

The Transportation Master Plan (TMP) provides the framework for developing the current 10 year roads construction program. The TMP supports the Regional goal of sustainability, which is measured through three themes: sustainable natural environment, economic vitality and healthy communities.

The Roads Construction Program, also known as the 10 Year Roads Capital Plan, is a program of planned road and transit improvements to accommodate growth in population and employment in the Region and to upgrade existing roads to meet Regional design standards. Major projects include road widenings, grade separations, road re-constructions, jog eliminations and major intersection improvements.

It is also geared towards meeting the Region's 2011-2015 Strategic Priority Area of "Continue to Deliver and Sustain Critical Infrastructure" with the focus on moving people. It includes a number of ongoing programs designed to optimize the efficiency and effectiveness of the Regional road network. This includes a series of projects as part of the Intelligent Transportation System (ITS) Strategy that were first adopted as part of the 2008 plan. The goal of these projects is to provide more accurate and timely data to commuters so that more informed travel choices can be made. It will also allow York Region to be more responsive in the case of incidents on our roads so that the network can respond in the most efficient manner.

## 2011 - 10 Year Roads Construction Program will include:

- Building approximately 410 new lane-kilometres of arterial roads
- Resurfacing approximately 600 lane-kilometres of Regional roads
- Rehabilitating approximately 70 bridge structures
- Improving approximately 18 intersections
- Building 150 kilometres of bike lanes
- Building 105 lane-kilometres of Transit/HOV lanes
- Building two new highway interchanges
- Building three new rail grade-separations

## CONTACT INFORMATION

For more information about projects in the 10 Year Capital Plan, please visit the York Region website.



[www.york.ca/Services/Construction](http://www.york.ca/Services/Construction)





QUICKFACTS

- Over the past five years, York Region has widened 65 kilometres of arterial roads adding approximately 153 new lane-kilometres to the Regional road network
- Approximately 870 lane-kilometres of Regional roads have been reconstructed or resurfaced in the past five years



York Region is committed to improving the Regional road system through road widening and resurfacing projects to meet the needs of population and employment growth.

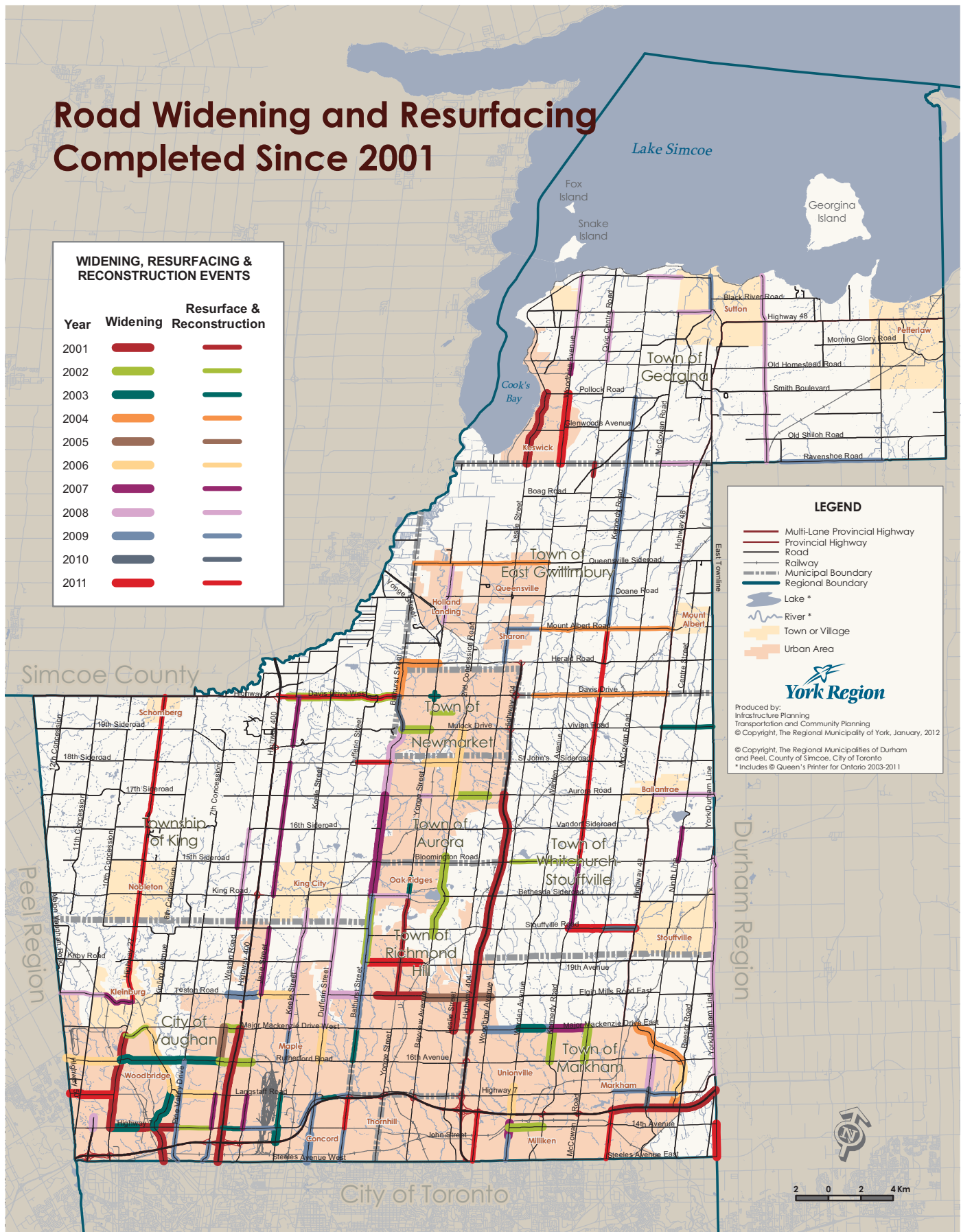
To optimize the delivery of different Regional infrastructure, road projects are coordinated with water, wastewater, utilities, rapid transit, development construction and maintenance work projects wherever they coincide physically with similar timing. This reduces public cost and inconvenience to the travelling public.

Road widening helps ease congestion on York Region’s heavily travelled roads while resurfacing projects ensure that infrastructure will continue to be in a state of good repair. The chart below and the following map outline the number of linear kilometres of road that have been widened, resurfaced or reconstructed since 2001.



| Year  | Linear Kilometres of Regional Road Widening | Linear Kilometres of Regional Road Resurfacing & Reconstruction |
|-------|---------------------------------------------|-----------------------------------------------------------------|
| 2001  | 21                                          | 7                                                               |
| 2002  | 29                                          | 9                                                               |
| 2003  | 13                                          | 12                                                              |
| 2004  | 9                                           | 25                                                              |
| 2005  | 6                                           | 44                                                              |
| 2006  | 25                                          | 49                                                              |
| 2007  | 9                                           | 31                                                              |
| 2008  | 9                                           | 72                                                              |
| 2009  | 10                                          | 78                                                              |
| 2010  | 12                                          | 55                                                              |
| Total | 143                                         | 382                                                             |

# Road Widening and Resurfacing Completed Since 2001





York Region is intersected by six railway corridors: CN York subdivision, CP MacTier subdivision, GO Barrie, CN Bala subdivision, GO Uxbridge and CP Havelock subdivision. CN York, CP MacTier and CN Bala subdivisions are major freight routes. The GO Barrie and GO Uxbridge lines and the CN Bala subdivision are important regional urban passenger rail corridors with GO Transit rail services operating during peak periods.

Rail-rail and rail-road intersections are considered for grade separation as a way to improve train, goods and passenger movements. Grade separations improve service reliability and train safety.

Factors such as traffic volume on both rail and road facilities, location, terrain and roadway surface will determine the type of rail crossing implemented to protect public safety.

Grade separation of existing at-grade rail crossings in York Region is an important component of the Region's 10 Year Roads Construction Program. It provides for increased traffic capacity and improved traffic safety on road and rail corridors.

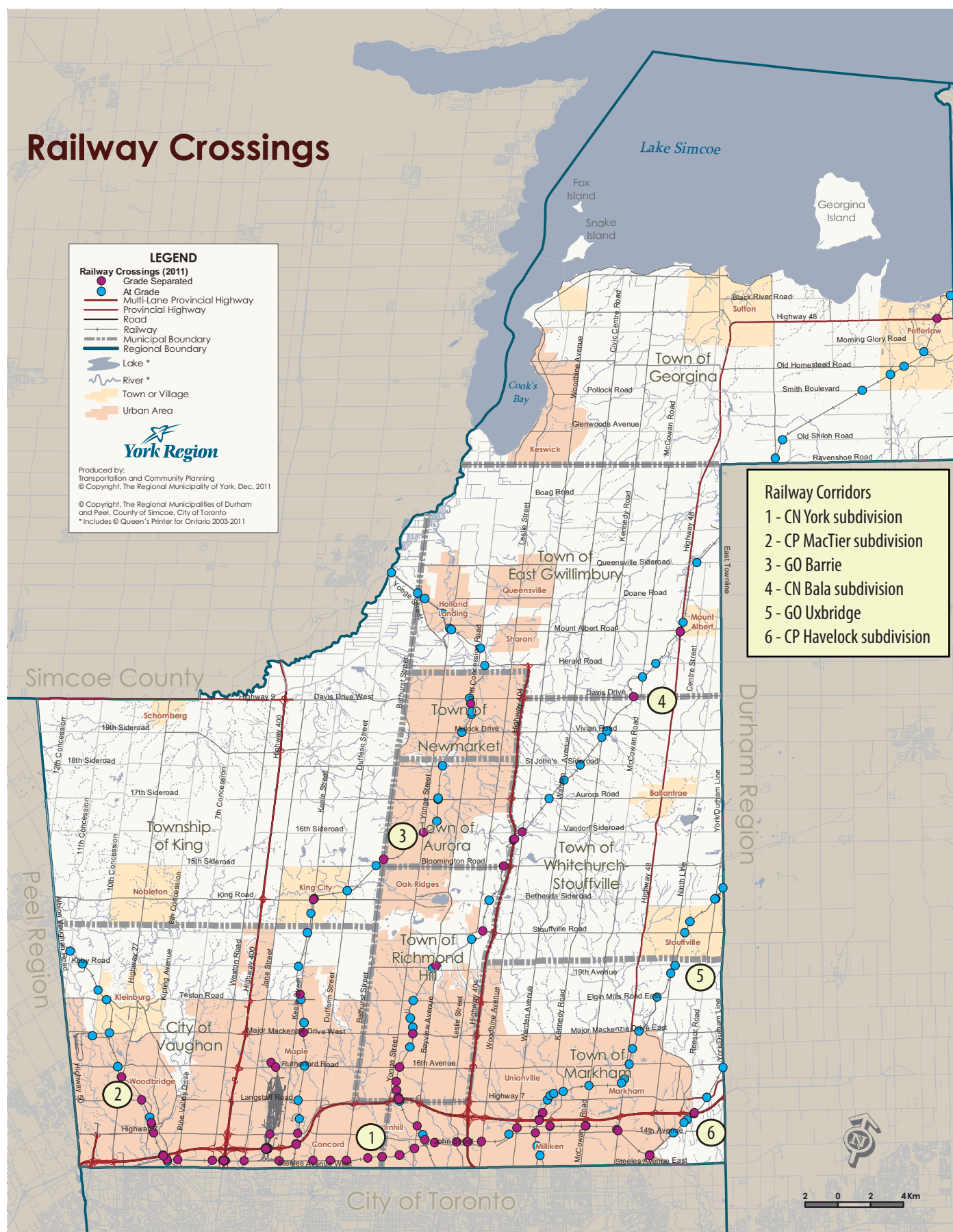
Existing and forecast traffic and train volumes are used in a hazard formula to calculate a Rail Exposure Index. This index is used to rank the priority for various forms of crossing protection including the need to grade separate existing at-grade rail crossings. It is this priority ranking that forms the basis for inclusion in York Region's Roads Construction Program.

## QUICKFACTS

- 179 railway crossings in York Region
- 83 of these railway crossings are on Regional roads
- Of the 87 level or at-grade crossings, 42 are on Regional roads
- 92 grade separated crossings, 41 are on Regional roads
- There are four rail-to-rail grade separations



# Railway Crossings



In April 2011, York Region approved the new speed limit policy for Regional roads. This policy superseded the speed limit policy that was adopted in September 2004.

The new speed limit policy is based on three basic principles:

1. Speed limits should be set as low as reasonably possible to reduce the likelihood of serious injury or death in the event of a collision.
2. Speeds limits should ideally be self-enforcing. The design of the roadway should create conditions that encourage compliance with the posted speed limit.
3. Urban areas, towns and villages with higher volumes of pedestrians, cyclists and children playing require special attention.



These principles reflect the injury minimization approach to setting speed limits which suggests that speed limits be set according to the types of crashes that are likely to occur and the tolerance that the human body can withstand in such crashes. This practice is commonly used in Europe; however, it is a new approach for North American jurisdictions. Using an injury minimization approach to set speed limits is based on the fact that road users are safer when motor vehicles are travelling more slowly.

The mobility impacts of the new speed limit policy on road users and goods movement are expected to be only 1.5 minutes during p.m. peak. The new policy will result in lower speed limits on Regional roads in urban areas in order to reduce the likelihood of serious injury or death in the event of a motor vehicle collision. The change in policy is necessary to reflect the changing nature of our road system and to reflect the needs of our most vulnerable road users.

The new speed limit policy recommended speed limits of 60 km/h for urban areas, towns and villages and 80 km/h for rural areas. The roadway characteristics that would justify each posted speed limit are summarized in the table below.

| POSTED SPEED LIMIT (km/h) | CONDITIONS                                                                                                                 |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 40                        | School Zones – 40 km/h speed limit enabled by flashing beacons during school hours                                         |
| 50                        | Special conditions only                                                                                                    |
| 60                        | Basic speed limit for urban areas, towns and villages. *<br>Adjusted upwards or downwards based on roadway characteristics |
| 70                        | Special conditions only                                                                                                    |
| 80                        | Basic speed limit for rural areas. Adjusted downwards based on roadway characteristics                                     |

\* Urban areas, towns and villages are defined as those areas identified as such on Map 5 of the Regional Official Plan

## CONTACT INFORMATION

For more information please contact:

**Road Safety & Traffic Data Management**  
Transportation and Community Planning

 905-895-1200,  
ext. 5251

 1-877-464-9675,  
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# Speed Zones on York Region Roads

**LEGEND**

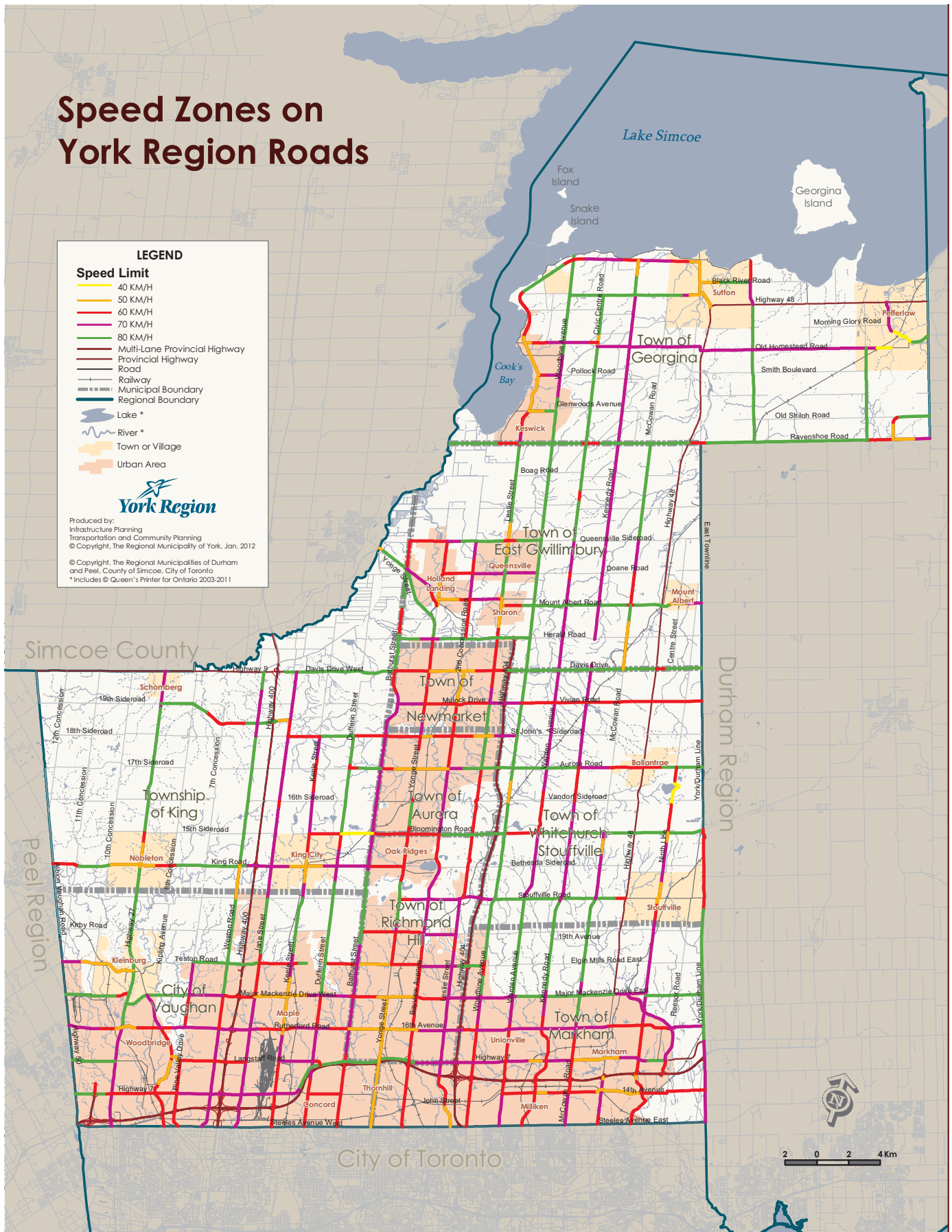
**Speed Limit**

- 40 KM/H
- 50 KM/H
- 60 KM/H
- 70 KM/H
- 80 KM/H
- Multi-Lane Provincial Highway
- Provincial Highway
- Road
- Railway
- Municipal Boundary
- Regional Boundary
- Lake \*
- River \*
- Town or Village
- Urban Area

**York Region**

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York Region conducts yearly traffic monitoring programs in order to evaluate changes in traffic patterns on the Regional road system. This assists in setting the priorities for various road rehabilitation and construction projects, determining warrants for traffic signals, calibrating traffic models and assessing the impact of new development on the Regional road system. Two traffic volume measures used in traffic analysis are: annual average daily traffic (AADT) and turning movement counts (TMC). For AADT, the traffic monitoring program consists of a permanent (continuous) count program and a short duration count program. For TMC's, manual counts at intersections must be conducted.

## Permanent Count Station (PCS)

PCS data is needed to understand temporal (day-of-week, month and seasonal) changes in traffic volume. Seasonal factors are applied to the short duration counts to develop the Region's AADT listing. The PCS program uses permanent vehicle detectors that are embedded into the pavement of the road making traffic data year round counts. PCS detects traffic in each direction and is capable of detecting traffic in each lane.

## Short Duration or Automatic Traffic Recorder (ATR) Counts

The short duration count program is designed to provide roadway segment-specific traffic count information on an ongoing basis and forms the basic component for calculating annual average daily traffic volumes.

## Turning Movement Counts (TMC)

A TMC is a manual count of an intersection generally over an eight hour period and captures detailed information such as the number of vehicles entering each approach of the intersection and each turning manoeuvre (i.e. left, through, or right). Information on the number of crossing pedestrians, heavy vehicles (three or more axles), vehicle occupancy and vehicle queues may also be collected as part of an intersection TMC.

## QUICKFACTS

- 12 Permanent Counting Stations (PCS) to monitor seasonal variations in traffic
- Approximately 300 mid-block or short duration counts (ATR) annually
- Over 300 counts per year at intersections (TMC) capturing turning movements, truck percentages, and pedestrian crossings



