PW-C4-1

York Region

Regional Clerk's Office
Corporate Services Department

November 18, 2011

LEGISLATIVE SERVICES		
COPY TO:		FOR:
Chair	✓	Committee
CAO	✓	
Corporate Services		Council ✓
Public Works	✓	Dec. 8, 2011
Employee and Business Services		RC
Health Services		File
Human Services		
Peel Living		

Ms. Carol Reid
Regional Clerk
Regional Municipality of Peel
10 Peel Centre Drive
Brampton, ON L6T 4B9

Dear Ms. Reid:

Re: 2011 Cordon Count Results

Regional Council, at its meeting held on November 17, 2011, adopted the following recommendations of the Planning and Economic Development Committee regarding the report entitled "2011 Cordon Count Results":

1. This report be received for information.

2. Copies of this report be forwarded by the Regional Clerk, to the Ministry of Transportation, the City of Toronto, Metrolinx, The Toronto Transit Commission, The Regional Municipalities of Peel and Durham, and the Region's nine area municipalities.

A copy of Clause No. 4, Report No. 9 of the Planning and Economic Development Committee is enclosed for your information.

Please contact Loy Cheah, Director, Infrastructure Planning at 905-830-4444, Ext. 5024, if you have any questions with respect to this matter.

Sincerely,

Denis Kelly
Regional Clerk

G. Boulianne/kc
Attachments

#3864425 P07 November 2, 2011

RECEIVED
NOV 2 . 2011
REGION OF PEEL
CLERKS DEPT.

REFERRAL TO _____
RECOMMENDED
DIRECTION REQUIRED _____
RECEIPT RECOMMENDED ✓

York Region

Clause No. 4 in Report No. 9 of the Planning and Economic Development Committee was adopted, without amendment by the Council of The Regional Municipality of York at its meeting on November 17, 2011.

4
2011 CORDON COUNT RESULTS

The Planning and Economic Development Committee recommends:

1. **Receipt of the presentation by Loy Cheah, Director, Infrastructure Planning; and**

2. **Adoption of the recommendations contained in the following report dated October 21, 2011, from the Acting Commissioner of Planning and Development Services.**

1. RECOMMENDATIONS

It is recommended that:

1. This report be received for information.

2. Copies of this report be forwarded by the Regional Clerk, to the Ministry of Transportation, the City of Toronto, Metrolinx, The Toronto Transit Commission, The Regional Municipalities of Peel and Durham, and the Region's nine area municipalities.

2. PURPOSE

This report is to inform Council on the findings of the 2011 Cordon Count Program, highlighting the changes in travel behaviour since 2001 and 2006.

3. BACKGROUND

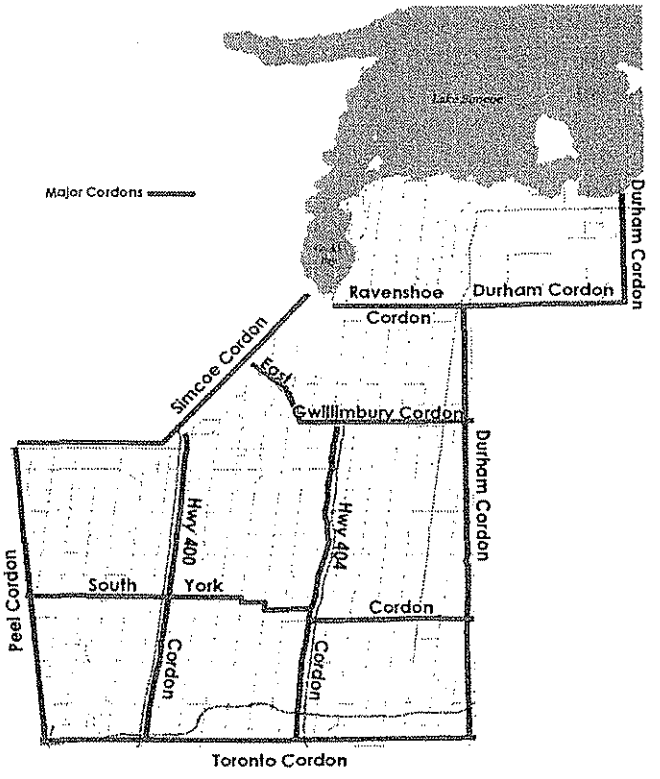
The purpose of the 2011 Cordon Count Program is to collect and report on the changes in commuting behaviours and travel patterns

The 2011 Cordon Count Program provides an updated snapshot of commuting behaviour and travel patterns in York Region. Travel data collected includes the number of persons and vehicles crossing various screenlines in York Region. Screenlines are strategic lines typically spanning municipal boundaries, man-made boundaries (such as railways or

highways) and natural boundaries (such as rivers). Screenlines provide a means of capturing travel behaviour between geographical areas. The screenlines used for travel data collection in the 2011 Cordon Count Program are shown in *Figure 1*.

Collecting consistent and accurate traffic information is a very important component of infrastructure planning for provincial, regional and municipal jurisdictions within the GTA. The 2011 Cordon Count Program measure the total traffic volume on an average weekday, classifying the data by type of vehicle and occupancy.

Figure 1 – 2011 Cordon Count Screenlines



The vehicle classifications used are as follows:

- Passenger cars, taxis and light trucks, with 1 or more occupants.
- Medium and heavy trucks.
- York Region Transit (YRT), Viva, Brampton Transit, TTC, GO Transit, school buses and other buses.
- Bicycles.

All day traffic data counts are conducted on weekdays (excluding Fridays) during the months of May and June. This provides a strategic snapshot of travel behaviour and changes in travel patterns in and around York Region, and is done in conjunction with the Regions of Durham, Peel, Halton, City of Hamilton and the City of Toronto who conduct similar surveys at the same time.

It is important to monitor internal changes in travel patterns within the Region and interregional behaviour at the boundaries. The data sheds light on the impact of economic activities on travel patterns and assists in monitoring the effectiveness of planning, transportation and transit policies.

The Cordon Count Program is conducted every five years

The Cordon Count Program is conducted every five years and is timed to coincide with other monitoring programs such as the GTA-wide Transportation Tomorrow Survey (TTS) and the Federal Statistics Canada Census. The last full Cordon Count Program was conducted in 2006, and prior to that in 2001. The data collected in 2011 is compared to the 2001 and 2006 counts along the defined screenlines to highlight changes in travel behaviour.

The raw data from the 2011 Cordon Count Program is stored at a central repository at the University of Toronto together with data from previous Cordon Count Programs and data from other participating jurisdictions across the GTA to create a time-series database of travel information. The cordon count database is an important shared resource of travel data that is used by regions, municipalities, the Province, transportation consultants and academics for various transportation studies and analyses.

4. ANALYSIS

The 2011 Cordon Count Bulletin provides a summary of the data collected and changes in travel behaviour

The 2011 Cordon Count Bulletin (included as *Attachment 1*) shows the change in traffic and travel behaviour that has taken place both in the longer term (2001-2011) and in the medium term (2006-2011). A summary of the results for the all day period (between 7:00 AM – 7:00 PM), the morning peak period (between 6:30 AM – 9:30 AM), and the afternoon peak period (between 3:30 PM – 6:30 PM) are presented in the Bulletin.

It is worth noting that population and employment levels in York Region increased by approximately 41% and 34%, respectively, between 2001 and 2011, resulting in corresponding changes in traffic patterns throughout the Region. The key findings of the 2011 Cordon Count Program are listed below.

Provincial expressways play a critical role in regional and inter-regional travel

- The 2011 Cordon Count Program found that the 400 series highways (Highway 400, 404, 427 and 407) carry an increasing proportion of all traffic into and out of York Region (42%). In 2001 and 2006, the 400 series highways carried 38% of all traffic into and out of the Region.

- Highway 407 accounted for 51 % of the traffic crossing the York-Peel boundary and 35% of the traffic crossing the York-Durham boundary.

- 400-series highways carry 39% of all traffic crossing the Steeles Avenue screenline. In 2006, Provincial expressways carried 36% of this traffic.

Travel between York Region and Toronto continues to grow

- Total traffic volume across the Steeles Avenue screenline, during the period between 2001 and 2011, grew 17.9% during the 12-hour period counted, which is an increase of 163,190 vehicles. Approximately 1,074,000 vehicles crossed Steeles Avenue screenline during the 12-hour period in 2011.

- Crossing the Steeles Avenue screenline, the average vehicle occupancy rate of 1.16 remained unchanged during the 12-hour period between 2001 and 2011. Transit trips increased by 5.0% during the same period.

- The 2011 data shows that in the morning peak period, 59% of the total traffic crossing the Steeles Avenue screenline traveled south while 41% traveled north. This has not changed significantly since the 2001 and 2006 surveys when 58% of the total traffic crossing the Steeles Avenue screenline traveled south and 42% traveled north. Earlier cordon count results had shown a more balanced north-south trend across the Steeles Avenue screenline, with 53% southbound and 47% northbound vehicles crossing Steeles Avenue during the morning peak period in 1998.

- The total proportion of trucks crossing Steeles Avenue decreased from 6% to 5% in the 2001 to 2011 period.

Trips between York Region and Peel Region also show a steady increase

- There was an increase of 10.3% in total traffic volume across the York-Peel screenline between 2001 and 2011. Total vehicle trips increased from 169,510 in 2001 to 186,930 in 2011.

- The York-Peel screenline experienced traffic growth between 2001 and 2006, however, traffic volumes decreased between the 2006 and 2011 surveys. This is

likely due to changes in economic conditions and construction related factors on Queen Street in Peel Region during the 2011 survey.

- The average vehicle occupancy level decreased slightly from 1.11 to 1.09 persons per vehicle between 2001 and 2011. Transit trips crossing the York-Peel screenline increased from 1% to 3.9% between 2001 and 2011.

Travel between York Region and Durham Region grew at a fast rate

- The York-Durham screenline experienced a growth of 40% in all day traffic between 2001 and 2011. Total vehicle trips increased from 61,790 in 2001 to 86,460 in 2011.The majority of the traffic growth occurred between the 2001 and 2006 surveys.

- There was an increase in truck traffic from 8.0 to 11.0% crossing the York-Durham screenline over the last 10 years.

- Average car occupancy increased slightly (by 0.01 people per vehicle) over the same 10 year period.

Travel to and from the north also shows significant growth

- Traffic crossing the York-Simcoe screenline experienced a 16.4% growth during the 12-hour count between 2001 and 2011. Total vehicle trips increased from 86,200 in 2001 to 100,320 in 2011.

- Truck traffic increased from 7.0 to 9.0% of total traffic from 2001 to 2011.

Internal screenlines show similar traffic growth compared to previous years

- Total all day east-west traffic crossing the Highway 404 screenline experienced significant growth of 36.4% during the period from 2001 to 2011.

- The Highway 404 screenline data shows an increase in auto occupancy of 0.01 persons per vehicle and transit use increased from 3.0 to 4.8% in the period from 2001 to 2011.

- East/west traffic across the Highway 400 screenline grew by 26.9% from 2001 to 2011. The majority of the traffic growth occurred in the period from 2001 to 2006, with the 2006 to 2011 traffic growth representing 3.1% of the 26.9% total growth over 10 years.

- The East Gwillimbury screenline experienced the highest total traffic growth of 41.5% from 2001 to 2011. Transit usage across this screenline increased from 4.0 to 5.3% of all trips.

- Traffic across the South York Screenline (at the north limit of Vaughan and Markham) shows a 28.7% increase in total traffic between 2001 and 2011. Truck traffic increased from 7.0 to 9.0% during the same 10 year.

- The Ravenshoe screenline showed a 21.1% increase in total traffic between 2001 and 2011.

Cycling trips were counted for the first time during the 2011 Cordon Count Program

A total of 3600 cycling trips were counted during the 12-hour period on Regional roads. Over time, this data will assist in measuring the effectiveness of the Region's various cycling initiatives, including implementation of cycling lanes on Regional roads.

Transit usage and modal share are on the rise across all major screenlines

The majority of the screenlines show increased transit trips between the 2001 and 2011 surveys. In 2001, transit trips crossing all screenlines represented 4.2% of all trips, compared to 5.4% in 2006 and 7.2% in 2011.

Average auto occupancy rates show no significant changes

Increases in average auto occupancy rates, particularly during peak periods, would have a positive impact on road congestion levels. However, average auto occupancy rates show no significant trend in either direction during the period from 2001 and 2011. The average occupancy rates, particularly in the urbanized areas are in the range of 1.12 to 1.16.

Link to Key Council-approved Plans

This report supports the 2011 to 2015 Strategic Plan in the following priority area:

- Continue to deliver and sustain critical infrastructure.

5. FINANCIAL IMPLICATIONS

The Region's 2011 Cordon Count Program was carried out for a cost of $63,750 with $27,000 recovered from the Ministry of Transportation.

6. LOCAL MUNICIPAL IMPACT

Each local municipality will have access to the cordon count database for use in their transportation planning.

The 2011 Cordon Count Bulletin will be available on the York Region website while the detailed cordon count database can be accessed through the University of Toronto website at www.dmg.utoronto.ca.

7. CONCLUSION

The Cordon Count Program is an important tool used in transportation planning. Full travel data is collected every 5 years with smaller counts usually conducted in an intervening year. Analysis of the change in travel patterns from 2001 to 2011 is presented in the 2011 Cordon Count Bulletin.

Overall, the 2011 cordon count data shows an increase in transit usage at most screenlines. All screenlines experienced growth in vehicular traffic and person trips over the 10 year period from 2001 to 2011. The growth in traffic and person trips is greater in the 2001 to 2006 period, with slower growth in traffic between 2006 and 2011.

For more information on this report, please contact Loy Cheah, Director, Infrastructure Planning at (905) 830-4444, Ext. 5024.

The Senior Management Group has reviewed this report.

(The attachment referred to in this clause is attached to this report.)

York Region

2011 CORDON COUNT BULLETIN

November 2011

1. HIGHLIGHTS

The Regional Municipality of York has been witnessing substantial growth over the last 10 years. The Region's population has grown from 759,320 to 1,073,158 (41%), and employment has risen from 380,800 to 512,000 (34%), between 2001 and 2011. Recently, the Region has embarked on aggressive transit initiatives to address growing auto travel demands and move towards sustainability.

Full cordon count surveys are conducted every five years with smaller counts usually conducted in an intervening year. The last full cordon count was conducted in 2006. These cordon counts are needed to gauge the travel impacts of growth and changes in travel trends. This bulletin provides summaries of inter-regional and inter-municipal travel characteristics.

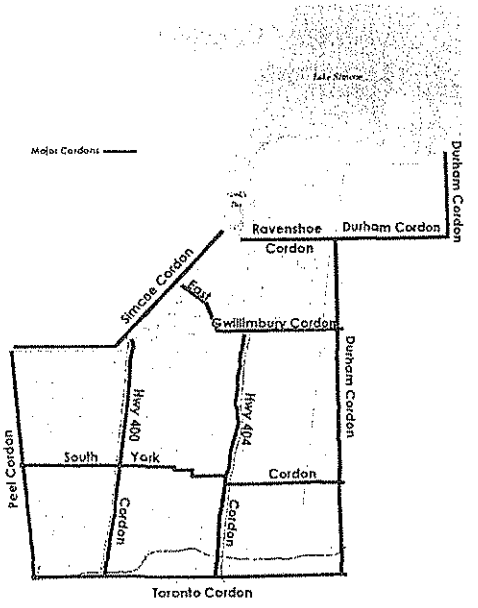


Exhibit 1: 2011 York Region Screenlines

Purpose

A cordon count is the periodic counting of persons and vehicles on all travel corridors crossing selected screenlines. Full cordon count surveys are conducted every five years and are timed to coincide with other programs such as the GTA wide Transportation Tomorrow Survey (TTS) and the Federal Statistics Canada Census. The last full cordon count was conducted in 2006. The collected data is used to assess changes in transit use, vehicle occupancy rates, congestion levels, travel patterns and trends. The purpose of this bulletin is to report on the analysis and findings of the 2011 full cordon count program.

"All day" 12-hour counts (7:00 AM - 7:00 PM) were taken during the months of May and June, on a typical weekday (excluding Fridays). The summary tables presented in this report include the peak periods (6:30 AM - 9:30 AM) and (3:30 PM - 6:30 PM). Records of the vehicle types and vehicle occupancy numbers were taken at 15-minute intervals. The following vehicle types were recorded:

- Passenger cars, taxis and light trucks with 1, 2, 3, 4 and more occupants
- Medium and heavy trucks
- York Region Transit (YRT), VIVA Rapid Transit, Brampton Transit, TTC, GO Transit, school buses and others
- Bicycles

Cordon screenlines (Exhibit 1) are strategic lines typically spanning along natural or man-made barriers to travel, such as rivers or freeways. The York Region perimeter screenlines are used to monitor inter-regional traffic flow to and from York Region and the adjacent regions.

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KEY HIGHLIGHTS FOR 2011

- Majority of the screenlines experienced growth in all day vehicle trips, with growth ranging between 10.3% at the Peel screenline to 41.5% across the East Gwillimbury screenline during the period between 2001 and 2011 as shown in Table 1.

Table 1: 2001 to 2011 Period Total Vehicle Change

Screenline	Number of Vehicles 12-Hour Period			Change 2001-2011	Change 2006-2011	Number of Vehicles AM Peak Period			Change 2001-2011	Change 2006-2011
	2001	2006	2011			2001	2006	2011		
Toronto Screenline	910,990	1,012,240	1,074,180	17.9%	6.1%	252,270	269,030	271,430	7.6%	0.9%
Peel Screenline	169,510	192,990	186,930	10.3%	-3.1%	50,970	58,970	48,690	-4.5%	-17.4%
Durham Screenline	61,790	80,210	86,460	39.9%	7.8%	18,560	25,470	23,840	28.4%	-6.4%
Simcoe Screenline	86,200	107,000	100,320	16.4%	-6.2%	24,070	28,180	24,280	0.9%	-13.8%
South York Screenline	225,540	277,210	290,170	28.7%	4.7%	70,410	82,820	75,710	7.5%	-8.6%
Highway 400 Screenline	260,190	320,310	330,130	26.9%	3.1%	73,960	91,790	84,150	13.8%	-8.3%
Highway 404 Screenline	278,700	321,450	380,220	36.4%	18.3%	77,050	91,860	98,790	28.2%	7.5%
East Gwillimbury Screenline	61,650	66,450	87,210	41.5%	31.2%	16,710	18,750	23,000	37.6%	22.7%
Ravenshoe Screenline	32,280	37,250	39,100	21.1%	5.0%	9,660	11,250	10,410	7.8%	-7.5%

- Average all day car occupancy rates show no significant trend in either direction during the period from 2001 to 2011 as shown in Table 2. The average occupancy rates, particularly in the urbanized areas are in the range of 1.12 to 1.16.

- All day person trips across all screenlines continued to grow between 2001 and 2011. This growth ranged between 10% at Simcoe screenline and 41% at the Highway 404 Screenline as shown in Table 3. Highway 407 accounted for 51 % of the traffic crossing the York-Peel boundary and 35% of the traffic crossing the York-Durham boundary in 2011.

- All day transit ridership increased between the 2001 and 2011 surveys. In 2001, transit trips crossing all screenlines represented 4.2% of all trips, compared to 5.4% in 2006 and 7.2% in 2011.

- In 2011, 400 series highways (Highway 400, 404, 427 and 407) carry an increasing proportion of all traffic into and out of York Region (42%). In 2001 and 2006, the 400 series highways carried 38% of all traffic into and out of the Region.

Table 2: 2001 to 2011 Average Car Occupancy Change

Screenline	Average Car Occupancy Average 12-Hour 2001	2006	2011	Change 2001-2011	Change 2006-2011
Toronto Screenline	1.16	1.16	1.16	0.00	0.00
Peel Screenline	1.11	1.12	1.09	-0.02	-0.03
Durham Screenline	1.15	1.16	1.16	0.01	0.00
Simcoe Screenline	1.19	1.16	1.12	-0.07	-0.04
South York Screenline	1.13	1.14	1.11	-0.02	-0.03
Highway 400 Screenline	1.15	1.13	1.12	-0.03	-0.01
Highway 404 Screenline	1.15	1.13	1.16	0.01	0.03
East Gwillimbury Screenline	1.21	1.17	1.14	-0.07	-0.03
Ravenshoe Screenline	1.21	1.20	1.29	0.08	0.09

- Table 1 and Exhibits 2 and 3 show the changes in traffic volumes in the AM peak period across all the screenlines both in the long term (2001-2011) and mid term (2006-2011). Peak period traffic continues to increase despite high congestion levels at the Toronto boundary. South bound and north bound person trips crossing the Toronto boundary increased 20% and 14% respectively (35,600 trips in the SB direction and 17,700 trips in the NB direction) during the morning peak period between 2001 and 2011.

- In terms of total person trips crossing York Region's boundary travel across the Toronto boundary remains the most significant with almost ¾ (75%) of all person trips going through the Toronto screenline.

- Percent of truck traffic increased across the majority of the screenlines.

Table 3: Percent Change in Total Person Trips

Screenline	Person Trips 12-Hour Period 2001	2006	2011	% Change 2001-2011	% Change 2006-2011
Toronto Screenline	1,099,773	1,252,640	1,325,340	20.5	5.8
Peel Screenline	188,518	218,000	209,233	11.0	-4.0
Durham Screenline	70,973	92,760	99,276	39.9	7.0
Simcoe Screenline	105,523	128,410	116,023	10.0	-9.6
South York Screenline	269,828	329,930	341,780	26.7	3.6
Highway 400 Screenline	305,117	371,360	387,142	26.9	4.2
Highway 404 Screenline	324,832	371,350	459,305	41.4	23.7
East Gwillimbury Screenline	76,924	80,650	103,767	34.9	28.7
Ravenshoe Screenline	39,062	44,910	50,868	30.2	13.3

Exhibit 2: Percent Change in A.M. Peak Period Traffic Flow
between 2001 and 2011

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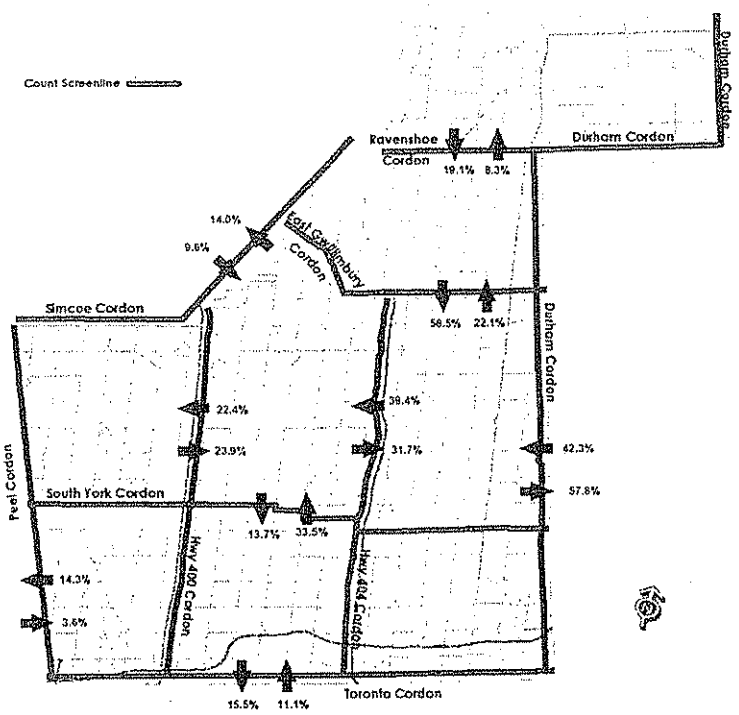
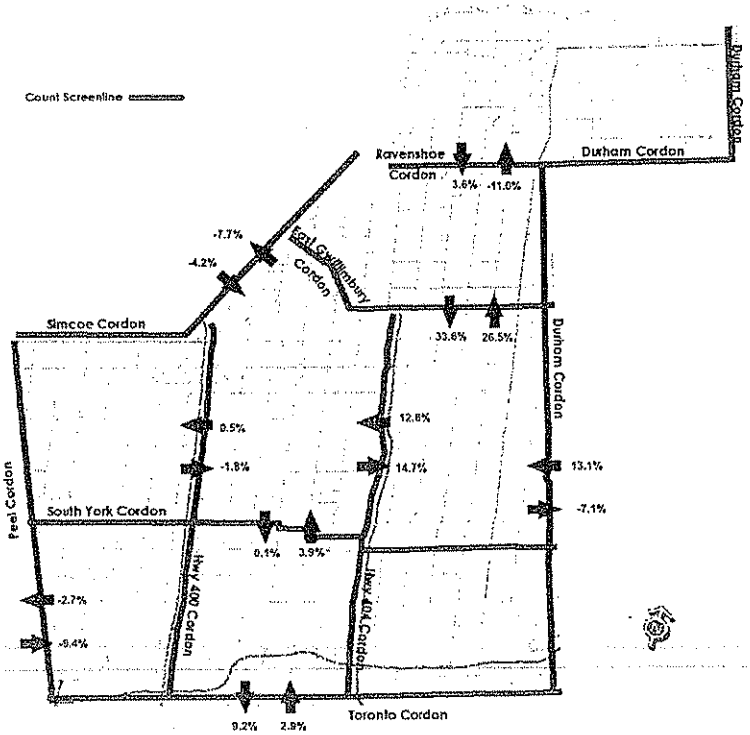


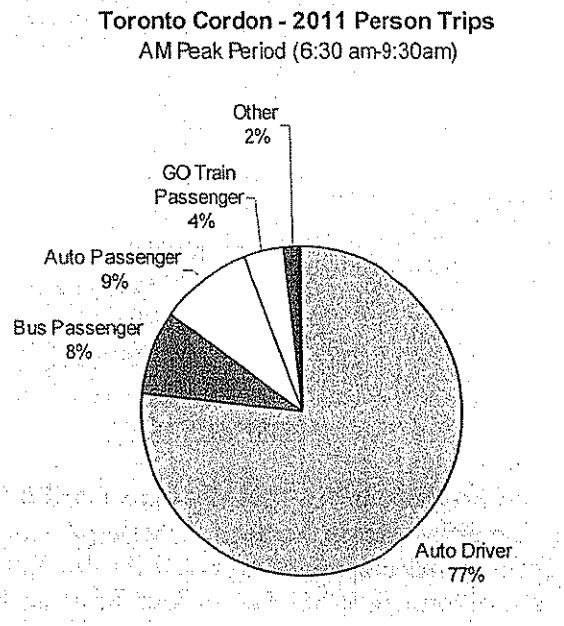
Exhibit 3: Percent Change in A.M. Peak Period Traffic Flow
between 2006 and 2011



2. RESULTS AND ANALYSIS OF SCREENLINE COUNTS

2.1. Toronto Cordon

The Toronto Cordon Screenline runs in an east-west direction along the north side of Steeles Avenue between Highway 50 in the west and York-Durham Line to the east. Counts along this line were conducted in partnership with the City of Toronto, which coordinated counts west of Yonge Street, while York Region counted the eastern section.



York-Toronto Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	910,990	1,012,240	1,074,180	+17.9%	+6.1%
A.M. Peak 3-hour - NB	105,180	113,500	116,810	+11.1%	+2.9%
A.M. Peak 3-hour - SB	147,090	155,530	169,900	+15.5%	+9.2%
% Truck Usage (12 hour) Two Way	6.0%	5.0%	5.0%	-1.0%	No change
Total Person trips (12 hour) Two Way	1,099,770	1,252,640	1,325,340	+20.5%	+5.8%
A.M. Peak 3-hour - NB	123,830	137,430	141,530	+14.3%	+3.0%
A.M. Peak 3-hour - SB	177,440	195,830	213,060	+20.1%	+8.8%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.12	1.12	1.12	No change	No change
P.M. Peak 3-hour	1.18	1.17	1.17	-0.01	No change
12 hour	1.16	1.16	1.16	No change	No change
Transit Usage Two Way					
A.M. Peak 3-hour	8.0%	10.5%	12.5%	+4.5%	+2.0%
P.M. Peak 3-hour	6.0%	8.8%	10.8%	+4.8%	+2.0%
12 hour	5.0%	7.4%	10.1%	+5.1%	+2.7%

The Provincial highways (400, 427 and 404) carry 39% of the traffic crossing Steeles Avenue during the all day 12-hour period. In the 10 year period between 2001 and 2011, traffic increased by 17.9% or 163,190 two-way vehicular trips during the 12-hour period, with a growth of 11% in the northbound direction and 15% in the southbound, during the AM peak period. Total daily person trips have increased by 20%, which is generally a result of the increase in population and employment during the same period.

Table 4: A.M. Transit Usage on Selected Roads along the York–Toronto Screenline

Screenline	% Transit Usage 12-Hour Period			% Change 2001-2011	% Change 2006-2011
	2001	2006	2011		
Martin Grove N of Steeles	1.0	14.0	12.9	11.9	-1.1
Weston N of Steeles	2.0	7.0	5.3	3.3	-1.7
Jane N of Steeles	6.0	23.0	22.5	16.5	-0.5
Keele N of Steeles	7.0	13.0	21.5	14.5	8.5
Dufferin N of Steeles	3.0	4.0	6.2	3.2	2.2
Bathurst N of Steeles	3.0	12.0	16.2	13.2	4.2
Yonge Street N of Steeles	21.0	44.0	38.0	17.0	-6.0
Bayview N of Steeles	10.0	6.0	9.2	-0.8	3.2
Don Mills N of Steeles	6.0	11.0	13.4	7.4	2.4
Victoria Park N of Steeles	4.0	6.0	7.3	3.3	1.3
Markham N of Steeles	4.0	5.0	3.0	-1.0	-2.0

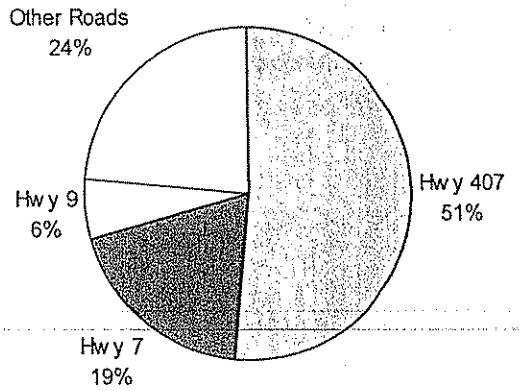
Transit usage in the AM peak period (Table 4) has shown an increase on majority of the roads crossing Steeles Avenue, similarly, the 12 hour all day transit usage increased by 5%. This increase in Toronto's cross boundary all day transit usage has been due to improved YRT services and the introduction of VIVA Bus Rapid Transit System which was launched in September 2005. Car occupancy rates are unchanged as well since the last Cordon Count conducted in 2006.

The 2011 data shows that in the morning peak period, 59% of the total traffic crossing the Steeles Avenue screenline traveled south while 41% traveled north. This has not changed significantly since the 2001 and 2006 surveys when 58% of the total traffic crossing the Steeles Avenue screenline traveled south and 42% traveled north. Earlier cordon count results had shown a more balanced north-south trend across the Steeles Avenue screenline, with 53% southbound and 47% northbound vehicles crossing Steeles Avenue during the morning peak period in 1998.

2.2. Peel Cordon

The Peel cordon is the western boundary of York Region. High traffic growth was basically limited to three major roads: Highway 407, Highway 7, and Highway 9. Highway 407 played the major role in the traffic crossing the Peel boundary, carrying 51% of the total all day traffic in 2011.

2011 Traffic Crossing Peel Cordon
12-hour period (7 am-7 pm)



Total all day vehicular traffic increased by almost 10% and person trips increased 11% during the period between 2001 and 2011. The York-Peel screenline experienced traffic growth between 2001 and 2006, however, traffic volumes decreased between the 2006 and 2011 surveys. This is likely due to changes in economic conditions and construction related factors on Queen Street in Peel Region. All day transit usage on Highway 407 remained unchanged at 3% and on Highway 7 increased from 2% to 10% in the last 10 years.

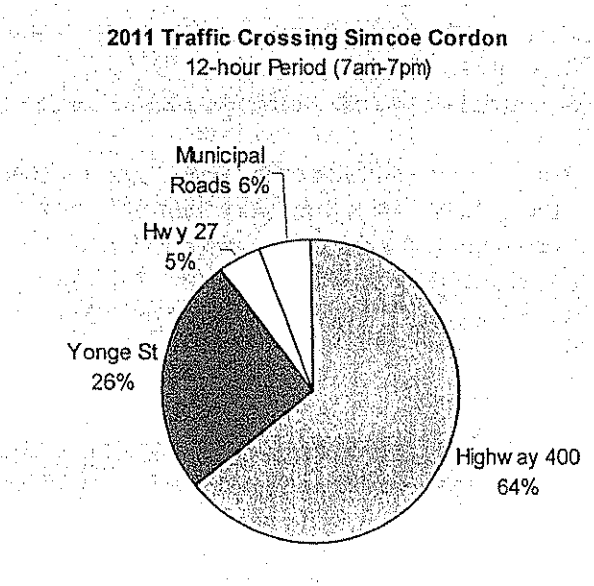
York-Peel Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	169,510	192,990	186,930	+10.3%	-3.1%
A.M. Peak 3-hour - EB	28,890	33,020	29,930	+3.6%	-9.4%
A.M. Peak 3-hour - WB	22,080	25,950	25,240	+14.3%	-2.7%
% Truck Usage (12 hour) Two Way	11.0%	10.8%	13.0%	+2.0%	+2.2%
Total Person trips (12 hour) Two Way	188,520	218,000	209,233	+11.0%	-4.0%
A.M. Peak 3-hour - NB	32,580	36,050	33,520	+2.9%	-7.0%
A.M. Peak 3-hour - SB	23,820	28,500	27,240	+14.4%	-4.4%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.10	1.08	1.08	-0.02	No change
P.M. Peak 3-hour	1.11	1.14	1.10	-0.01	-0.04
12 hour	1.11	1.12	1.09	-0.02	-0.03
Transit Usage Two Way					
A.M. Peak 3-hour	2.0%	2.5%	3.4%	+1.4%	+0.9%
P.M. Peak 3-hour	1.0%	2.5%	4.0%	+3.0%	+1.5%
12 hour	1.0%	2.6%	3.9%	+2.9%	+1.3%

2.3. Simcoe Cordon

Person trips crossing the York-Simcoe boundary in the last 10 years during the 12-hour all day period increased by 10% (about 10,500 person trips). This was the lowest growth rate of all the screenlines surveyed. The average car occupancy rates decreased during the same period.

All day transit usage dropped from 5.0% in 2001 to 4.4% in 2011. Total vehicle trips during the 12-hour period have increased by 16% between 2001 and 2011, or 14,120 trips.

Highway 400 still carries the bulk of vehicular all day traffic, 64% of the total, followed by Yonge Street carrying 26%, and Highway 27 carrying 5%. Truck usage increased by 2% over the same period.



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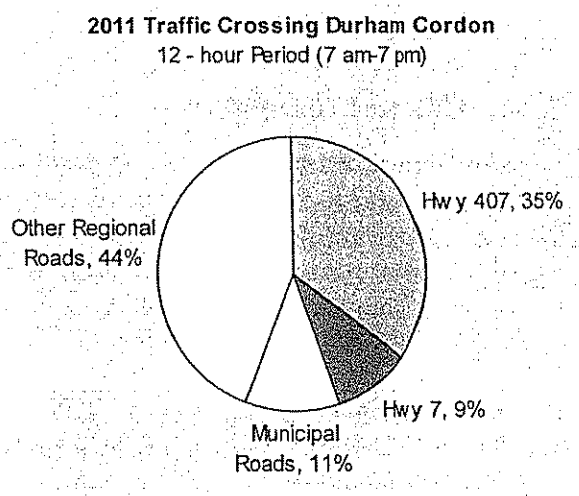
York-Simcoe Cordon	2001	2001	2011	Change 2001-2011	Change 2001-2011
Total Vehicle trips (12 hour) Two Way	86,200	107,000	100,320	+16.4%	-6.2%
A.M. Peak 3-hour - NB	6,940	8,570	7,910	+14.0%	-7.7%
A.M. Peak 3-hour - SB	17,130	19,610	18,780	+9.6%	-4.2%
% Truck Usage (12 hour) Two Way	7.0%	8.1%	9.0%	+2.0%	+0.9%
Total Person trips (12 hour) Two Way	105,520	128,410	116,023	+10.0%	-9.6%
A.M. Peak 3-hour - NB	8,470	9,620	9,410	+11.1%	-2.2%
A.M. Peak 3-hour - SB	19,080	22,520	20,880	+9.4%	-7.3%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.11	1.10	1.09	-0.02	-0.01
P.M. Peak 3-hour	1.20	1.17	1.11	-0.09	-0.06
12 hour	1.19	1.13	1.12	-0.07	-0.01
Transit Usage Two Way					
A.M. Peak 3-hour	4.0%	4.6%	4.7%	+0.7%	+0.1%
P.M. Peak 3-hour	4.0%	2.9%	2.9%	-1.1%	No change
12 hour	5.0%	5.0%	4.4%	-0.6%	-0.6%

2.4. Durham Cordon

York-Durham screenline experienced a growth of 40% in all day traffic between 2001 and 2011. Total vehicle trips increased from 61,790 in 2001 to 86,460 in 2011. The majority of the traffic growth occurred between the 2001 and 2006 surveys. In 2011, Highway 407 carries 35% of all day commuter traffic into Durham Region and Highway 7 carries 9% of the all day traffic as compared to 26% and 9% in 2006, respectively.

Both all day vehicle and person trips increased at the same rate of 40% during the last 10 years. However, there was a decline in the overall transit modal share between 2001 and 2011 of 1.2%. All day truck traffic increased by 3% between the years 2001 and 2011.



York-Durham Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	61,790	80,210	86,460	+39.9%	+7.8%
A.M. Peak 3-hour - EB	4,790	8,140	7,560	+57.8%	-7.1%
A.M. Peak 3-hour - WB	13,770	17,330	19,600	+42.3%	+13.1%
% Truck Usage (12 hour) Two Way	8.0%	8.1%	11.0%	+3.0%	+2.9%
Total Person trips (12 hour) Two Way	70,970	92,760	99,276	+39.9%	+7.0%
A.M. Peak 3-hour - NB	5,430	9,360	8,730	+60.8%	-6.7%
A.M. Peak 3-hour - SB	15,340	18,610	20,790	+35.5%	+11.7%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.10	1.09	1.09	-0.01	No change
P.M. Peak 3-hour	1.16	1.18	1.17	+0.01	-0.01
12 hour	1.15	1.16	1.16	+0.01	No change
Transit Usage Two Way					
A.M. Peak 3-hour	3.0%	2.0%	1.0%	-2.0%	-1.0%
P.M. Peak 3-hour	2.0%	0.7%	0.7%	-1.3%	No change
12 hour	2.0%	1.1%	0.8%	-1.2%	-0.3%

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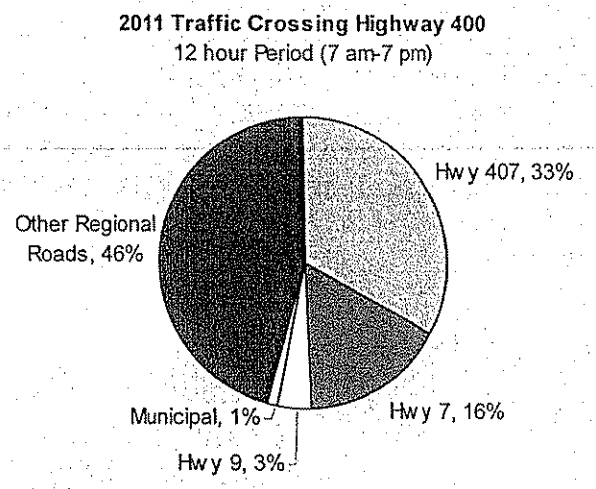
2.5 Highway 400 Cordon

All day traffic crossing Highway 400 cordon has increased by almost 27% or 69,940 vehicle trips between 2001 and 2011. The majority of the traffic growth occurred in the period from 2001 to 2006, with the 2006 to 2011 traffic growth representing 3.1% of the 27% total growth over 10 years.

A major role is now played by Highway 407 which carries 33% of the total 12-hour traffic crossing this screenline. Transit ridership increased by 3.1% in the 12 hour period, the average car occupancy decreased by 0.03 people/vehicle.

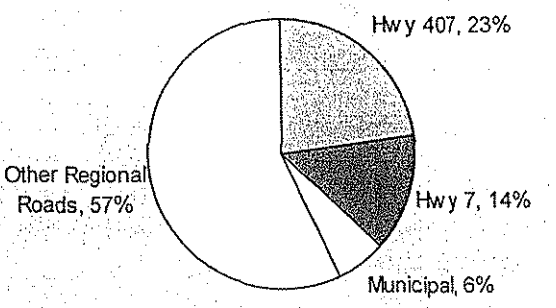


Highway 400 Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	260,190	320,310	330,130	+26.9%	+3.1%
A.M. Peak 3-hour - EB	38,760	48,890	48,020	+23.9%	-1.8%
A.M. Peak 3-hour - WB	35,200	42,900	43,100	+22.4%	+0.5%
% Truck Usage (12 hour) Two Way	9.0%	7.8%	8.0%	-1.0%	+0.2%
Total Person trips (12 hour) Two Way	305,120	371,690	387142	+26.9%	+4.2%
A.M. Peak 3-hour - NB	44,080	56,010	55,600	+26.1%	-0.7%
A.M. Peak 3-hour - SB	39,750	48,060	48,180	+21.2%	+0.2%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.11	1.10	1.09	-0.02	-0.01
P.M. Peak 3-hour	1.19	1.15	1.11	-0.08	-0.04
12 hour	1.15	1.13	1.12	-0.03	-0.01
Transit Usage Two Way					
A.M. Peak 3-hour	3.0%	4.5%	5.5%	+2.5%	+1.0%
P.M. Peak 3-hour	3.0%	4.1%	5.7%	+2.7%	+1.6%
12 hour	3.0%	4.0%	6.1%	+3.1%	+2.1%

2.6 Highway 404 Cordon

The traffic count conducted at this cordon shows a growth of 36% in total vehicle trips during the 12-hour count period between 2001 and 2011. Total person trips increased by 41%, while transit usage increased by 1.8%. Car occupancy increased by 0.01 people per vehicle over the same period. Highway 407 carried 23% of the total all day traffic crossing the screenline and Highway 7 carried 14% of all day traffic.

2011 Traffic Crossing Highway 404 Cordon
12 Hour Period (7 am-7 pm)

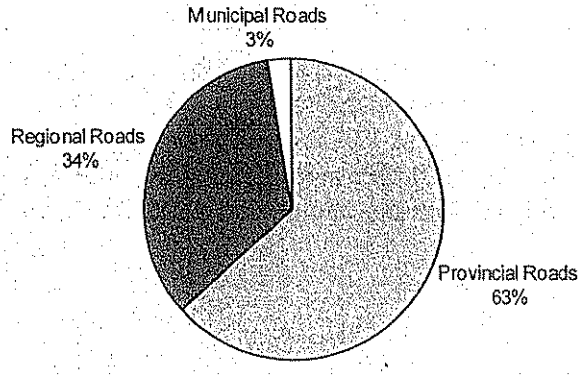


Highway 404 Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	278,700	321,450	380,220	+36.4%	+18.3%
A.M. Peak 3-hour - EB	39,580	45,460	52,130	+31.7%	+14.7%
A.M. Peak 3-hour - WB	37,470	46,400	52,250	+39.4%	+12.6%
% Truck Usage (12 hour) Two Way	*6.0%*	*5.3%*	*5.0%*	-1.0%	-0.3%
Total Person trips (12 hour) Two Way	324,830	371,350	459,305	+41.4%	+23.7%
A.M. Peak 3-hour - NB	46,290	51,870	60,810	+31.4%	+17.2%
A.M. Peak 3-hour - SB	43,230	51,620	64,320	+48.8%	+24.6%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.13	1.10	1.14	+0.01	+0.04
P.M. Peak 3-hour	1.18	1.15	1.15	-0.03	No change
12 hour	1.15	1.13	1.16	+0.01	+0.03
Transit Usage Two Way					
A.M. Peak 3-hour	4.0%	3.6%	6.0%	+2.0%	+2.4%
P.M. Peak 3-hour	3.0%	2.7%	4.2%	+1.2%	+1.5%
12 hour	3.0%	2.9%	4.8%	+1.8%	+1.9%

2.7 South York Cordon

The count at this station was conducted to monitor changes to north-south traffic within York Region. A growth of almost 29% in total vehicles in a 12 hour day between the years 2001 and 2011 was observed. Total person trips increased by almost 27% while there was a slight decline in transit usage in the 12 hour period. There was an increase of 2% in the truck usage over the same period.

2011 Traffic Crossing South York Cordon
12 hour Period (7 am-7 pm)

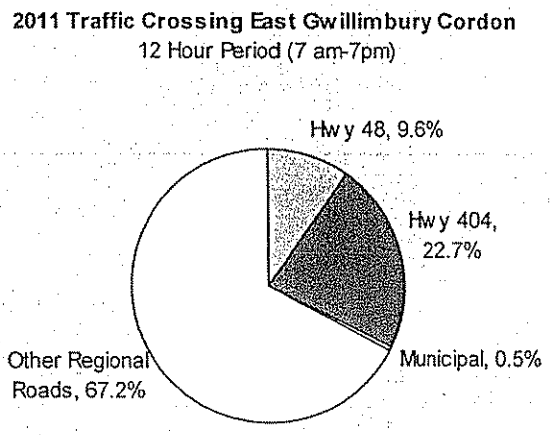


South York Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	225,540	277,210	290,170	+28.7%	+4.7%
A.M. Peak 3-hour - NB	19,020	24,440	25,390	+33.5%	+3.9%
A.M. Peak 3-hour - SB	51,390	58,380	58,450	+13.7%	+0.1%
% Truck Usage (12 hour) Two Way	7.0%	6.7%	9.0%	+2.0%	+2.3%
Total Person trips (12 hour) Two Way	269,830	329,930	341,780	+26.7%	+3.6%
A.M. Peak 3-hour - NB	24,270	28,110	29,860	+23.0%	+6.2%
A.M. Peak 3-hour - SB	59,570	68,480	69,860	+17.3%	+2.0%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.11	1.10	1.10	-0.01	No change
P.M. Peak 3-hour	1.13	1.16	1.11	-0.02	-0.05
12 hour	1.13	1.14	1.11	-0.02	-0.03
Transit Usage Two Way					
A.M. Peak 3-hour	8.0%	7.3%	8.9%	+0.9%	+1.6%
P.M. Peak 3-hour	6.0%	5.7%	7.4%	+1.4%	+1.7%
12 hour	7.0%	5.7%	6.9%	-0.1%	+1.2%

2.8 East Gwillimbury Cordon

Between 2001 and 2011 there was a 41% growth in total all day vehicles crossing the East Gwillimbury cordon line. Most of this traffic was handled on the Regional road system which totalled 67%. There was an increase of 35% in all day person trips over the same period.

All day transit usage increased by 1.3 % over the last 10 years and the truck usage also increased 1% from 2001 to 2011. Average occupancy rates decreased by 0.09 persons per vehicle across the cordon line during the period from 2001 to 2011.



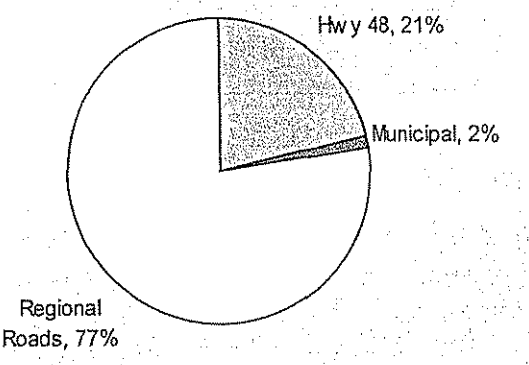
Georgina-East Gwillimbury Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	61,650	66,450	87,210	+41.5%	+31.2%
A.M. Peak 3-hour - NB	4,890	4,720	5,970	+22.1%	+26.5%
A.M. Peak 3-hour - SB	11,820	14,030	18,740	+58.5%	+33.6%
% Truck Usage (12 hour) Two Way	5.0%	4.1%	6.0%	+1.0%	+1.9%
Total Person trips (12 hour) Two Way	76,920	80,650	103,767	+34.9%	+28.7%
A.M. Peak 3-hour - NB	6,080	5,480	7,610	+25.2%	+38.9%
A.M. Peak 3-hour - SB	15,030	17,400	21,900	+45.7%	+25.9%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.20	1.12	1.11	-0.09	-0.01
P.M. Peak 3-hour	1.23	1.16	1.15	-0.08	-0.01
12 hour	1.21	1.18	1.14	-0.07	-0.03
Transit Usage Two Way					
A.M. Peak 3-hour	7.0%	10.0%	8.4%	+1.4%	-1.6%
P.M. Peak 3-hour	3.0%	3.7%	4.9%	+1.9%	+1.2%
12 hour	4.0%	5.3%	5.3%	+1.3%	No change

2.9 Ravenshoe Cordon

This is the most northerly screenline in the Region. In the period between 2001 and 2011 there was a 21% increase in traffic in the 12 hour period. Person trips were increased by 30% during the same period. The faster rate of increase in person trips can be attributed to the increase in all day average car occupancy rates. The all day average car occupancy rates increased by 0.08 during the last 10 years, this could be due to the continuous escalation of gasoline prices and the downturn in the economy.

There was a slight increase of 0.6% in the proportion of transit usage, truck usage also increased by 2% during the period from 2001 to 2011.

2011 Traffic Crossing Ravenshoe Cordon
12 Hour Period (7 am-7pm)



Ravenshoe Cordon	2001	2006	2011	Change 2001-2011	Change 2006-2011
Total Vehicle trips (12 hour) Two Way	32,280	37,250	39,100	+21.1%	+5.0%
A.M. Peak 3-hour - NB	2,170	2,640	2,350	+8.3%	-11.0%
A.M. Peak 3-hour - SB	7,490	8,610	8,920	+19.1%	+3.6%
% Truck Usage (12 hour) Two Way	5.0%	5.4%	7.0%	+2.0%	+1.6%
Total Person trips (12 hour) Two Way	39,060	44,910	50,868	+30.2%	+13.3%
A.M. Peak 3-hour - NB	2,470	3,010	3,010	+21.9%	+0.0%
A.M. Peak 3-hour - SB	8,890	9,750	10,890	+22.5%	+11.7%
Average Car Occupancy Two Way					
A.M. Peak 3-hour	1.16	1.14	1.23	+0.07	+0.09
P.M. Peak 3-hour	1.23	1.21	1.27	+0.04	+0.06
12 hour	1.21	1.20	1.29	+0.08	+0.09
Transit Usage Two Way					
A.M. Peak 3-hour	3.0%	1.4%	2.3%	-0.7%	+0.9%
P.M. Peak 3-hour	2.0%	2.5%	2.9%	+0.9%	+0.4%
12 hour	2.0%	2.2%	2.6%	+0.6%	+0.4%

3. TRAVEL CHARACTERISTICS

3.1. 400 SERIES HIGHWAYS

The 400 series Provincial highway system plays a major role in handling car and truck traffic through the Region. The system handles approximately 42% of all traffic entering and leaving the Region.

Highway 407 continues to play a major role in affecting travel patterns in the southern part of York Region. It now carries 35% of all traffic or about 30,670 vehicles to and from the east at York-Durham boundary during the 12-hour 7:00 am–7:00 pm weekday period. Highway 407 at the York-Peel boundary handled 96,300 vehicles during the 12-hour week day period or 51% of the total.

To the south, the combination of Highways 400, 404 and 427 handle approximately 39% of total traffic crossing to and from Toronto as compared to 36% and 34% in 2006 and 2001, respectively. To the north, Highway 400 handles 64% of total traffic as compared to 58% and 59% in 2006 and 2001, respectively. In all cases, the 400 series highways carry the bulk of all heavy truck traffic crossing each boundary.

3.2. AUTO OCCUPANCY

Auto occupancy levels are monitored very closely as minor changes in the average level of car occupancy can have a significant effect on total traffic volume and congestion levels. Twenty five years ago counts showed average auto occupancy levels at 1.26 to 1.43 persons per vehicle on an all day basis crossing York's boundaries, compared to 1.12 to 1.16 in 2011. Table 5 summarizes the difference in auto occupancy over the 2001 to 2011 period at each screenline for the 12-hour span and during the AM peak and PM peak periods. In the 10 year period between 2001 and 2011 average auto occupancy rates show no significant trend in either direction.

Table 5: Average Auto Occupancy by Screenlines

Screenline	Average Car Occupancy Average 12-Hour			Change 2001-2011	Change 2006-2011	Average Car Occupancy Average AM 3-hour			Rate Change 2001-2011	Rate Change 2006-2011	Average Car Occupancy Average PM 3-hour			Rate Change 2001-2011	Rate Change 2006-2011
	2001	2006	2011			2001	2006	2011			2001	2006	2011		
Toronto Screenline	1.16	1.16	1.16	0.00	0.00	1.12	1.10	1.12	0.00	0.02	1.18	1.17	1.17	-0.01	0.00
Peel Screenline	1.11	1.12	1.09	-0.02	-0.03	1.10	1.09	1.08	-0.02	-0.01	1.11	1.18	1.10	-0.01	-0.08
Durham Screenline	1.15	1.16	1.16	0.01	0.00	1.10	1.08	1.09	-0.01	0.01	1.16	1.14	1.17	0.01	0.03
Simcoe Screenline	1.19	1.16	1.12	-0.07	-0.04	1.11	1.12	1.09	-0.02	-0.03	1.20	1.17	1.11	-0.09	-0.06
South York Screenline	1.13	1.14	1.11	-0.02	-0.03	1.11	1.10	1.10	-0.01	0.00	1.13	1.16	1.11	-0.02	-0.05
Highway 400 Screenline	1.15	1.13	1.12	-0.03	-0.01	1.11	1.10	1.09	-0.02	-0.01	1.19	1.15	1.11	-0.08	-0.04
Highway 404 Screenline	1.15	1.13	1.16	0.01	0.03	1.13	1.10	1.14	0.01	0.04	1.18	1.15	1.15	-0.03	0.00
East Gwillimbury Screenline	1.21	1.17	1.14	-0.07	-0.03	1.12	1.12	1.11	-0.01	-0.01	1.23	1.16	1.15	-0.08	-0.01
Ravenshoe Screenline	1.21	1.20	1.29	0.08	0.09	1.16	1.14	1.23	0.07	0.09	1.23	1.21	1.27	0.04	0.06

3.3. TRUCK TRAFFIC

Truck counts include medium and heavy vehicles only. Commercial cars, vans and pickups are excluded in this category. The large vehicles categorised as trucks have a significant effect on roadway capacity and the structural conditions of Regional roads, because of its equivalent size and weight. The percentage of total traffic that trucks represent has increased in almost all the screenlines except at Toronto, Highway 400 and 404 (Table 6). The greatest increase of 2.8% was at York-Durham Boundary.

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Table 6: Percent (12-Hour) Truck Ratio at Screenlines

Screenline	12-hour % Trucks			% Change 2001-2011	% Change 2006-2011
	2001	2006	2011		
Toronto Screenline	6.0	5.0	5.4	-0.6	0.4
Peel Screenline	11.0	10.8	13.2	2.2	2.4
Durham Screenline	8.0	8.1	10.8	2.8	2.7
Simcoe Screenline	7.0	8.1	9.1	2.1	1.0
South York Screenline	7.0	6.7	8.9	1.9	2.2
Highway 400 Screenline	9.0	7.8	7.8	-1.2	0.0
Highway 404 Screenline	6.0	5.3	5.1	-0.9	-0.2
East Gwillimbury Screenline	5.0	4.1	6.4	1.4	2.3
Ravenshoe Screenline	5.0	5.4	6.6	1.6	1.2

3.4. TRANSIT MODAL SHARE

Transit modal share is generally trending upwards in the 12-hour observations (Table 7) except at the Ravenshoe and Durham screenlines. Transit usage includes trips on York Region Transit, VIVA, GO Transit, TTC, school and other buses. The most critical screenline in relation to transit modal share is the Toronto screenline where transit share has increased likely reflecting the continued investment in YRT/Viva services. In 2001, transit trips crossing all screenlines represented 4.2 % of all trips, compared to 5.4% in 2006 and 7.2% in 2011.

Table 7: Percent Change in Transit Usage

Screenline	% Transit Usage Average 12-Hour			% Change 2001-2011	% Change 2006-2011	% Transit Usage Average AM 3-hour			% Change 2001-2011	% Change 2006-2011	% Transit Usage Average PM 3-hour			% Change 2001-2011	% Change 2006-2011
	2001	2006	2011			2001	2006	2011			2001	2006	2011		
Toronto Screenline	5.0	7.4	10.1	5.1	2.7	8.0	10.5	12.5	4.5	2.0	6.0	8.8	10.8	4.8	2.0
Peel Screenline	1.0	2.6	3.9	2.9	1.3	2.0	2.5	3.4	1.4	0.9	1.0	2.5	4.0	3.0	1.5
Durham Screenline	2.0	1.1	0.8	-1.2	-0.3	3.0	2.0	1.0	-2.0	-1.0	2.0	0.7	0.7	-1.3	0.0
Simcoe Screenline	5.0	5.0	4.4	-0.6	-0.6	4.0	4.6	4.7	0.7	0.1	4.0	2.9	2.9	-1.1	0.0
South York Screenline	7.0	5.7	6.9	-0.1	1.2	8.0	7.3	8.9	0.9	1.6	6.0	5.7	7.4	1.4	1.7
Highway 400 Screenline	3.0	4.0	6.1	3.1	2.1	3.0	4.5	5.5	2.5	1.0	3.0	4.1	5.7	2.7	1.6
Highway 404 Screenline	3.0	2.9	4.8	1.8	1.9	4.0	3.6	6.0	2.0	2.4	3.0	2.7	4.2	1.2	1.5
East Gwillimbury Screenline	4.0	5.3	5.3	1.3	0.0	7.0	10.0	8.4	1.4	-1.6	3.0	3.7	4.9	1.9	1.2
Ravenshoe Screenline	2.0	2.2	2.6	0.6	0.4	3.0	1.4	2.3	-0.7	0.9	2.0	2.5	2.9	0.9	0.4

3.5. BICYCLE RIDERSHIP

Cycling trips were counted for the first time during the 2011 Cordon Count Program. A total of 3600 cycling trips were counted during the 12-hour period on Regional roads, 2100 of these trips crossed the Steeles Avenue boundary. Over time, this data will assist in measuring the effectiveness of the Region's various cycling initiatives, including implementation of cycling lanes on Regional roads.

4. FINAL NOTE

Significant development growth in York Region is planned to continue, but there are limited opportunities to increase the road capacity in the built up areas of the Region. Accommodating continued growth will require an aggressive effort to provide further measures and initiatives to reduce travel demand and to increase use of alternative modes such as transit, carpooling, cycling and walking.

In an effort to reduce the impact of this growth, the Region has implemented its bold rapid transit initiative in York Region (VIVA). The first phase of VIVA was launched in September 2005, the second phase of York Region's rapid transit strategy implementing dedicated bus-lanes on Highway 7, Yonge Street and Davis Drive, is in the construction stage. In addition, construction has begun on extending the Spadina Subway from Downsview Station to Jane and Highway 7 in York Region. The Region is also implementing High Occupancy Vehicle (HOV) lanes to improve transit service and to increase auto occupancy rates, and bicycle lanes to encourage cycling.

To reduce travel demand further, municipal governments of the Greater Toronto and Hamilton Area have partnered with Metrolinx (formerly known as the Greater Toronto Transportation Authority) in delivering the Smart Commute program.

Overall, the 2011 cordon count data shows an increase in transit usage at most screenlines. All screenlines experienced growth in vehicular traffic and person trips over the 10 year period from 2001 to 2011. The growth in traffic and person trips is greater in the 2001 to 2006 period, with slower growth in traffic between 2006 and 2011.

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York Region produces a number of additional brochures and reports on transportation that are available to the public in person or via the York Region website:

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