



Office of the Commissioner  
Transportation Services

## Memorandum

To: Committee of the Whole  
From: Paul Jankowski,  
Commissioner of Transportation Services  
Date: May 3, 2018  
Re: **2016 Transportation Tomorrow Survey – Key Findings**

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This memorandum provides an overview of the results of the 2016 Transportation Tomorrow Survey.

The Transportation Tomorrow Survey has provided additional insight into travel patterns and trends in the Greater Golden Horseshoe Area

The Transportation Tomorrow Survey (TTS) is a travel survey providing insight into how, why and where residents of the Greater Golden Horseshoe Area (GGHA) travel. It has been completed every five years since 1986 to correspond with the national census. The Ministry of Transportation of Ontario was responsible for managing the 2016 TTS on behalf of the funding partners, including York Region, Metrolinx/GO Transit, the Toronto Transit Commission and 18 other municipalities across the GGHA.

The survey captured travel behaviour over a 24-hour weekday, in the autumn of 2016, of over 160,000 randomly-sampled households in the GGHA. In York Region, 18,374 households, representing 5.1 per cent of all York Region households, completed a telephone or online survey.

The survey collected data in three categories:

- Household - Location, size, number of vehicles, type of residence, income
- Persons - Age, gender, occupation
- Trips - Origin, destination, purpose (work, school, shopping, etc.), departure time, mode(s) of travel

May 3, 2018

2016 Transportation Tomorrow Survey – Key Findings

Data from the Transportation Tomorrow Survey is used in a wide range of Regional transportation studies including the Transportation Master Plan

The information collected in the TTS is fundamental to understanding the travel patterns, behaviour and impact of personal travel in the GGHA as it allows planners and engineers to better forecast transportation infrastructure needs.

The TTS data is used to support the following Regional projects and studies:

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

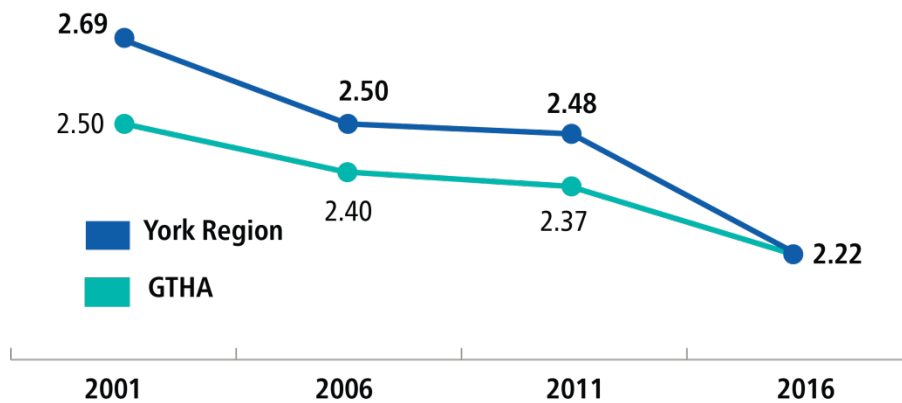
The initial findings from the 2016 TTS indicate travel patterns, behaviours and trip choices are generally trending in a positive direction in the Region compared to 15 years ago. Positive trends include a decline in the number of trips per person, increased use of transit, cycling and walking, and an increase in the number of trips that start and end within the Region. Council can take credit for contributing to these positive trends through ongoing efforts to prioritize enhanced transit service, promote active and sustainable transportation and develop complete communities with a focus on Regional Centres and Corridors.

As York Region's population grows, residents are making fewer trips per person than in 2001

Over the 15-year period since 2001, the Region's population has grown by 52 per cent, while over the same period, the total number of trips, by all modes, has increased by only 29 per cent. This is consistent with those of other cities in Canada. This declining trend of trips per person is observed throughout the municipalities included in the survey area (see Figure 1).

Residents are making fewer trips even though car ownership has grown at a similar rate to population growth. This indicates people are choosing not to make as many trips as they used to. This could be a result of working from home, online shopping or simply choosing not to travel. This is a positive trend for travel in the Region and GGHA.

**Figure 1**  
**Changes in Daily Trips per Person 2001-2016**

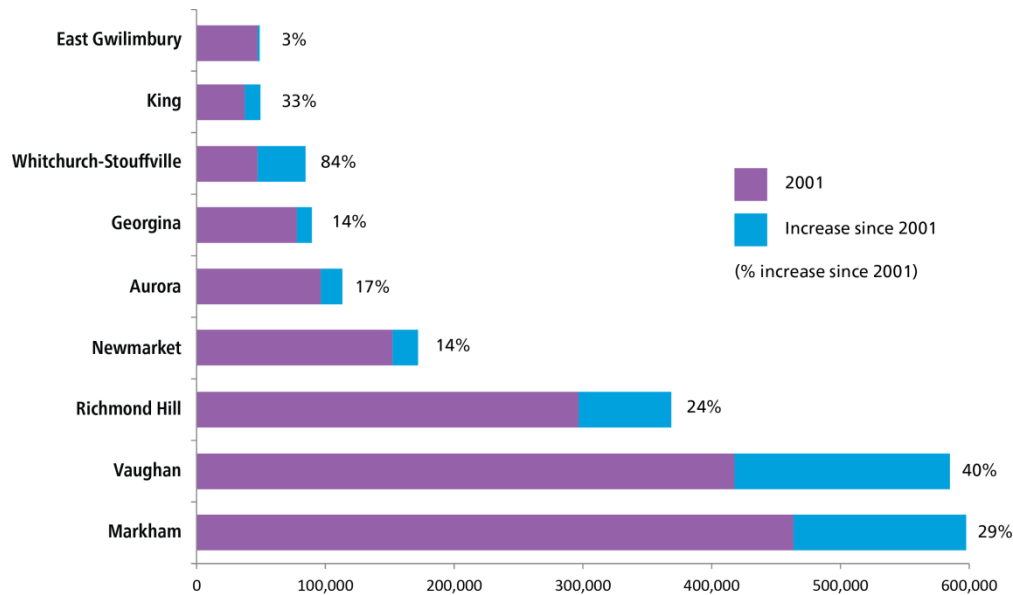


Total daily trips in York Region are growing

There are approximately 2.1 million person trips, by all modes, daily in the Region; a 29 per cent increase compared to 2001. Figure 2 shows the daily trips made by York Region residents by local municipality and per cent increase since 2001.

- Residents of the Cities of Markham and Vaughan made the highest number of daily trips in 2016. Each City's share is 28 per cent of the Region's total daily trips, followed by the Town of Richmond Hill at 17 per cent. The share of daily trips for each municipality is approximately the same as their population share.
- Town of Whitchurch-Stouffville has seen the highest per cent increase in daily trips in the Region since 2001 at 84 per cent, followed by the City of Vaughan at 40 per cent and Township of King at 33 per cent.

**Figure 2**  
**Total Daily Trips Made by York Region Residents**  
**by Local Municipality**

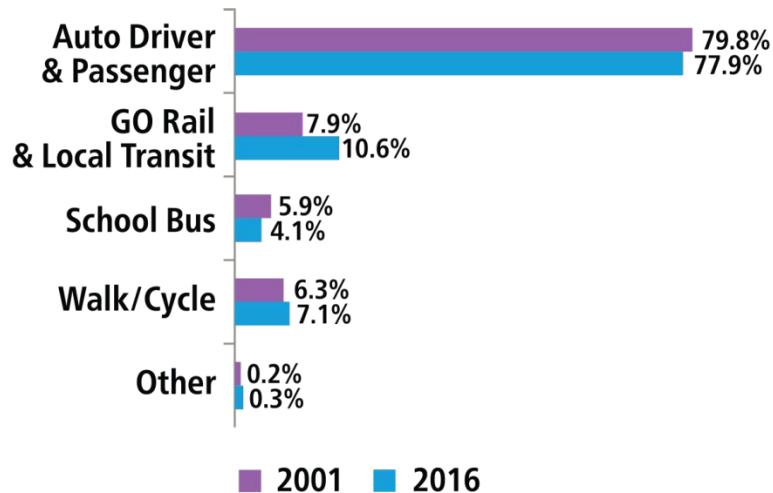


More people are using transit, walking and cycling to make trips now than in 2001

Travel by all modes has increased, except for school bus trips which have decreased by three per cent. GO Transit rail trips, York Region Transit, and walking and cycling trips have increased since 2001 by 143 per cent, 81 per cent and 69 per cent, respectively. This is at a faster growth than by automobile alone at 26 per cent, and automobile passenger at 16 per cent.

Figure 3 shows what modes people were using during the morning peak period from 6 a.m. to 9 a.m. in 2016. Although automobile use remains the most popular mode of travel by Region residents at 77.9 per cent of all trips, its share has decreased by approximately two per cent since 2001. Travel by transit on York Region Transit and GO Transit services has increased by approximately three per cent compared to 2001. Transit trips account for approximately 10.6 per cent of all trips. Travel by cycling or walking has also increased by approximately one per cent compared to 2001, representing 7.1 per cent of all trips. Travel by school bus has decreased by approximately two per cent since 2001, representing 4.1 per cent of all trips. The decline in school bus travel has likely been replaced by auto trips as well as walking and cycling.

**Figure 3**  
**Change in Mode of Travel in York Region**  
**During Morning Peak Period 2001-2016**



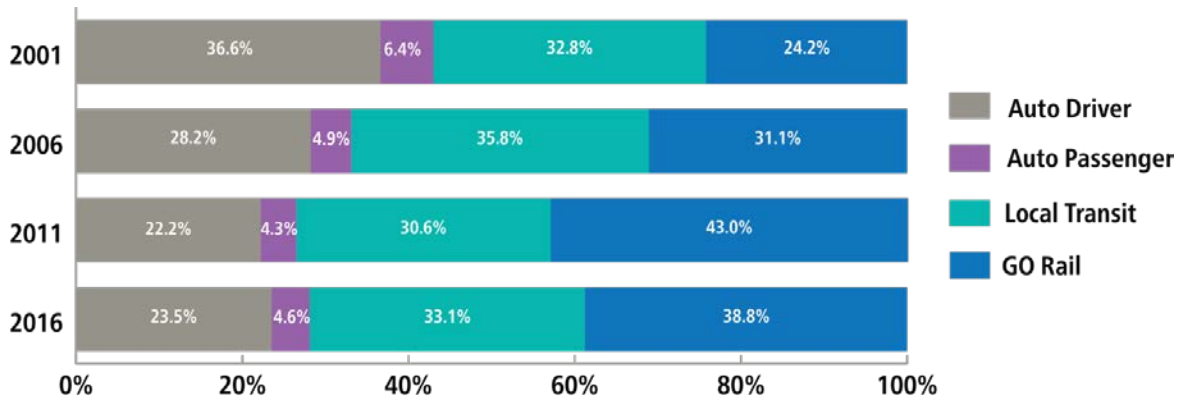
Transit usage in York Region at 10.6 per cent of trips, is the third highest in the GGHA when compared to the other municipalities included in the study. The City of Toronto has the highest transit modal share of 31.3 per cent, followed by Peel Region at 11.4 per cent.

The increase in transit, walking and cycling is a positive trend for the Region and reflects the significant investment in public transit at all levels of government.

Transit continues to be the most utilized mode of travel from the Region to downtown Toronto

Transit (York Region Transit, Toronto Transit Commission and GO Transit) is the most utilized mode of travel, from York Region to downtown Toronto, during the morning peak period from 6 a.m. to 9 a.m., at 71.9 per cent. Shares have increased by approximately 15 per cent since 2001 (see Figure 4). A significant share of this growth belongs to GO Transit rail service, and can be attributed to rail expansion including new stations, improved service, increased parking and improved connection with local transit since 2001. Travel by car accounts for 28.1 per cent and its share has decreased by approximately 15 per cent since 2001.

**Figure 4**  
**Mode of Travel from York Region to Downtown Toronto**  
**Morning Peak Period**

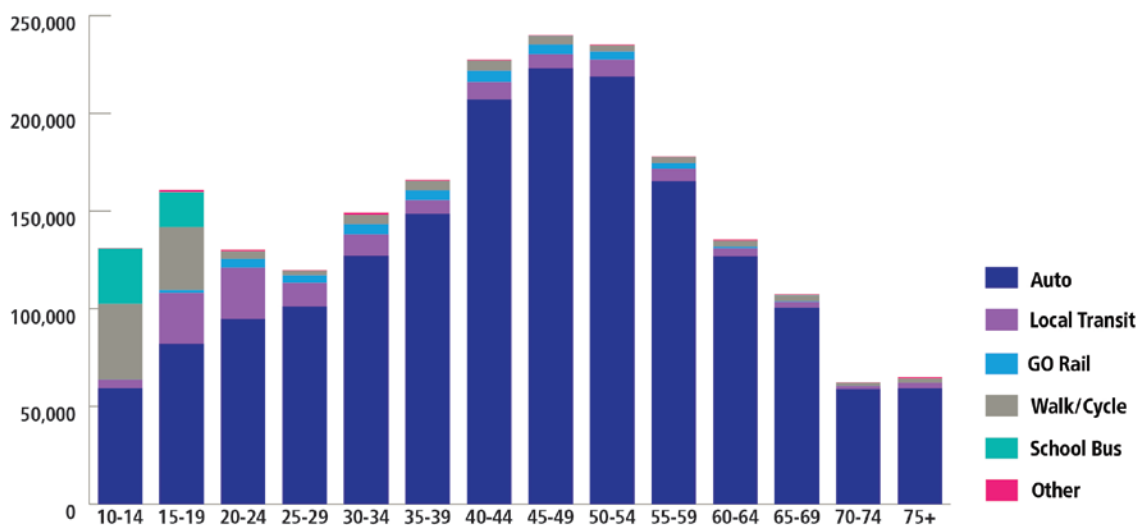


Transit, walking and cycling are popular modes among younger travellers

Residents between the ages of 40 and 54 account for the highest proportion of trips in the Region, contributing approximately 33 per cent of the total daily trips. Figure 5 shows the daily trips by travel mode and age group.

Auto driver and passenger is the dominant mode of travel among all age groups. York Region Transit share is highest among travellers between the ages of 15 and 29, where 10 to 20 per cent of trips are made using the service. Walking and cycling is most commonly used by people aged 10 to 19 at 20 to 30 per cent.

**Figure 5**  
**Daily Trips by Travel Mode by Age Group**



Since 2001 peak travel periods are busier and the afternoon peak occurs over a longer period of time than the morning peak

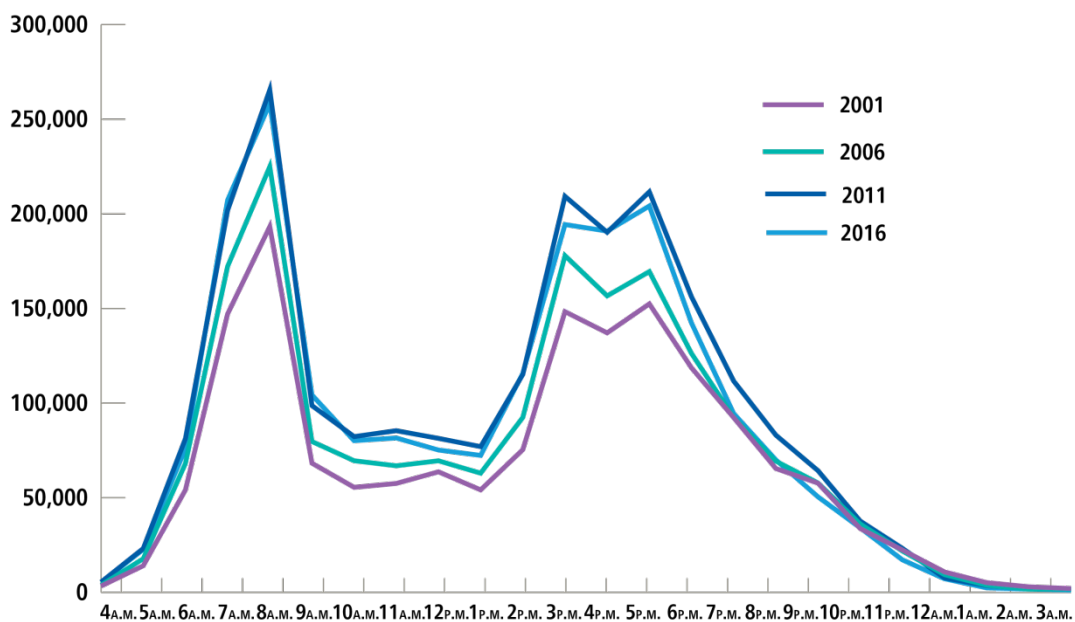
While travel in the Region has grown at all hours of the day, except during late night, growth has been steady since 2011. Figure 6 shows the hourly distribution of daily trips by all modes.

The morning and afternoon commuter peak periods continue to have the greatest concentration of daily travel. The two peak periods combined represent 54 per cent of daily trips. Between 2001 and 2016, the number of morning peak period trips increased by 37 per cent and afternoon trips increased by 35 per cent.

Travel during the morning peak period is concentrated and the single highest hourly volume of trips occurred between 8 a.m. and 9 a.m. A majority of trips during this time period, 76 per cent, is either commuting to work or school. Travel during the afternoon peak period is more evenly distributed. This is likely due to commuters returning home from work, shopping or for other purposes, and having more flexibility to adjust their travel during evening peak hours.

Traffic demand during morning peak period creates traveller pressure to build more roads or increase transit service, even though these demands are only experienced over a relatively short time of the day.

**Figure 6**  
**Start Time of Trip by York Region Residents**

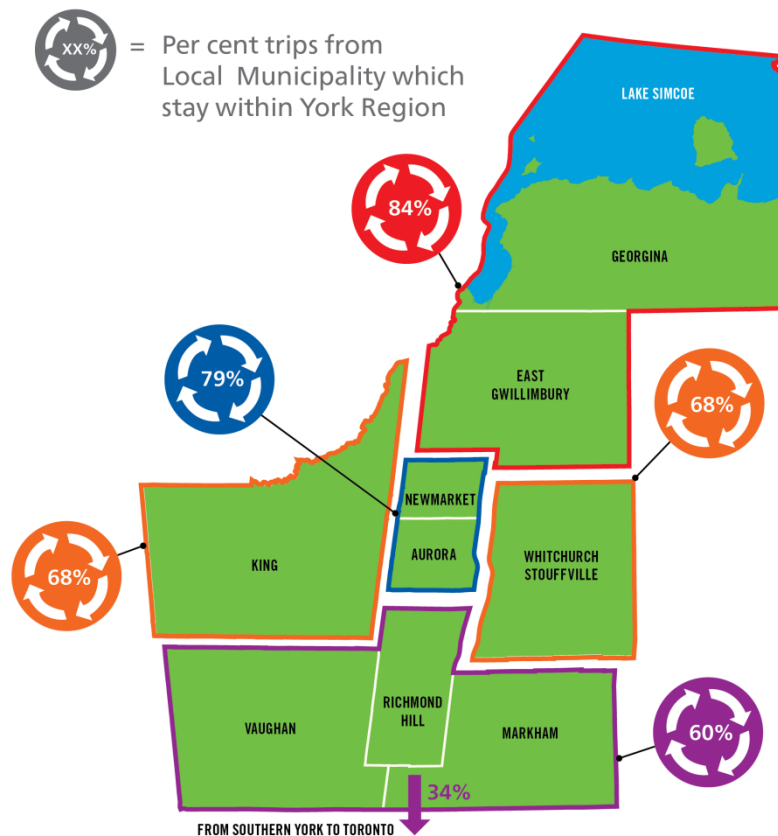


More people are now both living and working in the Region

Approximately 84 per cent of trips that start from northern York Region, Georgina and East Gwillimbury, also end in York Region (see Figure 7). Similarly, 79 per cent and 68 per cent of trips that start from central York Region, Newmarket and Aurora, and Whitchurch-Stouffville and King, also end in York Region.

Intra-regional travel between the three southern municipalities of Markham, Vaughan and Richmond Hill, have increased from 56 per cent to 60 per cent between 2001 and 2016. Over the same period, trips from these municipalities into Toronto have decreased from 38 per cent to 34 per cent of total trips. This trend is consistent across the Region. For example, trips from Georgina and East Gwillimbury to Toronto have decreased from 12 per cent in 2001 to nine per cent in 2016.

**Figure 7**  
**2016 Intra-Regional Travel across York Region**  
**During the Morning Peak Period**





These trends suggest the Region is becoming a more complete community where residents enjoy the opportunity to both live and work.

In York Region, the average number of people in each vehicle has declined

The average number of people in each vehicle was steady in the Region at 1.24 persons per vehicle for more than a decade. The 2016 data shows the average has declined to 1.21 persons per vehicle.

For more efficient use of the transportation network, the average number of persons per car would ideally be increasing. While this is not a positive trend for the Region, the impacts of fewer people in each car is somewhat mitigated by fewer trips per resident and increased use of transit, cycling and walking than 15 years ago.

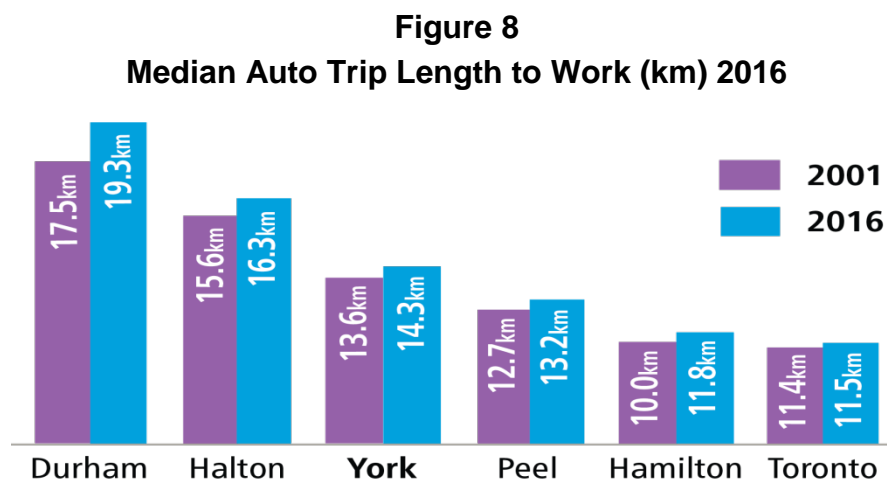
York Region residents travel long distances by car to work, ranking third highest in the Greater Golden Horseshoe Area

On average, York Region residents travelled 14.3 kilometres by car to get to work, ranking third in the GGHA, behind Durham Region at 19.3 kilometres and Halton Region at 16.3 kilometres.

Toronto residents travelled the shortest distance to work by car at 11.5 kilometres.

The commute distance in York Region has increased slightly since 2001. This increasing trend is observed throughout the municipalities included in the survey area, except for Toronto where the commute trip length remained steady at 11.5 kilometres (see Figure 8).

While the length of a car trip in the Region can partly be attributed to the large geography, it is also an area of potential future improvement as more options to both live and work in the Region are created.



The 2016 Transportation Tomorrow Survey provides a reliable profile of travel measurements, conditions and trends










Staff will continue to analyze the 2016 TTS database to:

- Test assumptions in the 2016 Transportation Master Plan, which were based on the 2011 TTS data
- Summarize transportation trends in more detail at Regional and local municipal levels
- Better understand travel by transit, cycling and walking
- Continue to share information with other groups in the Region, local municipalities and the travelling public

The 2016 Transportation Tomorrow Survey will assist the Region in better understanding changing travel patterns while planning for the future

The preliminary results of the 2016 TTS indicate there are some positive trends in how people travel in the Region (see Figure 9). There are also some trends that will be monitored as they contribute to less efficient use of the transportation network. Some trends are neutral as they are partly positive but could be improved.

**Figure 9**  
**Summary of Travel Trends in York Region**

Residents are making fewer trips per person than in 2001	
Total daily trips in York Region are growing	
More people are using transit, walking or cycling to get around compared to fifteen years ago	
Transit continues to be the most utilized mode of travel from the Region to downtown Toronto	
Transit, walking and cycling are popular modes among younger travellers	
Since 2001 peak travel periods are busier and the afternoon peak occurs over a longer period of time than the morning peak	
More people are now both living and working in the Region	
The average number of people in each car has decreased after remaining steady for ten years	
York Region residents travel the third longest distance to work by car amongst the municipalities included in the survey	

 POSITIVE   
  NEUTRAL   
  NEGATIVE

May 3, 2018

2016 Transportation Tomorrow Survey – Key Findings

The 2016 TTS trends reflect that Council’s ongoing focus on a number of investments in numerous transportation initiatives have been successful. These initiatives include record capital investments for road and transit capital projects, operation of the new rapidways, ongoing leadership in the Greater Toronto Area Smart Commute Initiative and continued investment in the Centres and Corridors programs.

Through increased use of transit, cycling and walking, reliance on the automobile for travel has begun to decrease in York Region. This is a positive sign the Region is moving towards a more sustainable future and addressing the goals of Vision 2051.

The 2016 TTS Bulletin (Attachment 1) provides additional information on the 2016 Transportation Tomorrow Survey results.

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Paul Jankowski  
Commissioner of Transportation Services

Attachment (1)

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# 2016 TRANSPORTATION TOMORROW SURVEY

## BULLETIN

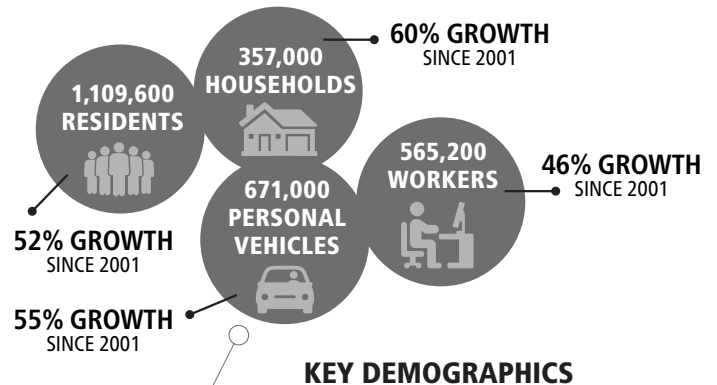
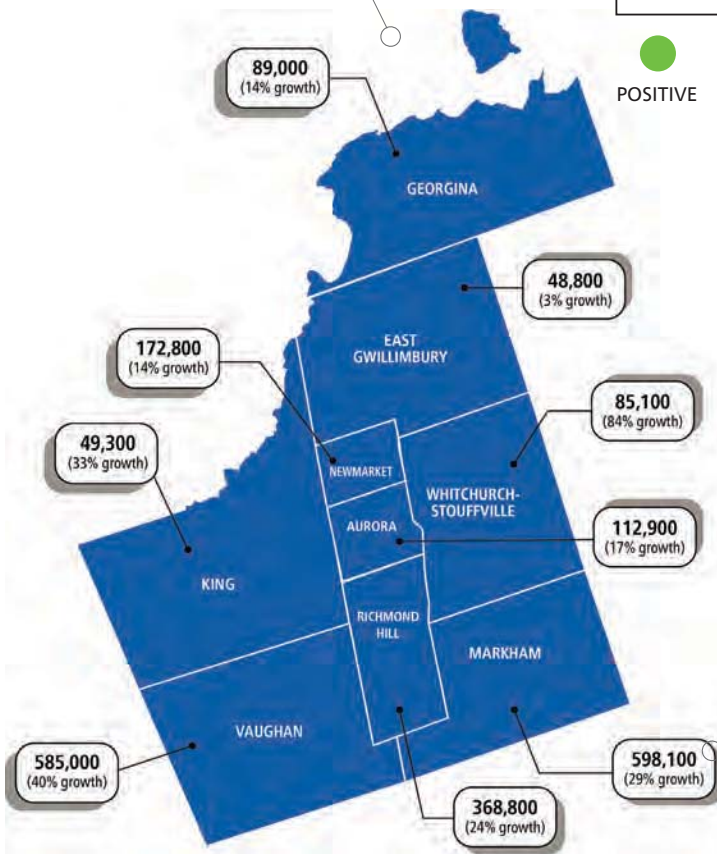
May 2018

### SUMMARY OF TRAVEL TRENDS

Total daily trips in York Region are growing	●
Residents are making fewer trips per person than in 2001	●
More people are using transit, walking or cycling to get around	●
York Region residents travel the third longest distance to work by car	●
The average number of people in each car has decreased	●
Transit continues to be the most utilized mode of travel to downtown Toronto	●
Transit, walking and cycling are popular modes among younger travellers	●
More people are now both living and working in the Region	●
The majority of trips continue to occur during peak periods	●

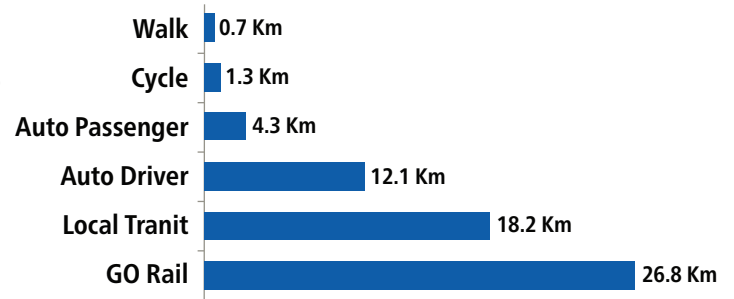
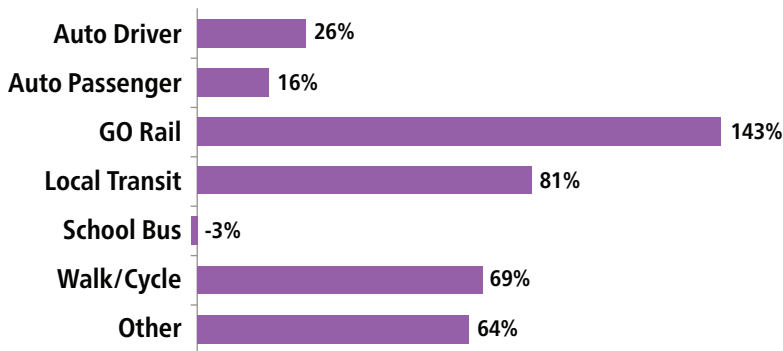
**YORK REGION RESIDENTS MADE 2.1 MILLION TRIPS DAILY IN 2016, A 29 PERCENT INCREASE FROM 2001**

● POSITIVE    ● NEUTRAL    ● NEGATIVE



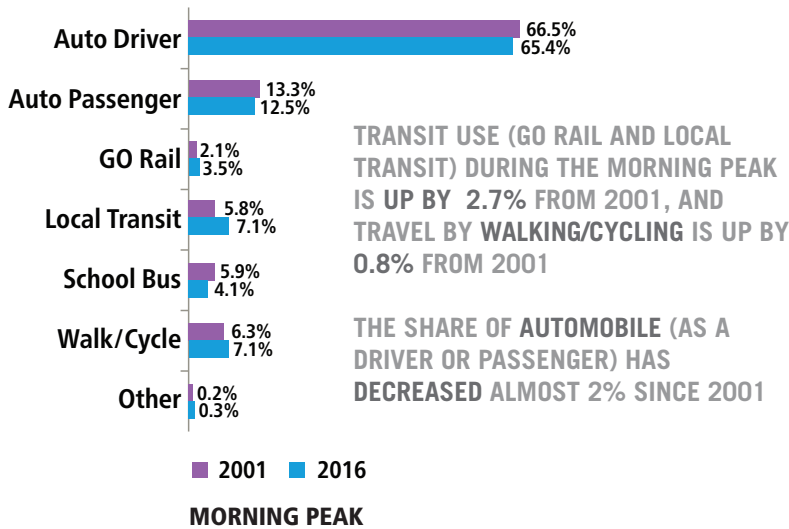
**DAILY TRIPS IN THE REGION ARE GROWING SLOWER (29%) THAN POPULATION (52%) AND VEHICLE (55%) GROWTH SINCE 2001**

**DAILY TRIPS ORIGIN BY MUNICIPALITY**  
(% growth since 2001)

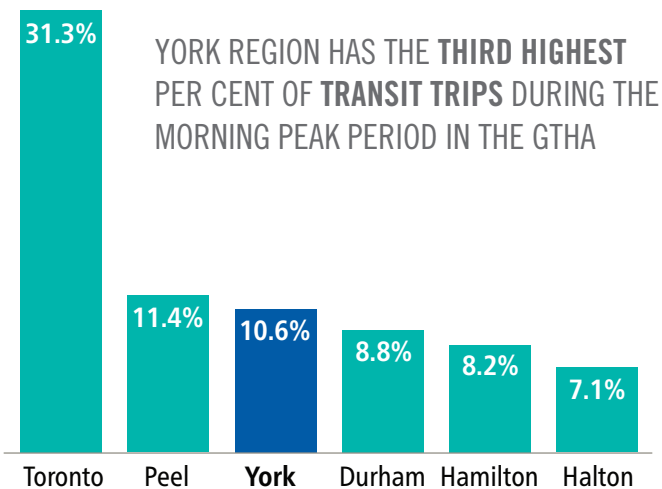
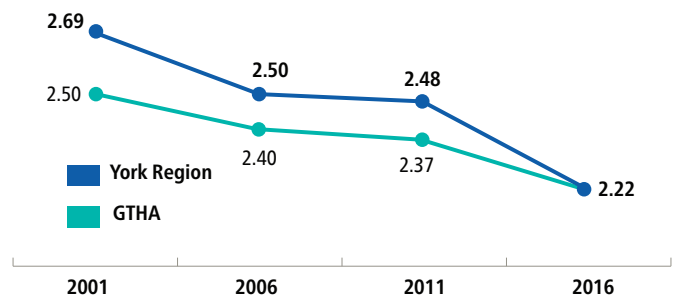


TRAVEL BY MOST MODES HAS INCREASED SINCE 2001  
TRANSIT & ACTIVE TRANSPORTATION TRIPS  
EXPERIENCED THE GREATEST INCREASE

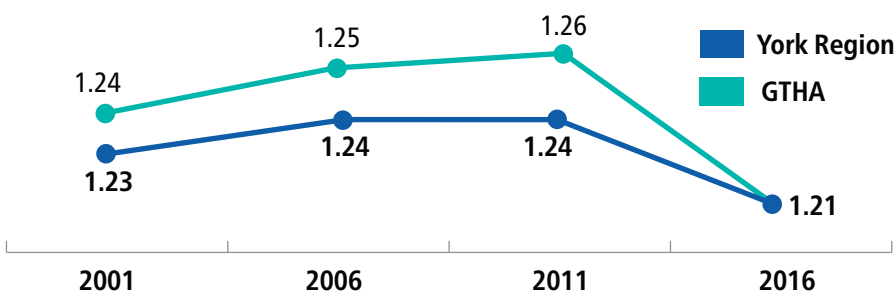
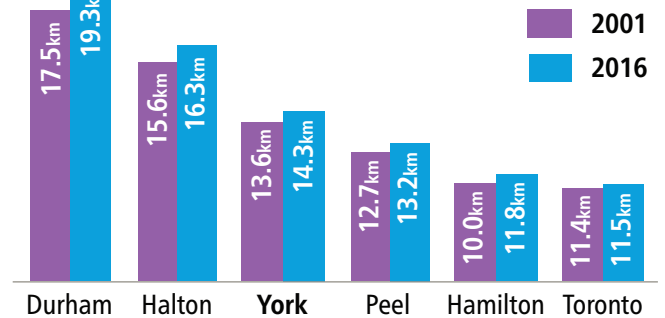
MORNING PEAK TRAVEL BY GO RAIL MAKE UP THE LONGEST  
TRIPS BY DISTANCE ORIGINATING FROM YORK REGION,  
FOR ALL PURPOSE TRIPS



RESIDENTS ARE MAKING FEWER TRIPS  
IN 2016, THE RESIDENTS OF YORK REGION  
MADE ON AVERAGE 2.22 TRIPS PER DAY,  
A DECREASE FROM 2.69 IN 2001

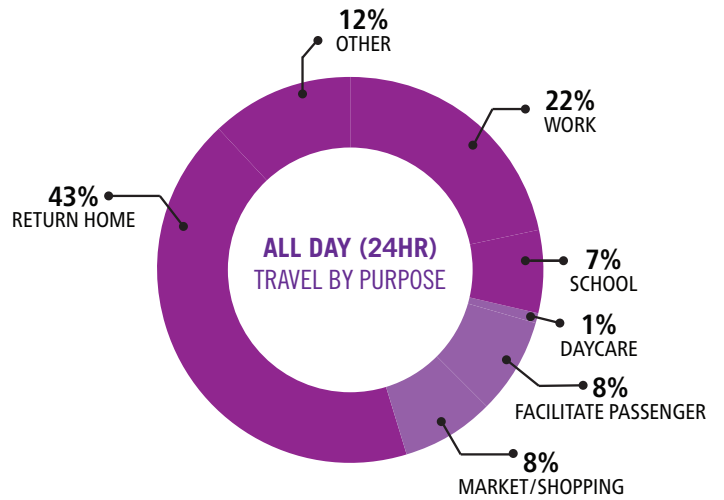
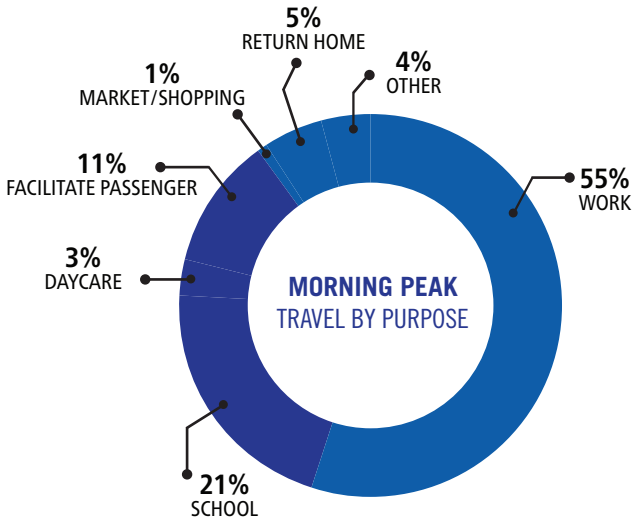


RESIDENTS OF YORK REGION HAVE THE  
THIRD LONGEST AUTOMOBILE COMMUTE  
TO WORK BY DISTANCE



THE AVERAGE NUMBER OF PEOPLE IN A  
VEHICLE HAS DECREASED TO 1.21 PERSONS  
PER VEHICLE, FROM 1.23 IN 2001

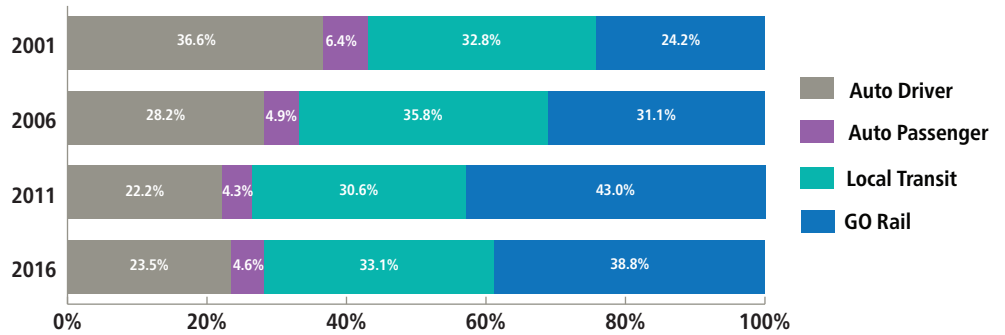
## TRAVEL BY PURPOSE



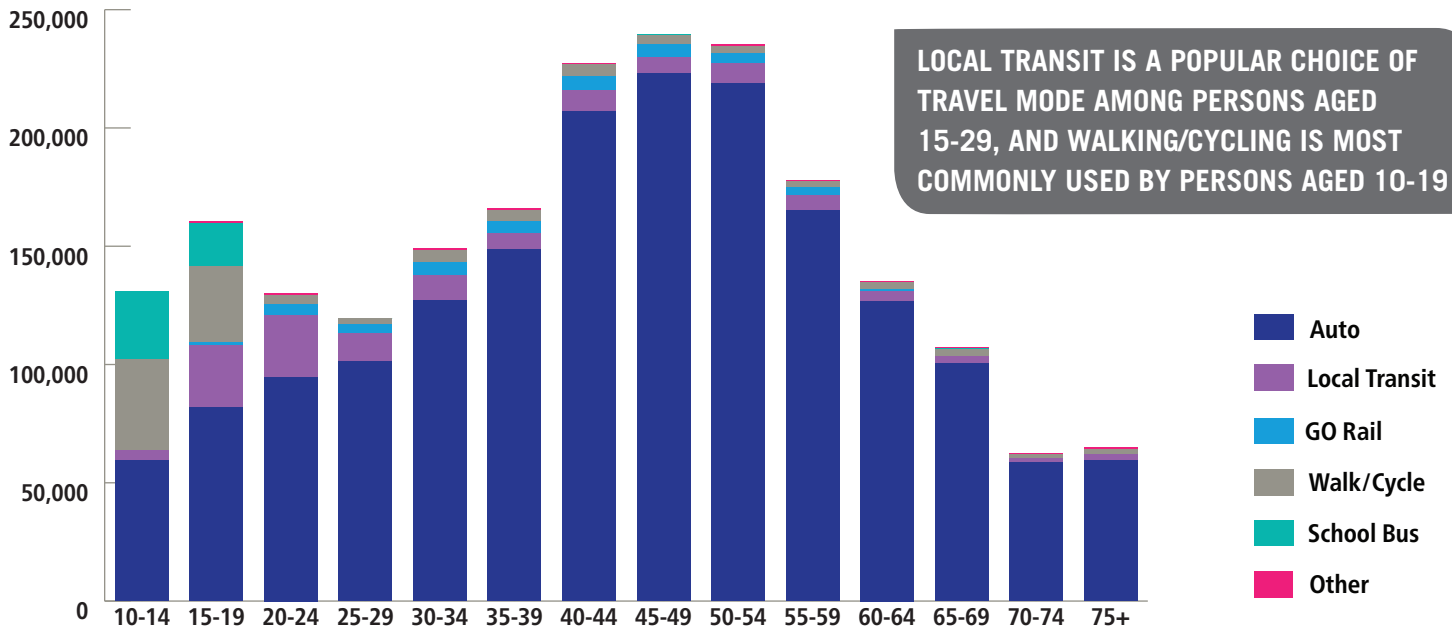
**COMMUTE TO WORK AND SCHOOL IS THE MOST COMMON TRIP PURPOSE DURING THE MORNING PEAK PERIOD AT 76% OF ALL TRIPS**

## A.M. PEAK TRAVEL TO DOWNTOWN TORONTO

**TRANSIT CONTINUES TO BE THE MOST UTILIZED (71.9%) MODE OF TRAVEL FROM YORK REGION TO DOWNTOWN TORONTO IN THE MORNING PEAK PERIOD**



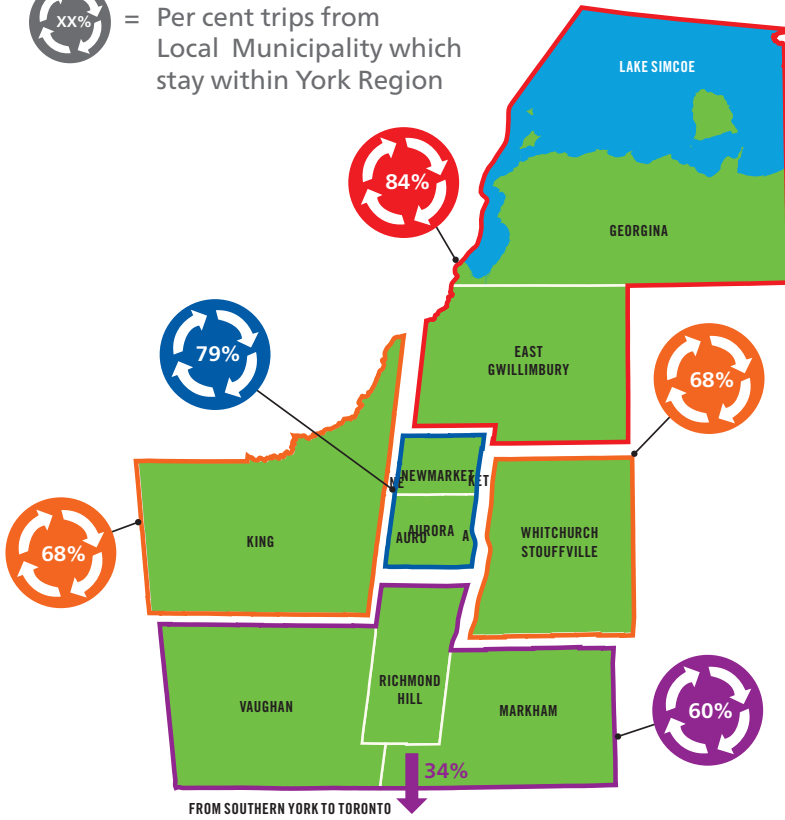
## TRIPS BY MODE BROKEN DOWN BY AGE GROUPS



## INTRA-REGIONAL TRAVEL (MORNING PEAK PERIOD)

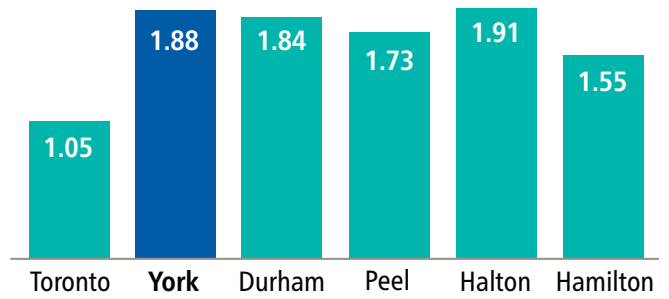


XX% = Per cent trips from Local Municipality which stay within York Region

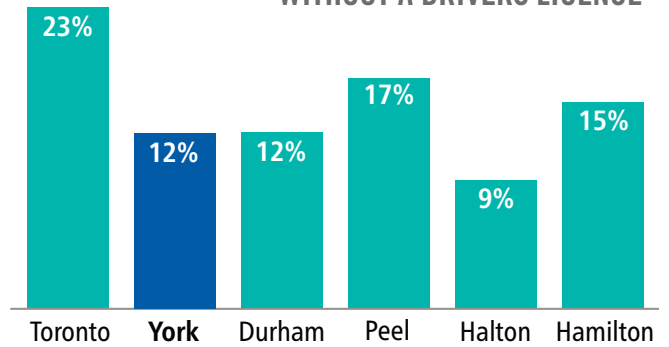


60% TO 84% TRIPS START AND END IN YORK REGION DURING THE MORNING PEAK PERIOD IN 2016

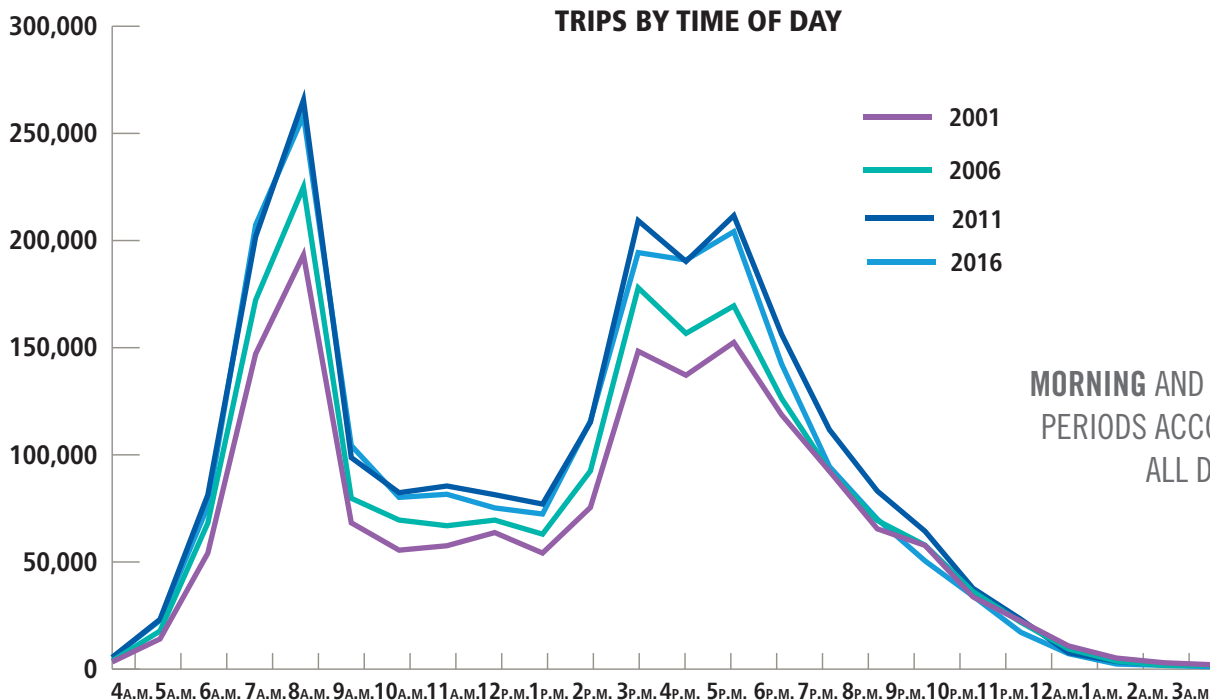
## YORK REGION HAS THE SECOND HIGHEST OWNERSHIP OF VEHICLES PER HOUSEHOLD IN THE GTHA



## YORK REGION HAS THE SECOND LOWEST PROPORTION OF ADULTS (16+) IN THE GTHA WITHOUT A DRIVERS LICENCE



## THE MAJORITY OF TRIPS CONTINUE TO OCCUR DURING PEAK PERIODS



MORNING AND AFTERNOON PEAK PERIODS ACCOUNT FOR 54% OF ALL DAILY TRIP-MAKING