

Clause No. 15 in Report No. 7 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 17, 2014.

# 15 2011 TRANSPORTATION TOMORROW SURVEY

Committee of the Whole recommends adoption of the following recommendation contained in the report dated March 12, 2014 from the Commissioner of Transportation and Community Planning:

### 1. RECOMMENDATIONS

It is recommended that:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities.

#### 2. PURPOSE

This report informs Regional and local Councils of the Transportation Tomorrow Survey completed in 2011-2012 and released to the public in December 2013. The Survey data is available for use in transportation and development planning studies, and this report highlights key information on travel patterns and trends in York Region based on this Survey.

#### 3. BACKGROUND

The Transportation Tomorrow Survey has been conducted since 1986 and provides a comprehensive database for travel patterns and trends in the Greater Toronto and Hamilton Area (GTHA)

The Transportation Tomorrow Survey (TTS) is a travel survey that summarizes how, why and where residents of the Greater Golden Horseshoe (GGH) travel. It is completed every five years to correspond with the national census. Past surveys were conducted in 1986, 1991, 1996, 2001 and 2006.

York Region is one of 23 government organizations across the GGH area that contributed to funding the 2011 study. Other organizations include the Ministry of Transportation of Ontario (MTO), Metrolinx/GO Transit, the Toronto Transit Commission (TTC), and 20 municipalities across the GGH area. The geographic limits of the survey area are shown in Figure 1. The area extends from Niagara Region to the south, the Region of Waterloo to the west, the County of Peterborough to the east and Simcoe County to the north.

Consistent with previous surveys, the University of Toronto's Data Management Group was responsible for managing the 2011 TTS survey on behalf of the MTO and the funding partners.

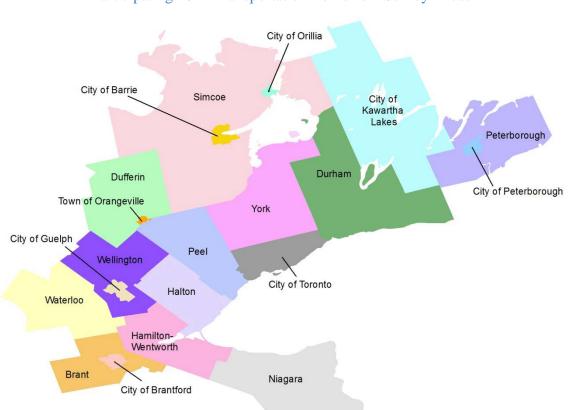


Figure 1
Participating 2011 Transportation Tomorrow Survey Areas

Overall, 159,157 households from across the Greater Golden Horseshoe were surveyed in the Study. In York Region, 16,580 households (representing 4.9 per cent of all York Region households), completed a telephone interview or online survey between the fall 2011 and fall 2012.

# The Transportation Tomorrow Survey is used in a wide range of transportation studies

The information collected in the TTS is fundamental to understanding the travel behaviour and spatial impact of personal travel in the GTHA. This understanding of trip patterns is critical for planners and engineers to forecast transportation infrastructure needs and service growth.

Types of projects and studies that use the Transportation Tomorrow Survey data include:

- Traffic impact studies to support development applications
- Transportation studies in support of area plans
- Transit and road environmental assessments
- Transportation Master Planning
- Development of transportation demand forecast models

The Transportation Tomorrow Survey is also an important tool that is used to assess and monitor the overall impact of changing demographic trends and travel patterns of York Region's residents and workers, and to establish benchmarks and key performance indicators to help guide the Region in achieving its strategic transportation goals such as those defined in the York Region Strategic Plan.

# The 2011 Transportation Tomorrow Survey results were released for use at the end of 2013 and analysis of the data is underway

The 2011 Transportation Tomorrow Survey database was made public at the end of 2013 and is readily available at no cost for use in planning and transportation studies. Local municipal and Regional staff and consultants working on municipal projects may obtain this data through the Data Management Group of the Department of Civil Engineering at the University of Toronto.

### 4. ANALYSIS AND OPTIONS

The following provides highlights of the 2011 Transportation Tomorrow Survey data with respect to modal choice, transit use, intra-regional travel, work trips, and trip start times. Detailed analysis of the data will be part of the baseline analysis within the upcoming Transportation Master Plan update.

# Transit use is increasing at a faster rate than population growth

Since 1996, York Region residents who use conventional and rapid transit (local transit) as their primary mode of travel during the morning peak period (6 a.m. to 9 a.m.) have nearly doubled from about 20,000 trips (6.8 per cent of all trips) to 39,400 trips (7.2 per cent of all trips) between 1996 and 2011(see Table 1 and Figure 2). Similarly, trips on GO Rail have increased from approximately 3,800 trips (1.3 per cent of all trips), to over 22,500 trips (4.1 per cent of all trips), or an increase of nearly six-fold during the same time period. In comparison, York Region's population increased by 82 per cent, indicating that transit use is increasing faster than population growth.

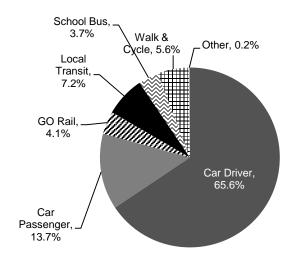
Table 1
Primary Mode for Trips by York Region Residents
During the Morning Peak Period

Mode Choice	1996	2001	2006	2011	% Increase 1996 to 2011
Car Driver	191,652	262,362	303,184	359,932	88%
Car Passenger	38,990	52,336	64,453	74,958	92%
GO Rail	3,768	8,139	12,489	22,543	498%
Local Transit	19,945	22,953	31,110	39,413	98%
School Bus	17,855	23,359	23,579	20,134	13%
Walk & Cycle and Other	20447	22,653	25,398	30,572	40%
Total Trips	294,863	394,547	465,387	548,665	86%

### Transit modal split is increasing while auto modal split has not changed

As shown in Figure 2, automobile use (as a driver or a passenger) remains the primary mode of travel for York Region residents making up 79 per cent of trips during the morning peak period (6 a.m. to 9 a.m.). The auto modal split has stayed relatively constant since 1996 at 78 to 79 per cent. The corresponding car driver and car passenger modal splits have remained static at about 65 per cent and 13.5 per cent, respectively, since 1996. On the other hand, transit modal split combining local transit and GO Rail for York Region residents during the morning peak period increased from 8.1 per cent to 11.3 per cent from 1996 to 2011.

Figure 2
2011 Mode of Travel During Morning Peak Period



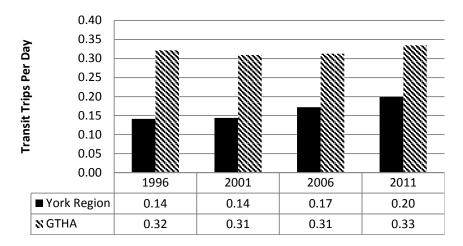
\* Walking and cycling trips only collected for trips to work or school.

As indicated in Table 1, the increase in local transit and GO Rail trips between 1996 and 2011 is mainly attributed to a higher rate of growth in transit trips than auto trips and a very low annual increase in school bus trips.

## The number of transit trips per person has increased by over 40 per cent

While transit trips per person (see Figure 3) have remained static across the GTHA at approximately 0.32 to 0.33 transit trips per person, York Region's transit trips per resident has increased from 0.14 transit trips per person in 1996 to 0.20 transit trips per person, an increase of 41 per cent. During the same horizon, the total number of transit trips (local transit and GO Rail) per day by York Region residents has increased by 267 per cent, while the GTHA has increased by 144 per cent. Both of these trends are consistent with the improvement in transit modal split observed in York Region.

Figure 3
Transit Trips per Resident 11 Years of Age and Older

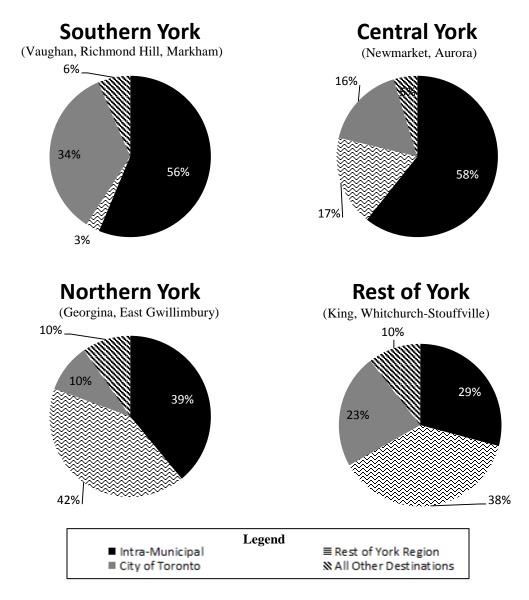


Although York Region has shown improvements in transit trips over the past 10 to 15 years, continued focus on community design, with emphasis on live work relationships and access to transit will be critical in continuing this modal shift to support the development of sustainable transportation choices.

# York Region intra-municipal travel is improving

Within southern York Region (City of Markham, City of Vaughan and the Town of Richmond Hill), intra-municipal trips (trips originating and ending in the sub-area of York Region), have increased during the morning peak period from 53 per cent to 56 per cent between 1996 and 2011 (see Figure 4 – Southern York). Over the same 15-year period, trips originating from southern York Region destined to the City of Toronto have decreased from 40 per cent to 34 per cent of total trips.

Figure 4
2011 Intra-Regional Travel Across York Region During the Morning Peak Period



This trend is consistent across the Region. For example, trips from northern York Region (Georgina and East Gwillimbury) to the City of Toronto have decreased from 14 per cent to 10 per cent. These trends continue to suggest that York Region is becoming a more complete community where more and more residents live and work.

# Work trip characteristics show trip lengths are fairly constant but more residents are working within York Region

Work trip length by York Region residents is staying fairly constant at 21.0 km in 1996 and 20.9 km in 2011. However, more York Region residents have a place of employment within the Region. For residents that work inside and outside of their homes, Table 2 indicates that the proportion of York Region residents working in York Region grew from about 49 per cent in 1996 to about 52 per cent in 2011.

**Table 2**Where Do York Region Residents Work?

Usual Place of Work	1996	2001	2006	2011
City of Toronto	41%	38%	36%	34%
Durham Region	1%	1%	1%	1%
York Region	49%	50%	53%	52%
Peel Region	4%	5%	6%	6%
Halton Region	0%	0%	0%	0%
Hamilton Region	0%	0%	0%	0%
Outside GTHA	1%	1%	1%	1%
No Usual Place of Work	3%	5%	4%	6%

The data from the Transportation Tomorrow Survey correlates well with the data from Statistics Canada's National Household Survey (NHS) regarding usual place of work. As reported in January 2014 on the 2011 National Household Survey, approximately 60 per cent of York Region residents work in York Region (inside and outside their homes) or have no usual place of work. Based on this definition, the Transportation Tomorrow Survey estimate is 58 per cent. The difference in estimates is due to differences in the survey methodology. For instance, the Transportation Tomorrow Survey is a controlled random sample survey while the National Household Survey is a voluntary self-administered sample survey.

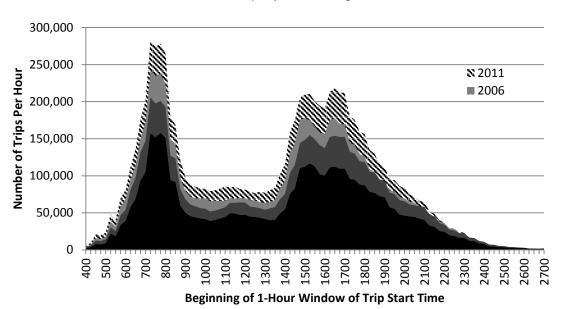
# York Region Residents are relying less on the City of Toronto for employment

As the data from Figure 4 and Table 2 indicate, a decreasing proportion of York Region residents have jobs in the City of Toronto. This is the result of a number of changes in the economy across the Greater Toronto Area but it indicates a very positive trend for York Region resulting from the strategic planning and infrastructure policies of York Region Council.

# Commuters have been spreading their trip start times in both the morning and afternoon peak travel periods

Trip start times (see Figure 5) for morning and afternoon trips for all modes and purposes have been spreading over the last decade and peak periods are slowly converging. This suggests that commuters are adjusting trip start times to account for longer delays and higher levels of traffic congestion.

Figure 5
Start Time of Trip by York Region Residents



The 2011 Transportation Tomorrow Survey will assist the Region in establishing a baseline of travel characteristics and patterns for the Transportation Master Plan Update

The Transportation Tomorrow Survey is a comprehensive source of travel demand data that has been used since 1986 to analyse and understand travel behaviour of every municipality in the GTHA. Detailed analysis of the TTS data is planned to be part of a baseline analysis for the upcoming Transportation Master Plan update to better understand the transportation challenges in York Region.

With significant growth continuing in York Region to 2041, managing congestion through road network expansion, improvements to transit service, providing opportunities for active transportation and policies and programs to manage travel demand, will be key issues that need to be addressed in the next update of the Transportation Master Plan.

# Link to key Council-approved plans

This report supports the 2011 to 2015 Strategic Plan in the priority area of "Continue to Deliver and Sustain Critical Infrastructure" and section 7.1 "Reducing the Demand for Service" and section 7.2 "Moving People and Goods" of the Regional Official Plan.

### 5. FINANCIAL IMPLICATIONS

There are no current financial implications associated with this report. York Region, as one of the project partners, contributed a total of \$118,000 for the survey during the 2010 -2012 budget years.

### 6. LOCAL MUNICIPAL IMPACT

This data is readily available at no cost to local municipalities for their planning and transportation studies. Local municipalities and consultants working on municipal projects may obtain this data through the University of Toronto's Data Management Group's web site (www.dmg.utoronto.ca).

#### 7. CONCLUSION

The Transportation Tomorrow Survey is a comprehensive source of travel demand data that has been used since 1986 to analyse and understand travel behaviour of every municipality in the GTHA. Transportation Tomorrow Survey data is used to identify important travel characteristics and patterns related to auto use and mode choice that are important indicators of existing and emerging trends. The Transportation Tomorrow Survey informs transportation planning that supports Regional growth to 2031 and beyond.

The 2011 Transportation Tomorrow Survey provides researchers, municipal staff and consultants with updated information in the preparation of transportation planning studies including traffic impact studies, development monitoring, road planning, and transit planning.

For more information on this report, please contact Loy Cheah, Director, Transportation Planning at 905-830-4444, ext. 75024.

The Senior Management Group has reviewed this report.