

SECTION 3

Traffic Safety

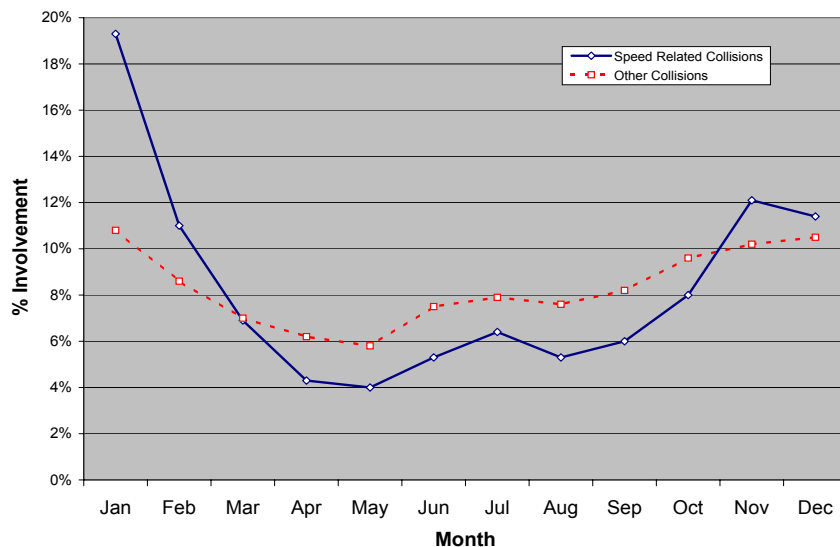
Traffic Safety in York Region

Deaths and injuries resulting from traffic collisions are a significant public concern throughout the Greater Toronto Area. Annually, approximately 3,900 people in the GTA are injured as a result of motor vehicle collisions.

Approximately 18 percent of injury related collisions in York Region occur on Provincial highways, 57 percent on Regional roads, and 25 percent on municipal roads.

The majority of collisions on Regional roads happen at signalized intersections where most collisions are “angle” or “turning” type collisions. About 50 percent of fatal and injury collisions occurred as “angle” and “turning” type collisions. Continued engineering improvements, law enforcement programs and educational programs focus on reducing these types of collisions. These programs have reduced the number of fatal and injury collision rates by over 6 percent.

York Region 2003 - Collisions



During the winter months, there is a disproportionately high number of speed related collisions, especially when roads are slippery due to snow, slush or ice. January accounts for 12 percent of total collisions, and nearly 20 percent of speed related collisions.



Community Safety Village, Bruce's Mill

To address growing community concerns about road safety in York Region, the Save-a-Life Campaign was initiated in 1999 as a year long program supported by Transportation and Works and Police staff as well as schools. This team approach has gained great acceptance in the community. In Spring 2005, the newest addition to the program – a Community Safety Village opened at Bruce's Mill Conservation Area.

For more information on the Region's Traffic Safety initiatives please contact:

Traffic Engineering and Road Safety Section

Transportation and Works Department

Tel: (905) 895-1200 ext. 5212

Toll Free: 1-877-464-9675 ext. 5212

Collision Types

- There were a total of 29 traffic fatalities in 2003 on all roads in York Region (19 on Regional roads), representing about one third of non-health related accidental deaths in the Region.
- Between 1999 and 2003, the number of fatal and injury collisions grew by an average of 0.9 percent per year. Fortunately, this growth is significantly less than the population growth rate of 4.5 percent per year over the same period. Between 2002 and 2003, the number of fatal and injury collisions on Regional roads decreased by 3.5 percent.

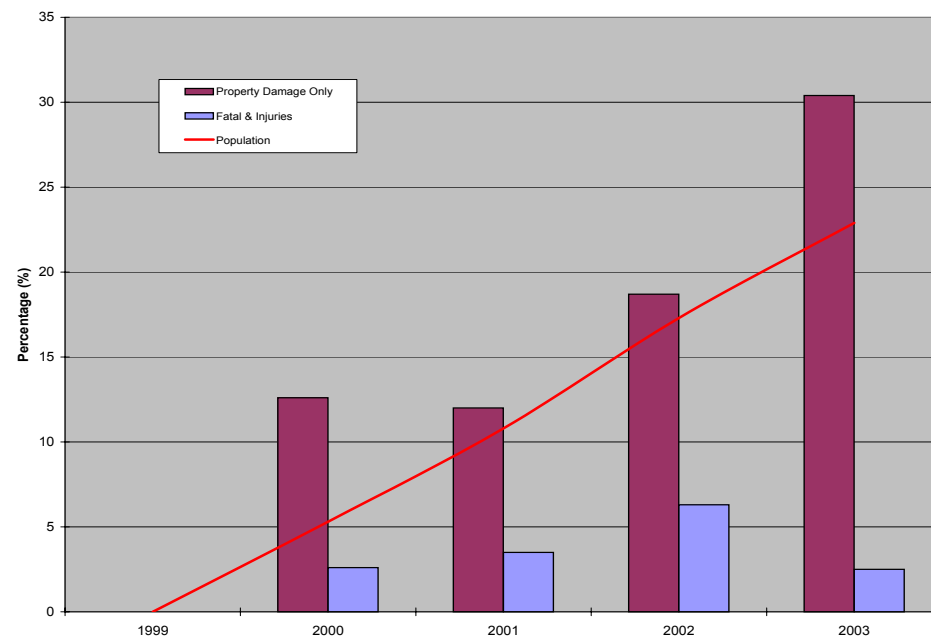
Collisions on York Region Roads 1999 to 2003

Year	Fatal	Injury	Property Damage Only	Total
1999	27	1,411	4,985	6,423
2000	25	1,451	5,618	7,094
2001	18	1,470	5,581	7,069
2002	33	1,496	5,918	7,447
2003	19	1,456	6,499	7,974

Collisions by Vehicle Type - York Region 2003

Vehicle Type	Collisions	Percent
Automobile + Vans	13,236	83.4%
Light Trucks	1,360	8.6%
Large Trucks	723	4.6%
Buses	61	0.4%
School Vehicles	38	0.2%
Emergency Vehicles	66	0.4%
Motorcycles	57	0.4%
Bicycles	55	0.3%
Other	280	1.8%
Total	15,876	100.0%

York Region Change in Collision Levels since 1999



- Fatal and injury levels have remained low in spite of significant population increases which is a reflection of the Save-a-Life campaign and other initiatives.
- Property damage collisions have increased faster than population, which is a reflection of greater general levels of traffic congestion.

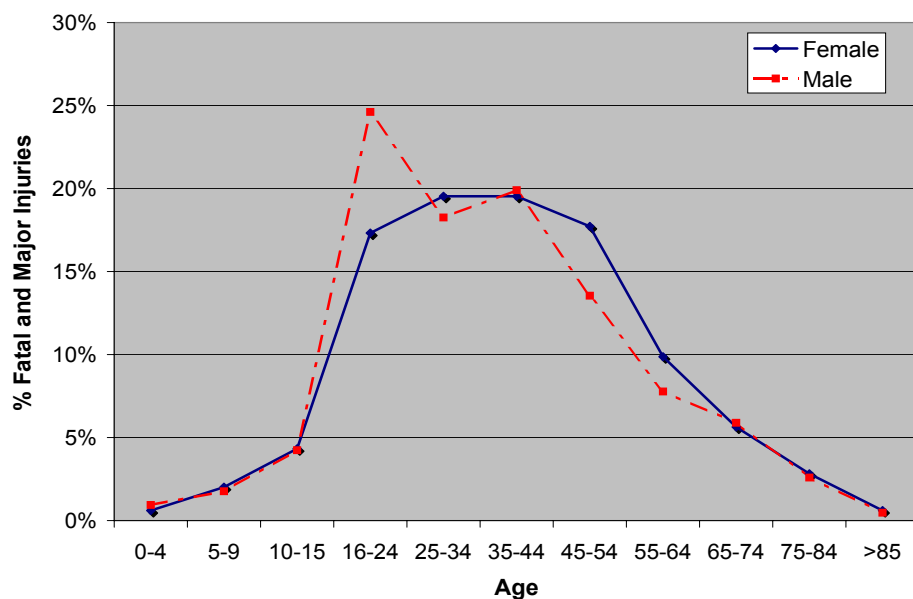
Save
a Life
one vision... one goal.

Drive responsibly

2003 Injuries by Road User Age

- The risk of serious injury increases substantially with age for all groups - driver, passenger, or pedestrian, especially after the age of 65.
- 16 to 24 year old males are at the highest risk of major traffic related injuries than any other age group.
- 37 percent of the youth group (16-24 year olds) injured were not wearing seatbelts compared to 7 percent in the 45-54 age group.
- Age groups over 65 years have a far greater risk of serious injury due to traffic collisions rather than other causes. Almost 20 percent of non-health related major injuries and fatalities suffered by those over age 85 are due to traffic collisions compared to an average of 6 percent for age groups between 25 and 55 years.

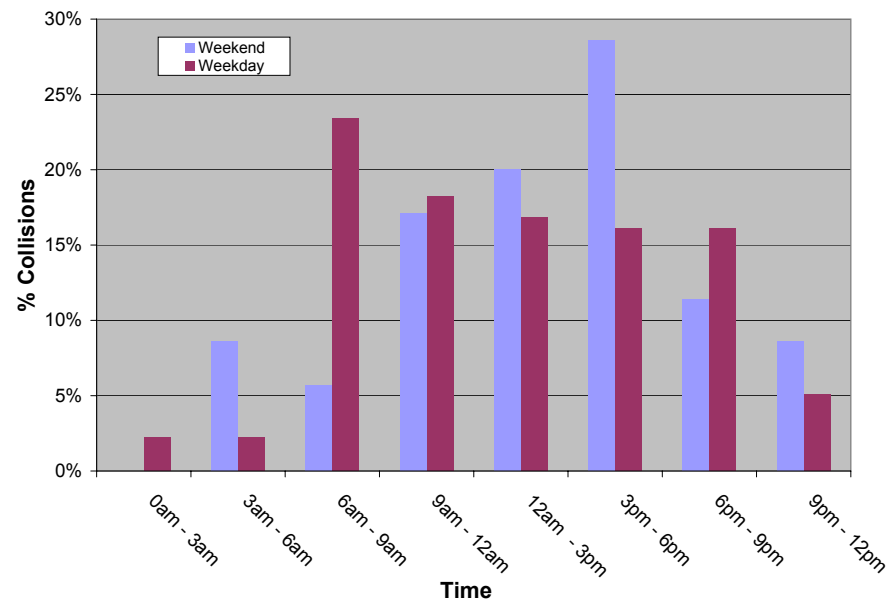
York Region 2003 - Proportion of Traffic Related Injuries by Age



2003 Pedestrians Related Collisions

- There were 26 percent more pedestrian related collisions in 2003 than the annual average for the previous four years, 1999 - 2002.
- The majority of pedestrian related collisions occurred in the fall and winter.
- Pedestrian related collisions peaked on Thursday and Friday.
- Over 60 percent of pedestrian fatalities involved people over the age of 60 walking at night and crossing at a non-signalized location.
- There was a significant difference in the time-of-day pattern for pedestrian-related collisions. On weekends, it was late afternoon when most of the pedestrian-related collisions occurred while during the weekdays, it was mostly during the morning traffic peak period.

York Region 2003 - Pedestrian Related Collisions by Time of Day



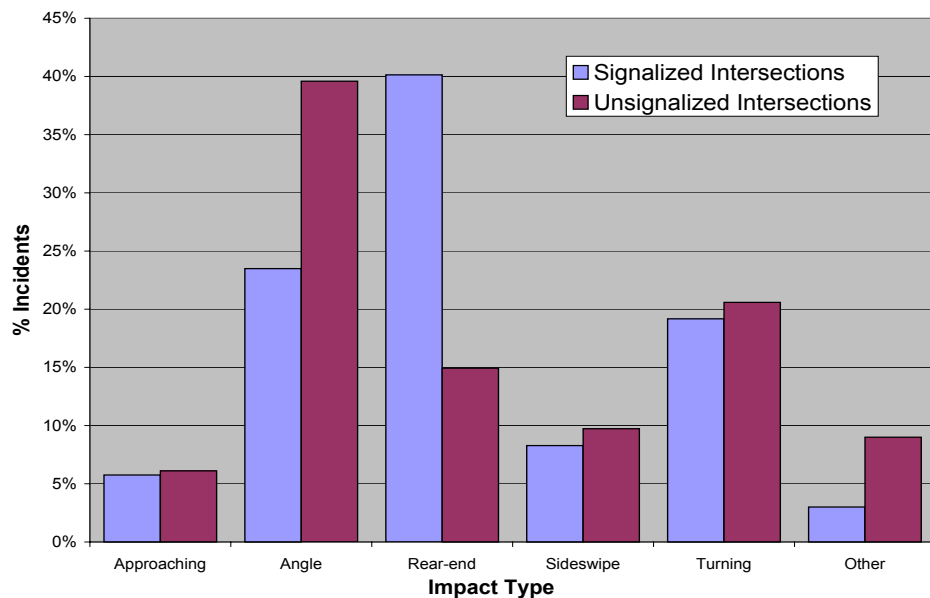
2003 Type of Collisions

- Most traffic fatalities result from angle and turning movement collisions at intersections.
- Other collisions such as single motor vehicles, and snowmobiles, represent only a small proportion of total incidents.
- Most personal injury collisions are rear-end collisions.

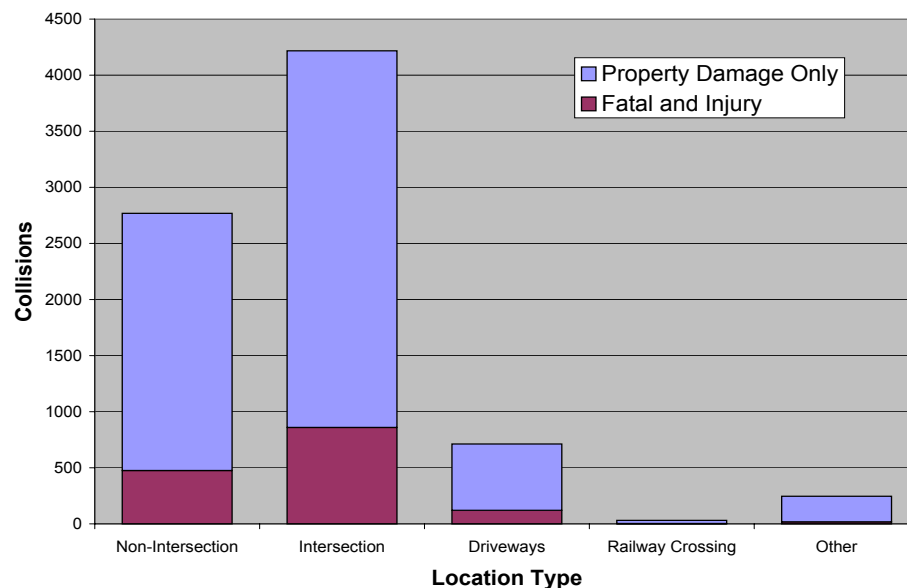
2003 Collisions by Type of Location

- Most collisions (62 percent) occur at intersections (signalized, non-signalized and at driveways).
- One third of all reported collisions were mid-block or “run-off-the-road” type of collisions.
- The predominant collision type at signalized intersections was “rear-end” collisions, and at non-signalized intersections it was “angle” collisions.
- The risk of an “angle” collision at an non-signalized intersection was almost twice the risk of such a collision at a signalized intersection.
- The risk of a “rear-end” collision at a signalized intersection is almost three times more than the risk of such a collision at an unsignalized intersection.

York Region 2003 - Type of Collisions



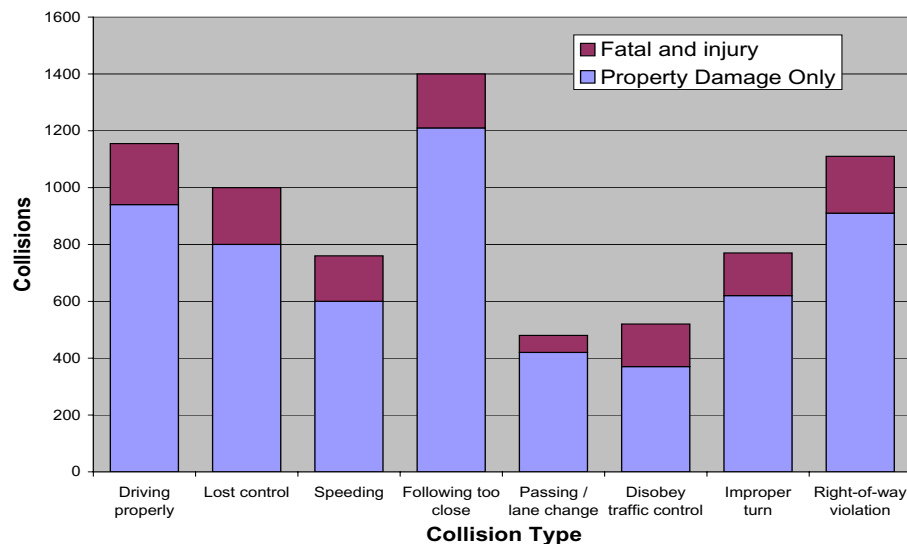
York Region 2003 - Collisions by Type of Location



Driver Action in 2003 Collisions

- The most common driver action prior to a collision is “following too close”. These collisions however have relatively low severity.
- Records show that drivers are generally at five times greater risk of getting into a motor vehicle collision when talking on a cellular phone.
- In 2003, alcohol was a contributing factor in six of 29 traffic fatalities (20.6 percent) in York Region. This compares closely to the national average of 24.6 percent.
- In response to this, York Regional Police stopped 63,821 vehicles throughout 2003 in 166 RIDE program inspections, and administered 836 roadside tests, charging 57 motorists and issuing 231 suspensions.
- There was a significant increase of over 20 percent in the number of “speeding” related collisions in 2003 compared to 2002.

York Region 2003 - Collisions by At-fault Driver Action and Collision Severity



Speeding Factor in 2003 Collisions

- The majority of speed related collisions (over 50 percent) occurred during the winter months when road surfaces were covered by water, snow, slush or ice.
- January accounted for almost 20 percent of all speed related collisions.
- The highest proportion of speed related collisions occurred on Mondays and during morning peak periods.
- Speed related collisions occurred mostly during the AM and PM traffic peak periods when motorists follow too close during congested traffic conditions.



SECTION 4

Travel Patterns and Characteristics



Why do we conduct travel surveys?

The main purpose for collecting travel behaviour information from household travel surveys is to understand travel habits of residents and provide base data for long range planning and improvement of transportation facilities through the development of travel demand models. Travel models such as the Region's Travel Demand Model cannot be developed solely on the basis of traffic and transit counts. These models simulate the various components of travel behaviour: auto ownership, trip frequency (trip generation), and the distribution of trips between origins and destinations by travel mode.

Travel surveys answer the basic questions of: have trip rates (trip frequencies) changed? Are average trip lengths stable over time? How does the value of travel time change with relative changes in household income and price levels?

York Region, along with other municipalities in the GTA + Hamilton (GTAH) conduct two primary travel surveys, the Transportation Tomorrow Survey (TTS) and Cordon Count Program, which are further described in this section.

For more information on Travel Surveys please contact:

Infrastructure Planning Branch

Planning and Development Services Department

Tel: (905) 830-4444 ext. 5030

Toll Free: 1-877-464-9675 ext. 5030

Transportation Tomorrow Survey (TTS)

Considered one of the largest travel surveys in North America, the **Transportation Tomorrow Survey (TTS)** is a comprehensive travel survey conducted in the Greater Toronto Area + Hamilton (GTAH) once every five years. This important travel survey is a cooperative effort by the Province and 19 local government agencies to collect information about urban travel. An understanding of urban travel results in better decisions on road and transit improvements. Similar surveys were undertaken in 1986, 1991 and 1996 and the resulting information has been widely used in literally hundreds of transportation planning studies.



2001 TTS Survey Area

TTS is a survey that collects information on how each member of a household uses the transportation system. The information from each household is processed, stored and used in a form that does not permit any particular household to be identified. Names, addresses and phone numbers are destroyed at the conclusion of the survey's data verification phase.

The 2001 TTS completed approximately 137,000 household interviews.

For more information on the Transportation Tomorrow Survey please contact:

Joint Program in Transportation

University of Toronto
35 St. George Street, Room 305
Toronto, ON M5S 1A4
Tel: (416) 978-7282

Web Site: <http://www.jpint.utoronto.ca/ttshome/>

2001 Transportation Tomorrow Survey

Travel Characteristics of York Region Households

Number of Cars Available

York Region residents have more cars per household than the average GTA resident. 69 percent of York households have two or more cars available compared to an average of 43 percent for the GTA. In York Region, only four percent of households do not have a car compared to 25 percent in the City of Toronto and 16 percent in the GTA.

Area	0 car	1 car	2 cars	3 cars	4+ cars
York Region	4%	27%	51%	13%	5%
GTA	16%	40%	34%	7%	2%

Possession of Driver Licence

There is a higher percentage of women having a driver's licence in York Region than in the GTA.

Area	Male with Driver Licence	Female with Driver Licence
York Region	70%	66%
GTA	69%	59%

Trips Per Day

The number of daily work trips / day is equal for both York Region and the GTA. In York Region, there are more overall trips per day than in the GTA. These extra trips are generally for recreation, school, personal and business.

Area	Household average trips/day	Daily work trips/worker
York Region	7.2	0.79
GTA	5.8	0.79

Total Number of Trips

Almost 70 percent of all trips originating from York Region stay within the Region in both the morning and 24 hour periods. The City of Toronto is the second highest destination at 25 percent of all trips in a 24 hour period.

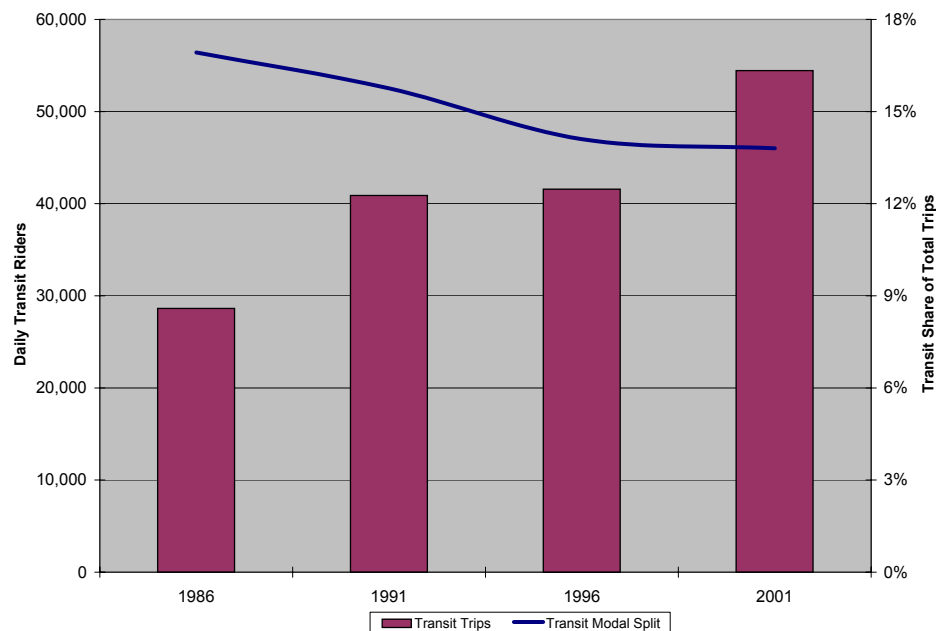
From York to:	City of Toronto	Durham	York	Peel	Halton	City of Hamilton	Region Total
24 Hour Period							
All Trips	386,800	33,500	1,051,100	57,500	6,300	1,900	1,537,000
Work Trips	129,400	3,600	139,900	20,600	1,600	200	295,500
AM period (6 - 9)							
ALL Trips	127,900	4,200	236,800	16,300	1,500	300	387,100
Work Trips	98,700	2,500	96,300	15,000	1,100	200	213,800

2001 Transportation Tomorrow Survey

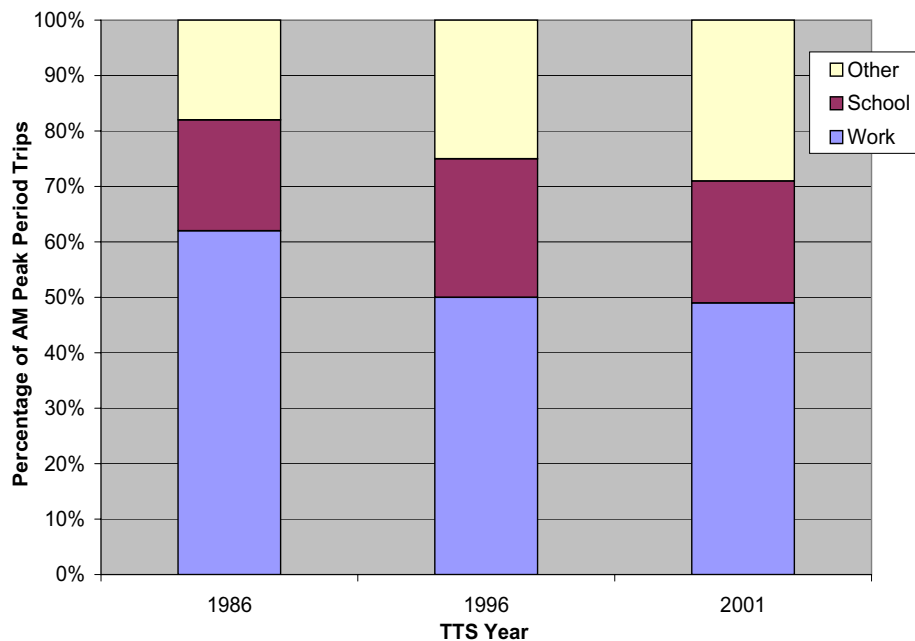
General Travel Characteristics

- On average York Region residents are making more trips than ever before.
- 47 percent of work trips made by York Region residents remain within the Region.
- Work trip destinations to other areas are: Toronto 44 percent, Peel 7 percent, Halton 1 percent, Durham 1 percent and Simcoe County 1 percent.
- There are approximately 1.2 million trips made by York residents on an average weekday.
- GTAH residents make 11.5 million daily trips. Seven million of these trips are by automobile.
- Automobile use (79 percent) is the main transportation mode in York Region. The rate of public transit use is eight percent with a further six percent by school bus.
- Work trips to York Region have the highest average trip length in comparison to the other regions in the GTAH. In general, work trip lengths are increasing across the GTAH.
- Non-work and non-school (commonly called discretionary) trips are becoming more and more important. This category now represents more than 50 percent of the daily trips made by York Region residents. Discretionary trips are also having an increasing impact on morning peak period travel, accounting for about 30 percent of all morning peak period travel.

Transit Characteristics of York Residents



A.M. Peak Period Trips by York Residents

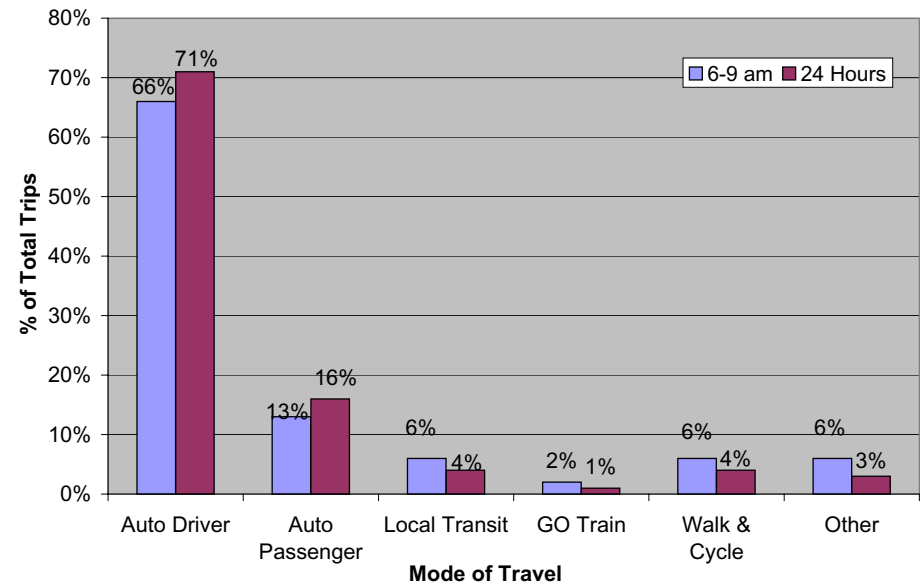


2001 Transportation Tomorrow Survey

Method of Travel

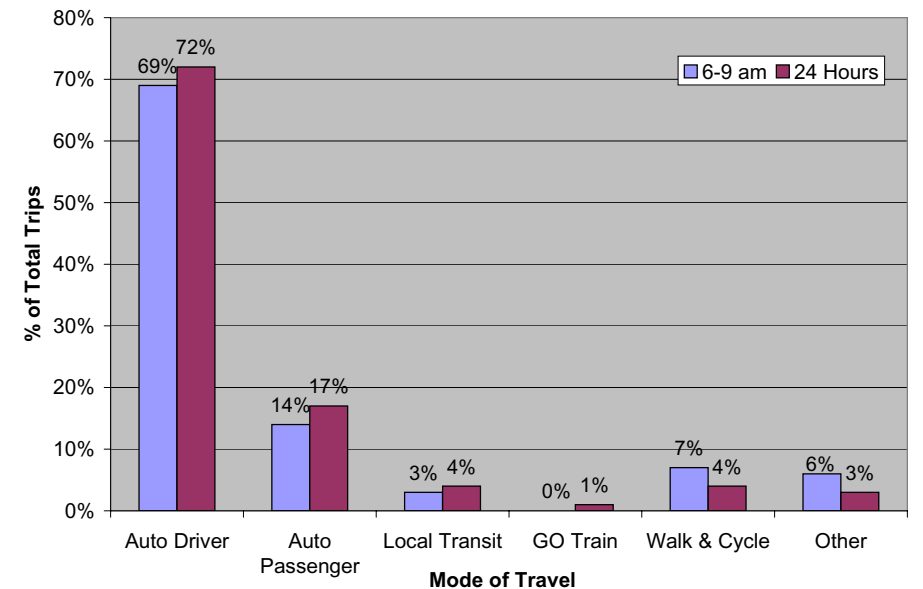
Trips Made by York Region Residents

York Region is still heavily dependant on automobile use with 79 percent of trips made by residents during the morning peak period using cars and vans. Non-auto modes are used for only 20 percent of trips made by York residents during the morning peak period.



Trips Made to York Region

Similarly, with many workers and shoppers commuting into York Region from neighbouring municipalities, the use of autos has increased to 83 percent of trips made during the morning peak period.



Cordon Count / Screenline Program

Cordon counts are conducted every five years and coincide with other programs such as Transportation Tomorrow Survey (TTS) and Statistics Canada, Census of Population. Occasionally, York Region also conducts cordon counts in intermittent years. The data collected demonstrates relationships between trip-making and factors such as level-of-service, socio-economic conditions and land use characteristics.

All day 12-hour counts (6:30a.m-6:30p.m) are taken during the month of May, on a typical weekday (excluding Fridays). Records of the vehicle types and vehicle occupancy (number of people in each vehicles) are summarized in 15-minute intervals. The following vehicle types are defined:

- Passenger cars and cabs
- Light, medium and heavy trucks
- York Region Transit (YRT), GO Transit including GO Trains and school buses

Highlights of 2004 Cordon Count Program, which is the ninth in a series, are as follows:

- Subsequent to the 2001 Cordon Study, Highway 407 was extended into Pickering from Markham Road. As a result, traffic patterns at the boundary have changed. York-Durham traffic volumes have grown significantly in both directions by 31 percent, while traffic that crosses the York-Toronto Cordon line has increased by 13.5 percent.
- Significant growth in transit ridership continues to occur. Transit use includes trips on York Region Transit, GO Transit, school and other buses. The biggest increase was at the York-Toronto screenline, which showed an increase of 2 percent (to 10 percent overall) during the A.M. peak period.
- Trucks have a significant effect on roadway capacity and on the structural condition of Regional roads and Provincial highways. Truck traffic increases have been observed throughout the Region – particularly along all of the 400 series highways and in the Peel boundary area where the Canadian Pacific truck/ rail intermodal yard is

located. Although truck traffic has increased in a couple of corridors, it has generally kept pace with increases in general traffic demand.

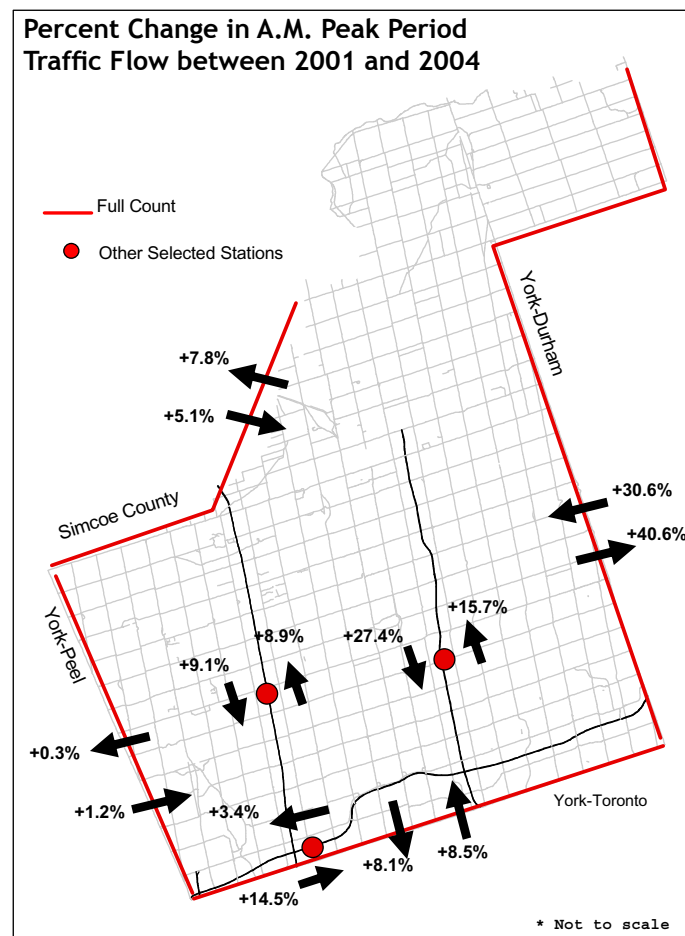
For more information on the Cordon Count Program or to obtain a copy of the full 2004 Cordon Count Bulletin please contact:

Infrastructure Planning Branch

Planning and Development Services Department

Tel: (905) 830-4444 ext. 5028

Toll Free: 1-877-464-9675 ext. 5028



SECTION 5

Contact and General Information

Road Maintenance Contact Information



MINISTRY OF TRANSPORTATION
MTO Info, General Information Line
1-800-268-4686



ETR 407
Dispatch Department
1-888-407-0407



CITY OF TORONTO
Roads Information and Reporting Hotline
(416) 599-9090



REGIONAL MUNICIPALITY OF YORK

Road Maintenance, Dispatch
Tel: (905) 895-1200 ext. 5200
Toll Free: 1-877-464-9675 ext. 5200



TOWN OF AURORA

Public Works Department
P.O. Box 1000, 100 John West Way
Aurora, ON L4G 6J1
(905) 727-3123 ext. 3446



TOWN OF EAST GWILLIMBURY

Engineering and Public Works Department
19000 Leslie Street
Sharon, ON L0G 1V0
(905) 478-4282 ext. 261



**TOWN OF
GEORGINA**

TOWN OF GEORGINA

Engineering and Public Works Department
26557 Civic Centre Road, R.R. #2
Keswick, ON L4P 3G1
(905) 476-6902



TOWNSHIP OF KING

Operations Department
2075 King Road
King City, ON L7B 1A1
(905) 833-5321



TOWN OF MARKHAM

Roads Department
101 Town Centre Boulevard
Markham, ON L3R 9W3
(905) 477-7000 ext. 4866



TOWN OF NEWMARKET

Operations Department
395 Mulock Drive, P.O. Box 328
Newmarket, ON L3Y 4X7
(905) 895-5193



TOWN OF RICHMOND HILL

Operations Centre
Box 300, 225 East Beaver Creek Road
Richmond Hill, ON L4C 4Y5
(905) 884-8013



CITY OF VAUGHAN

Public Works Department
2141 Major Mackenzie Drive
Vaughan, ON L6A 1T1
(905) 832-8562



TOWN OF WHITCHURCH-STOUFFVILLE

Public Works Department
37 Sandiford Drive, 4th Floor
Stouffville, ON L4A 7X5
(905) 640-1900

Transit Service Providers

VIVA - YORK RAPID TRANSIT

1 West Pearce, 6th Floor
Richmond Hill, ON L4B 3K3

Tel: (905) 886-6767

Web Site: <http://www.vivayork.com/>



YORK REGION TRANSIT (YRT)

50 High Tech Road, 5th Floor
Richmond Hill, ON L4B 4N7

Tel: (905) 762-2100

Toll Free: 1-866-MOVE YRT (668-3978)

Web Site: <http://www.yorkregiontransit.com>



YORK REGION MOBILITY PLUS

50 High Tech Road, 5th Floor
Richmond Hill, ON L4B 4N7

Tel: (905) 762-2112

Toll Free: 1-866-744-1119

Web Site: <http://www.yorkregiontransit.com/specialized.asp>



TORONTO TRANSIT COMMISSION (TTC)

1900 Yonge Street
Toronto, ON M4S 1Z2

Wheel-Trans: (416) 393-4222

General Info: (416) 393-INFO

Web Site: <http://www.ttc.ca>



GO TRANSIT

20 Bay Street, Suite 600,
Toronto, ON M5J 2W3

Toll Free: 1-888-GET ON GO (438-6646)

Web Site: <http://www.go transit.com>

