Greater Toronto Area
Cordon Count Summary

Analysis of Peak Periods
2011

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The collection of traffic counts taken by various Regional Governments and the Province of Ontario at various locations in the Greater Toronto Area over the last several years have been assembled in one data base. This report presents a summary of conditions during the periods of maximum traffic flow at a collection of screenlines for the most recent counts in 2011. The data is presented without alteration or corrections as provided by the City of Toronto, the Regional Municipalities of Durham, Halton, Peel and York and the Ministry of Transportation Ontario (MTO). The data was collected in the May and June period of 2011.

Each Regional Municipality has their own set of needs and priorities for the data. Therefore, the data collection methods are somewhat different in each jurisdiction. The level of commonality in the database, which makes this report possible, is the result of efforts by the Transportation Research and Data Management Group (TRADMAG). TRADMAG is a technical committee with representatives from the Regional Municipalities mentioned above plus the City of Hamilton, GO Transit, and the Toronto Transit Commission (TTC).

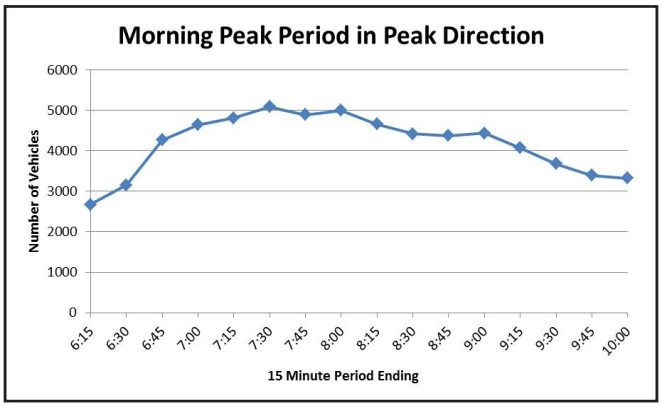
Eleven screenlines were chosen to illustrate the variation in vehicular counts. Common morning (6:00 to 10:00A.M.) and evening (3:00 to 7:00 P.M.) time windows are used to represent the periods of peak travel and to provide a common frame for comparison. The screenlines are chosen to represent the interests of each jurisdiction in addition to providing information on the development of north-south travel within some Regional Municipalities.

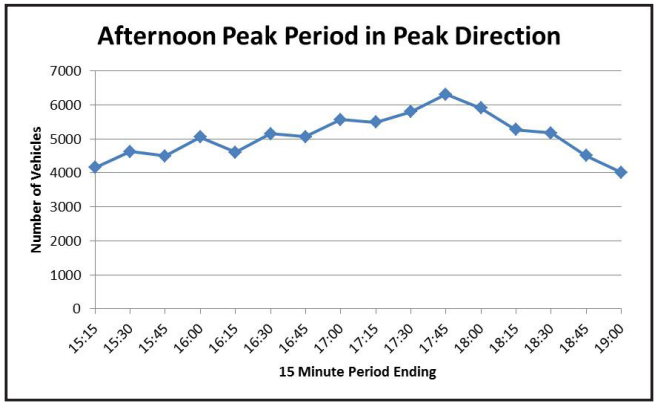
Screenline Definitions

Halton West Screenline

This screenline is located at the western edge of the Regional Municipality of Halton as an extension of the common boundary between Halton and the City of Hamilton to intersect the Burlington Skyway. The screenline follows this straight path rather than the Regional boundary to minimize the influence of trips double crossing the line. The dominant direction is east-west although the direction of the Burlington Skyway is north-south. Northbound traffic on this bridge is assumed to be destined to eastbound routes, while the reverse is assumed for southbound traffic. East(north)bound is the peak direction in the morning peak period, and west(south)bound is the peak direction in the afternoon. Contraflow (flow in the opposite direction during the peak 3 hour period) represents 65% of the peak direction in the morning and 72% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

East(north)bound		West(south)bound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	52423	15:00 to 18:00	62214
6:15 to 9:15	53820	15:15 to 18:15	63320
6:30 to 9:30	54329	15:30 to 18:30	63871
6:45 to 9:45	53480	15:45 to 18:45	63879
7:00 to 10:00	52168	16:00 to 19:00	62839

The absolute peak three hour window in the morning occurs from 6:30 to 9:30 A.M. In the afternoon, the peak three hours occurs from 3:45 to 6:45 P.M. but is very similar to the three hour window beginning 15 minutes earlier. The number of vehicles in the peak three hours in the afternoon is 18% higher than the number in the morning peak, which reflects the sustained higher 15 minute traffic volumes over an extended period.

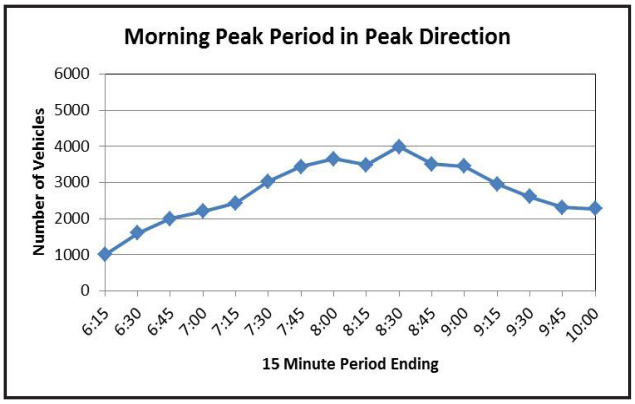
Morning and Afternoon Peak Hour

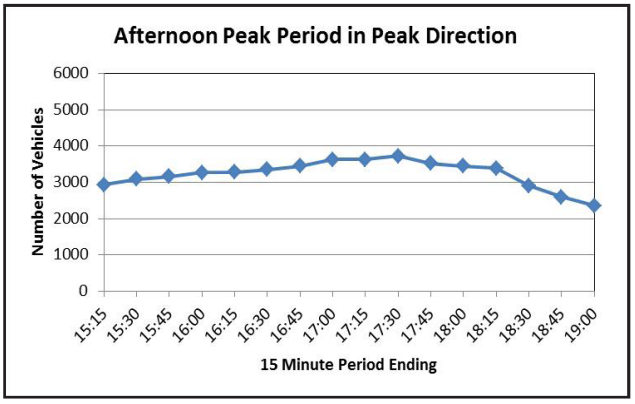
In the morning, the peak one hour window occurred between 7:00 and 8:00 A.M. with a total of 19,794 vehicles representing 36% of the peak three hours. In the afternoon, the peak one hour window occurred between 5:00 and 6:00 P.M with a total of 23,494 vehicles representing 37% of the peak three hours. The afternoon peak hour is 19% larger than the morning peak hour.

Halton South Screenline

This screenline consists of all major streets crossing Dundas Street (Regional Road 5) in the northern sections of Burlington. Although the actual directions are northeast and southwest, the screenline is considered to be east-west from Orchard Rd West to Indian Creek. The traffic directions are considered to be north and south. Southbound is the peak direction in the morning peak period and northbound is the peak direction in the afternoon which is a reverse of the peak directions from previous years. Contra-flow represents 96% of the peak direction in the morning and 98% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Southbound		Northbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	33764	15:00 to 18:00	40469
6:15 to 9:15	35724	15:15 to 18:15	40924
6:30 to 9:30	36733	15:30 to 18:30	40744
6:45 to 9:45	37045	15:45 to 18:45	40179
7:00 to 10:00	37116	16:00 to 19:00	39264

The absolute peak three hour window in the morning occurs from 7:00 to 10:00 A.M. but is very similar to the three hour window beginning 15 minutes earlier. In the afternoon, the peak three hours occur from 3:15 to 6:15 P.M. but is very similar to the three hour window beginning 15 minutes earlier and 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 10% higher than the number in the morning peak three hours.

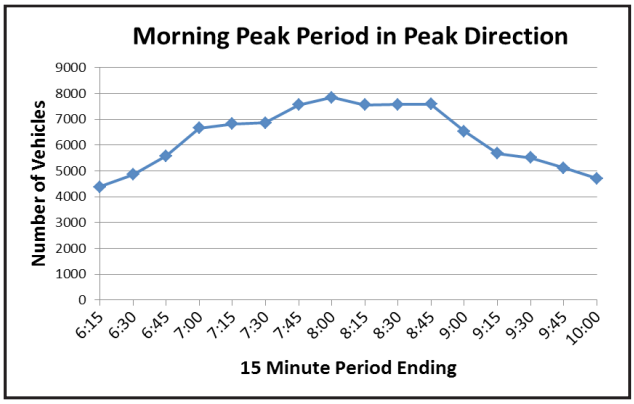
Morning and Afternoon Peak Hour

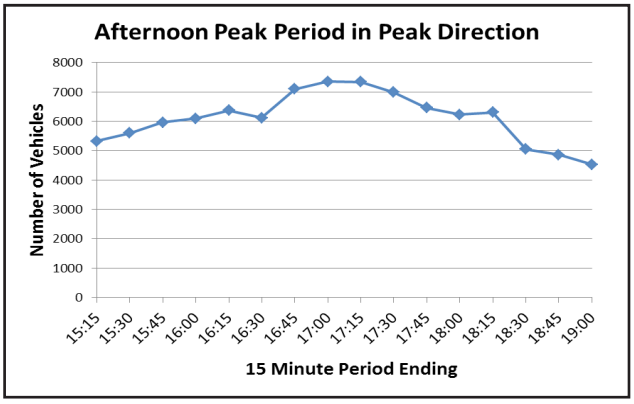
In the morning, the peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 14,634 vehicles representing 39% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:45 and 5:45 P.M. with a total of 14,499 vehicles representing 35% of the peak three hours.

Halton-Peel Screenline

This screenline follows the western boundary of the Regional Municipality of Peel, including the full length of the common boundary with the Regional Municipality of Halton. The screenline follows the jurisdictional boundary and includes all major roads crossing the boundary in the east-west direction. Eastbound traffic into Peel Region is the dominant direction in the morning peak period and westbound traffic towards the Region of Halton is the dominant direction in the afternoon peak period. Contra-flow represents 66% of the peak direction in the morning and 81% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Eastbound		Westbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	79776	15:00 to 18:00	76887
6:15 to 9:15	81070	15:15 to 18:15	77866
6:30 to 9:30	81718	15:30 to 18:30	77307
6:45 to 9:45	81262	15:45 to 18:45	76202
7:00 to 10:00	79327	16:00 to 19:00	74636

The absolute peak three hour window in the morning occurs from 6:30 to 9:30 A.M. but is very similar to the three hour windows beginning 15 minutes earlier and later. In the afternoon, the peak three hours occur from 3:15 to 6:15 P.M. but is very similar to the three hour window beginning 15 minutes later. The number of vehicles in the peak three hours in the morning is 5% higher than the number in the afternoon peak three hours.

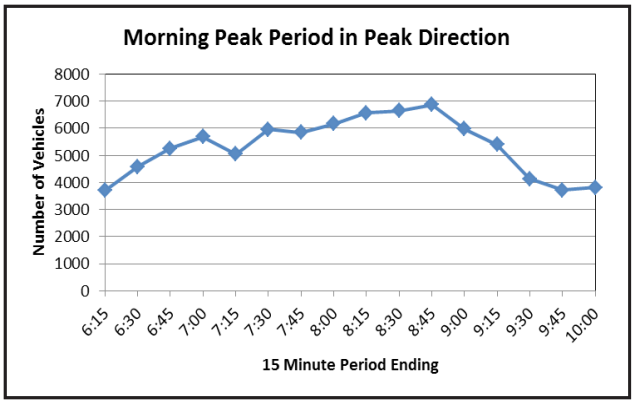
Morning and Afternoon Peak Hour

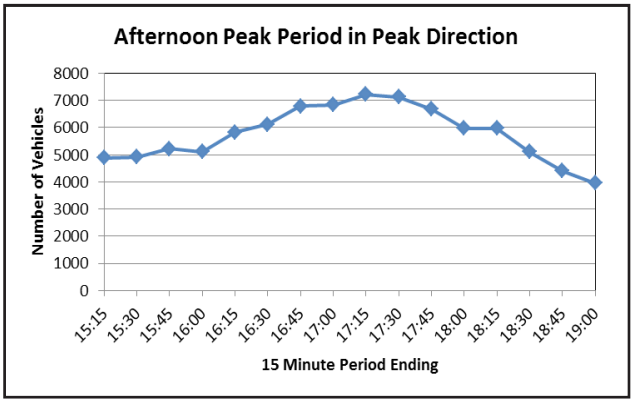
In the morning, the peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 30,536 vehicles representing 37% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:30 and 5:30 P.M. with a total of 28,765 vehicles representing 37% of the peak three hours. The morning peak hour is 6% larger than the afternoon peak hour.

Peel Steeles Avenue Screenline

This screenline follows Steeles Avenue in the southern portion of the City of Brampton close to its common boundary with the City of Mississauga all within the Regional Municipality of Peel. The line extends in an east-west direction from the common boundary with the City of Toronto to the common boundary with the Regional Municipality of Halton. The screenline includes all major roads crossing the screenline in the north-south direction. Southbound traffic into Mississauga is the dominant direction in the morning peak period and northbound traffic into Brampton is the dominant direction in the afternoon peak period. Contra-flow represents 58% of the peak direction in the morning and 67% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Southbound		Northbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	68283	15:00 to 18:00	72714
6:15 to 9:15	69979	15:15 to 18:15	73803
6:30 to 9:30	69528	15:30 to 18:30	73997
6:45 to 9:45	67997	15:45 to 18:45	73176
7:00 to 10:00	66115	16:00 to 19:00	72026

The absolute peak three hour window in the morning occurs from 6:15 to 9:15 A.M. but is very similar to the three hour window beginning 15 minutes later. In the afternoon, the peak three hours occur from 3:30 to 6:30 P.M. but is very similar to the three hour window beginning 15 minutes earlier and 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 6% higher than the number in the morning peak three hours.

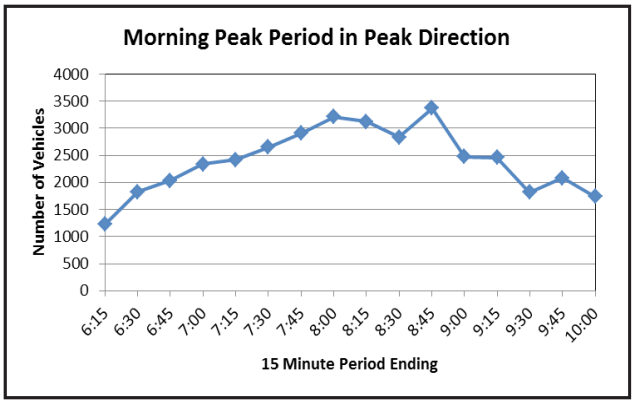
Morning and Afternoon Peak Hour

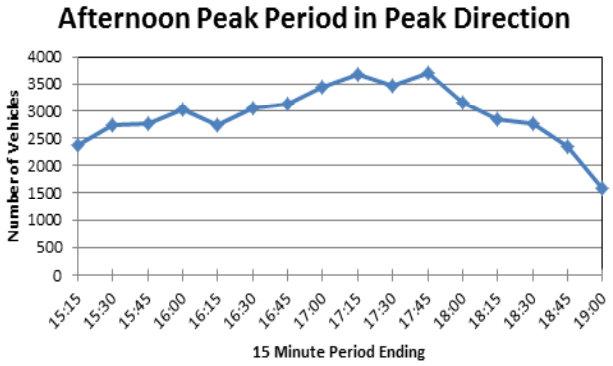
In the morning, the peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 26,243 vehicles representing 38% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:30 and 5:30 P.M. with a total of 27,992 vehicles representing 38% of the peak three hours. The afternoon peak hour is 7% larger than the morning peak hour.

Peel-York Screenline

This screenline is located at the western boundary of the Regional Municipality of York where it is coincident with the eastern boundary of the Regional Municipality of Peel and a portion of the south-eastern boundary of the County of Simcoe. Because it is a combination of directions, the screenline includes all major roads crossing the boundary regardless of the direction of the road. This analysis combines the eastbound with the southbound traffic and the westbound with the northbound traffic, which is consistent with travel entering or leaving the Greater Toronto Area. Eastbound traffic into York Region is the dominant direction in the morning peak period and westbound traffic out of York Region is the dominant direction in the afternoon peak period. Contra-flow represents 87% of the peak direction in the morning and 74% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Eastbound		Westbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	30424	15:00 to 18:00	37230
6:15 to 9:15	31657	15:15 to 18:15	37700
6:30 to 9:30	31651	15:30 to 18:30	37720
6:45 to 9:45	31694	15:45 to 18:45	37319
7:00 to 10:00	31093	16:00 to 19:00	35877

The absolute peak three hour window in the morning occurs from 6:45 to 9:45 A.M. but is very similar to the three hour window beginning 15 and 30 minutes earlier. In the afternoon, the peak three hours occur from 3:30 to 6:30 P.M. but is very similar to the three hour window beginning 15 minutes earlier. The number of vehicles in the peak three hours in the afternoon is 19% higher than the number in the morning peak three hours.

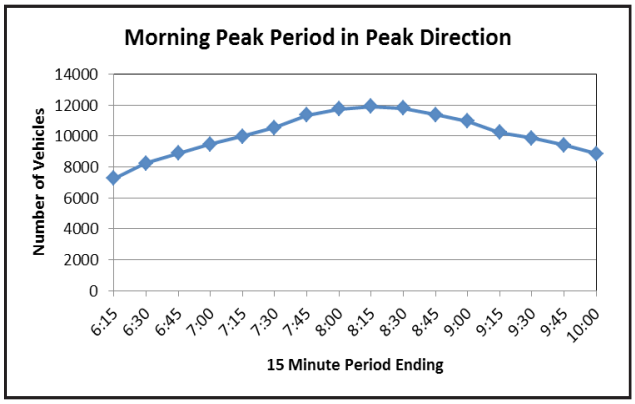
Morning and Afternoon Peak Hour

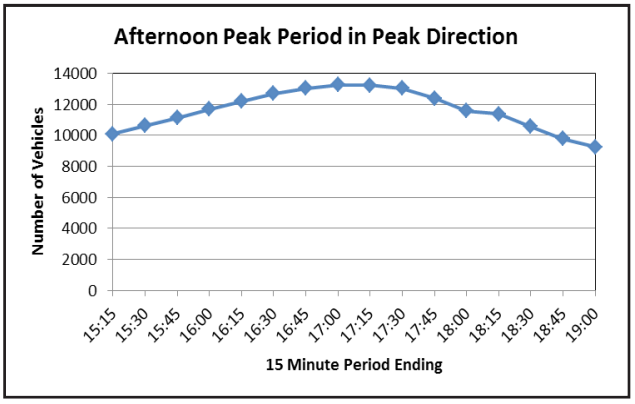
In the morning, the peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 12,548 vehicles representing 40% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:45 and 5:45 P.M. with a total of 14,268 vehicles representing 38% of the peak three hours. The afternoon peak hour is 14% larger than the morning peak hour.

Peel-Toronto Screenline

This screenline is located at the western boundary of the City of Toronto and coincides with a portion of the eastern boundary of the Regional Municipality of Peel. The potential for vehicles double crossing the jurisdictional boundary is very high in the areas of the south and east of Toronto International Airport. For the sake of consistency, the stations included in the analysis are the same used by the Region of Toronto. The screenline includes all major roads crossing the boundary in the east-west direction. Eastbound traffic into Toronto is the dominant direction in the morning peak period and westbound traffic towards Peel Region is the dominant direction in the afternoon peak period. Contra-flow represents 85% of the peak direction in the morning and 82% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Eastbound		Westbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	123491	15:00 to 18:00	144878
6:15 to 9:15	126456	15:15 to 18:15	146153
6:30 to 9:30	128098	15:30 to 18:30	146118
6:45 to 9:45	128624	15:45 to 18:45	144772
7:00 to 10:00	128004	16:00 to 19:00	142310

The absolute peak three hour window in the morning occurs from 6:45 to 9:45 A.M. In the afternoon, the peak three hours occur from 3:15 to 6:15P.M. but is very similar to the three hour window beginning 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 14% higher than the number in the morning peak three hours.

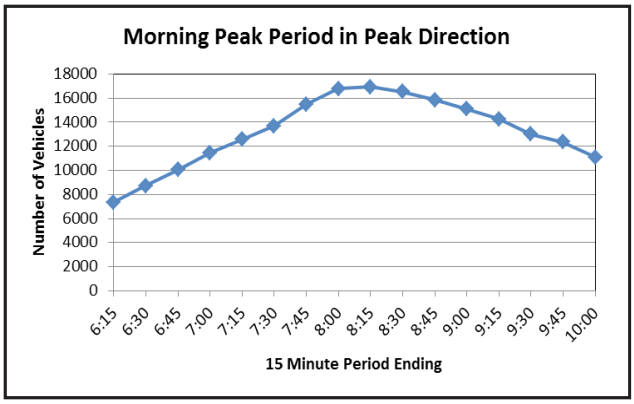
Morning and Afternoon Peak Hour

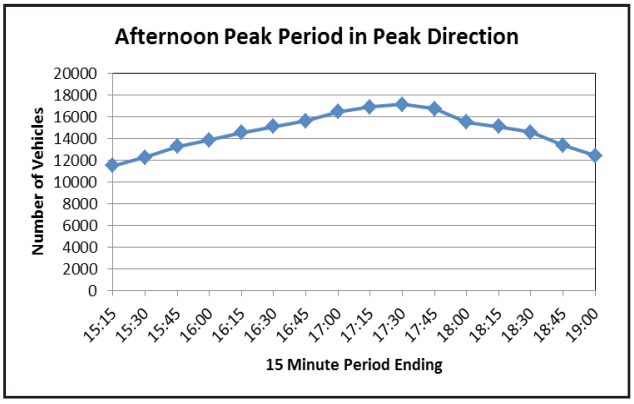
The peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 46,816 vehicles representing 36% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:30 and 5:30 P.M. with a total of 52,515 vehicles representing 36% of the peak three hours. The afternoon peak hour is 12% larger than the morning peak hour.

Steeles Avenue Screenline

This screenline is located along Steeles Avenue at the northern boundary of the City of Toronto and coincides with the southern boundary of the Regional Municipality of York. The screenline includes all major roads crossing the boundary in the north-south direction. Southbound traffic into Toronto is the dominant direction in the morning peak period and northbound traffic into York Region is the dominant direction in the afternoon peak period. Contra-flow represents 70% of the peak direction in the morning and 82% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Southbound		Northbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	160600	15:00 to 18:00	178784
6:15 to 9:15	167514	15:15 to 18:15	182387
6:30 to 9:30	171821	15:30 to 18:30	184706
6:45 to 9:45	174135	15:45 to 18:45	184846
7:00 to 10:00	173784	16:00 to 19:00	183395

The absolute peak three hour window in the morning occurs from 6:45 to 9:45 A.M. In the afternoon, the peak three hours occur from 3:45 to 6:45P.M. but is very similar to the three hour window beginning 15 minutes earlier. The number of vehicles in the peak three hours in the afternoon is 6% higher than the number in the morning peak three hours.

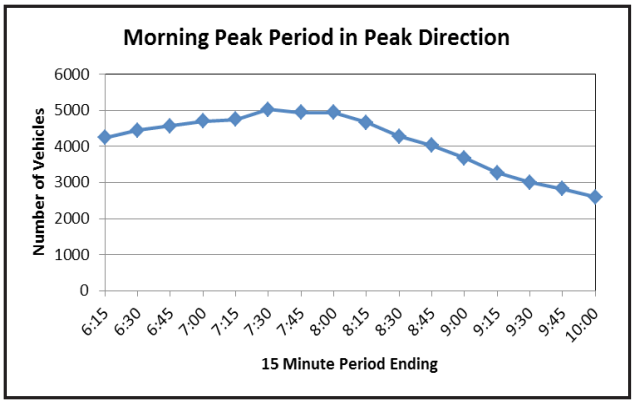
Morning and Afternoon Peak Hour

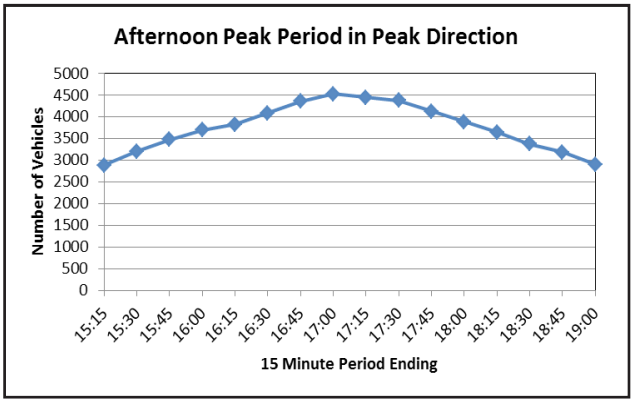
The peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 66,157 vehicles representing 38% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:45 and 5:45 P.M. with a total of 67,245 vehicles representing 36% of the peak three hours. The afternoon peak hour is 2% larger than the morning peak hour.

Durham-Toronto Screenline

This screenline follows the eastern boundary of the City of Toronto and is coincident with a portion of the western boundary of the Regional Municipality of Durham. The screenline follows the jurisdictional boundary and includes all major roads crossing the boundary in the east-west direction. Westbound traffic into Toronto is the dominant direction in the morning peak period and eastbound traffic into Durham Region is the dominant direction in the afternoon peak period. Contra-flow represents 34% of the peak direction in the morning and 54% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Westbound		Eastbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	54243	15:00 to 18:00	46859
6:15 to 9:15	53271	15:15 to 18:15	47613
6:30 to 9:30	51821	15:30 to 18:30	47779
6:45 to 9:45	50078	15:45 to 18:45	47484
7:00 to 10:00	47965	16:00 to 19:00	46697

The absolute peak three hour window in the morning occurs from 6:00 to 9:00A.M. In the afternoon, the peak three hours occur from 3:30 to 6:30P.M. but is very similar to the three hour window beginning 15 minutes earlier and 15 minutes later. The number of vehicles in the peak three hours in the morning is 14% higher than the number in the afternoon peak three hours.

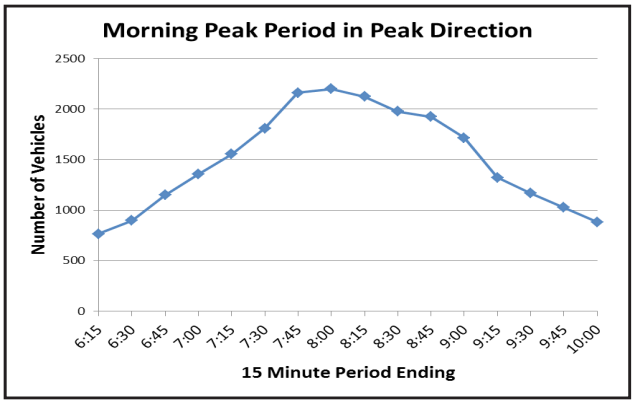
Morning and Afternoon Peak Hour

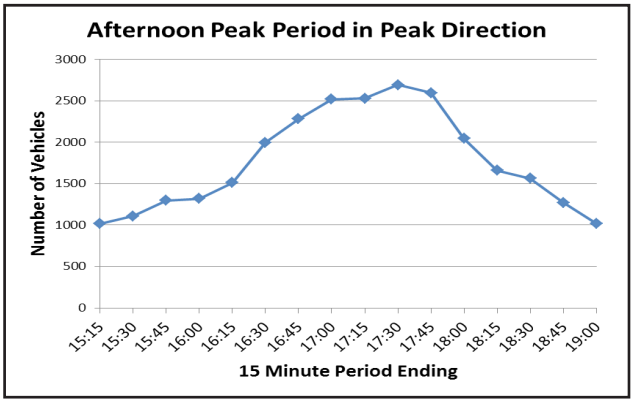
In the morning, the peak one hour window occurred between 7:00 and 8:00 A.M. with a total of 19,642 vehicles representing 36% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:30 and 5:30 P.M. with a total of 17,693 vehicles representing 37% of the peak three hours. The morning peak hour is 11% larger than the afternoon peak hour.

Durham-York Screenline

This screenline is located at the eastern boundary of the Regional Municipality of York where it coincides with the western boundary of the Regional Municipality of Durham. Because it is a combination of directions, the screenline includes all major roads crossing the boundary regardless of the direction of the road. This analysis combines the eastbound with the southbound traffic and the westbound with the northbound traffic. Although this combination of directions is somewhat arbitrary, it is consistent with traffic moving between Durham and York. In addition, the definition is consistent with peak directions of traffic flow. West and northbound traffic into York Region is the dominant direction in the morning peak period and east and southbound traffic into Durham is the dominant direction in the afternoon peak period. Contra-flow represents 45% of the peak direction in the morning and 43% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

West(north)bound		East(south)bound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	19634	15:00 to 18:00	22911
6:15 to 9:15	20192	15:15 to 18:15	23556
6:30 to 9:30	20462	15:30 to 18:30	24011
6:45 to 9:45	20340	15:45 to 18:45	23985
7:00 to 10:00	19869	16:00 to 19:00	23681

The absolute peak three hour window in the morning occurs from 6:30 to 9:30 A.M. but is very similar to the three hour window beginning 15 minutes earlier and 15 minutes later. In the afternoon, the peak three hours occur from 3:30 to 6:30 P.M. but is very similar to the three hour window beginning 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 17% higher than the number in the morning.

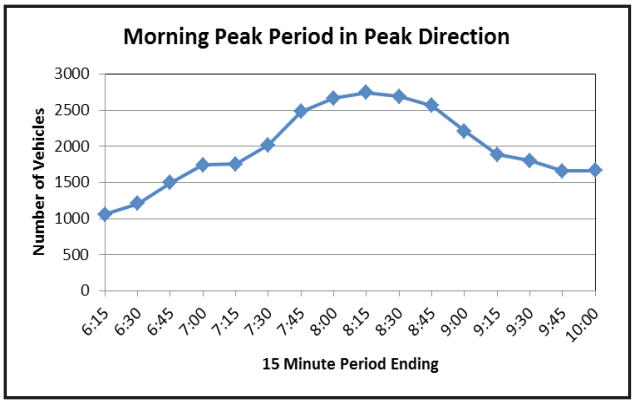
Morning and Afternoon Peak Hour

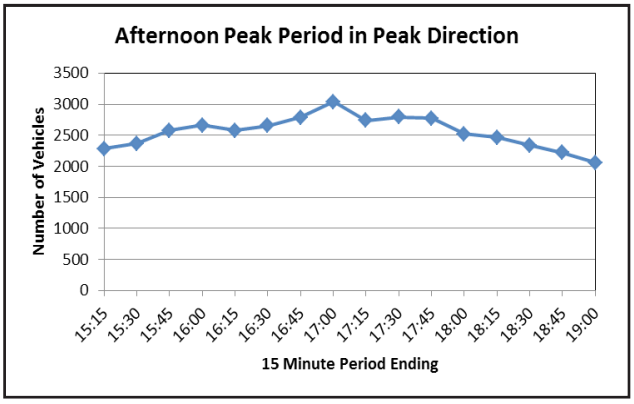
The peak one hour window occurred between 7:30 and 8:30 A.M. with a total of 8,466 vehicles representing 41% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:45 and 5:45 P.M. with a total of 10,332 vehicles representing 43% of the peak three hours. The afternoon peak hour is 22% larger than the morning peak hour.

Durham South (Taunton Road) Screenline

This screenline consists of all major streets crossing Taunton Road, or a continuation of the alignment of this road, in the northern sections of the local municipalities of Pickering, Ajax, Whitby, Oshawa and Clarington. The screenline runs east-west from the eastern boundary of the Regional Municipality of Durham to the common boundary between Durham and the City of Toronto. The traffic directions on the intersecting roads are north and south. Southbound traffic is the dominant direction in the morning peak period and northbound traffic is the dominant direction in the afternoon peak period. Contra-flow represents 91% of the peak direction in the morning and 94% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

Southbound		Northbound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	24629	15:00 to 18:00	31790
6:15 to 9:15	25454	15:15 to 18:15	31972
6:30 to 9:30	26048	15:30 to 18:30	31941
6:45 to 9:45	26213	15:45 to 18:45	31585
7:00 to 10:00	26132	16:00 to 19:00	30988

The absolute peak three hour window in the morning occurs from 6:45 to 9:45 A.M. but is very similar to the three hour window beginning 15 minutes earlier and 15 minutes later. In the afternoon, the peak three hours occur from 3:15 to 6:15 P.M. but is very similar to the three hour window beginning 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 22% higher than the number in the morning.

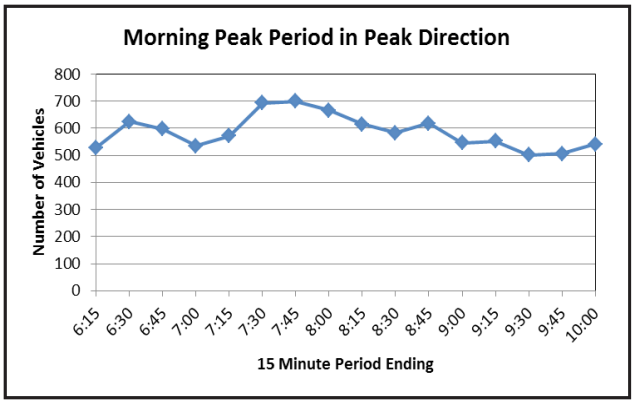
Morning and Afternoon Peak Hour

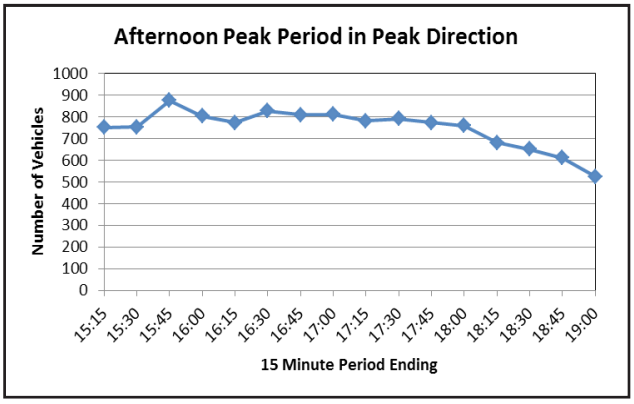
The peak one hour window occurred between 7:45 and 8:45 A.M. with a total of 10,661 vehicles representing 41% of the peak three hours. In the afternoon, the peak one hour window occurred between 4:30 and 5:30 P.M. with a total of 11,369 vehicles representing 36% of the peak three hours. The afternoon peak hour is 7% larger than the morning peak hour.

Durham East Screenline

This screenline follows the eastern boundary of the Regional Municipality of Durham. The screenline is north-south in some portions and east-west in others. This analysis combines eastbound with northbound traffic on intersecting roads as a representation of traffic leaving the Greater Toronto area. Conversely, westbound and southbound traffic are combined to represent traffic entering the GTA. West(south)bound traffic into the GTA is the dominant direction in the morning peak period and east(north)bound traffic out of the GTA is the dominant direction in the afternoon peak period. Contra-flow represents 82% of the peak direction in the morning and 85% of the peak direction in the afternoon.

Peak Period Analysis





Peak Three Hours

West(south)bound		East(north)bound	
Time of Day	**Total Number of Vehicles**	**Time of Day**	**Total Number of Vehicles**
6:00 to 9:00	7280	15:00 to 18:00	9501
6:15 to 9:15	7304	15:15 to 18:15	9431
6:30 to 9:30	7180	15:30 to 18:30	9328
6:45 to 9:45	7088	15:45 to 18:45	9064
7:00 to 10:00	7095	16:00 to 19:00	8786

The absolute peak three hour window in the morning occurs from 6:15 to 9:15 A.M. but is very similar to the three hour window beginning 15 minutes earlier. In the afternoon, the peak three hours occur from 3:00 to 6:00 P.M. but is very similar to the three hour window beginning 15 minutes later. The number of vehicles in the peak three hours in the afternoon is 30% higher than the number in the morning.

Morning and Afternoon Peak Hour

The peak one hour window occurred between 7:15 and 8:15 A.M. with a total of 2675 vehicles representing 37% of the peak three hours. In the afternoon, the peak one hour window occurred between 3:30 and 4:30 P.M. with a total of 3275 vehicles representing 34% of the peak three hours. The afternoon peak hour is 22% larger than the morning peak hour.

Cordon Count Information

pages 2,3

- •Halton West Screenline
- •Halton Dundas Screenline

Data on these pages were extracted from records from the cordon count program carried out by the Regional Municipality of Halton. For more information on counts in this Region, please contact:
Patrick Monaghan (905) 825-6000 X7213

pages 4,5

- •Halton-Peel Screenline
- •Peel Steeles Avenue Screenline

Data on these pages were extracted from records from the cordon count program carried out by the Regional Municipality of Peel. For more information on counts in this Region, please contact:
Alejandro Cifuentes (905) 791-7800 X4420

pages 7, 8, 9

- •Peel-Toronto Screenline
- •Steeles Avenue Screenline
- •Durham-Toronto

Data on these pages were extracted from records from the cordon count program carried out by the City of Toronto (previously the Municipality of Metropolitan Toronto). For more information on count in the Region, please contact:
Edmond Wu (416)396-7038

pages 6,10

- • Peel-Simcoe-York Screenline
- • Durham-York Screenline

Data on these pages were extracted from records from the cordon count program carried out by the Regional Municipality of York. For more information on counts in this Region, please contact:
Shahid Matloob (905) 830-4444 X5080

pages 11,12

- • Durham South (Taunton Road) Screenline
- • Durham East Screenline

Data on these pages were extracted from records from the cordon count program carried out by the Regional Municipality of Durham. For more information on counts in this Region, please contact:
Michael Blake (905) 668-4113 X2549