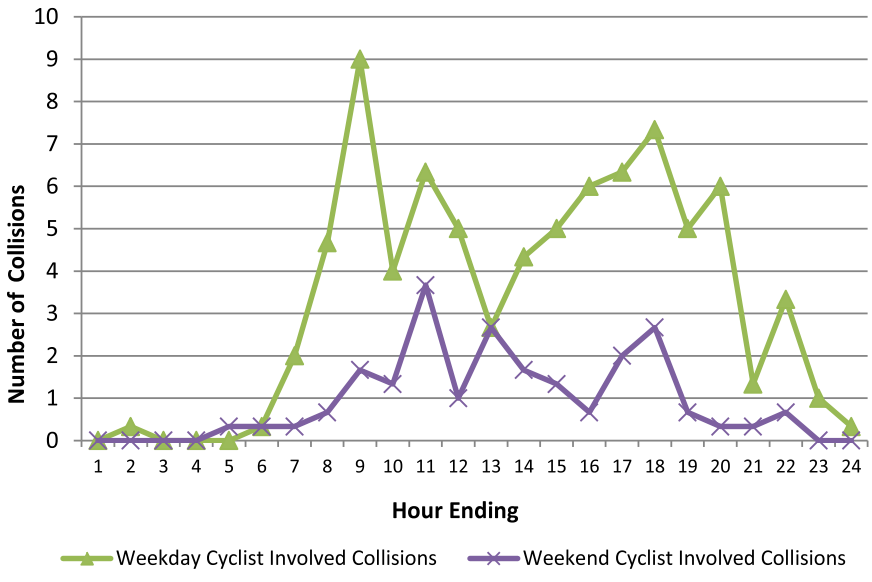
The time-of-day collision pattern shows the highest number of pedestrian involved collisions occurred during the afternoon peak hour between 5 and 6 p.m.

Collisions Involving a Pedestrian by Day-of-Week, Three-Year Average Between 2013 and 2015



The highest number of cyclist involved collisions occurred during the morning peak hour between 8 and 9 a.m.

Collisions Involving a Cyclist by Time-of-Day, Three-Year Average Between 2013 and 2015



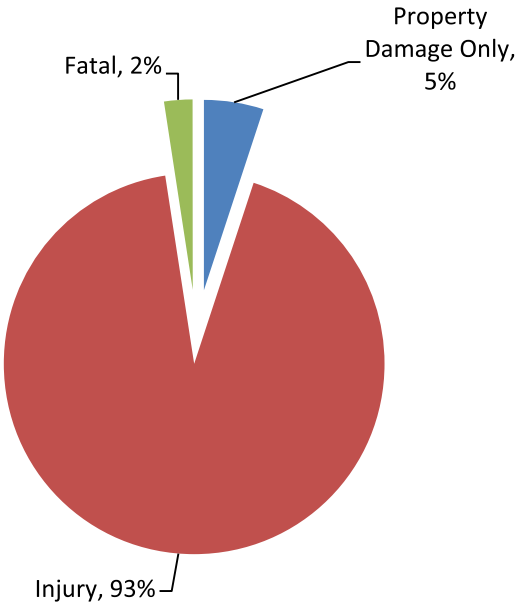
- **Pedestrian involved collisions occurred most often during the afternoon peak periods when traffic volumes are highest**

- **93 per cent of pedestrian involved collisions resulted in injuries**

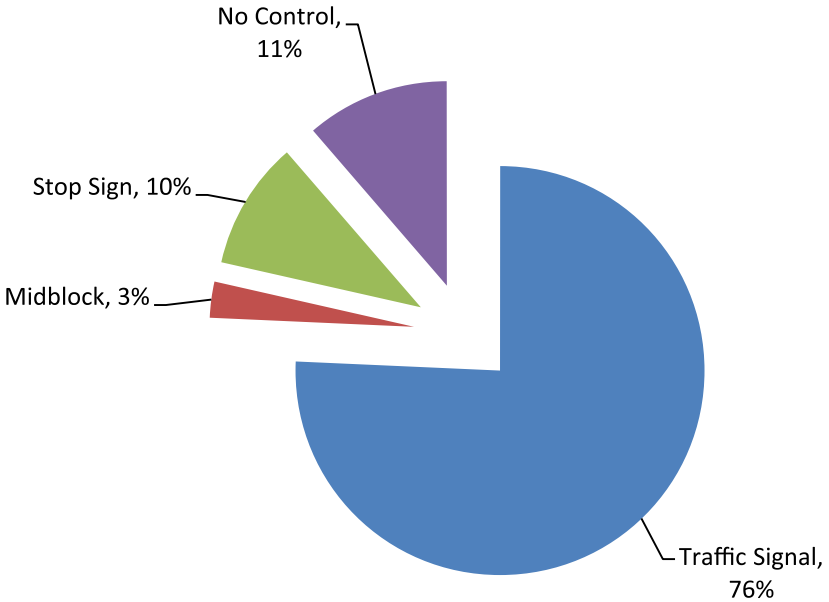
- **76 per cent of pedestrian involved collisions occurred at signalized intersections**

As the Region continues to promote transit usage more people are walking on our streets because transit riders become pedestrians or cyclists for part of their trip. This increased interaction between pedestrians and vehicles increases the likelihood of collisions. The majority of pedestrian involved collisions occur at signalized intersections, involving a turning vehicle.

Collisions Involving a Pedestrian, Three-Year Average Between 2013 and 2015

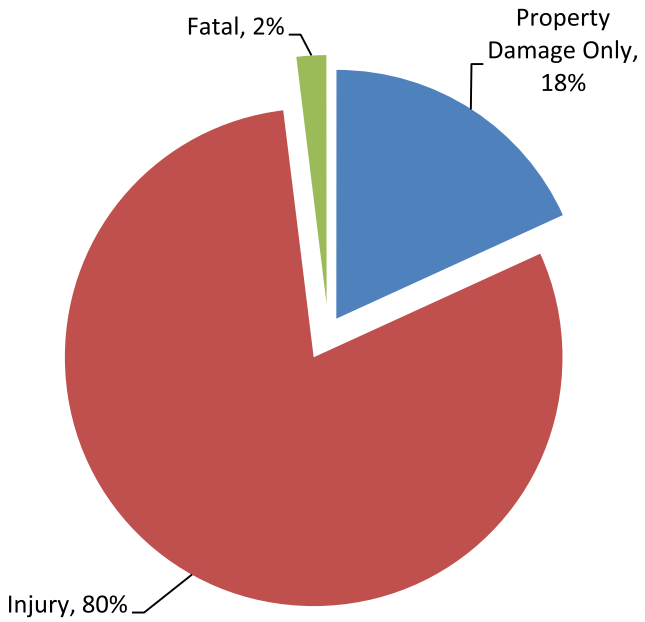


Collisions Involving a Pedestrian by Traffic Control Type, Three-Year Average Between 2013 and 2015

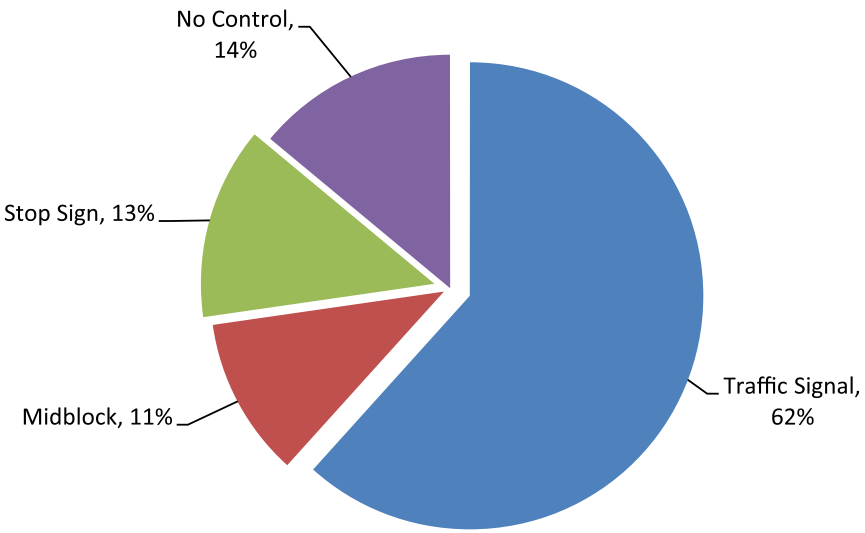


Similar to collisions involving a pedestrian, the majority of cyclist involved collisions occurred at signalized intersections, involving a turning vehicle.

Collisions Involving a Cyclist, Three-Year Average Between 2013 and 2015



Collisions Involving a Cyclist by Traffic Control Type, Three-year Average Between 2013 and 2015

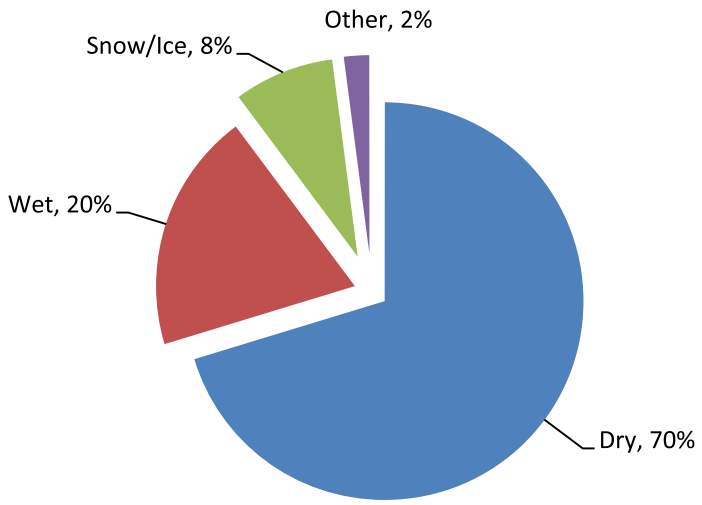


- **80 per cent of cyclist involved collisions resulted in injuries**
- **62 per cent of cyclist involved collisions occurred at signalized intersections**

Collisions by Road Surface Condition

The majority (70 per cent) of all collisions occurred during dry road surface conditions, 20 per cent occurred during wet road surface conditions and eight per cent of collisions occurred during snow/ice road surface conditions. The other road surface conditions include oil, mud, gravel, etc.

Collisions by Road Surface Condition, Three-Year Average Between 2013 and 2015



Nine of the top ten high frequency collision days between 2013 and 2015 experienced a winter event or significant rainfall event. The number of collisions which occurred on the highest days were more than triple the Region's average of 24 collisions per day. Although adverse weather conditions contributes to peak collision days, the majority of collisions occur during dry conditions.

Top Ten Days that Experienced the Most Collisions, Between 2013 and 2015

Date	Weekday	Number of Collisions	Rain (mm)	Snow (cm)	Average Temperature (°C)
November 23, 2013	Saturday	76	1.4	2.6	-6.2
February 21, 2015	Saturday	73	-	9.0	-12.5
January 29, 2015	Thursday	67	0.3	8.1	-3.7
September 21, 2013	Saturday	66	24.2	-	14.7
January 24, 2014	Friday	66	-	0.4	-15.6
March 12, 2014	Wednesday	65	-	18.4	-6.3
October 31, 2014	Friday	64	12.5	-	3.3
July 4, 2013	Thursday	58	2.4	-	23.8
February 1, 2014	Saturday	56	-	16.5	-3.8
January 23, 2013	Wednesday	55	-	-	-1.9

- **70 per cent of all collisions occurred during dry road surface conditions**

- **Over the last three years, the Region experienced an average of 24 collisions per day.**

- **Ninth of the top ten high frequency collision days occurred during adverse weather event (rain or snow) of some kind**

- **55 per cent of all collisions occurred at signalized intersections**

Collisions by Traffic Control Type

Fifty-five per cent of all collisions occurred at signalized intersections.

While the benefits of traffic signals are understood, there are trade-offs that need to be considered prior to installation. From a safety perspective, the installation of traffic signals may prevent some types of collisions at an intersection, however they often increase the number of rear-end collisions. Traffic signals also increase delays to traffic on the major street which adds to congestion on the Regional road network.

Therefore, it is important that new signals only be installed in compliance with the Region's Traffic and Pedestrian Signal Policy. This policy requires thorough analysis and careful consideration of all the trade-offs using engineering tools and data.

Collisions by Traffic Control Type,
Three-Year Average Between 2013 and 2015

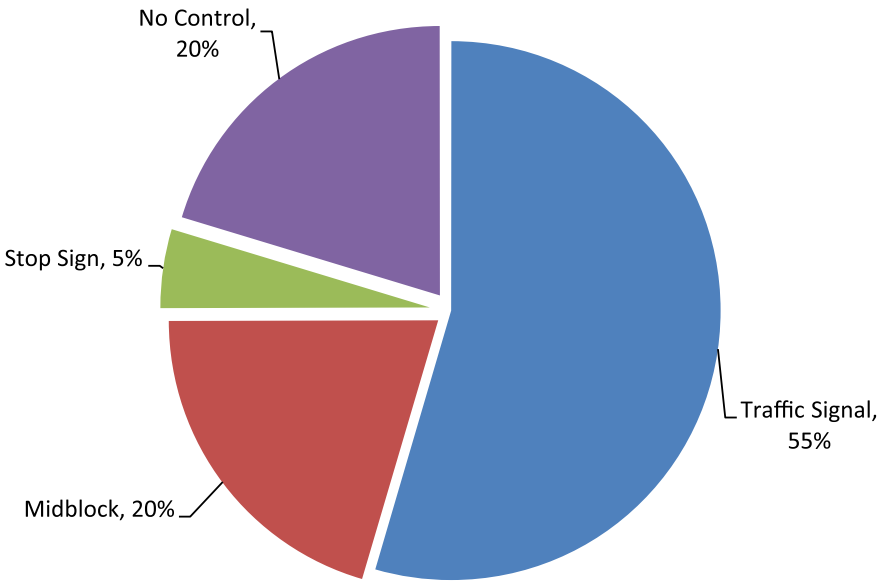


Photo: Intersection at Ninth Line and Main Street.

Collisions by Initial Impact Type

The most common collision type was rear-end collisions at signalized intersections. Rear-end collisions can occur as a result of driver inattention or distraction, tailgating, or acts of aggressive driving. Rear-end collisions are considered "low severity" as they have a lower injury rate compared to right angle or turning movement collisions. Right angle and turning movement collisions at intersections are considered "high severity" as they are generally most likely to result in serious injury to vehicle occupants. Three per cent of all collisions were recorded as "other" and were excluded from the below chart.

Collisions by Initial Impact Type, Three-Year Average Between 2013 and 2015

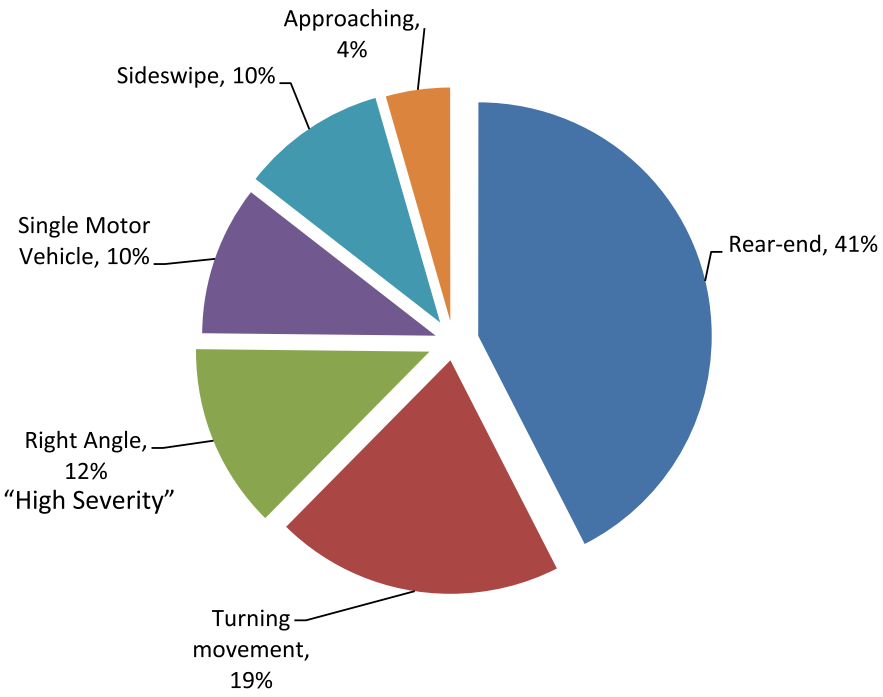


Photo: Highway 7 west end, Vaughan Mills Centre.

- **Rear-end collisions (least severe type) represented 41 per cent of all collisions, while right angle collisions (most severe type) represented 12 per cent of all collisions**

- **There were 164 right angle collisions at red light camera intersections in the two years prior to implementing the cameras. They have reduced to 56 in the two years following**
- **The number of rear-end collisions has also reduced from 319 collisions down to 252 collisions over the first two years of operation of red light cameras**
- **A violation occurs when a motorist enters an intersection after the signal light has turned red. The registered license plate holder receives the ticket, regardless of who was driving the vehicle**

Collision Frequency at Red Light Camera Locations

Since fall of 2013, red light cameras have been operational at 20 intersections on Regional roads. There were 164 right angle collisions at red light camera intersections in the two years prior to implementing the cameras. They have reduced to 56 in the two years following. This is a significant right angle collision reduction and meets the safety objectives of the program. As drivers change their behaviour, this continues the trend from last year's report which showed a 48 per cent reduction in right angle collisions. However, experience in other jurisdictions suggests that, over time, a right angle collision reduction of 25 or 30 per cent is more likely.

Right Angle and Rear-End Collision Frequency at Red Light Camera Locations, Between 2013 and 2015

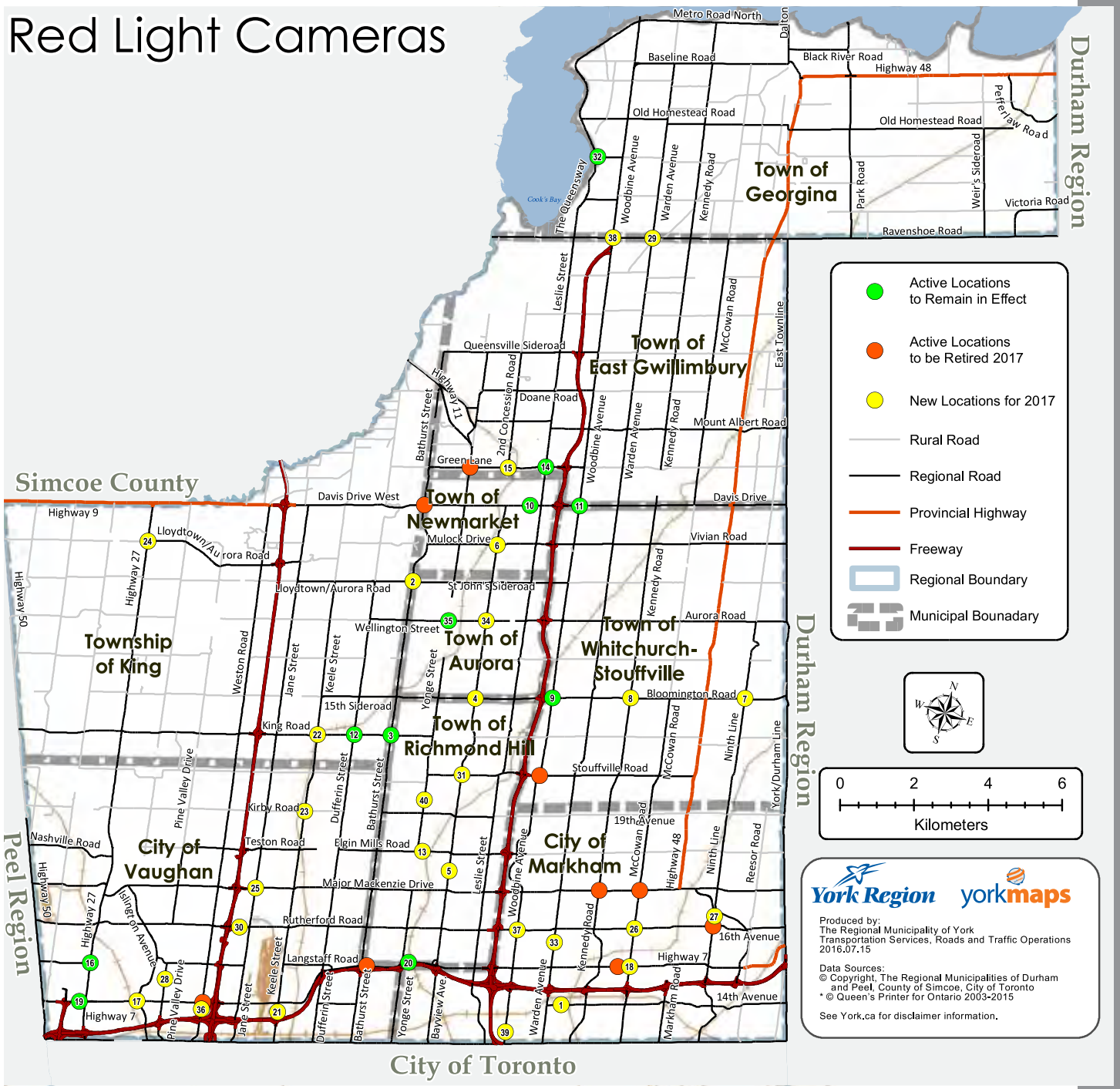
Location	Right Angle		Rear-end	
	Before*	After**	Before*	After**
16th Avenue and Ninth Line	5	3	5	6
Bloomington Road and Woodbine Avenue	6	2	0	2
Davis Drive and Ashton Road/Carlson Drive	3	0	1	1
Davis Drive and Bathurst Street	4	5	17	15
Davis Drive and Woodbine Avenue	4	3	6	5
Green Lane and Yonge Street	23	5	61	53
Green Lane East and Leslie Street	4	5	22	18
Highway 7 and Bathurst Street Ramp	4	2	15	3
Highway 7 and Bullock Drive	1	2	11	9
Highway 7 and Vaughan Valley Boulevard	8	1	8	7
Highway 7 and Weston Road	21	11	74	48
Highway 7 and Yonge Street Ramp	8	1	11	11
King Road and Bathurst Street	12	2	14	10
King Road and Dufferin Street	8	3	17	11
Langstaff Road and Highway 27	11	1	14	9
Major Mackenzie Drive East and Kennedy Road	8	2	11	9
Major Mackenzie Drive East and McCowan Road	3	2	4	6
Morton Avenue and The Queensway/Metro Road	4	3	5	4
Stouffville Road and Woodbine Avenue	4	2	3	5
Wellington Street and Yonge Street	23	1	20	20
20 Red Light Camera Locations	164	56	319	252

*Collision statistic over the last two years (2012 and 2013) before red light cameras were in operations
**Collision statistic over the first two years (2014 and 2015) of operation

Red Light Camera Locations Map

In June 2015, Regional Council approved the expansion of the red light camera program to add 20 new red light cameras at additional locations. Combined with the relocation of nine existing red light cameras to other locations, there will be 29 new locations, plus 11 existing locations, for a total of 40 red light camera locations throughout the Region in 2017

Red Light Cameras



Red Light Camera Locations Map

1 14th Avenue and Birchmount Road
2 Bathurst Street and 18th Sideroad/ St. John's Sideroad
3 Bathurst Street and King Road
4 Bayview Avenue and Bloomington Road
5 Bayview Avenue and Crosby Avenue/ Redstone Road
6 Bayview Avenue and Mulock Drive
7 Bloomington Avenue and Ninth Line
8 Bloomington Road and Kennedy Road
9 Bloomington Road and Woodbine Avenue
10 Davis Drive and Ashton Road/Carlson Drive
11 Davis Drive and Woodbine Avenue
12 Dufferin Street and King Road
13 Elgin Mills Road and Enford Road/ Yorkland Street
14 Green Lane East and Leslie Street
15 Green Lane East and Main Street North/2nd Concession Road
16 Highway 27 and Langstaff Road
17 Highway 7 and Islington Avenue
18 Highway 7 and McCowan Road
19 Highway 7 and Vaughan Valley Boulevard/Roybridge Gate
20 Highway 7 and Yonge Street Connecting Road
21 Keele Street and Doney Crescent/ Jardin Drive
22 Keele Street and King Road
23 Keele Street and Kirby Road
24 Lloydtown/Aurora Road and Highway 27
25 Major Mackenzie Drive West and Jane Street
26 McCowan Road and 16th Avenue
27 Ninth Line and Bur Oak Avenue
28 Pine Valley Drive and Willis Road/ Chancellor Drive
29 Ravenshoe Road and Warden Avenue
30 Rutherford Road and Sweetriver Boulevard
31 Stouffville Road and Bayview Avenue
32 The Queensway South and Metro Road South/Morton Avenue
33 Warden Avenue and Carlton Road/ Baycliffe Road
34 Wellington Street East and Bayview Avenue
35 Wellington Street and Yonge Street
36 Weston Road and Rowntree Dairy Road/ Colossus Drive
37 Woodbine Avenue and 16th Avenue
38 Woodbine Avenue and Ravenshoe Road
39 Woodbine Avenue and Steelcase Road
40 Yonge Street and Jefferson Forest Drive/ Tower Hill Road

York Region

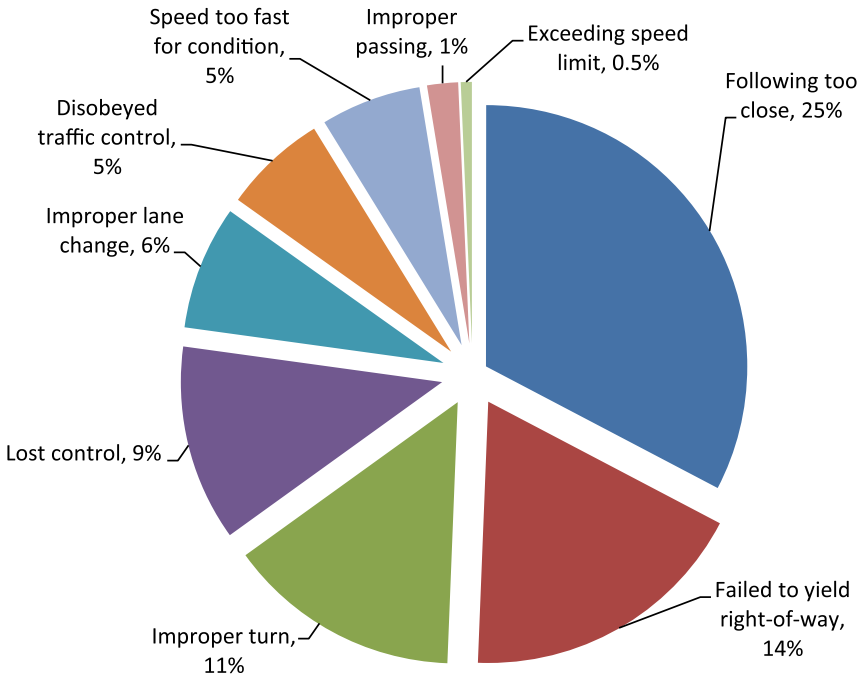
- **Statistics show that the attending police officer at collisions noted that drivers were driving properly in only 22 per cent of all collisions, 78 per cent of all collisions were a direct cause of someone's improper driving**

- **Acts of aggressive driving, including following too close, exceeding speed limit, speed too fast for condition, improper passing and improper lane change, accounted for 38 per cent of all collisions**

Collisions by Driver Action

Collisions are typically a direct cause of driver error. Leading causes are "following too close" and "failed to yield".

Collisions by Driver Action, Three-Year Average Between 2013 and 2015



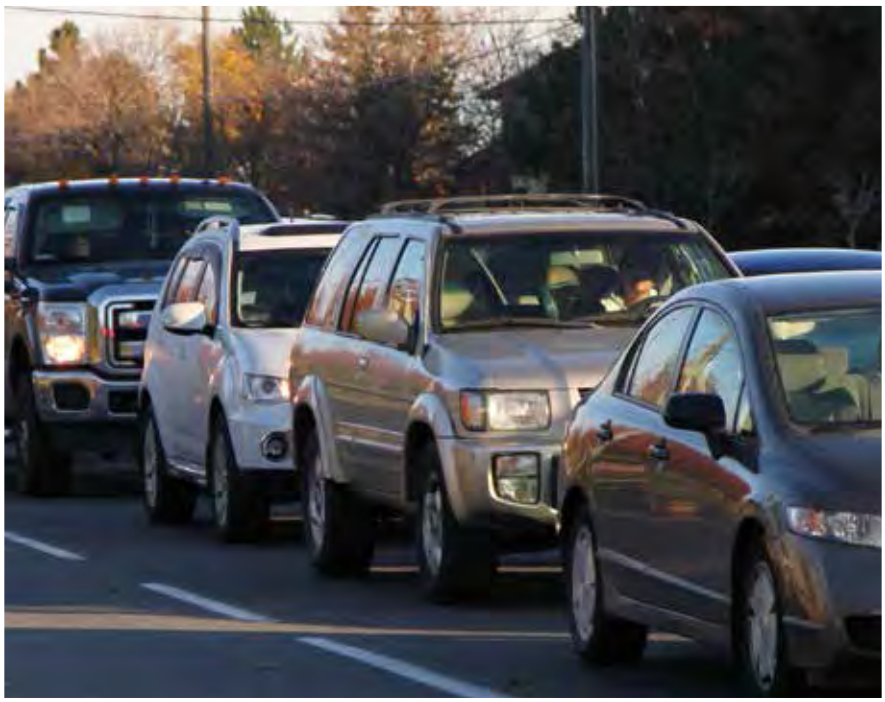


Photo: Traffic congestion on McCowan Road.

Collisions by Driver Condition

Collisions where the condition of at-fault driver was recorded as "normal" or "unknown" accounted for 80 per cent of all collisions. Of the remaining at-fault drivers, most of them were identified as "inattentive driving", i.e. distracted drivers.

Distracted driving continues to be one of the most common offences that York Regional Police see out on the roads. A reminder to motorists that distracted driving is not limited to just mobile phones, it refers to all forms of distracted or inattentive driving, such as adjustment a vehicle's entertainment system, or GPS unit or stereo, eating and drinking, using a hand-held device, self-grooming or tending to children in the backseat.

Collisions by At-Fault Driver Condition, Three-Year Average Between 2013 and 2015

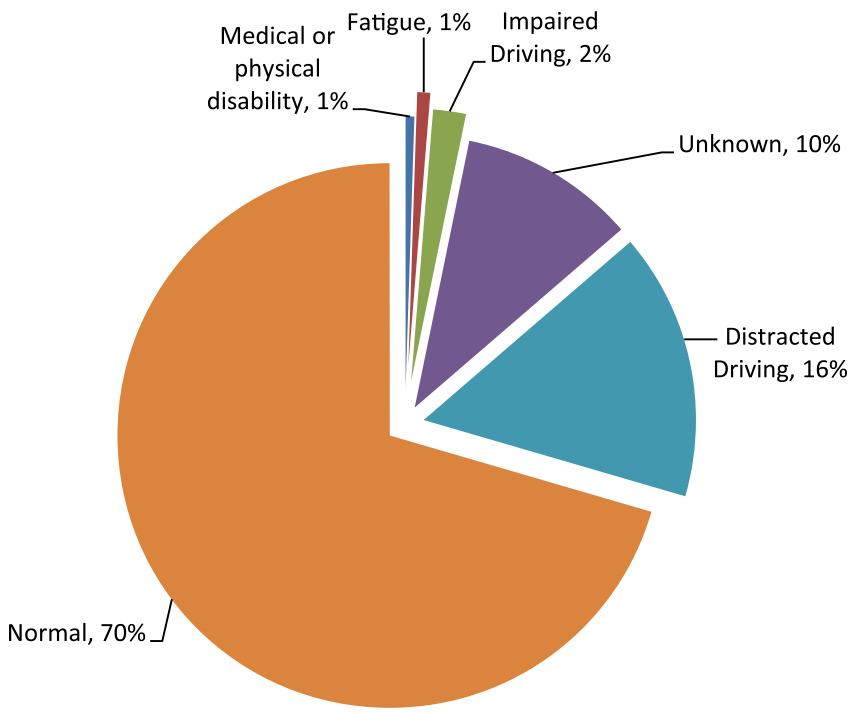


Photo: Photo of York Region Chairman and CEO, Wayne Emmerson and York Region Transportation Commissioner, Daniel Kostopoulos with signs supporting the Pledge To Ignore Campaign in 2016.

- **Distracted driving accounted for 16 per cent of all collisions**

- **The Pledge to Ignore campaign is designed to help save lives and means making a commitment not to use your cell phone while driving or walk near traffic**

- **Over the last three years, the intersection of Highway 7 and Weston Road experienced the highest number of collisions on the Regional road network**

Collisions by Location

Highway 7 is York Region's most travelled roadway providing a link between Peel Region and Durham Region. Highway 7, along with Major Mackenzie Drive and Rutherford Road/16th Avenue are also major connecting roads to Highway 427, Highway 400 and Highway 404. Therefore, it is not unexpected that the majority of high collision intersections are situated along these high volume major arterials. Nine of the 10 intersections were in the top ten of last year's report.

Top 10 High Collision Frequency Locations, Three-Year Total Between 2013 and 2015

Description (Position in Last Year's Report)	Total Volume*	Injury Collisions	Three-Year Total
Highway 7 and Weston Road (1)	57,000	43	180
Major Mackenzie Drive West and Highway 400 Off-Ramp (-)	40,000	52	177
Weston Road and Rutherford Road (2)	37,000	42	162
Keele Street and Highway 7 (5)	55,000	24	160
Yonge Street and Green Lane (3)	37,000	34	157
Highway 7 and Jane Street (7)	52,000	32	156
Major Mackenzie Drive West and Jane Street (8)	37,000	39	140
Highway 7 and McCowan Road (4)	67,000	28	139
Yonge Street and Carrville Road/16th Avenue (6)	36,000	35	135
Major Mackenzie Drive East and Bayview Avenue (9)	34,000	22	120

* The volume are derived from an eight-hour turning movement count for all approaches and represents traffic during a typical weekday.

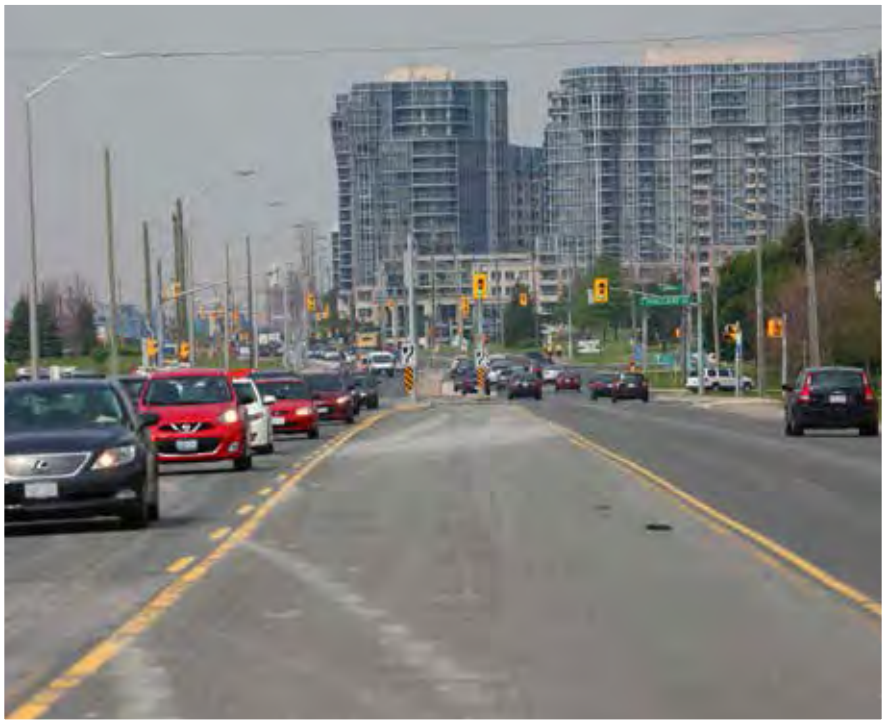


Photo: Highway 7 before start of construction.

Collision Frequency by Municipality

The following maps illustrate the top ten high collision locations for York Region and for each of the local municipalities separately for the three-year period between 2013 and 2015.

The Regional Municipality of York

Town of Aurora

Town of East Gwillimbury

Town of Georgina

Township of King

City of Markham

Town of Newmarket

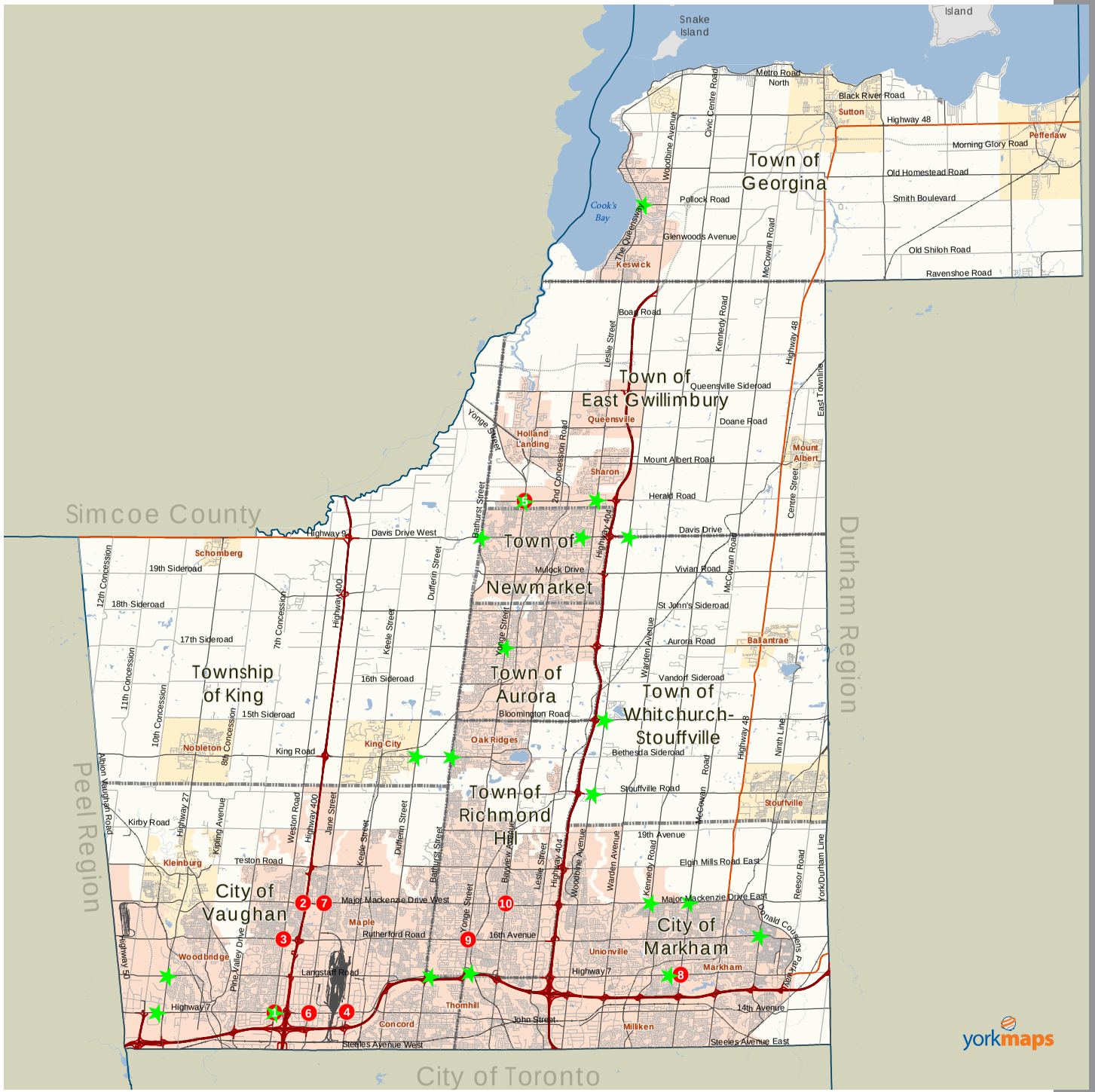
Town of Richmond Hill

City of Vaughan

Town of Whitchurch-Stouffville

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.



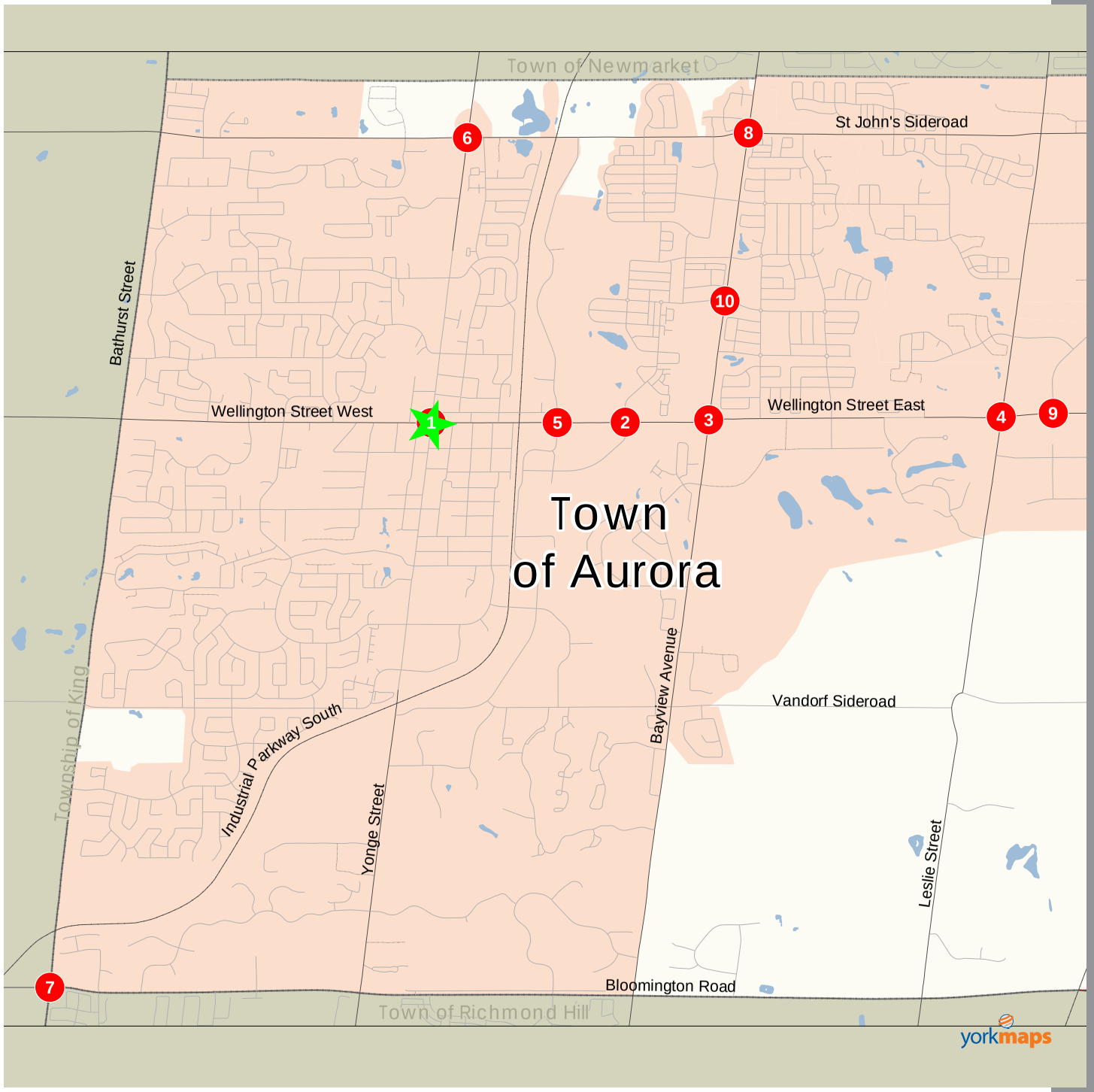
Top 10 High Collision Locations for York Region

1. Highway 7 and Weston Road (180)*
2. Major Mackenzie Drive West and Highway 400 Off-Ramp (177)*
3. Weston Road and Rutherford Road (162)*
4. Keele Street and Highway 7 (160)*
5. Yonge Street and Green Lane (157)*
6. Highway 7 and Jane Street (156)*
7. Major Mackenzie Drive West and Jane Street (140)*
8. Highway 7 and McCowan Road (139)*
9. Yonge Street and Carrville Road/16th Avenue (135)*
10. Major Mackenzie Drive East and Bayview Avenue (120)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



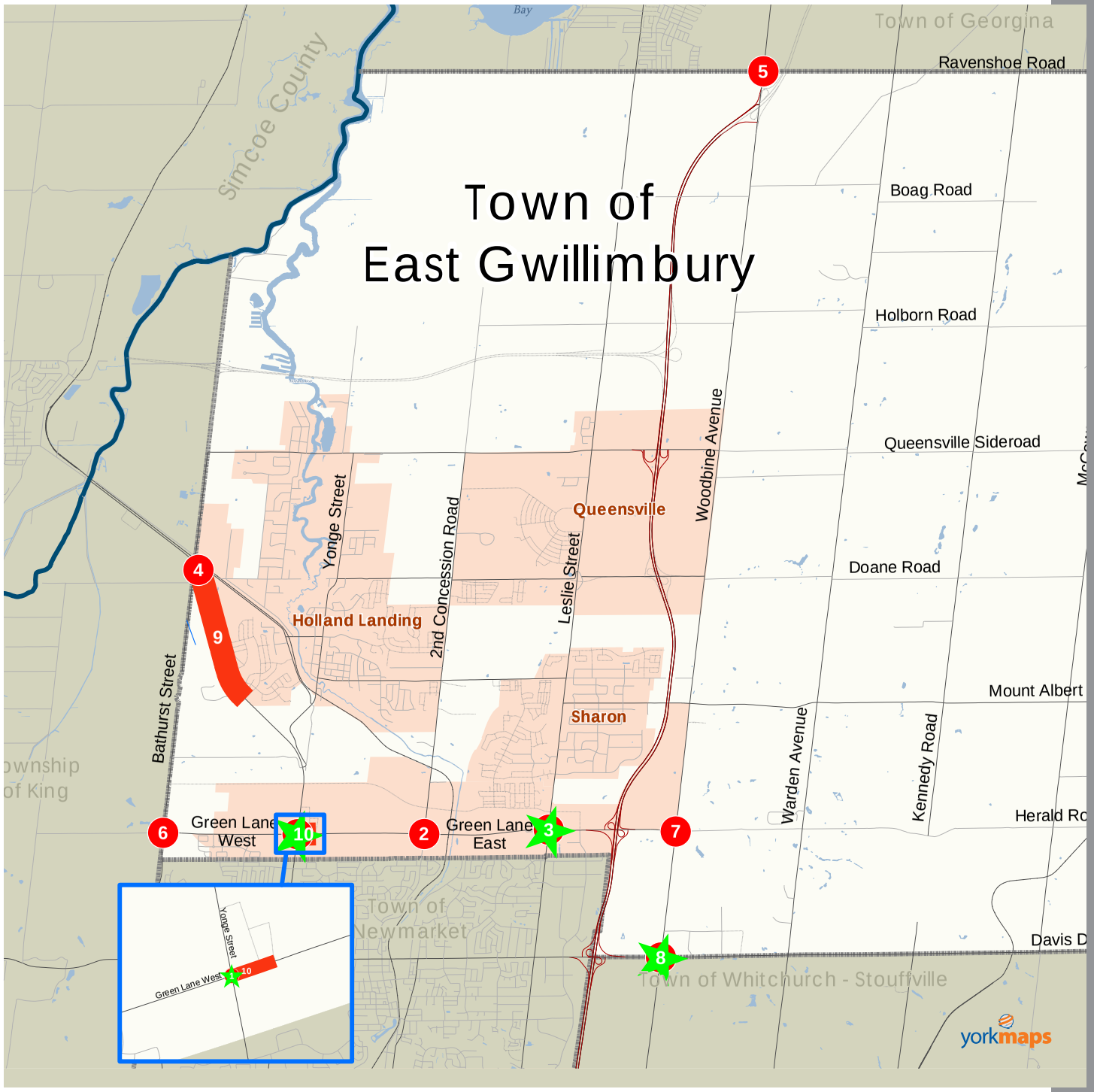
Top 10 High Collision Locations for the Town of Aurora

1. Wellington Street and Yonge Street (74)*
2. Wellington Street East and Mary Street/John West Way (49)*
3. Wellington Street East and Bayview Avenue (46)*
4. Leslie Street and Wellington Street East (46)*
5. Wellington Street East and Industrial Parkway (41)*
6. Yonge Street and St John's Sideroad (38)*
7. Bathurst Street and 15th Sideroad/Bloomington Road (34)*
8. St John's Sideroad and Bayview Avenue (31)*
9. Wellington Street East and First Commerce Drive (31)*
10. Bayview Avenue and Hollidge Boulevard/Borealis Avenue (23)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



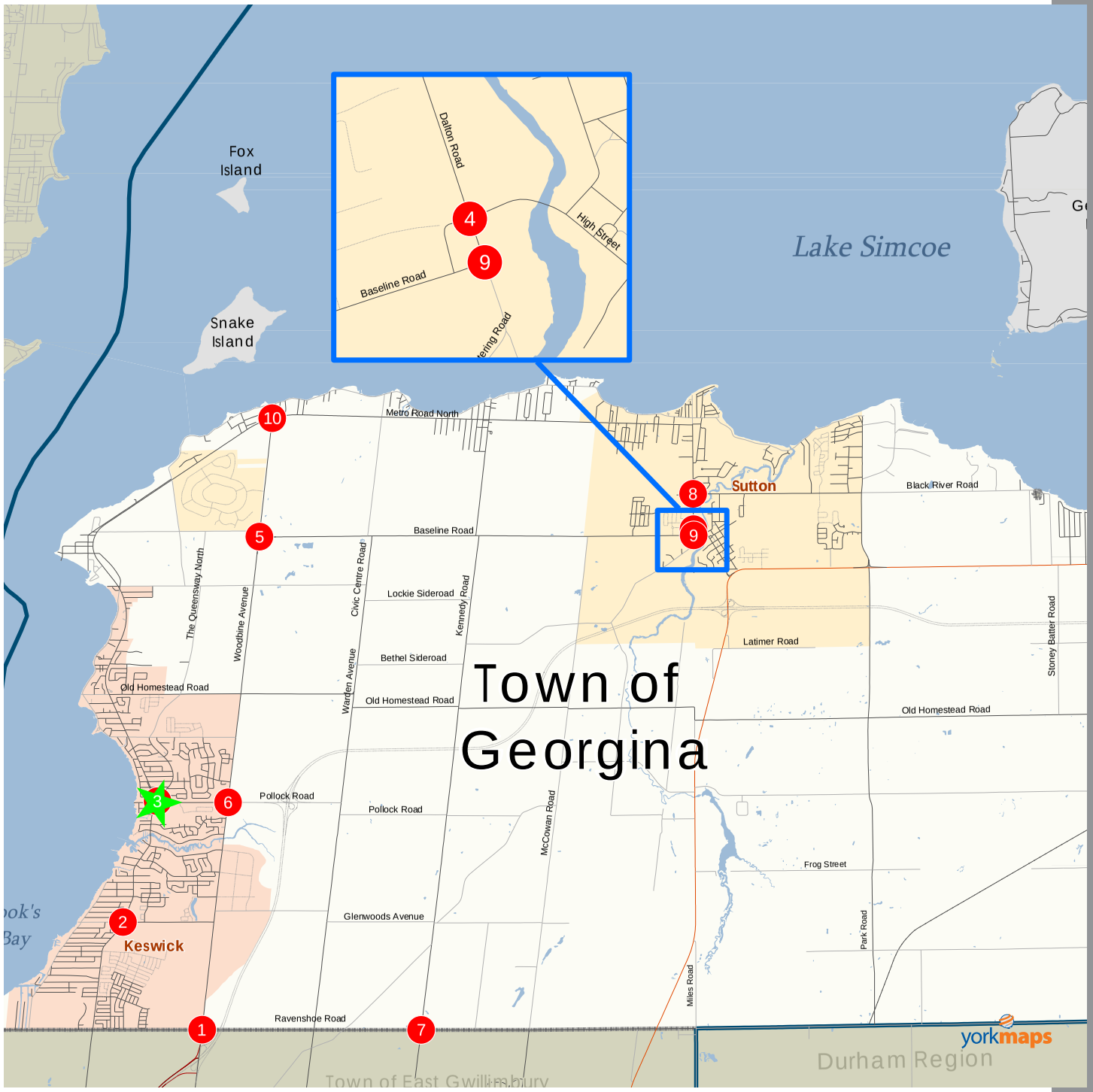
Top 10 High Collision Locations for the Town of East Gwillimbury

1. Yonge Street and Green Lane (157)*
2. Green Lane East and Main Street North/ 2nd Concession Road (84)*
3. Leslie Street and Green Lane East (67)*
4. Highway 11 and Bathurst Street (43)*
5. Woodbine Avenue and Ravenshoe Road (41)*
6. Green Lane West and Miller's Sideroad/Bathurst Street (36)*
7. Woodbine Avenue and Herald Road/ Green Lane East (32)*
8. Woodbine Avenue and Davis Drive (32)*
9. Highway 11 between Sherwood Glen and Bathurst Street (26)*
10. Green Lane East between Yonge Street and Yonge-Green Lane Cetnre (23)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



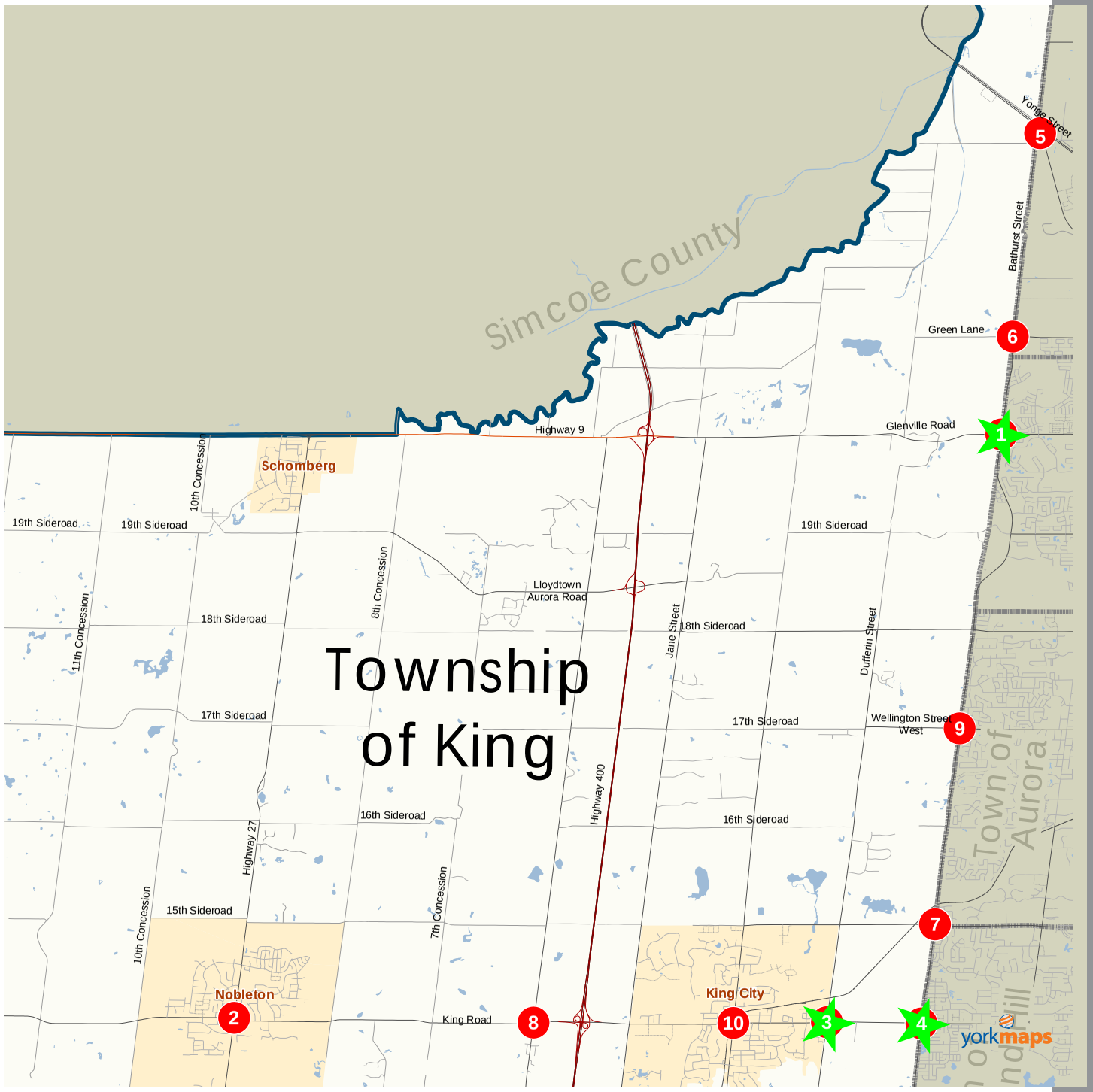
Top 10 High Collision Locations for the Town of Georgina

1. Woodbine Avenue and Ravenshoe Road (41)*
2. The Queensway South and Glenwoods Avenue (23)*
3. The Queensway South and Metro Road South/ Morton Avenue (19)*
4. Dalton Road and McDonough Avenue/High Street (18)*
5. Woodbine Avenue and Baseline Road (16)*
6. Woodbine Avenue and Morton Avenue/Pollock Road (16)*
7. Kennedy Road and Ravenshoe Road (14)*
8. Dalton Road and Black River Road (13)*
9. Dalton Road and Baseline Road (13)*
10. Woodbine Avenue and Metro Road North (12)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



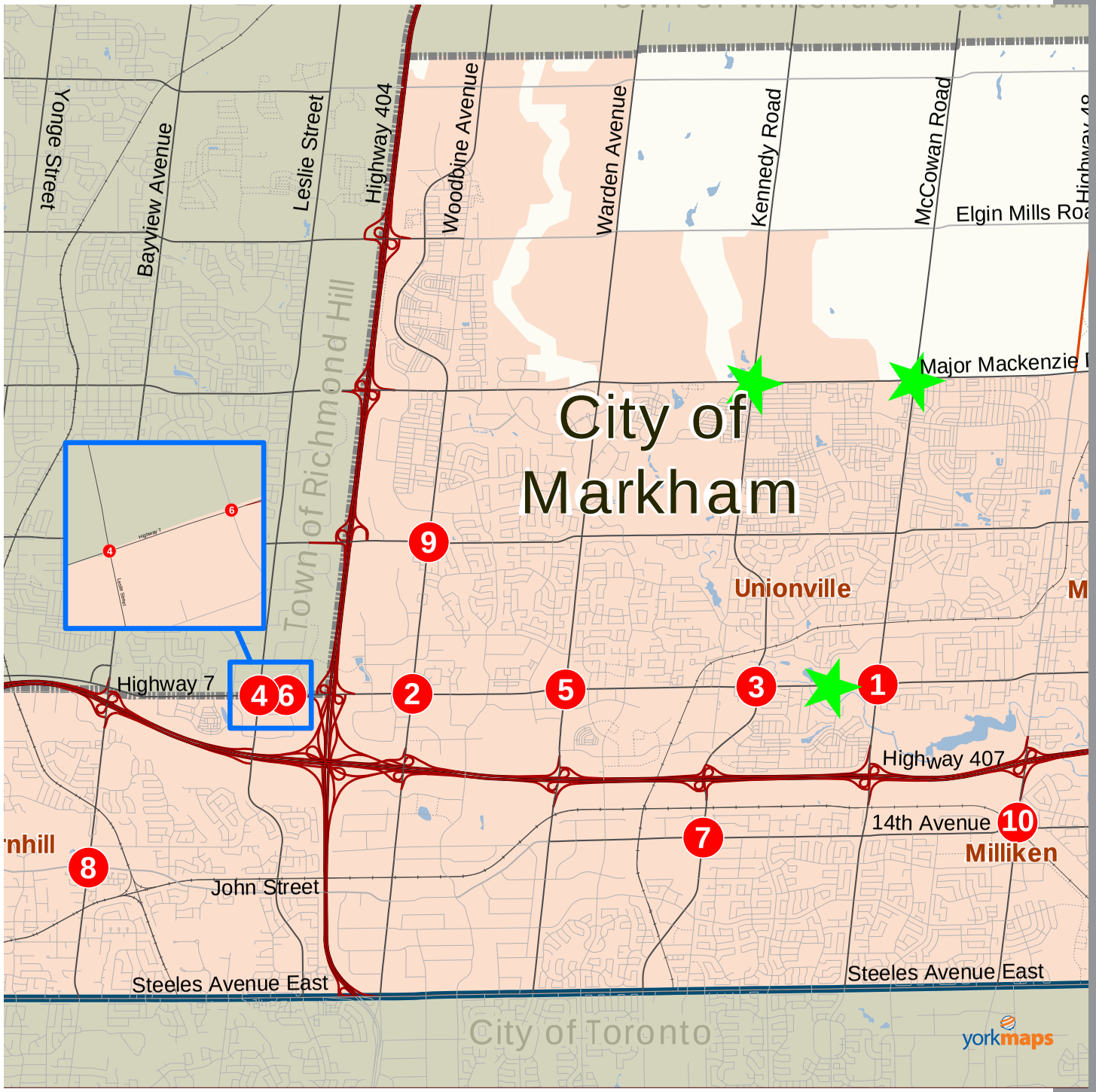
Top 10 High Collision Locations for the Township of King

1. Davis Drive West and Bathurst Street (68)*
2. King Road and Highway 27 (52)*
3. King Road and Dufferin Street (48)*
4. King Road and Bathurst Street (44)*
5. Highway 11 and Bathurst Street (43)*
6. Green Lane West and Miller's Sideroad/Bathurst Street (36)*
7. Bathurst Street and 15th Sideroad/Bloomington Road (34)*
8. Road and Weston Road (27)*
9. Wellington Street West and Bathurst Street (27)*
10. Keele Street and King Road (26)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



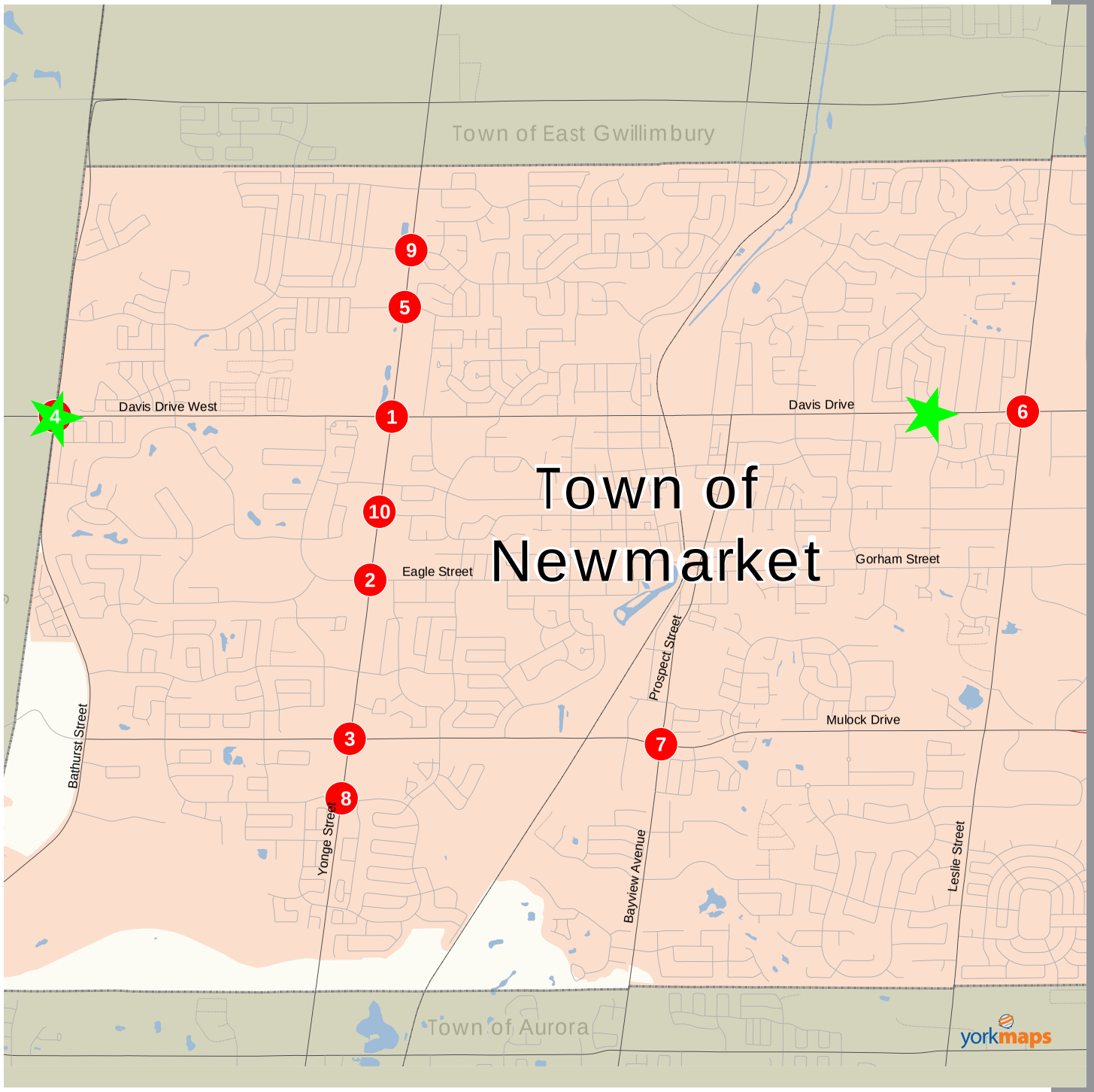
Top 10 High Collision Locations for the City of Markham

1. Highway 7 and McCowan Road (139)*
2. Highway 7 and Woodbine Avenue (112)*
3. Kennedy Road and Highway 7 (112)*
4. Highway 7 and Leslie Street (106)*
5. Highway 7 and Warden Avenue (95)*
6. Highway 7 and Commerce Valley Drive East/ East Beaver Creek Road (93)*
7. Kennedy Road and 14th Avenue (82)*
8. Bayview Avenue and John Street (79)*
9. Woodbine Avenue and 16th Avenue (79)*
10. 14th Avenue at Markham Road (77)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



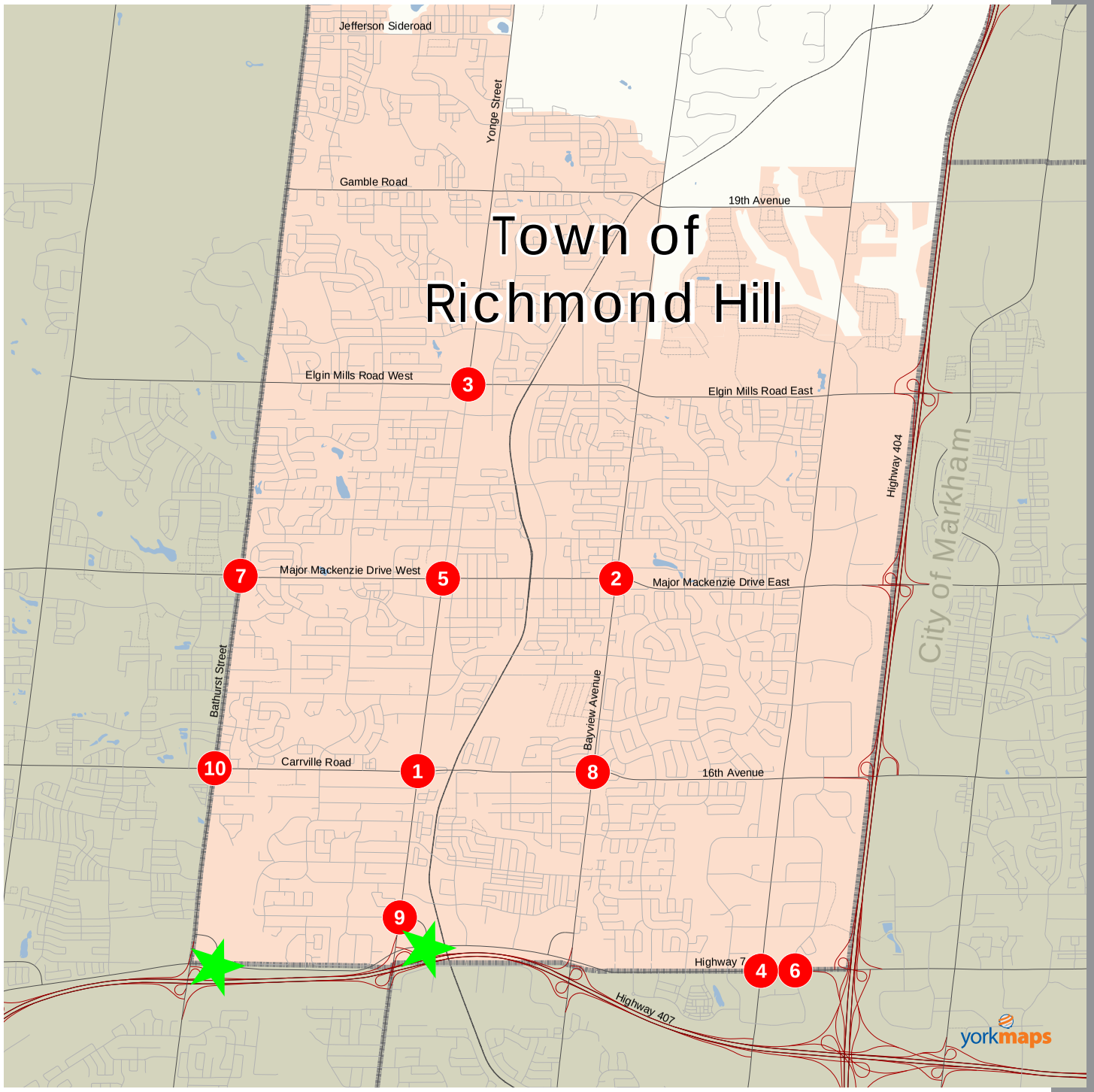
Top 10 High Collision Locations for the Town of Newmarket

1. Yonge Street and Davis Drive (86)*
2. Yonge Street and Eagle Street (77)*
3. Yonge Street and Mulock Drive (68)*
4. Davis Drive West and Bathurst Street (68)*
5. Yonge Street and Kingston Road/ Dawson Manor Boulevard (60)*
6. Leslie Street and Davis Drive (57)*
7. Prospect Street and Bayview Avenue/Mulock Drive (47)*
8. Yonge Street and Savage Road/ Sawmill Valley Drive (42)*
9. Yonge Street and London Road/Bonshaw Avenue (40)*
10. Yonge Street and Gladman Avenue (38)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



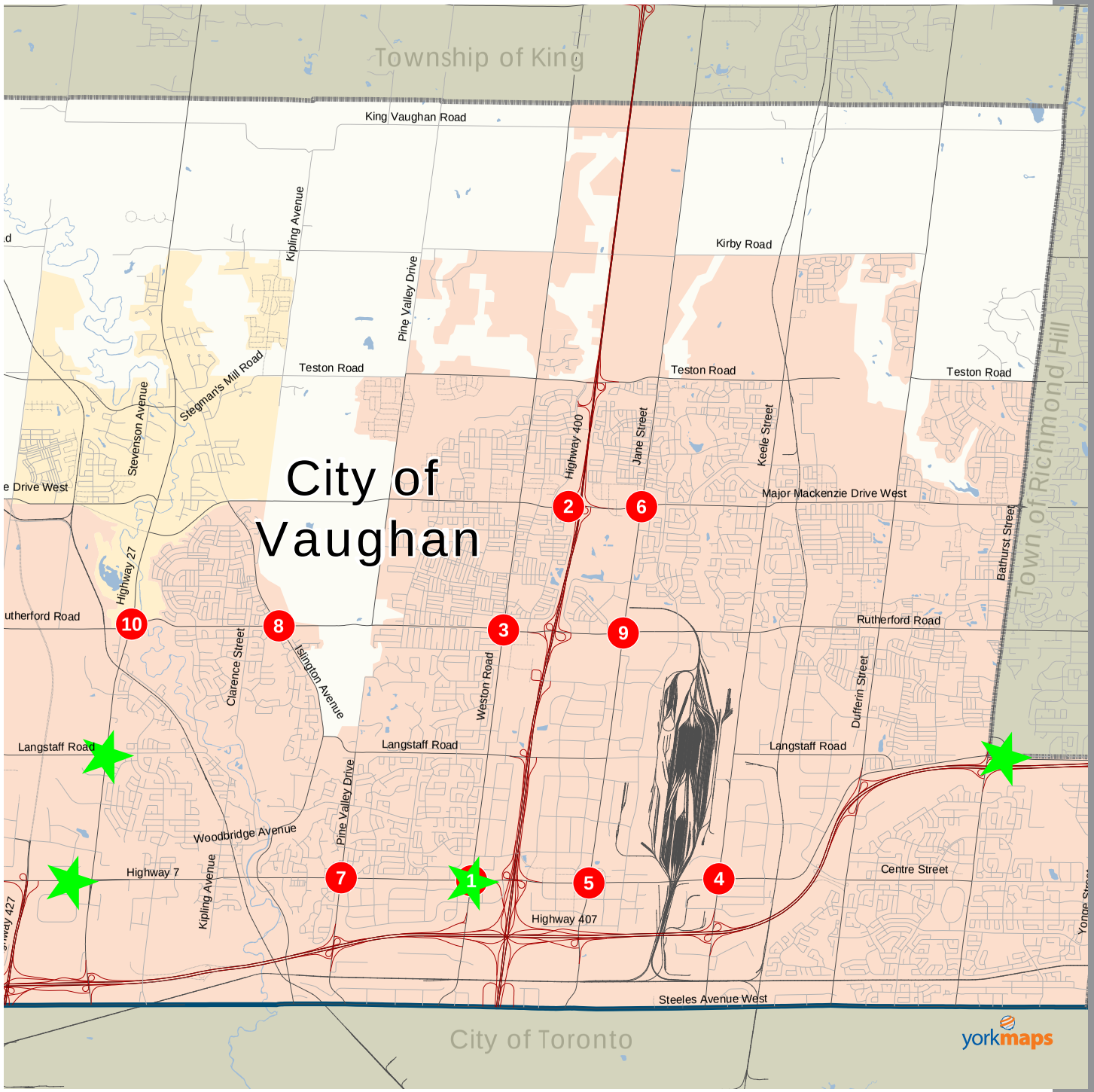
Top 10 High Collision Locations for the Town of Richmond Hill

1. Yonge Street and Carrville Road/16th Avenue (135)*
2. Major Mackenzie Drive East and Bayview Avenue (120)*
3. Yonge Street and Elgin Mills Road (106)*
4. Highway 7 and Leslie Street (106)*
5. Yonge Street and Major Mackenzie Drive West (95)*
6. Highway 7 and Commerce Valley Drive East/ East Beaver Creek Road (93)*
7. Major Mackenzie Drive West and Bathurst Street (90)*
8. Bayview Avenue and 16th Avenue (83)*
9. Yonge Street and Garden Avenue/ Highway 7 - Yonge Street Ramp (80)*
10. Bathurst Street and Carrville Road/Rutherford Road (68)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



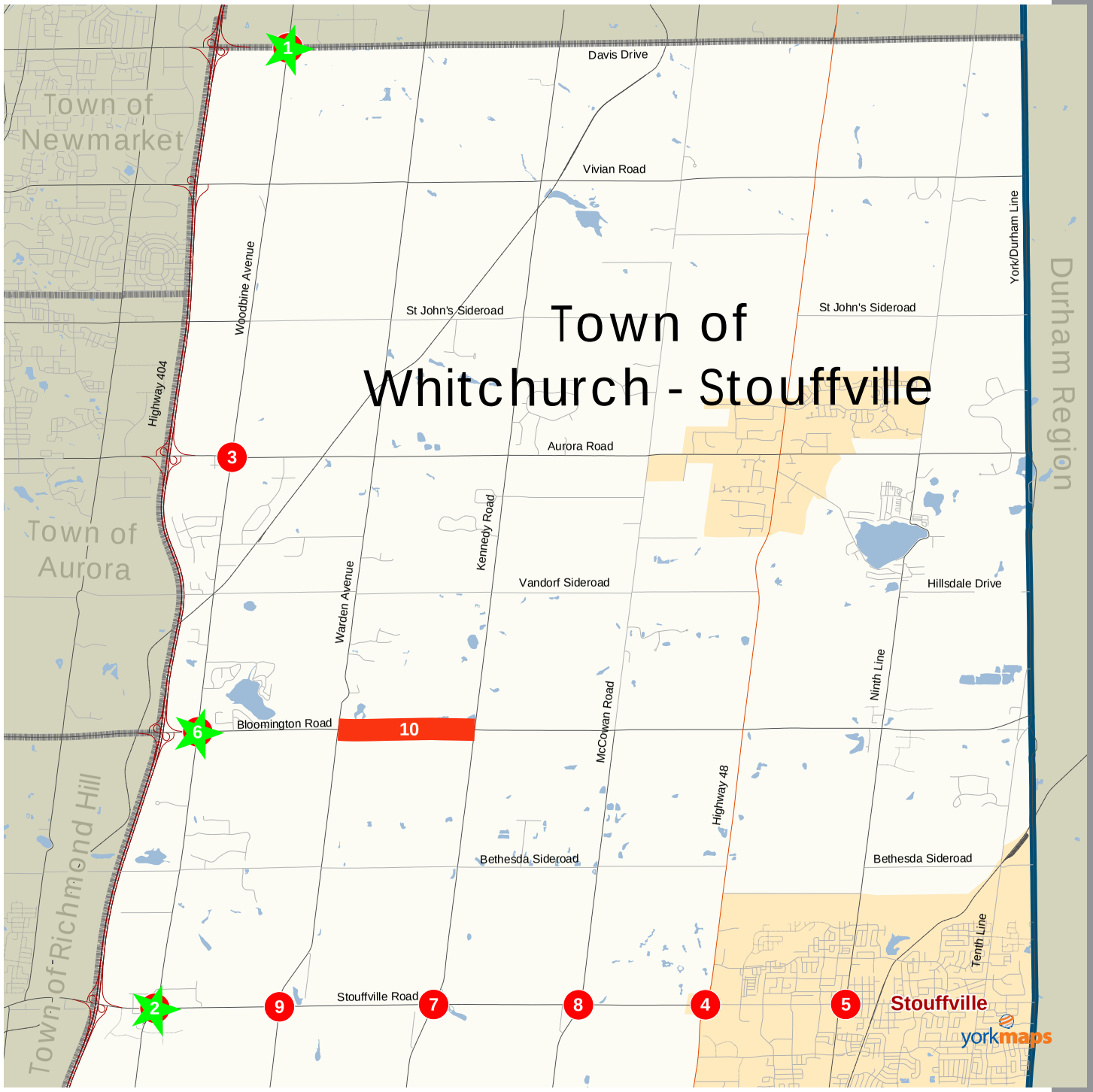
Top 10 High Collision Locations for the City of Vaughan

1. Highway 7 and Weston Road (180)*
2. Major Mackenzie Drive West and Highway 400 Off-Ramp (177)*
3. Weston Road and Rutherford Road (162)*
4. Keele Street and Highway 7 (160)*
5. Highway 7 and Jane Street (156)*
6. Major Mackenzie Drive West and Jane Street (140)*
7. Highway 7 and Pine Valley Drive (114)*
8. Islington Avenue and Rutherford Road (112)*
9. Jane Street and Rutherford Road (111)*
10. Highway 27 and Rutherford Road (93)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region



Top 10 High Collision Locations for the Town of Whitchurch-Stouffville

1. Woodbine Avenue and Davis Drive (32)*
2. Woodbine Avenue and Stouffville Road (23)*
3. Woodbine Avenue and Aurora Road (22)*
4. Stouffville Road and Main Street/Highway 48 (20)*
5. Main Street and Ninth Line (20)*
6. Woodbine Avenue and Bloomington Road (17)*
7. Kennedy Road and Stouffville Road (16)*
8. Stouffville Road and McCowan Road (16)*
9. Stouffville Road and Warden Avenue (14)*
10. Bloomington Road between Warden Avenue and Kennedy Road (14)*

* Represents the number of collisions between 2013 and 2015.

★ Represents existing red light camera locations.

York Region

Accessible formats of this report or
communication supports are also available upon request.

Please contact us for more information.

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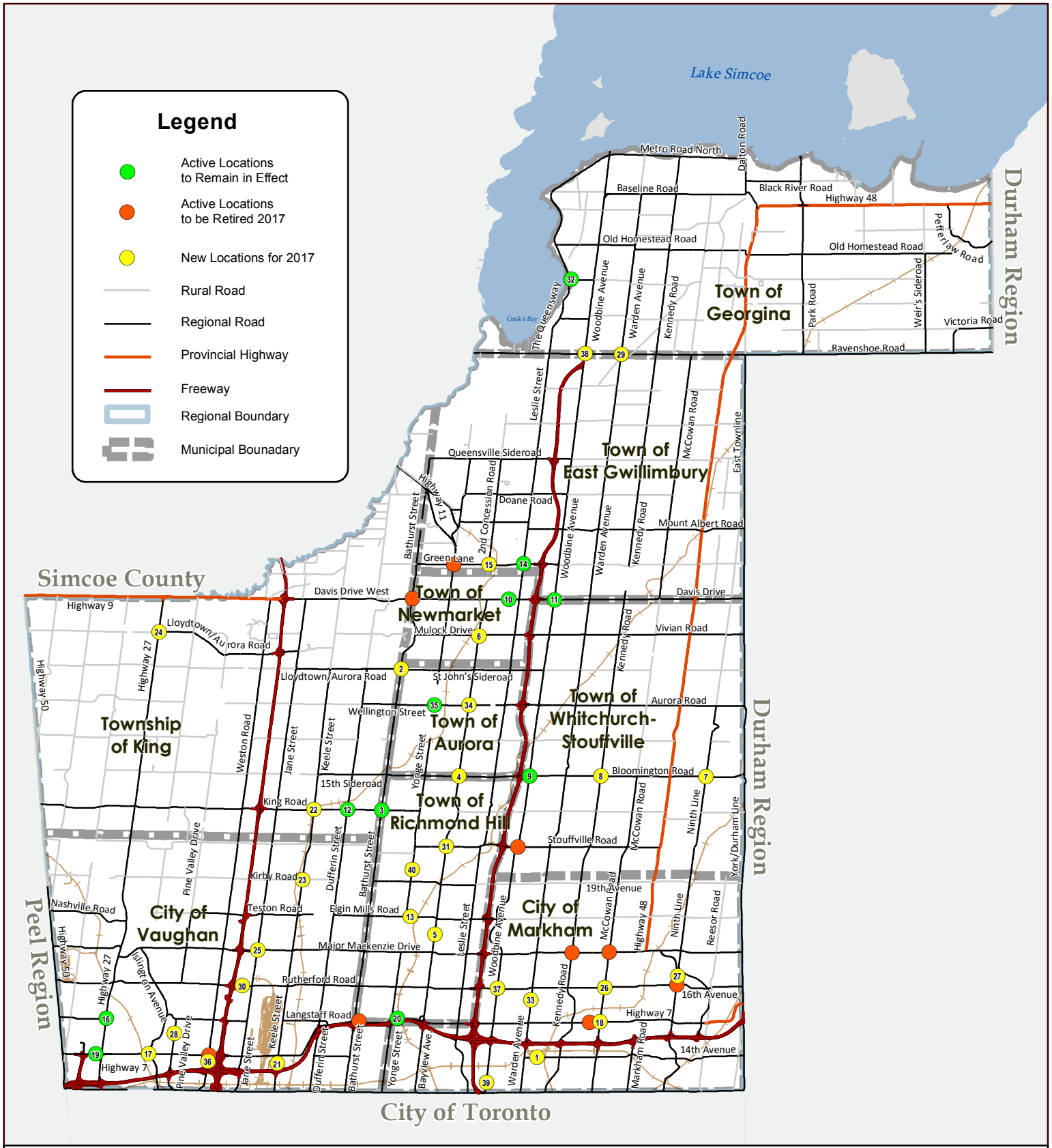
Newmarket, Ontario
L3Y 6Z1

Transportation Services
1-877-464-9675 Ext. 75000
TransportationServices@york.ca

2016 Annual Traffic Safety Report

York Region



Red Light Camera Locations

Annual Traffic Safety Report
September 8, 2016

yorkmaps York Region

Produced by:
The Regional Municipality of York
Corridor Control and Safety, Transportation Services
August 2016

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Kilometers

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Red Light Camera Locations

No.	Intersection	Municipality
1	14th Avenue and Birchmount Road	Markham
2	Bathurst Street and 18th Sideroad/St. John's Sideroad	Aurora/King
3	* Bathurst Street and King Road	King/Richmond Hill
4	Bayview Avenue and Bloomington Road	Aurora/Richmond Hill
5	Bayview Avenue and Crosby Avenue/Redstone Road	Richmond Hill
6	Bayview Avenue and Mulock Drive	Newmarket
7	* Bloomington Avenue and Ninth Line	Whitchurch-Stouffville
8	Bloomington Road and Kennedy Road	Whitchurch-Stouffville
9	Bloomington Road and Woodbine Avenue	Whitchurch-Stouffville
10	* Davis Drive and Ashton Road/Carlson Drive	Newmarket
11	* Davis Drive and Woodbine Avenue	East Gwillimbury/ Whitchurch-Stouffville
12	* Dufferin Street and King Road	King
13	Elgin Mills Road and Enford Road/Yorkland Street	Richmond Hill
14	* Green Lane East and Leslie Street	East Gwillimbury
15	Green Lane East and Main Street North/2nd Concession Road	East Gwillimbury
16	* Highway 27 and Langstaff Road	Vaughan
17	Highway 7 and Islington Avenue	Vaughan
18	Highway 7 and McCowan Road	Markham
19	* Highway 7 and Vaughan Valley Boulevard/Roybridge Gate	Vaughan
20	* Highway 7 and Yonge Street Connecting Road	Markham/ Richmond Hill/ Vaughan
21	Keele Street and Doney Crescent/Jardin Drive	Vaughan
22	Keele Street and King Road	King
23	Keele Street and Kirby Road	Vaughan
24	Lloydtown/Aurora Road and Highway 27	King
25	Major Mackenzie Drive West and Jane Street	Vaughan

No.	Intersection	Municipality
26	McCowan Road and 16th Avenue	Markham
27	Ninth Line and Bur Oak Avenue	Markham
28	Pine Valley Drive and Willis Road/Chancellor Drive	Vaughan
29	Ravenshoe Road and Warden Avenue	East Gwillimbury/ Georgina
30	Rutherford Road and Sweetriver Boulevard	Vaughan
31	Stouffville Road and Bayview Avenue	Richmond Hill
32	* The Queensway South and Metro Road South/Morton Avenue	Georgina
33	Warden Avenue and Carlton Road/Baycliffe Road	Markham
34	Wellington Street East and Bayview Avenue	Aurora
35	* Wellington Street and Yonge Street	Aurora
36	Weston Road and Rowntree Dairy Road/Colossus Drive	Vaughan
37	Woodbine Avenue and 16th Avenue	Markham
38	Woodbine Avenue and Ravenshoe Road	East Gwillimbury/ Georgina
39	Woodbine Avenue and Steelcase Road	Markham
40	Yonge Street and Jefferson Forest Drive/Tower Hill Road	Richmond Hill

* Existing Red Light Camera Locations

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