

Clause No. 19 in Report No. 11 of the Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on June 26, 2014.

**19**  
**ROAD USER SAFETY PERFORMANCE**  
**WHILE TRAVELLING ON REGIONAL ROADS**

**Committee of the Whole recommends adoption of the following recommendation contained in the report dated May 29, 2014 from the Commissioner of Transportation and Community Planning:**

**1. RECOMMENDATION**

It is recommended that:

1. This report be circulated to the Chief of York Regional Police.

**2. PURPOSE**

This report provides information on road user safety performance while travelling on Regional roads.

**3. BACKGROUND**

**York Region continues to implement measures to educate road users and promote safety**

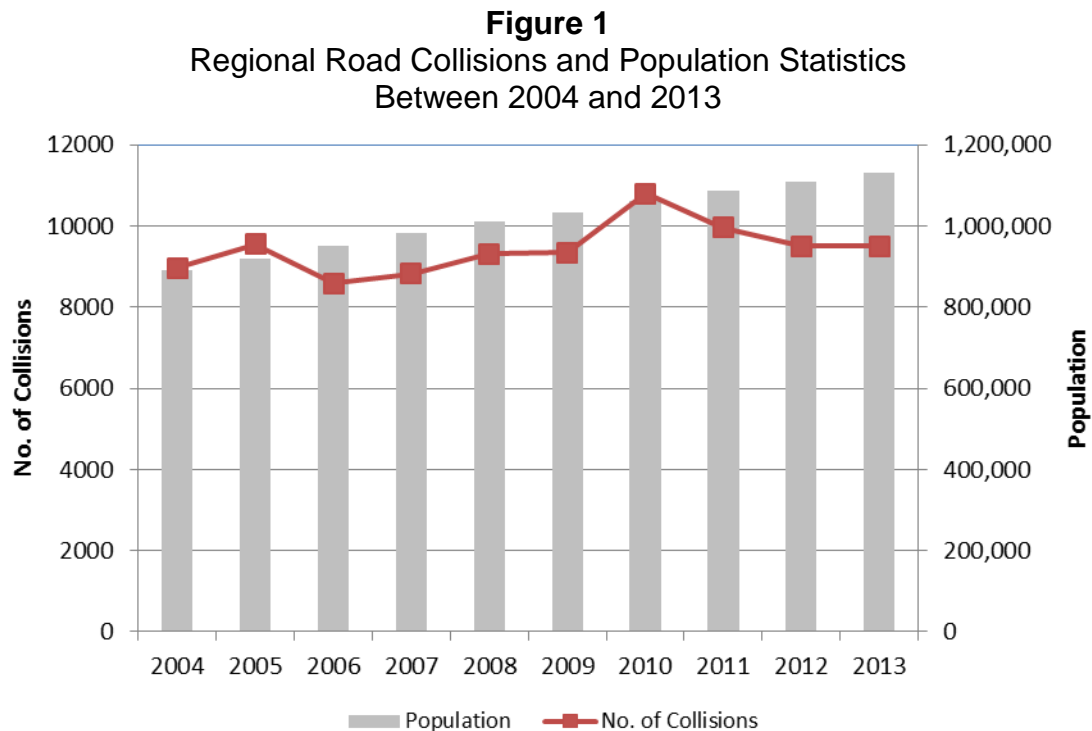
On January 27, 2011, Council approved safety initiatives and measures to educate and promote pedestrian safety, including:

- Increased pedestrian crossing time at signalized intersections
- Pedestrian countdown signal installations
- Public education campaigns to help reduce pedestrian injuries and fatalities
- Revised speed limit policy
- Zebra crosswalk marking installations at signalized intersections

In 2011, the Region created a pedestrian safety campaign in response to an unusual spike in pedestrian fatalities in 2010. The pedestrian safety campaign is focused on enhancing awareness around key issues affecting pedestrians. This year's campaign will focus on educating the public about distracted behaviour and slowing down.

### **Regional statistics show the number of collisions has remained relatively consistent over the past decade**

The Region's population statistics show a steady increasing trend of approximately 2.7 per cent per year in population growth over the past decade. The Region's collision statistics show a relatively consistent trend over the same period. Generally, it is expected that the number of collisions will continue to increase due to growth in the population, urbanization and number of vehicle trips in York Region. Figure 1 illustrates York Region collisions and population statistics between 2004 and 2013.

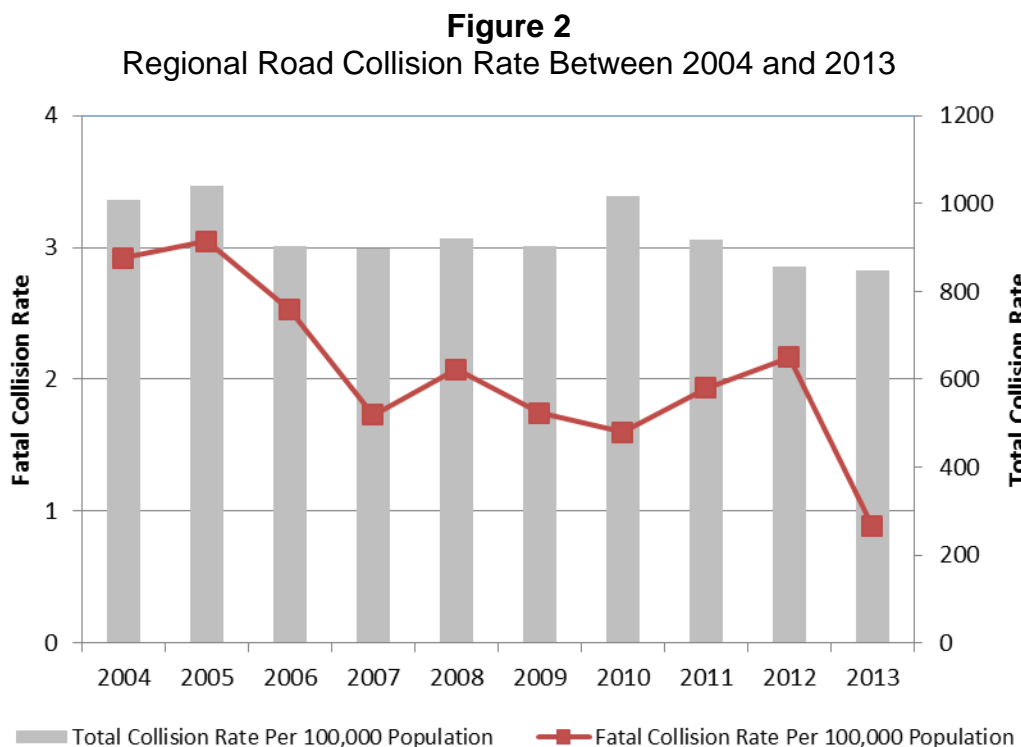


**During the same 10-year period there has been a decrease in the number of fatal collisions**

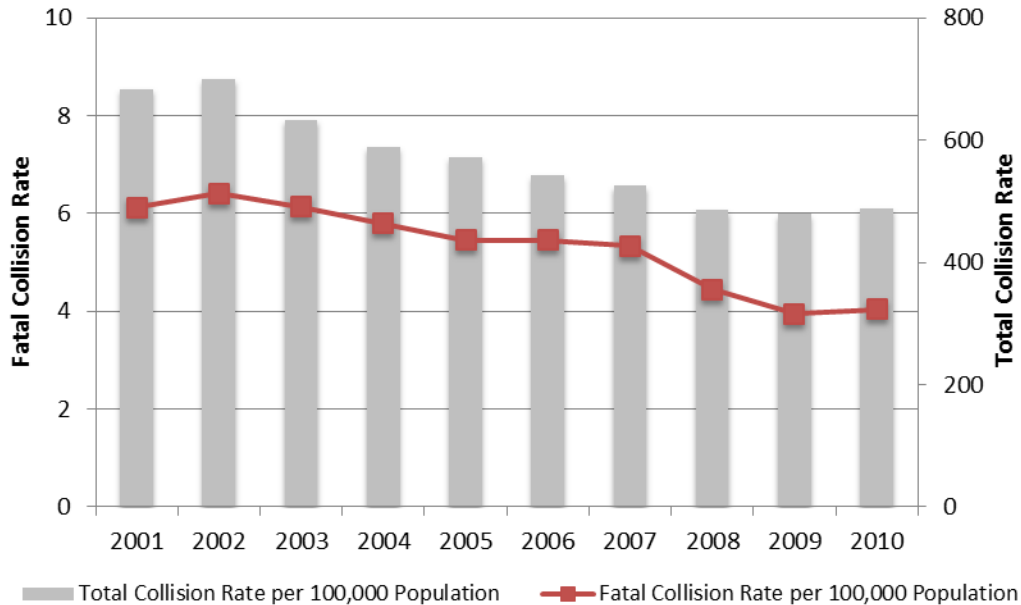
While the total collision rate per 100,000 population has remained relatively consistent for the past decade, the fatal collision rate per 100,000 population has decreased by approximately 70 per cent since 2004 (see Figure 2). In comparison, Provincial statistics show a steady decrease of 30 per cent per year in fatal collision rates per 100,000 population between 2004 and 2010 (see Figure 3).

Studies conducted by the Insurance Institute for Highway Safety (IIHS) suggest that a decrease in fatalities can be attributed to advancements in vehicle safety and new technology. Examples include; winter tires and all-wheel drive systems, which help motorists with improved vehicle control over the traditional front or rear wheel systems to maintain traction on icy road conditions, and improvements in airbag deployment systems that prevent occupants from striking interior objects such as the steering wheel, dashboard or windows during a collision.

In addition to vehicle improvements, there have been improvements in engineering design, enforcement programs, EMS response and Emergency Medical care.



**Figure 3**  
Ministry of Transportation of Ontario  
2001 to 2010 Collision Rate



\* 2010 Ontario Road Safety Annual Report collision statistics are the most recent published by the Ministry of Transportation of Ontario.

### **Distracted driving and speeding are two leading human factors that contribute to vehicle collisions**

There are a number of factors that contribute to the risk of vehicle collisions such as distracted driving, speed, vehicle design, road design and road environment. Among all driver behaviours, distracted driving and speeding are the two leading human factors that contribute to vehicle collisions.

Amendments were introduced to the *Highway Traffic Act* in 2009 and 2014 to address driver distraction:

- On October 26, 2009, the use of electronic hand-held devices when driving, including cell phones, was banned on all Ontario highways, streets and roads. Drivers caught using a hand-held device were issued a \$155 ticket, in accordance with Section 78.1 of the Highway Traffic Act.
- On March 18, 2014, a toughened distracted driving law was adopted. In accordance with Section 78.1 of the Highway Traffic Act, a convicted driver found guilty of using any hand-held device while driving faced an increased set fine of \$280, with no demerit points. The provincial government continues seeking tougher fines that could



potentially include demerit points with a fine up to \$1,000 as an additional penalty in the future.

Council endorsed a revised speed limit policy in April 2011, and since then, Regional staff have been reviewing speed limits in urban areas. This has resulted in 45 speed limit bylaw revisions. These speed limit revisions have resulted in lower operating speeds on Regional roads, which can reduce the number of collisions and the potential for serious injury or death.

#### 4. ANALYSIS AND OPTIONS

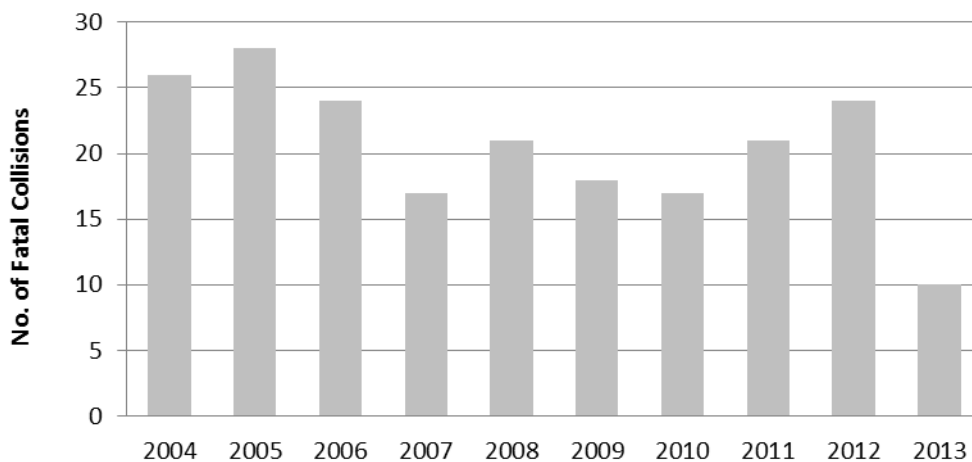
##### **The Region experienced a 10-year low in fatal collisions in 2013**

A review of the Region's fatal collision statistics shows a 10-year low in fatal collisions in 2013 (see Figure 4).

During the same time period, the City of Toronto experienced the highest number of pedestrian fatalities in 2013 in nearly a decade with 63 total fatalities, an increase of 43 per cent over 2012. Although there was an increase in total fatalities, the number of fatalities involving motorists and passengers remain relatively consistent.

Due to the general irregularity of traffic collisions it is difficult to predict a trend for 2014.

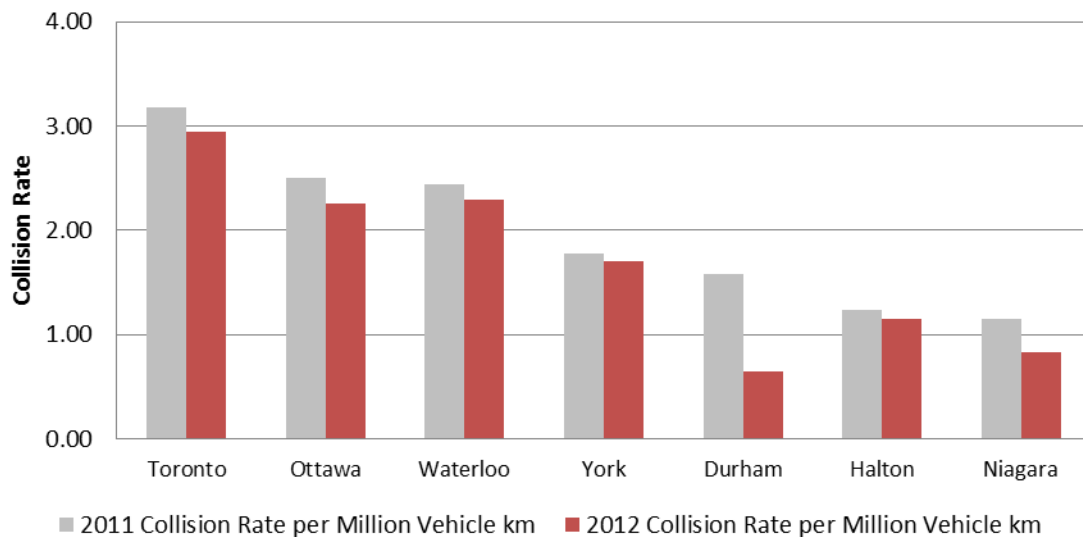
**Figure 4**  
Regional Road Fatal Collision Statistics  
Between 2004 and 2013



**Ontario Municipal Benchmarking Initiative (OMBI) data and Ontario Road Safety Annual Reports (ORSAR) indicate that the safety performance of Regional roads in York Region compares favourably to other jurisdictions in the Province of Ontario**

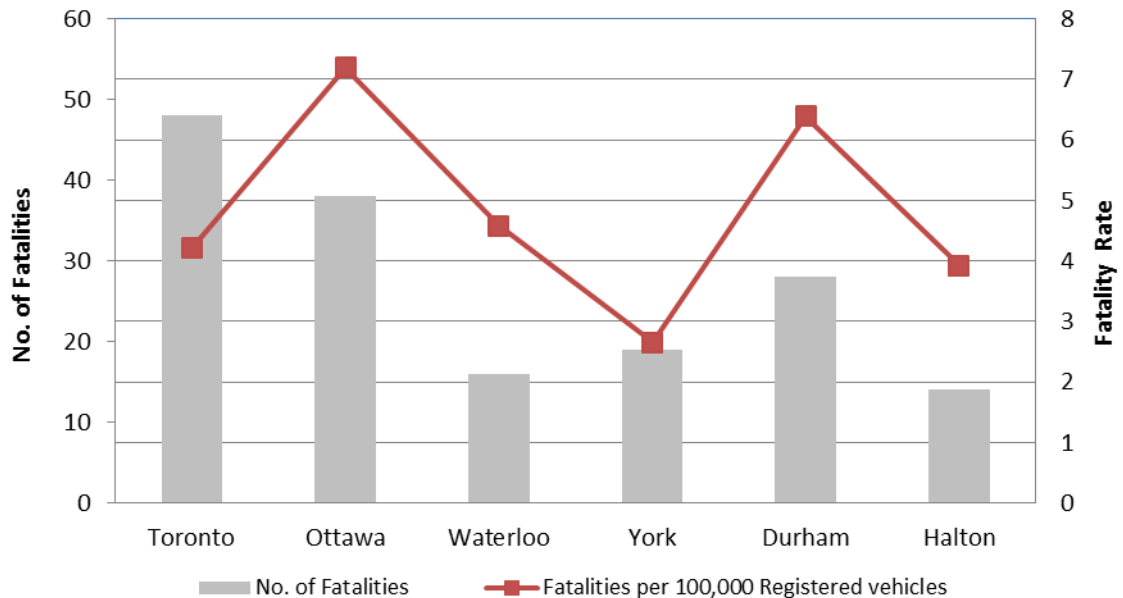
The Ontario Municipal Benchmarking Initiative includes collision rates (reported collisions per million vehicle kilometres travelled) as one of the annual key performance indicators for municipalities. York Region’s collision rate is higher than Durham, Halton and Niagara but lower than Ottawa, Toronto and Waterloo.

**Figure 5**  
Ontario Municipal Benchmarking Initiative Collision Rate Comparison



The Ontario Ministry of Transportation also publishes key performance indicators for traffic safety in their Ontario Road Safety Annual Report. The Ministry of Transportation reports the number of fatalities and the number of registered vehicles in each jurisdiction. York Region’s fatality rate (number of fatalities per 100,000 registered vehicles) compares positively to our peers as illustrated in Figure 6.

**Figure 6**  
Ontario Road Safety Annual Report - 2010



**The intersection of Highway 7 at Weston Road experiences the highest number of collisions on the Regional road network**

A general overview of collision statistics on Regional roads between 2011 and 2013 confirms that collisions are most likely to occur on weekdays during the winter months and the evening rush hour. Additionally, a motorist is most likely to be involved in a rear-end collision at a signalized intersection. A detailed breakdown of collision patterns and trends is outlined in *Attachment 1*.

As expected, the majority of high collision intersections are situated on the high volume arterials of Highway 7, Rutherford Road, Major Mackenzie Drive and Yonge Street. The top 10 locations for each municipality with the highest number of collisions on Regional roads between 2011 and 2013, and the associated location map are included in *Attachment 1*.

Table 1 lists intersections that experienced the highest number of collisions for the three-year period between 2011 and 2013. Table 2 lists the top 10 intersections with the highest collision rate for the three-year period between 2011 and 2013 in York Region.

**Table 1**  
 High Collision Frequency Intersections  
 Three-Year Total Between 2011 and 2013

| <b>Intersection</b>                         | <b>Total Collisions</b> | <b>Property Damage</b> | <b>Injury Collisions</b> |
|---|-------------------------|------------------------|--------------------------|
| * Highway 7 and Weston Road                 | 211                     | 166                    | 45                       |
| Rutherford Road and Weston Road             | 186                     | 142                    | 44                       |
| * Yonge Street and Green Lane               | 179                     | 144                    | 35                       |
| Major Mackenzie Drive and Jane Street       | 176                     | 136                    | 40                       |
| Highway 7 and McCowan Road                  | 176                     | 143                    | 33                       |
| Highway 7 and Keele Street                  | 174                     | 136                    | 38                       |
| Carrville Road/16th Avenue and Yonge Street | 170                     | 130                    | 40                       |
| Highway 7 and Leslie Street                 | 162                     | 128                    | 34                       |
| Major Mackenzie Drive and Bayview Avenue    | 156                     | 120                    | 36                       |
| Rutherford Road and Jane Street             | 148                     | 119                    | 29                       |

\* Red light camera locations

**Table 2**  
 High Collision Rate Intersections  
 Between 2011 and 2013

| <b>Intersection</b>                     | <b>Total Volume</b> | <b>Total Collisions</b> | <b>Collision Rate</b> |
|---|---------------------|-------------------------|-----------------------|
| Woodbine Avenue and Metro Road          | 2224                | 13                      | 5.34                  |
| McCowan Road and Elgin Mills Road       | 10981               | 49                      | 4.08                  |
| Kennedy Road and Herald Road            | 1544                | 6                       | 3.55                  |
| Jane Street and Bagg Street/Gensal Gate | 5104                | 19                      | 3.40                  |
| Teston Road and Pine Valley Drive       | 1867                | 6                       | 2.93                  |
| Kennedy Road and Metro Road             | 2806                | 9                       | 2.93                  |
| McCowan Road and Herald Road            | 2066                | 6                       | 2.65                  |
| Weston Road and Rutherford Road         | 65409               | 186                     | 2.60                  |
| Major Mackenzie Drive and Jane Street   | 64047               | 176                     | 2.51                  |
| * Yonge Street and Green Lane           | 67233               | 179                     | 2.43                  |

\* Red light camera locations

It is reasonable to expect that as traffic volumes increase the number of collisions may also increase. Collision rates (number of collisions per one million vehicles entering the intersection) are often used as a measure of safety. As shown, some of the intersections in the rural and suburban areas have a higher collision rate as compared to major urbanized intersections.

### **Regional staff identified nine areas of concern that can be targeted through engineering, enforcement and education**

Based on the review of available collision data, general knowledge and experience of safety issues in York Region, common public concern and perception about safety, Regional staff have identified nine areas of concern in York Region that are over-represented in collision statistics, as shown in Table 3.

**Table 3**  
Areas of Concern  
Three-Year Average Between 2011 and 2013

| <b>Area of Concern</b>       | <b>Total Collisions</b> | <b>Injury Collisions</b> | <b>% Change Three-Year Average to 2013</b> |
|------------------------------|-------------------------|--------------------------|--|
| Rear end at traffic signals  | 2,660                   | 568                      | -2   |
| Distracted driving           | 1,275                   | 519                      | 9  |
| Left turn at traffic signals | 841                     | 329                      | 9  |
| Winter driving               | 661                     | 113                      | 8  |
| Speeding                     | 364                     | 116                      | 6  |
| Red light running            | 310                     | 154                      | 6  |
| Pedestrians                  | 152                     | 139                      | 1  |
| Cyclists                     | 83                      | 71                       | 6  |
| Impaired driving             | 111                     | 40                       | -9   |

These areas of concern are not mutually exclusive. For example, a large proportion of speeding-related collisions may involve young drivers, and a large proportion of rear-end collisions at signals may be the result of speeding and distracted driving. This implies that addressing any one concern area may also impact other areas.

The Transportation and Community Planning Department has made engineering improvements including; pavement rehabilitation programs, intersection improvement programs, the Red Light Camera Program, speed limit revisions, safety audits and radar speed boards, that will help prevent collisions in concern areas such as speeding, winter driving and collisions at intersections.

The Transportation and Community Planning Department, in partnership with York Regional Police, supports traffic safety programs such as pedestrian safety campaigns to educate and promote traffic safety.

In addition, York Regional Police conducts targeted enforcement in conjunction with legislation to focus on high risk areas provided by the Transportation and Community Planning Department, such as speeding, impaired driving and distracted driving.

### **Regional and local municipal staff work with York Regional Police to educate the community on distracted driving**

On March 17, 2014, York Regional Police launched a distracted driving blitz at Vaughan's Colossus Theatre near Highway 7 and Weston Road, in the City of Vaughan, to coincide with the increased fines for distracted driving that were introduced on March 18, 2014.

York Regional Police conducted strict enforcement, with warnings issued to any motorist using a cell phone while driving (see Figure 7). The purpose of the distracted driving blitz was to educate the public about the increased fines. York Regional Police issued 80 cautions and seven charges during the two-hour media event. For the entire day across the Region, 160 warnings were issued to motorists who were distracted behind the wheel.

**Figure 7**  
Distracted Driving Blitz on March 17, 2014



In June 2014, Regional staff launched the pedestrian safety campaign to coincide with York Regional Police's distracted driving campaign, and focused on educating the public about distracted drivers and pedestrians.

### **Public outreach targets children, teenagers and seniors**

The Region continues to conduct public education campaigns to educate the public about pedestrian safety in partnership with York Regional Police. These include the Police Open House, Road, Rail and Community Safety Day and the National Public Works Family Fun Day in May (see Figure 8). These events provide great opportunities for staff to interactively communicate valuable pedestrian safety tips to the public, especially vulnerable road users.

**Figure 8**  
Road, Rail and Community Safety Day 2014  
Community Safety Village



### **Link to Key Council-approved Plans**

Vision 2051- Interconnected Systems for Mobility: A seamless network for mobility provides access to all destination using diverse transportation options for people in all communities, promotes active healthy living and safely and efficiently moves people and goods.

### **5. FINANCIAL IMPLICATIONS**

The costs associated with this report are included in the 2014 Transportation and Community Planning Operating budget.

### **6. LOCAL MUNICIPAL IMPACT**

Staff will continue to work with local municipalities and York Regional Police to promote traffic safety.

## 7. CONCLUSION

### **Driver responsibility plays a significant role in the overall safety of the Regional road network**

There are a number of factors that contribute to the risk of vehicle collisions, including vehicle design, operating speed, road design, road environment and human factors. Many places that appear dangerous may have fewer collisions than other locations, possibly due in part to driver behaviour, as they perceive the road to be hazardous and are more alert and attentive to the road environment. Some key elements of good driving habits include:

- Alertness and anticipating the behaviour of other users on the road
- Maneuvering the vehicle with its size and capabilities in mind
- Reading and reacting to road signs, conditions, weather and the surrounding environment

To build on recent success, the Region will put forth continuing efforts to improve safety on the Regional road network. These efforts include a comprehensive strategy targeting all road users to create awareness and improve the relationship between pedestrians and motorists. York Region will also continue to work collaboratively with York Regional Police to deal with distracted driving and speeding and to promote safe and efficient traffic operations on Regional roads.

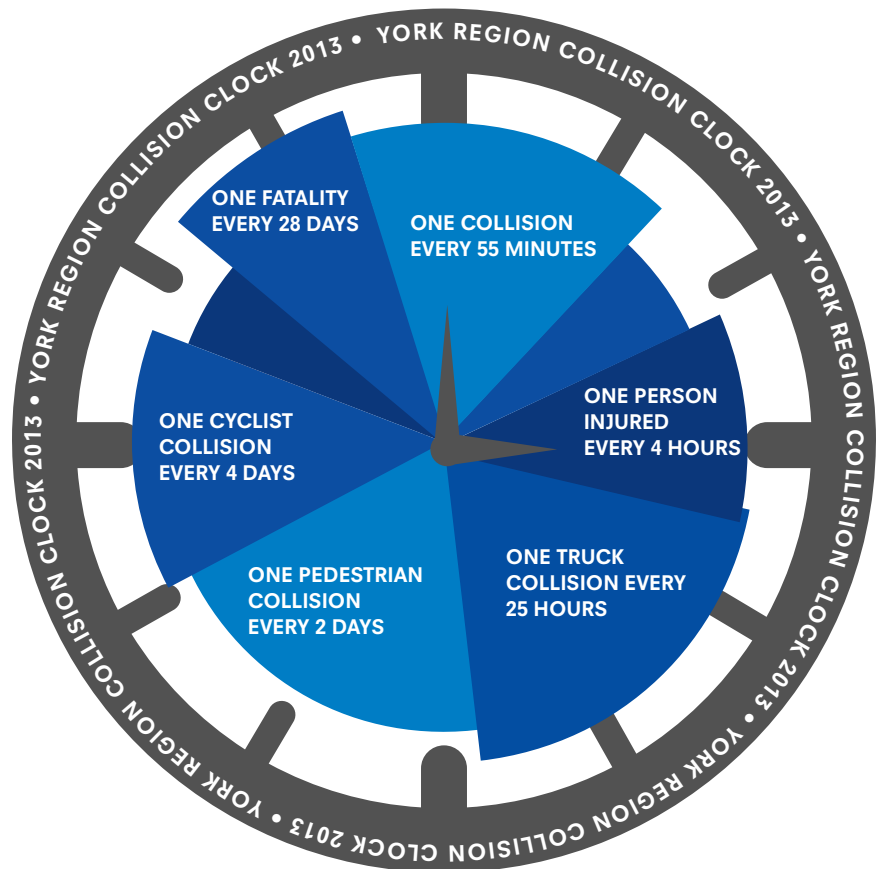
For more information on this report, please contact Steven Kemp, Director, Traffic Management and Intelligent Transportation Systems at ext. 75226.

The Senior Management Group has reviewed this report.

*Attachment (1)*



# Traffic Safety Status Report 2011-2013



# Introduction

The Traffic Safety Status Report is produced by the Transportation and Community Planning Department. The purpose of this report is to provide York Region residents, Councillors and staff with an understanding of road safety trends on Regional roads in York Region. In addition, this report is to support the planning and execution of coordinated law enforcement, road safety improvements, public education and advertising campaigns for York Region residents.

The collision data used in the preparation of this report was obtained from York Region's traffic data system and covers the period 2011 to 2013. This data system contains information on all collisions that occur on York Regional roads only. At this time, the data system does not contain collision data for local municipal roadways.

When a collision occurs, York Regional Police complete a Motor Vehicle Collision (MVC) report form. A copy of the MVC report is provided to Traffic Safety Group who then ensures the data is entered into the system.

This report is dedicated to those whose lives have been impacted by motor vehicle collisions in York Region.

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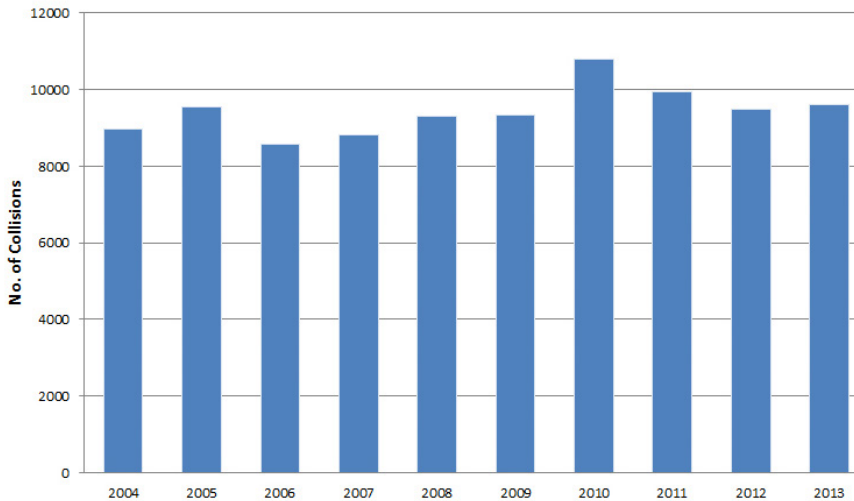
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## Collision Frequency and Severity

Between 2004 and 2009, statistics show a relatively consistent trend in the total number of collisions, increasing by approximately four per cent. However, there was an unusual spike in total collisions, increased by approximately 16 per cent in 2010.

Since 2010, the total number of collisions has decreased. However, the 2013 statistics show the total number of collisions has remained consistent as compared to 2012.

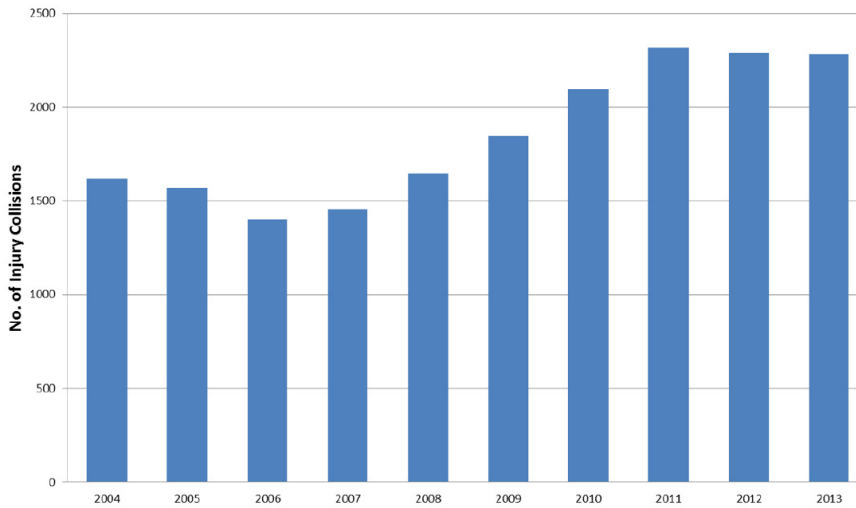


Collision frequency, between 2004 and 2013

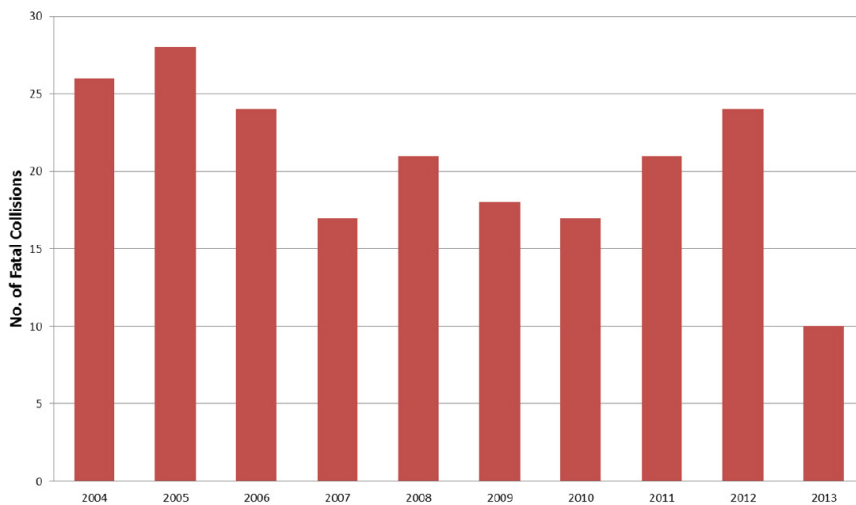
### 2011-2013 YORK REGION COLLISION STATISTICS HIGHLIGHTS

- Between 2011 and 2013, York Region population grew by approximately four per cent
- Between 2011 and 2013, total collisions decreased by four per cent. During the same period, casualty (injury and fatal) collisions decreased by two per cent

Between 2004 and 2013, injury collisions increased by approximately 41 per cent, while fatal collisions fluctuated over the same period. However, the Region experienced a 10-year low in fatal collisions in 2013, with a total of 10 fatalities.



Injury collision statistics, between 2004 and 2013

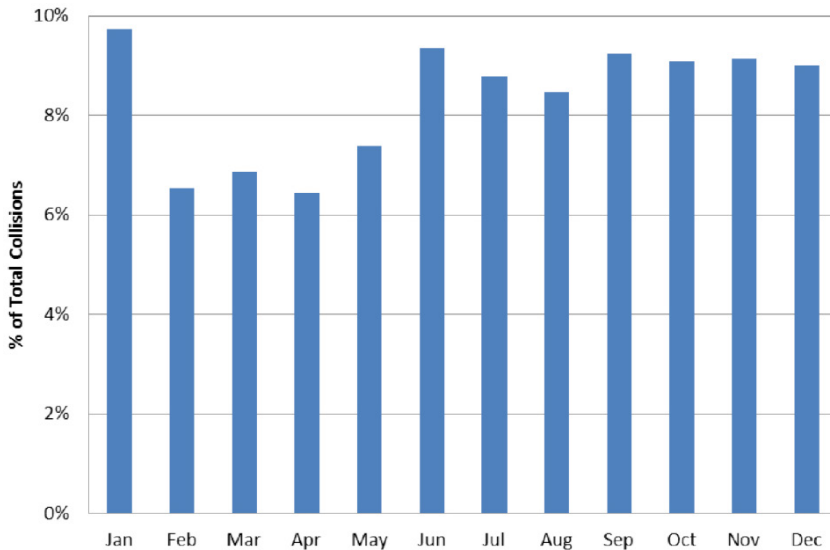


Fatal collision statistics, between 2004 and 2013

- Between 2011 and 2013, injury collisions accounted for 24 per cent of all collisions
- The Region experienced a 10-year low in fatal collisions in 2013, with a total of 10 fatalities

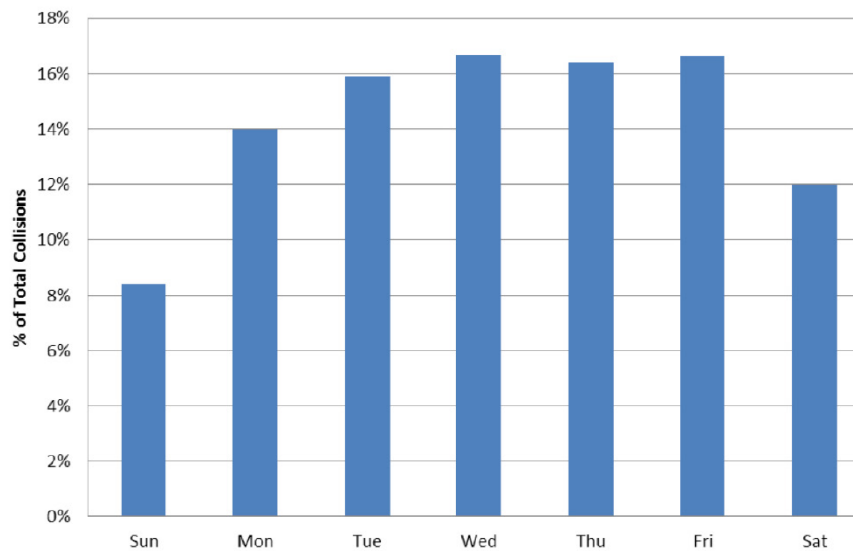
## Collisions by Month, Day, Time

It is evident that collisions follow a seasonal trend with higher collision frequencies during the fall and winter months. During the summer, we generally see an increase in collisions again because motorists generally drive faster, and there is no more pedestrian and cyclist activity, increasing potential conflicts between road users.



Collisions by month, three-year average between 2011 and 2013

The day-of-week collision pattern correlates closely with typical day-of-week traffic volume patterns – with higher collision frequencies on weekdays.

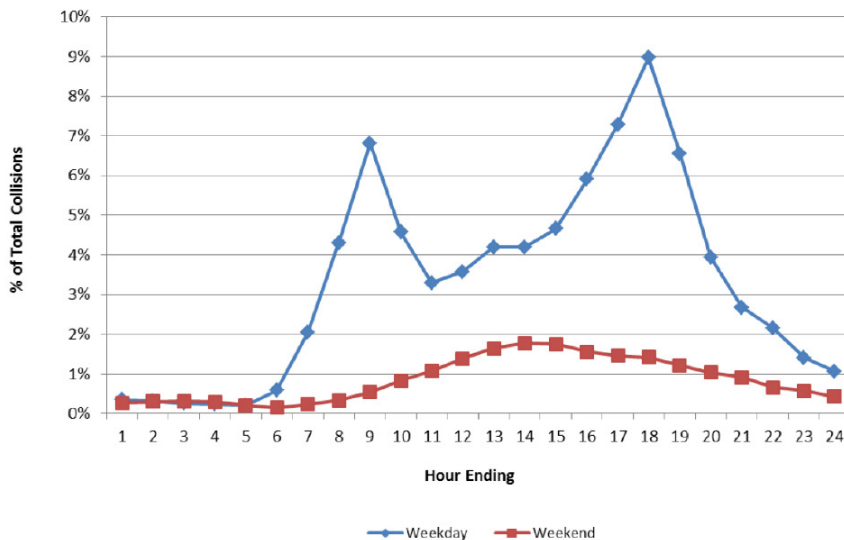


Collisions by day-of-week, three-year average between 2011 and 2013

- The months of November, December and January account for approximately 28 per cent of all collisions

- Approximately 80 per cent of all collisions occur on weekdays

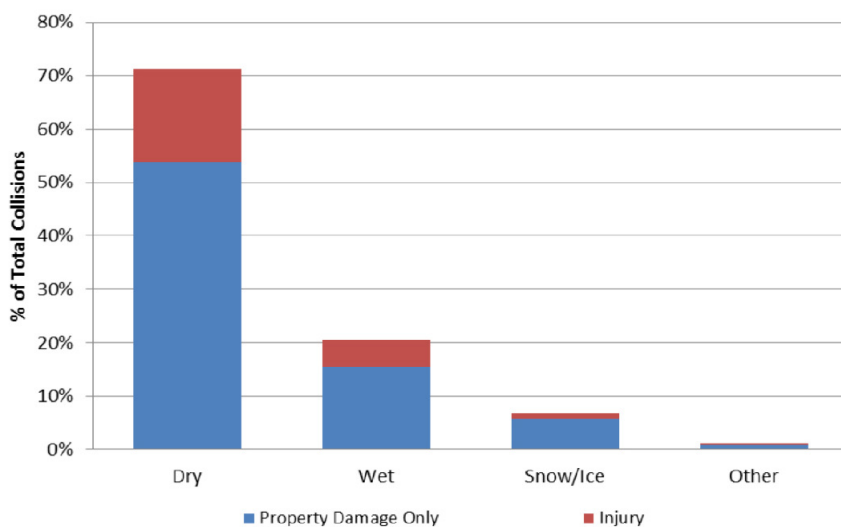
The time-of-day collision trend correlates closely with typical daily traffic volume patterns. Weekday collision peaks occur during the morning between 8 a.m. and 10 a.m. and afternoon between 3 p.m. and 7 p.m. There are generally more collisions during the afternoon on weekdays.



Collisions by time-of-day, three-year average between 2011 and 2013

## Collisions by Road Surface Condition

The majority of collisions occur during dry road surface condition. It is evident that we experienced, for the most part, dry road surface in 2011 and 2013. The 'other' category includes collisions that occurred when the road surface was covered with oil, mud, gravel, etc.



Collisions by road surface condition, three-year average between 2011 and 2013

- Weekday peak periods account for approximately 40 per cent of all collisions

- Based on the last three years of collision data, road users are most likely to have a collision between 5 p.m. and 6 p.m. on Wednesdays in January

- Approximately 71 per cent of all collisions occur during dry road surface conditions

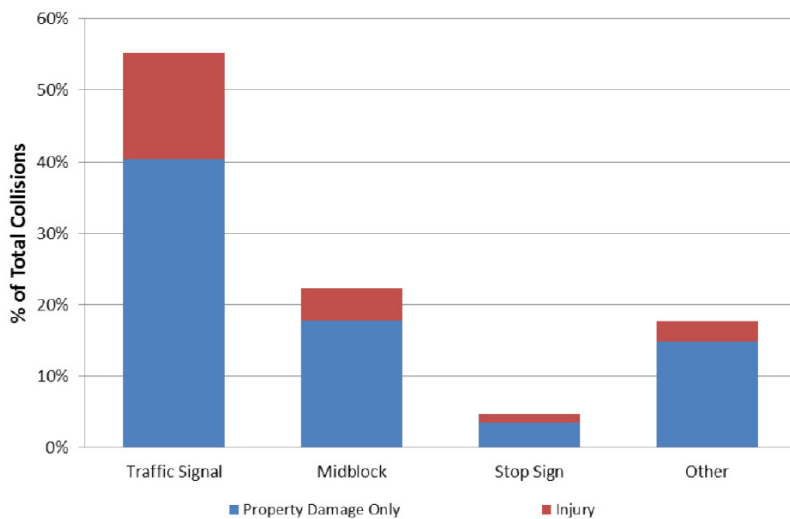


## Collisions by Traffic Control Type

The majority of collisions occur at signalized intersections. It is typical for residents to request traffic signals in response to a speeding problem or a long wait at an intersection before being able to enter the flow of traffic or to walk across the road safely. While these concerns are important, they are only addressed by signalization in very specific circumstances.

The installation of traffic signals may prevent angle and turning movement collisions at an intersection, however, they often increase the occurrence of rear-end collisions.

- Approximately 55 per cent of all collisions occur at signalized intersections

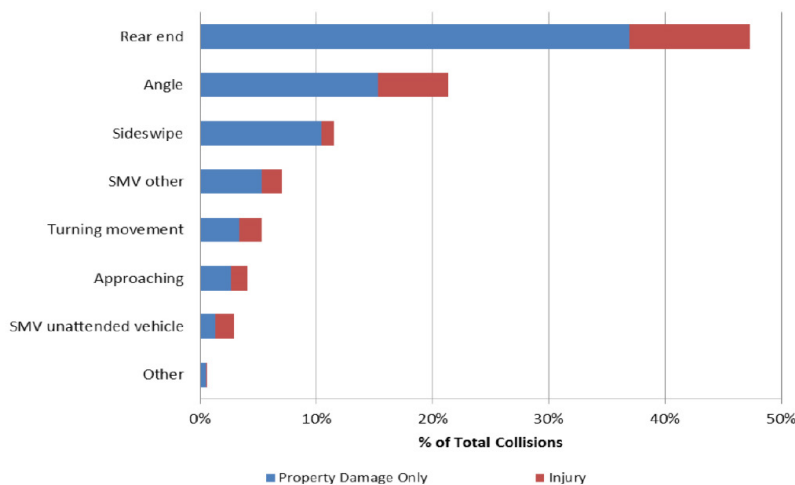


Collisions by traffic control type, three-year average between 2011 and 2013

## Collisions by Initial Impact Type

The most common collision type is rear-end collisions at signalized intersection. Rear-end collisions can occur as a result of driver inattention or distraction, tailgating, or acts of aggressive driving.

- Rear-end collisions represent 47 per cent per cent of all collisions

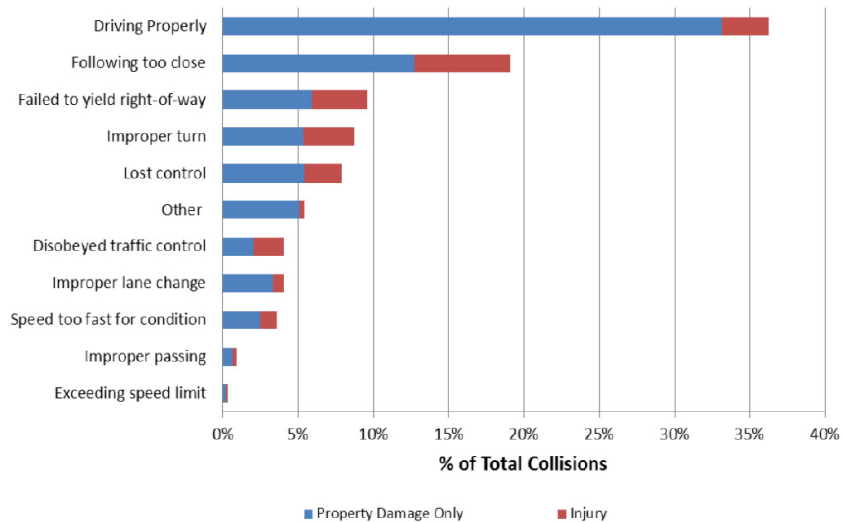


Collisions by initial impact type, three-year average between 2011 and 2013



## Collisions by Driver Action

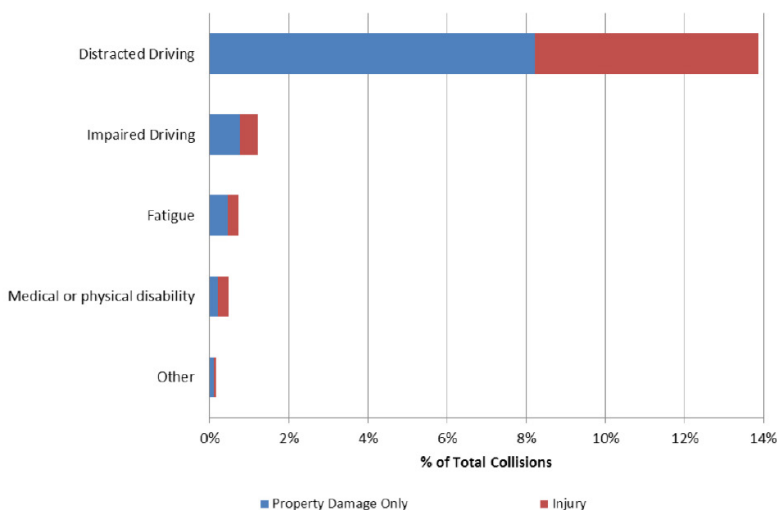
Statistics show that the attending police officer at collisions noted 'driving properly' in 36 per cent of cases. It would appear that 64 per cent of all collisions are as a result of someone's improper driving. This highlights the extent to which driver responsibility plays a significant role in overall safety on Regional roads.



Collisions by driver action, three-year average between 2011 and 2013

## Collisions by Driver Condition

The majority of collisions where the condition of the at-fault driver was recorded as 'normal' or 'unknown' accounted for about 83 per cent of all collisions. Of the remaining at-fault drivers, 14 per cent were identified as distracted drivers.



Collisions by at-fault driver condition, three-year average between 2011 and 2013

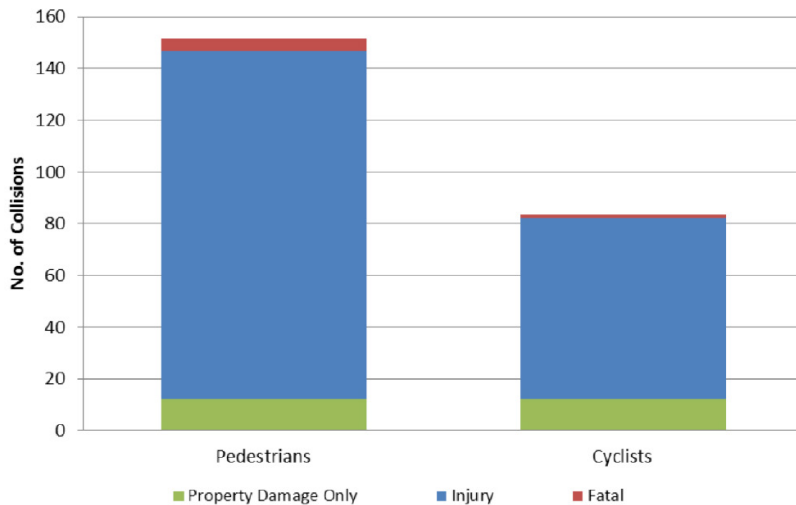
- Acts of aggressive driving were associated with approximately 32 per cent of all collisions

- Distracted driving accounts for approximately 14 per cent of all collisions



## Collisions Involving Vulnerable Road User

Approximately 87 per cent of collisions involving a vulnerable road user result in injury collisions.



Collisions involving a vulnerable road user, three-year average between 2011 and 2013

## Collisions by Location

The majority of high collision intersections are situated on the high volume arterials of Highway 7, Rutherford Road, Major Mackenzie Drive, and Yonge Street.

| Description                                  | Injury | Property Damage Only | Three-Year Total |
|--|--------|----------------------|------------------|
| Highway 7 at Weston Road                     | 45     | 166                  | 211              |
| Rutherford Road at Weston Road               | 44     | 142                  | 186              |
| Green Lane at Yonge Street                   | 35     | 144                  | 179              |
| Major Mackenzie Drive West at Jane Street    | 40     | 136                  | 176              |
| Highway 7 at McCowan Road                    | 33     | 143                  | 176              |
| Highway 7 at Keele Street                    | 38     | 136                  | 174              |
| Carrville Road/16th Avenue at Yonge Street   | 40     | 130                  | 170              |
| Highway 7 at Leslie Street                   | 34     | 128                  | 162              |
| Major Mackenzie Drive East at Bayview Avenue | 36     | 120                  | 156              |
| Rutherford Road at Jane Street               | 29     | 119                  | 148              |

High collision frequency intersections, three-year total between 2011 and 2013

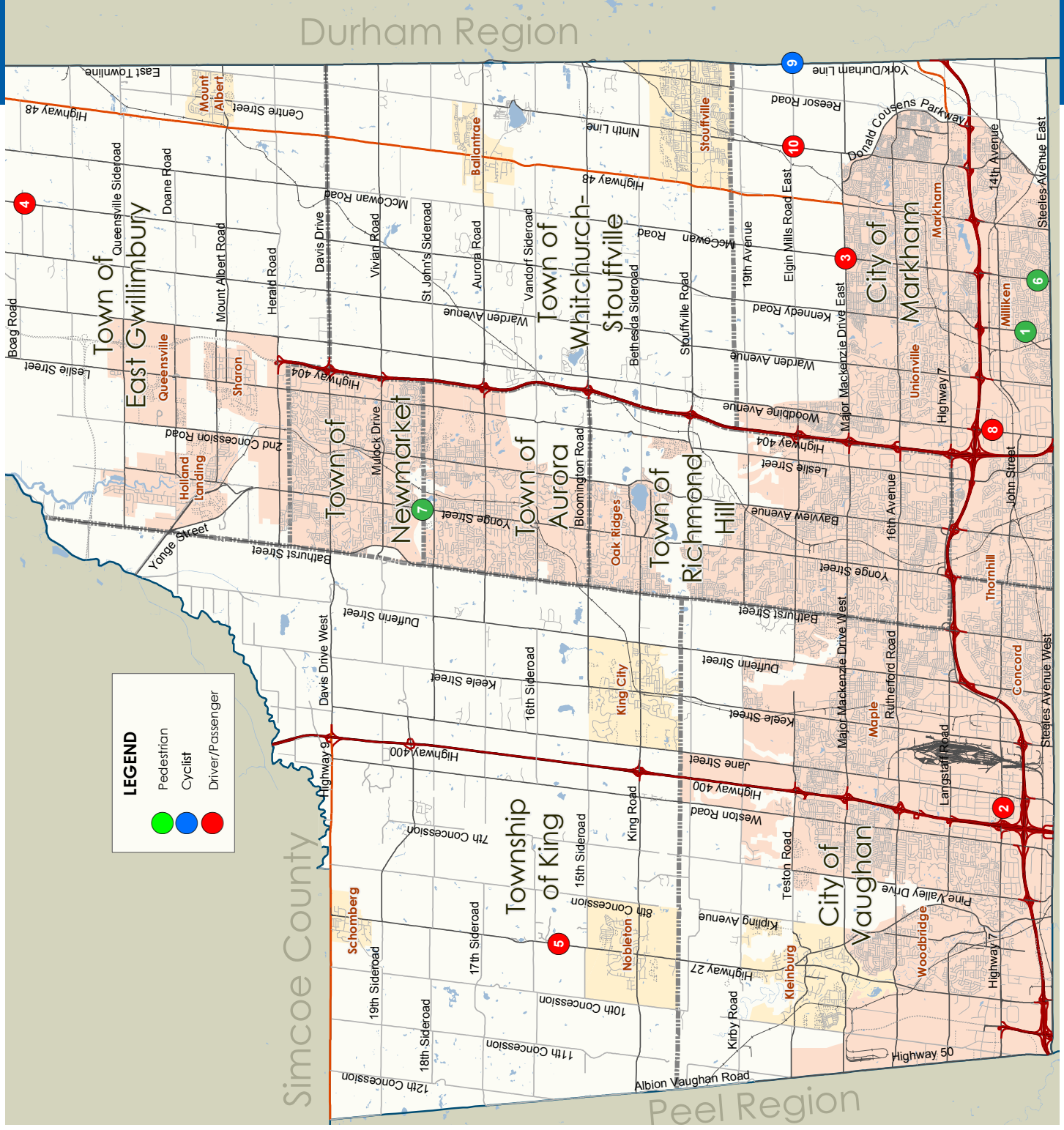
- Between 2011 and 2013, pedestrian collisions remained relatively consistent, cyclist collisions increased by approximately six per cent

- The intersection of Highway 7 at Weston Road experiences the highest number of collisions on the Regional road network

## 2013 Fatal Collisions

- 1 Kennedy Road and Denison Street (January 12)
- 2 Highway 7 and Edgeley Boulevard/Interchange Way (March 1)
- 3 Major Mackenzie Drive and McCowan Road (April 8)
- 4 Kennedy Road south of Boag Road (April 9)
- 5 Highway 27 south of 16th Sideroad (May 4)
- 6 Markham Road and Elson Road/Gillingham Avenue (July 4)
- 7 Yonge Street north of St. John's Sideroad (July 7)
- 8 Woodbine Avenue and Shields Court (July 17)
- 9 York/Durham Line and Elgin Mills Road (August 25)
- 10 Ninth Line and Elgin Mills Road (September 29)

Green circles represent pedestrian collisions, blue circles represent cyclist collisions and red circles represent vehicle collisions.



# Collision Frequency by Municipality

The following maps illustrate the top ten high collision intersections for York Region and for each of the municipalities separately for the three-year period between 2011 and 2013

York Region

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

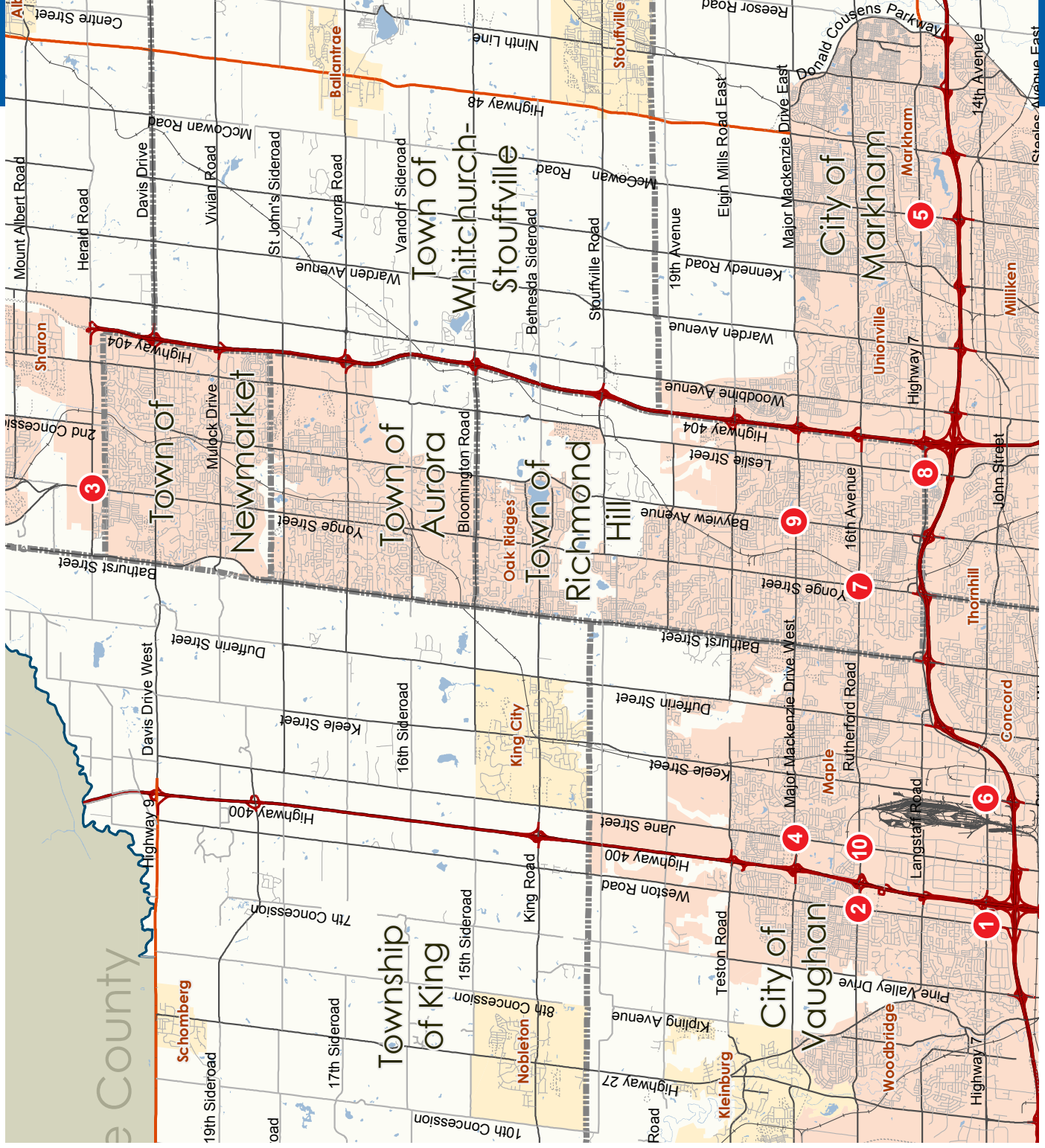
Town of Whitchurch-Stouffville



# Top 10 High Collision Intersections for York Region

- 1 Highway 7 and Weston Road (\*211)
- 2 Weston Road and Rutherford Road (\*186)
- 3 Yonge Street and Green Lane (\*179)
- 4 Major Mackenzie Drive and Jane Street (\*176)
- 5 Highway 7 and McCowan Road (\*176)
- 6 Keele Street and Highway 7 (\*174)
- 7 Yonge Street and Carrville Road/16th Avenue (\*170)
- 8 Highway 7 and Leslie Street (\*162)
- 9 Major Mackenzie Drive and Bayview Avenue (\*156)
- 10 Jane Street and Rutherford Road (\*148)

\*represents the number of collisions between 2011 and 2013

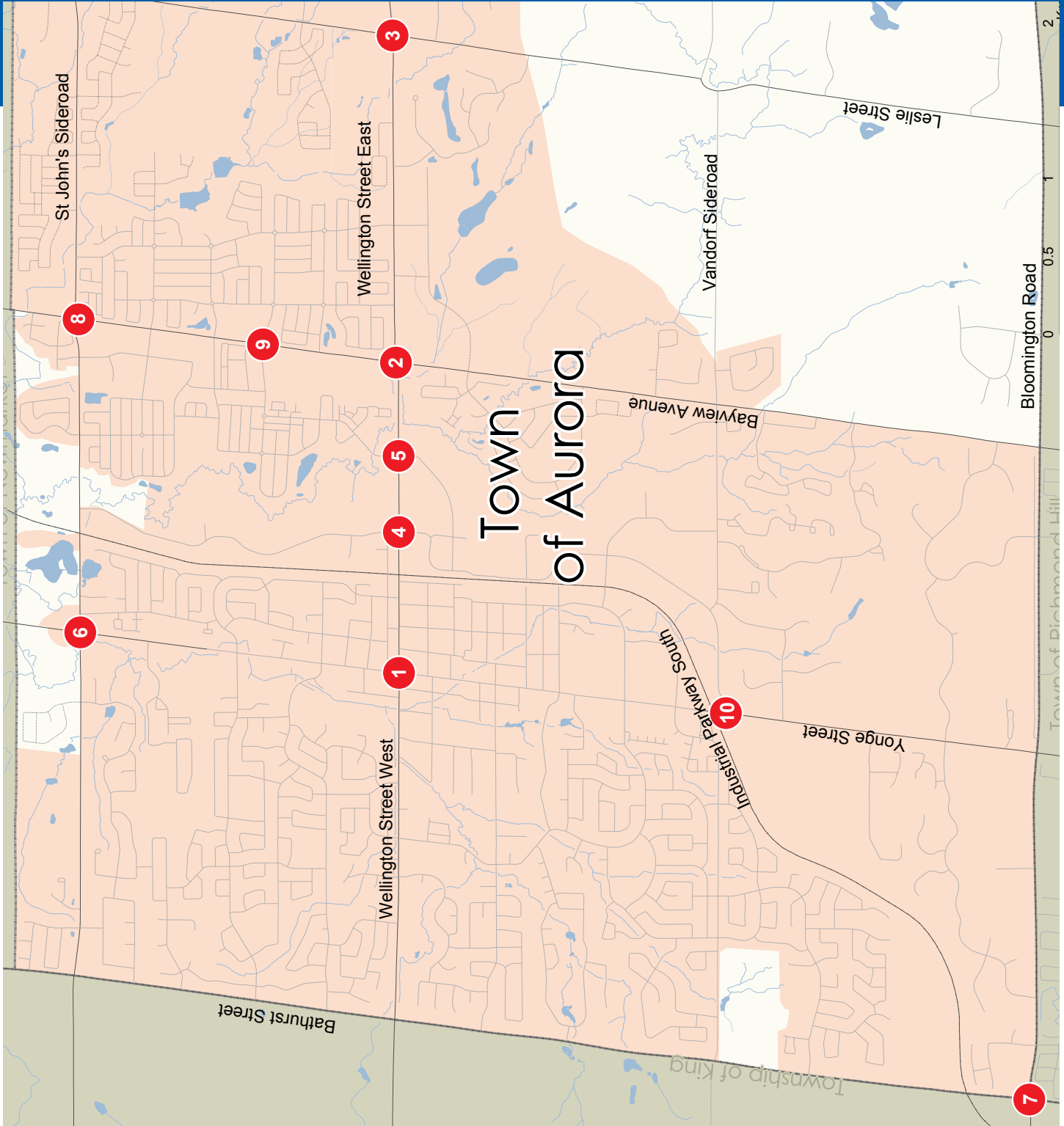




## Top 10 High Collision Intersections for the Town of Aurora

- 1 Yonge Street and Wellington Street; overall York Region rank 26 (\*100)
- 2 Bayview Avenue and Wellington Street; overall York Region rank 98 (\*51)
- 3 Leslie Street and Wellington Street; overall York Region rank 101 (\*51)
- 4 Wellington Street and Industrial Parkway; overall York Region rank 103 (\*50)
- 5 Wellington Street and Mary Street/John West Way; overall York Region rank 137 (\*42)
- 6 Yonge Street and St John's Sideroad; overall York Region rank 185 (\*34)
- 7 Bathurst Street and Bloomington Road/15th Sideroad; overall York Region rank 223 (\*29)
- 8 St John's Sideroad and Bayview Avenue; overall York Region rank 242 (\*26)
- 9 Bayview Avenue and Hollidge Boulevard/Borealis Avenue; overall York Region rank 314 (\*21)
- 10 Yonge Street and Industrial Parkway; overall York Region rank 316 (\*21)

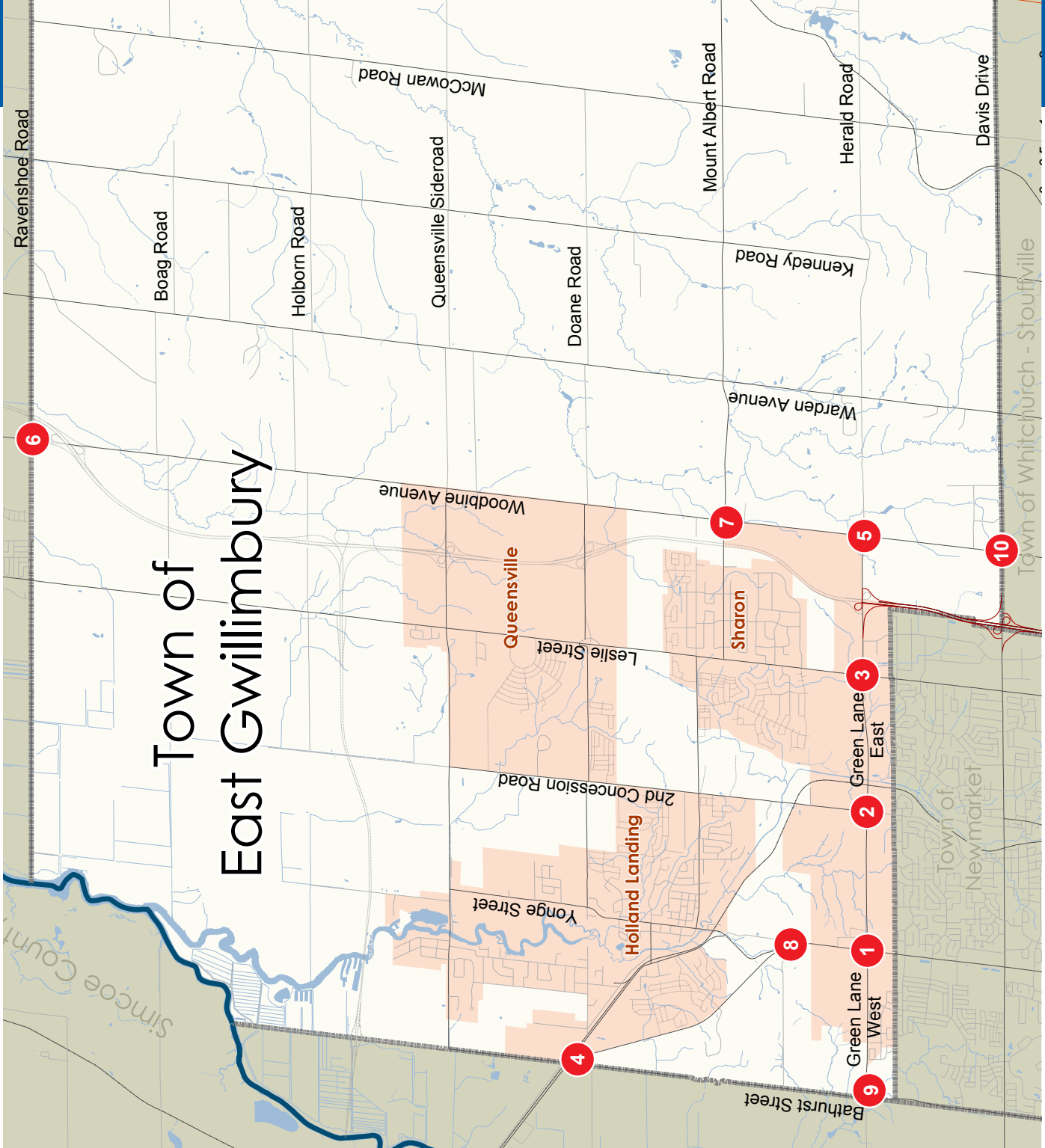
\*represents the number of collisions between 2011 and 2013



# Top 10 High Collision Intersections for the Town of East Gwillimbury

- 1 Yonge Street and Green Lane; overall York Region rank 3 (\*179)
- 2 Green Lane and Main Street/2nd Concession Road; overall York Region rank 38 (\*89)
- 3 Leslie Street and Green Lane; overall York Region rank 99 (\*51)
- 4 Highway 11 and Bathurst Street; overall York Region rank 142 (\*41)
- 5 Woodbine Avenue and Herald Road/Green Lane; overall York Region rank 151 (\*39)
- 6 Woodbine Avenue and Ravenshoe Road; overall York Region rank 177 (\*35)
- 7 Woodbine Avenue and Mount Albert Road; overall York Region rank 238 (\*27)
- 8 Highway 11 and Morning Sideroad/Yonge Street; overall York Region rank 250 (\*26)
- 9 Bathurst Street and Green Lane/Miller's Sideroad; overall York Region rank 279 (\*24)
- 10 Woodbine Avenue and Davis Drive; overall York Region rank 296 (\*23)

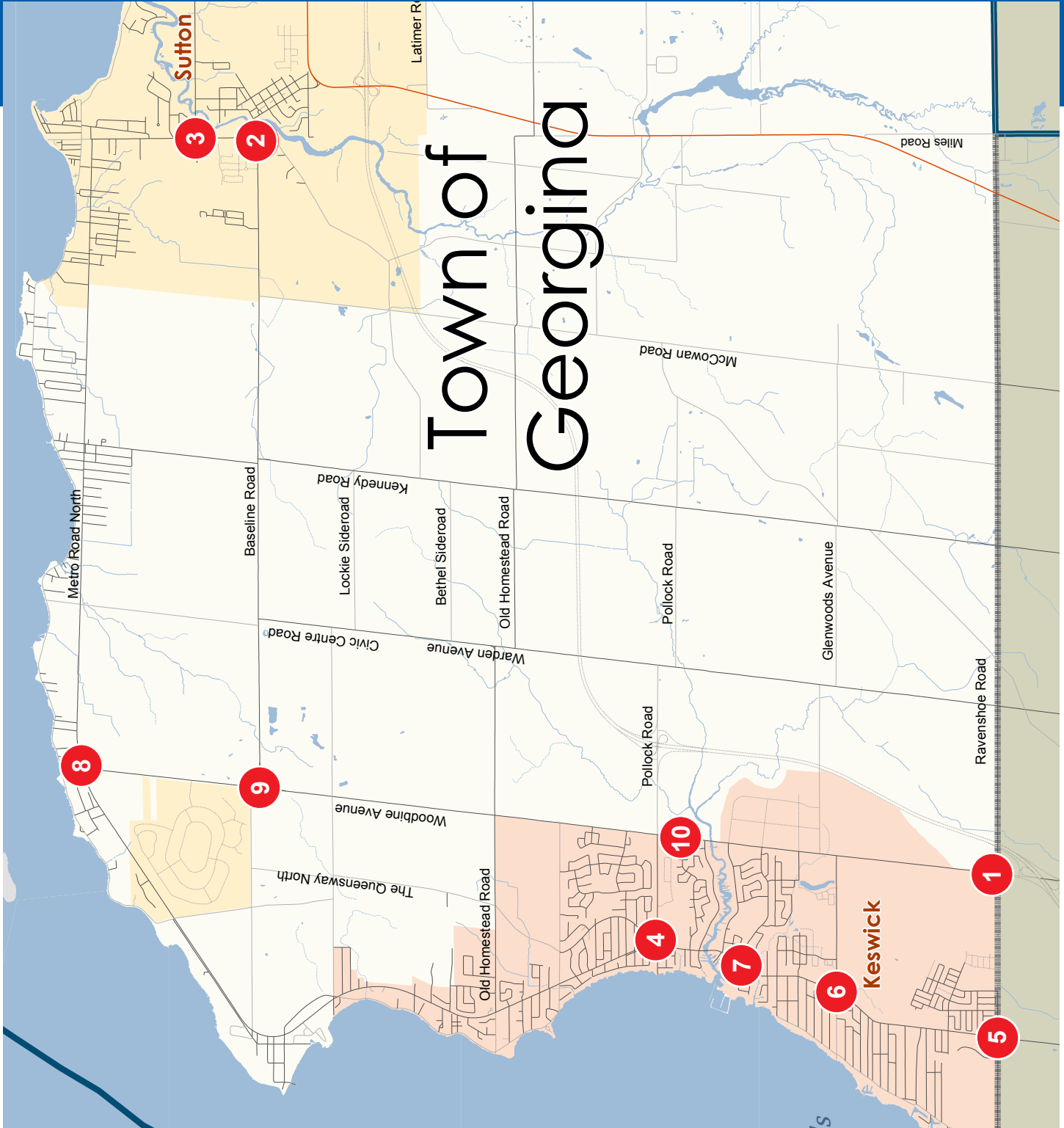
\*represents the number of collisions between 2011 and 2013



## Top 10 High Collision Intersections for the Town of Georgina

- 1 Woodbine Avenue and Ravenshoe Road; overall York Region rank 177 (\*35)
- 2 Dalton Road and McDonough Avenue/High Street; overall York Region rank 326 (\*21)
- 3 Dalton Road and Black River Road; overall York Region rank 407 (\*17)
- 4 The Queensway and Metro Road/Morton Avenue; overall York Region rank 422 (\*16)
- 5 Ravenshoe Road and Leslie Street/The Queensway; overall York Region rank 424 (\*16)
- 6 The Queensway and Glenwoods Avenue; overall York Region rank 512 (\*14)
- 7 The Queensway and Biscayne Boulevard; overall York Region rank 517 (\*13)
- 8 Woodbine Avenue and Metro Road; overall York Region rank 541 (\*13)
- 9 Woodbine Avenue and Baseline Road; overall York Region rank 549 (\*13)
- 10 Woodbine Avenue and Arlington Drive; overall York Region rank 713 (\*10)

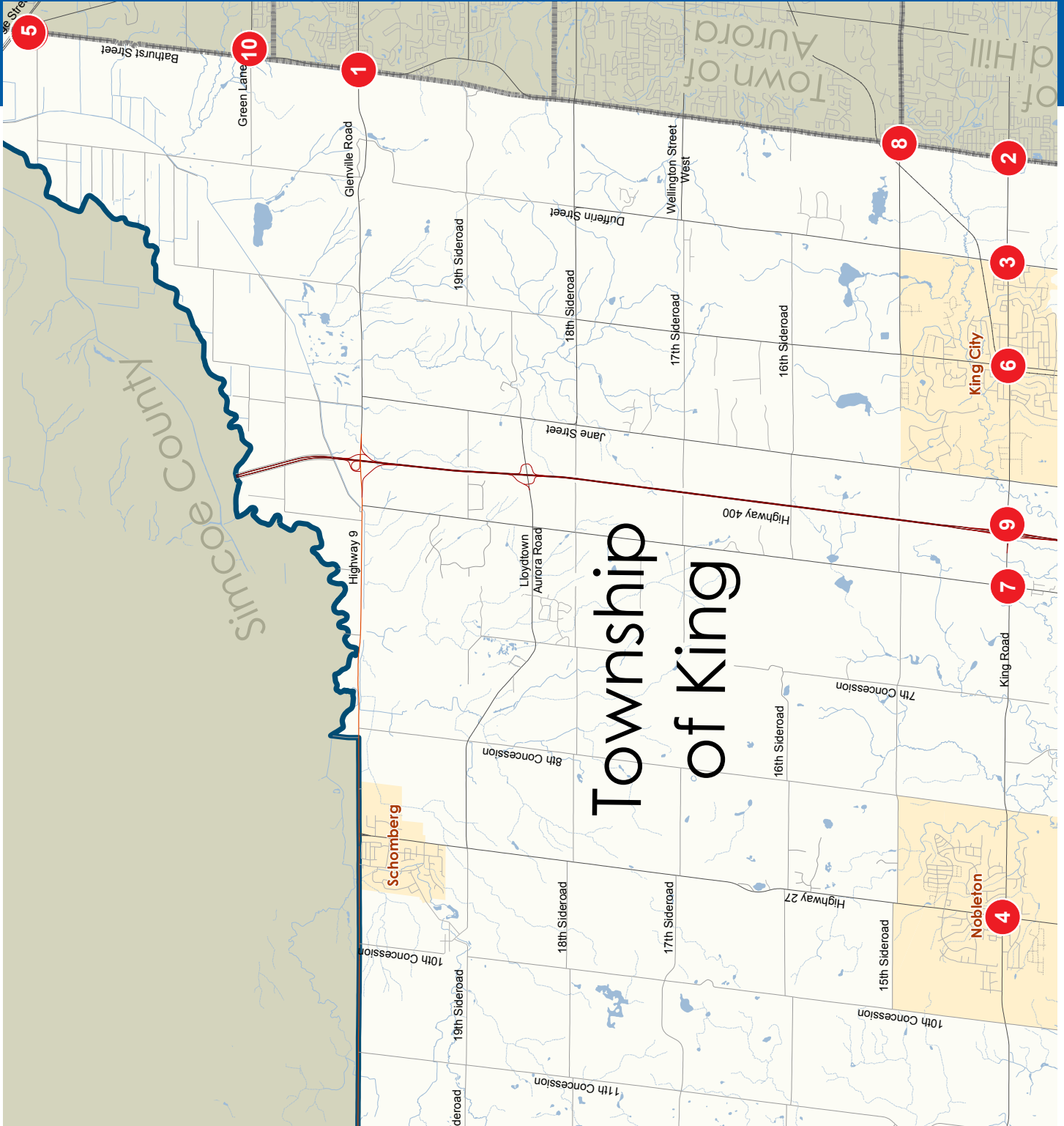
\*represents the number of collisions between 2011 and 2013



## Top 10 High Collision Intersections for the Township of King

- 1 Davis Drive and Bathurst Street; overall York Region rank 81 (\*60)
- 2 King Road and Bathurst Street; overall York Region rank 93 (\*54)
- 3 King Road and Dufferin Street; overall York Region rank 96 (\*53)
- 4 King Road and Highway 27; overall York Region rank 122 (\*46)
- 5 Highway 11 and Bathurst Street; overall York Region rank 142 (\*41)
- 6 Keele Street and King Road; overall York Region rank 205 (\*31)
- 7 King Road and Weston Road; overall York Region rank 221 (\*29)
- 8 Bathurst Street and Bloomington Road/15th Sideroad; overall York Region rank 223 (\*29)
- 9 King Road and Highway 400; overall York Region rank 252 (\*26)
- 10 Bathurst Street and Green Lane/Miller's Sideroad; overall York Region rank 279 (\*24)

\*represents the number of collisions between 2011 and 2013

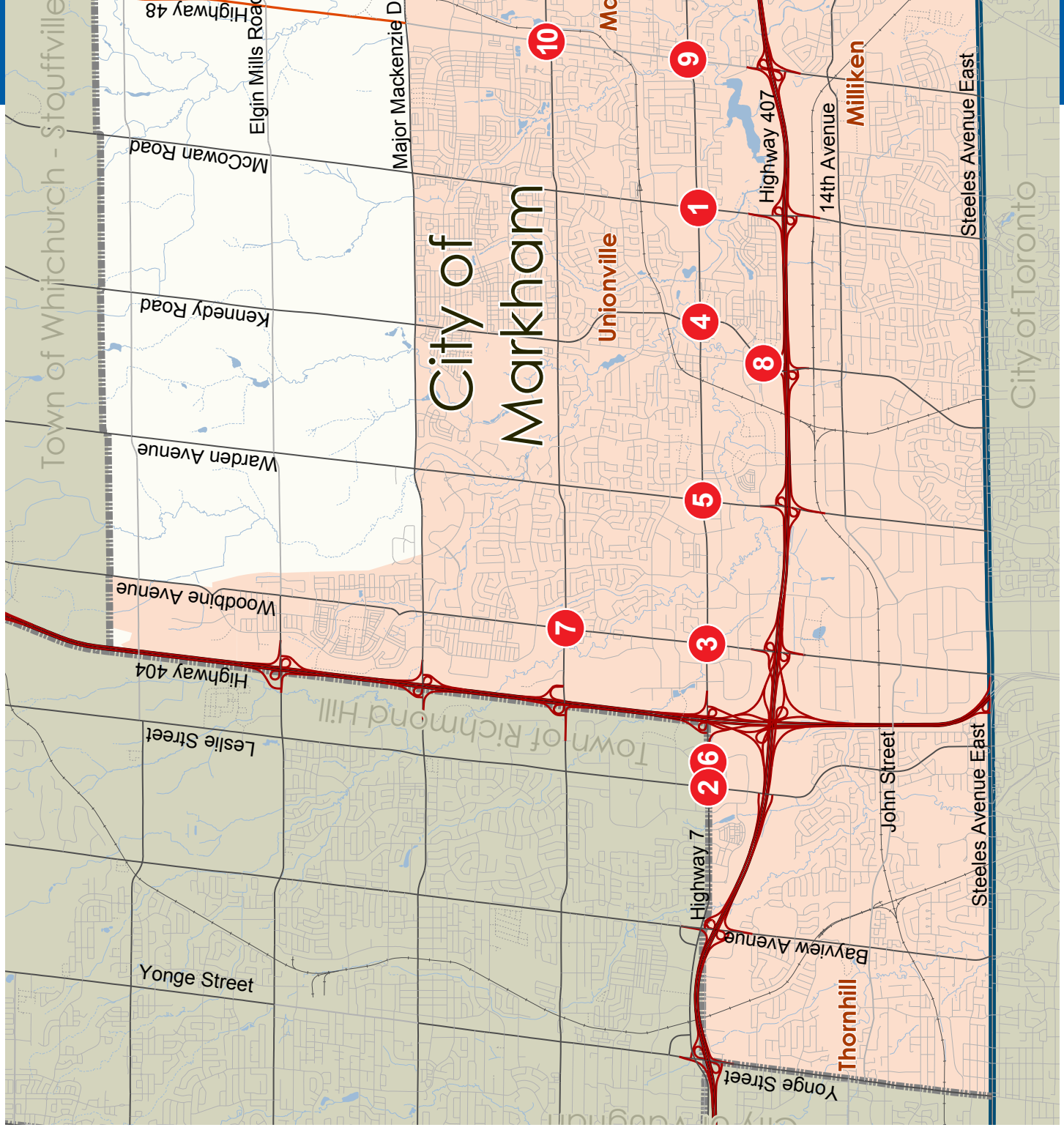




## Top 10 High Collision Intersections for the City of Markham

- 1 Highway 7 and McCowan Road; overall York Region rank 5 (\*176)
- 2 Highway 7 and Leslie Street; overall York Region rank 8 (\*162)
- 3 Highway 7 and Woodbine Avenue; overall York Region rank 12 (\*136)
- 4 Highway 7 and Kennedy Road; overall York Region rank 17 (\*121)
- 5 Highway 7 and Warden Avenue; overall York Region rank 19 (\*108)
- 6 Highway 7 and Commerce Valley Drive/ East Beaver Creek Road; overall York Region rank 20 (\*106)
- 7 Woodbine Avenue and 16th Avenue; overall York Region rank 21 (\*106)
- 8 Kennedy Road and Helen Avenue/YMCA Boulevard; overall York Region rank 23 (\*103)
- 9 Highway 7 and Main Street Markham; overall York Region rank 27 (\*100)
- 10 16th Avenue and Highway 48/Main Street Markham; overall York Region rank 31 (\*95)

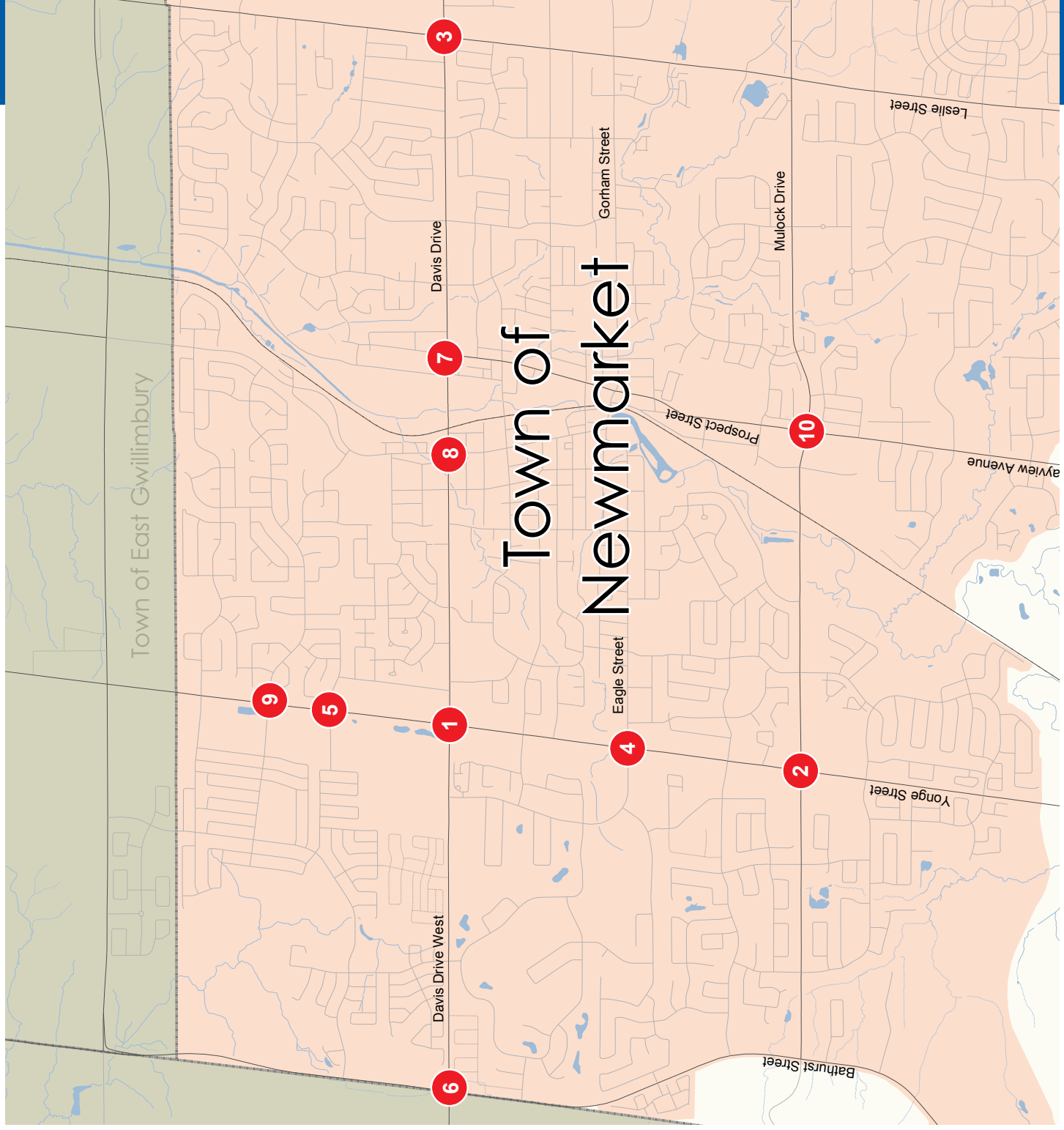
\*represents the number of collisions between 2011 and 2013



## Top 10 High Collision Intersections for the Town of Newmarket

- 1 Yonge Street and Davis Drive; overall York Region rank 24 (\*103)
- 2 Yonge Street and Mullock Drive; overall York Region rank 54 (\*76)
- 3 Leslie Street and Davis Drive; overall York Region rank 64 (\*68)
- 4 Yonge Street and Eagle Street; overall York Region rank 74 (\*66)
- 5 Yonge Street and Kingston Road/Dawson Manor Boulevard; overall York Region rank 78 (\*64)
- 6 Davis Drive and Bathurst Street; overall York Region rank 81 (\*60)
- 7 Davis Drive and Lundy's Lane/Prospect Street; overall York Region rank 100 (\*51)
- 8 Davis Drive and Main Street; overall York Region rank 107 (\*49)
- 9 Yonge Street and London Road/Bonshaw Avenue; overall York Region rank 114 (\*47)
- 10 Mullock Drive and Prospect Street/Bayview Avenue; overall York Region rank 124 (\*45)

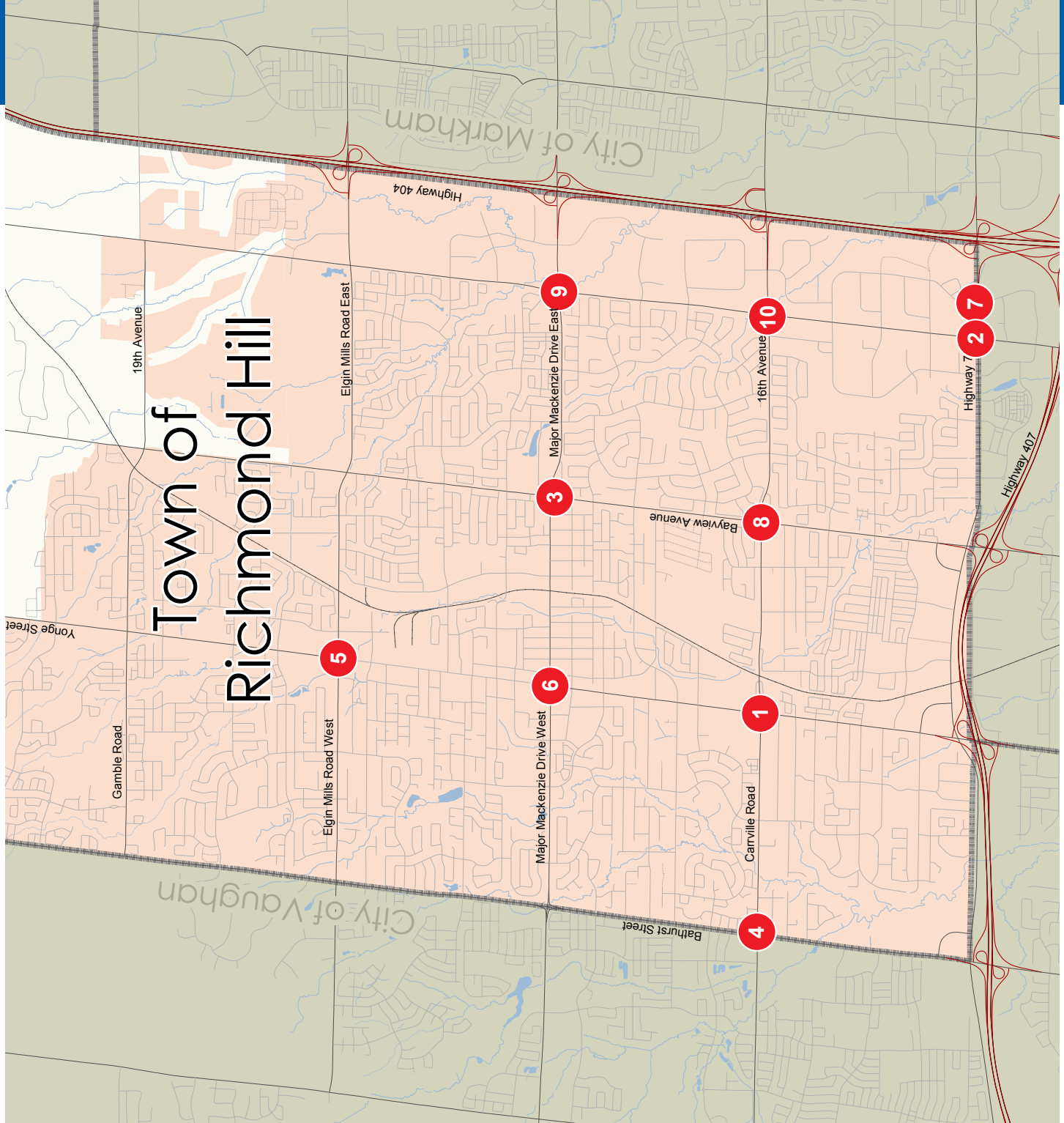
\*represents the number of collisions between 2011 and 2013



# Top 10 High Collision Intersections for the Town of Richmond Hill

- 1 Yonge Street and Carrville Road/16th Avenue; overall York Region rank 7 (\*170)
- 2 Highway 7 and Leslie Street; overall York Region rank 8 (\*162)
- 3 Major Mackenzie Drive and Bayview Avenue; overall York Region rank 9 (\*156)
- 4 Bathurst Street and Carrville Road/Rutherford Road; overall York Region rank 13 (\*125)
- 5 Yonge Street and Elgin Mills Road; overall York Region rank 15 (\*123)
- 6 Yonge Street and Major Mackenzie Drive; overall York Region rank 18 (\*121)
- 7 Highway 7 and Commerce Valley Drive/East Beaver Creek Road; overall York Region rank 20 (\*106)
- 8 Bayview Avenue and 16th Avenue; overall York Region rank 30 (\*96)
- 9 Leslie Street and Major Mackenzie Drive; overall York Region rank 36 (\*91)
- 10 Leslie Street and 16th Avenue; overall York Region rank 62 (\*69)

\*represents the number of collisions between 2011 and 2013

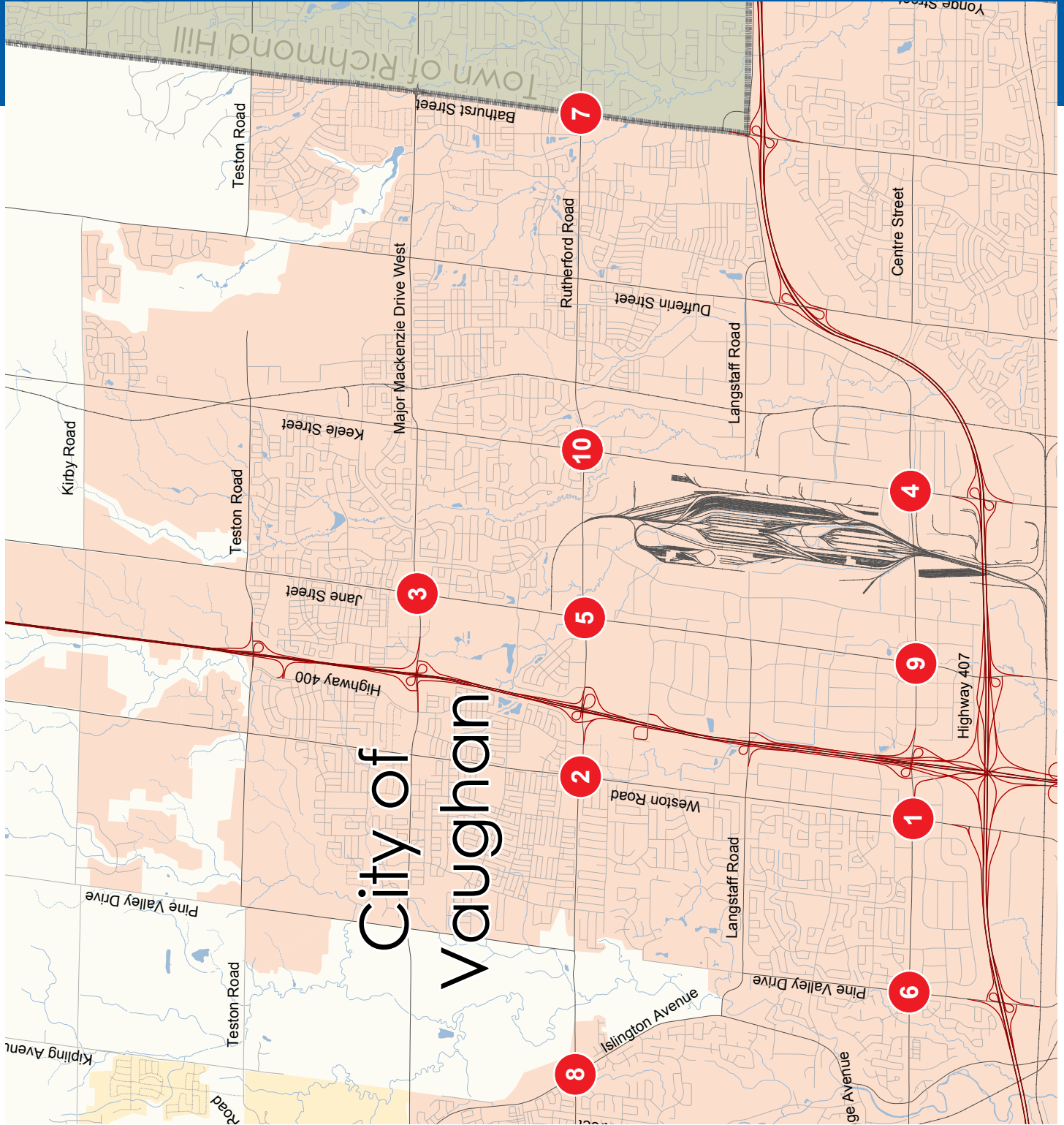




## Top 10 High Collision Intersections for the City of Vaughan

- 1 Highway 7 and Weston Road; overall York Region rank 1 (\*211)
- 2 Weston Road and Rutherford Road; overall York Region rank 2 (\*186)
- 3 Major Mackenzie Drive and Jane Street; overall York Region rank 4 (\*176)
- 4 Keele Street and Highway 7; overall York Region rank 6 (\*174)
- 5 Jane Street and Rutherford Road; overall York Region rank 10 (\*148)
- 6 Highway 7 and Pine Valley Drive; overall York Region rank 11 (\*144)
- 7 Bathurst Street and Carrville Road/Rutherford Road; overall York Region rank 13 (\*125)
- 8 Islington Avenue and Rutherford Road; overall York Region rank 14 (\*125)
- 9 Highway 7 and Jane Street; overall York Region rank 16 (\*122)
- 10 Keele Street and Rutherford Road; overall York Region rank 22 (\*105)

\*represents the number of collisions between 2011 and 2013



## Top 10 High Collision Intersections for the Town of Whitchurch-Stouffville

- 1 Woodbine Avenue and Davis Drive; overall York Region rank 296 (\*25)
- 2 Woodbine Avenue and Aurora Road; overall York Region rank 297 (\*25)
- 3 Main Street and Ninth Line; overall York Region rank 310 (\*22)
- 4 Woodbine Avenue and Stouffville Road; overall York Region rank 330 (\*20)
- 5 Bloomington Road and Highway 48; overall York Region rank 386 (\*18)
- 6 Stouffville Road and Warden Avenue; overall York Region rank 393 (\*17)
- 7 Bloomington Road and Ninth Line; overall York Region rank 464 (\*15)
- 8 Woodbine Avenue and Bloomington Road; overall York Region rank 505 (\*14)
- 9 Bloomington Road and Warden Avenue; overall York Region rank 506 (\*14)
- 10 Highway 48 and Stouffville Road/Main Street; overall York Region rank 591 (\*12)

\*represents the number of collisions between 2011 and 2013

