Greater Toronto Area Cordon Count Program

Analysis of Traffic Trends 1985 to 1998

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Greater Toronto Area Cordon Count Program Analysis of Traffic Trends 1985 to 1998

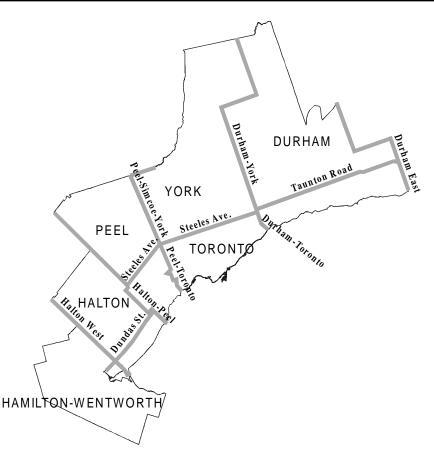
Prepared by: Data Management Group Joint Program in Transportation University of Toronto June 2000

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 for the first time. This report presents a summary of these cordon count data for the period from 1985 until the most recent counts in 1998. The data are presented without alteration or corrections as presented by the City of Toronto and the Regional Municipalities of Durham, Halton, Peel and York. The data were collected in the May and June period of the years indicated and include type of vehicle together with estimates of vehicle occupancy during the hours of daylight.

Each Regional Municipality has their own set of needs and priorities for these data. Therefore, the data collection methods are somewhat different in each jurisdiction. The set of common definitions across the data bases, 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 Hamilton-Wentworth, GO Transit, Toronto Transit Commission and the Ministry of Transportation Ontario.

Eleven screenlines have been chosen to illustrate the changes in vehicular and passenger counts. Common morning (7:00 to 9:00 A.M.) and evening (4:00 to 6:00 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

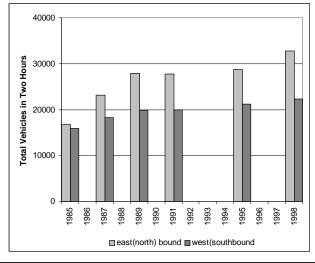
This screenline is located at the western edge of the Regional Municipality of Halton as an extension of the common boundary between Halton and the Regional Municipality of Hamilton-Wentworth to intersect the Burlington Skyway. The screenline follows this straight path rather than the Regional boundary 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. A total of ten roads were counted in the years 1985, 1987, 1989, 1991, 1995 and 1998. Passenger loadings on the GO Rail service were appended manually. The first table and graphs describe total vehicles (excluding bicycles and rail vehicles) crossing the screenline in the morning and afternoon peak periods by direction of travel. East(north)bound travel defines the morning peak direction and West(south)bound the afternoon. Morning and afternoon peak periods show similar patterns of growth with consistently more traffic in the afternoon.

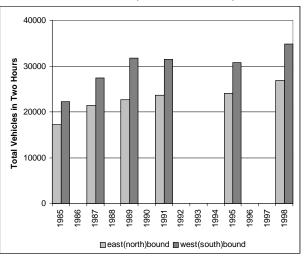
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Period	ł	A	Afternoon F	Peak Perio	d
	East(nor	th)bound	West(sou	uth)bound	East(nor	th)bound	West(south)bound	
	total	total annual		annual	total	annual	total	annual
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase
1985	16729		15870		17216		22296	
1987	23123	17.6%	18237	7.2%	21362	11.4%	27422	10.9%
1989	27926	9.9%	19830	4.3%	22712	3.1%	31817	7.7%
1991	27784	-0.3%	19877	0.1%	23585	1.9%	31409	-0.6%
1995	28758	0.9%	21136	1.5%	24114	0.6%	30808	-0.5%
1998	32745	4.4%	22294	1.8%	26789	3.6%	34771	4.1%

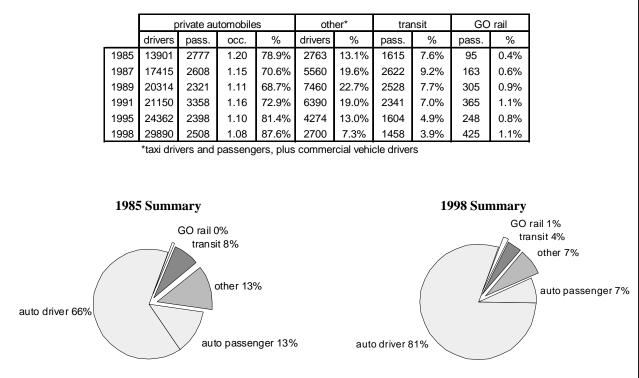
Morning Peak Period (7:00 to 9:00 A.M)

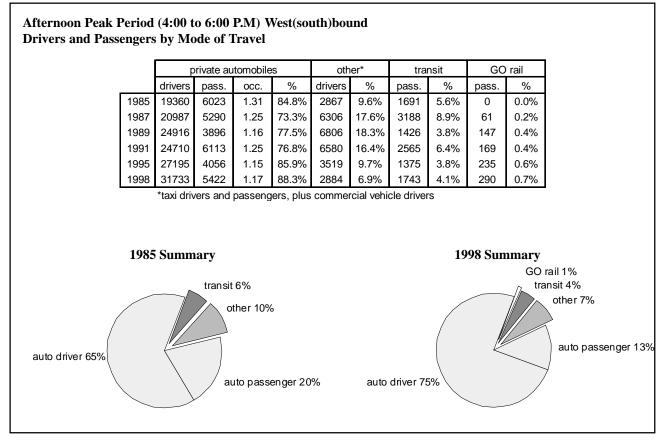




Halton West Screenline

Morning Peak Period (7:00 to 9:00 A.M) East(north)bound Drivers and Passengers by Mode of Travel





Halton Dundas Street Screenline

This screenline consists of all major streets crossing the Dundas Street (Highway #5) in the northern sections of the Cities of Burlington and Oakville. Although the actual direction is northeast and southwest, the screenline is considered to be east-west from the Peel-Halton boundary west to Indian Creek. The traffic directions are considered to be north and south. A total of 14 roads were counted in 1985, while in the years 1987, 1989, 1991, 1995 and 1998 a total of 17 roads were counted. GO Rail service does not intersect this screenline.

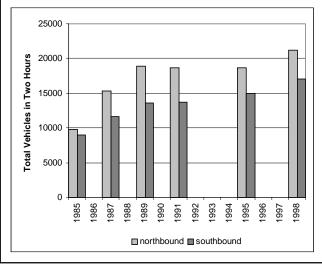
The table and graphs on this page describe total vehicles (excluding bicycles) crossing the screenline in the morning and afternoon peak periods by direction of travel. Northbound travel defines the morning peak direction and southbound the afternoon. Morning and afternoon peak periods show similar patterns of growth. The afternoon peak period has consistently more traffic than the morning peak, although the differences are small.

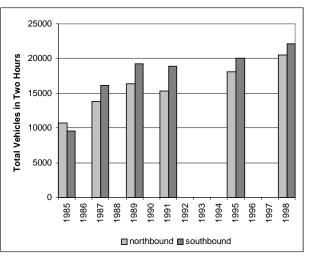
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Period		A	Afternoon F	Peak Perio	d	
	Northbound		South	bound	North	bound	Southbound		
	total annual		total annual		total	annual	total	annual	
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase	
1985	9801		9034		10702		9602		
1987	15299	24.9%	11593	13.3%	13808	13.6%	16154	29.7%	
1989	18896	11.1%	13646	8.5%	16398	9.0%	19205	9.0%	
1991	18663	-0.6%	13721	0.3%	15324	-3.3%	18944	-0.7%	
1995	18608	-0.1%	15007	2.3%	18040	4.2%	19997	1.4%	
1998	21237	4.5%	17064	4.4%	20506	4.4%	22086	3.4%	

Morning Peak Period (7:00 to 9:00 A.M)



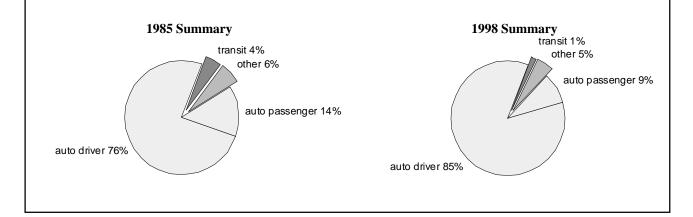


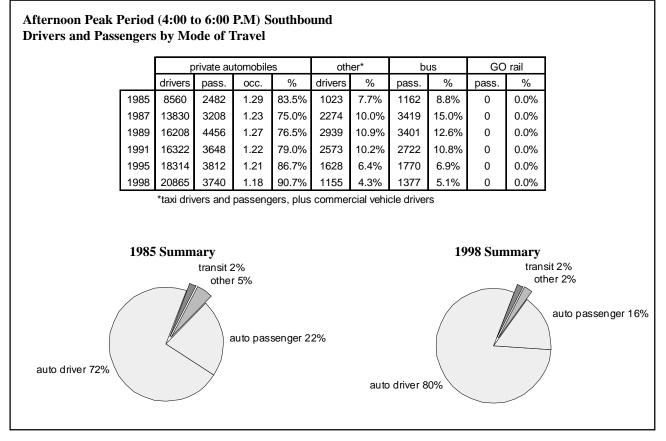
Halton Dundas Street Screenline

Morning Peak Period (7:00 to 9:00 A.M) Northbound Drivers and Passengers by Mode of Travel

	р	rivate au	Itomobile	S	other*		bus		GO rail	
	drivers	pass.	occ.	%	drivers	%	pass.	%	pass.	%
1985	8788	1828	1.21	88.5%	952	7.9%	425	3.5%	0	0.0%
1987	12888	1846	1.14	83.2%	2287	12.9%	688	3.9%	0	0.0%
1989	15687	3036	1.19	82.7%	3012	13.3%	891	3.9%	0	0.0%
1991	16020	2359	1.15	83.2%	2495	11.3%	1221	5.5%	0	0.0%
1995	16764	2055	1.12	88.6%	1705	8.0%	723	3.4%	0	0.0%
1998	19518	1886	1.10	89.4%	1541	6.4%	986	4.1%	0	0.0%

*taxi drivers and passengers, plus commercial vehicle drivers





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 is the dominant direction in the morning peak period and westbound traffic is the dominant direction in the afternoon peak period. A total of 19 roads were counted in the years 1985, 1987, a total of 18 were counted in 1989, a total of 20 in 1991, and a total of 21 in the years 1993, 1995 and 1998.

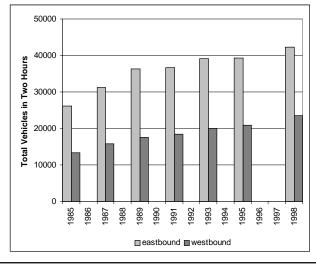
The table and graphs on this page describe total vehicles (excluding bicycles and rail vehicles) crossing the screenline in the morning and afternoon peak periods by direction of travel. Eastbound travel defines the morning peak direction and westbound the afternoon. Morning and afternoon peak periods show similar patterns of growth with consistently more traffic in the afternoon. Traffic volumes eastbound in the morning peak are similar to traffic volumes westbound in the afternoon peak.

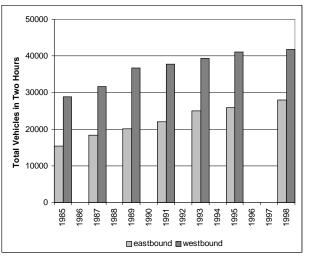
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perioc	ł	A	Afternoon F	Peak Perio	d
	East	bound	West	bound	Eastb	bound	Westbound	
	total annual		total	annual	total	annual	total	annual
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase
1985	26109		13299		15329		28825	
1987	31169	9.3%	15861	9.2%	18404	9.6%	31638	4.8%
1989	36244	7.8%	17527	5.1%	20128	4.6%	36700	7.7%
1991	36608	0.5%	18354	2.3%	21953	4.4%	37834	1.5%
1993	39056	3.3%	20075	4.6%	25027	6.8%	39375	2.0%
1995	39360	0.4%	20841	1.9%	25850	1.6%	41068	2.1%
1998	42306	2.4%	23422	4.0%	27912	2.6%	41714	0.5%

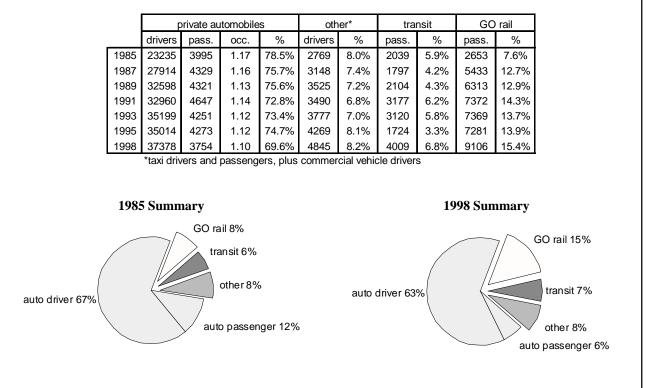
Morning Peak Period (7:00 to 9:00 A.M)

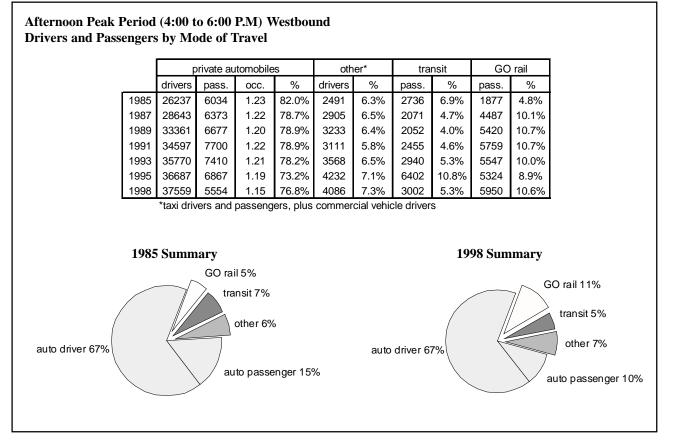




Halton-Peel Screenline

Morning Peak Period (7:00 to 9:00 A.M) Eastbound Drivers and Passengers by Mode of Travel





Peel Steeles Avenue Screenline

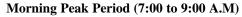
This screenline follows Steeles Avenue in the southern portion of the City of Brampton close to its common boundary with the City of Mississaga all within the Regional Municipality of Peel. The line extends in an east-west direction from the common boundary with the City of Toronto to the common boundary with the Regional Municipality of Halton. The screenline includes all major roads crossing the screenline in the north-south direction. A total of 13 roads were counted in the year 1985, a total of 12 were counted in 1987, a total of 14 in 1989, 1991, 1993 and 1995, and a total of 13 in the year 1998.

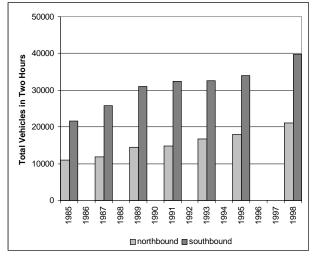
The table and graphs on this page describe total vehicles (excluding bicycles and rail vehicles) crossing the screenline in the morning and afternoon peak periods by direction of travel. Southbound travel defines the morning peak direction and northbound the afternoon. Morning and afternoon peak periods show similar patterns of growth. Traffic volumes eastbound in the morning peak were similar to traffic volumes westbound in the afternoon peak in earlier counts with the afternoon peak becoming larger in recent years.

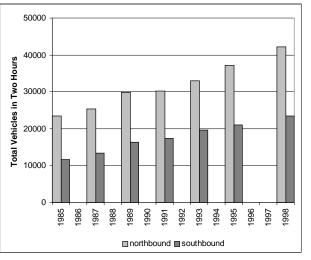
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perioc		Afternoon Peak Period				
	North	bound	South	bound	North	bound	South	bound	
	total annual		total	annual	total	annual	total	annual	
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase	
1985	10926		21661		23416		11556		
1987	11840	4.1%	25846	9.2%	25266	3.9%	13352	7.5%	
1989	14395	10.3%	31010	9.5%	29934	8.8%	16277	10.4%	
1991	14765	1.3%	32437	2.3%	30229	0.5%	17444	3.5%	
1993	16745	6.5%	32536	0.2%	33052	4.6%	19689	6.2%	
1995	17881	3.3%	34003	2.2%	37228	6.1%	20969	3.2%	
1998	21054	5.6%	39803	5.4%	42151	4.2%	23511	3.9%	

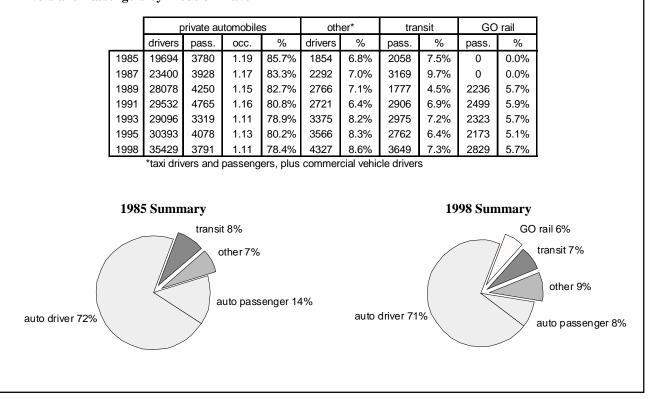


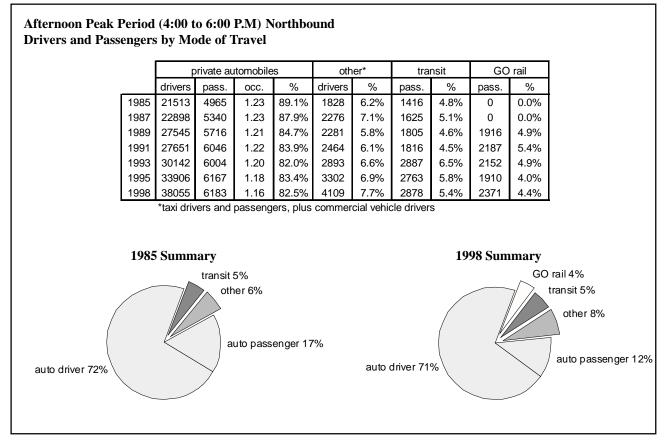




Peel Steeles Avenue Screenline

Morning Peak Period (7:00 to 9:00 A.M) Southbound Drivers and Passengers by Mode of Travel





Peel-Toronto Screenline

This screenline is located at the western boundary of the City of Toronto and is coincidental 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 City of Toronto, previously the Municipality of Metropolitan Toronto. The screenline includes all major roads crossing the boundary in the east-west direction. A total of 21 cordon count stations were counted in the years 1985, 1987, 1989, 1991, 1993, 1995, and 1998, which include appropriate locations on the GO rail lines.

The table and graphs on this page describe total vehicles (excluding bicycles and rail vehicles) crossing the screen-

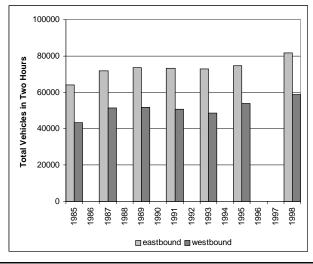
line in the morning and afternoon peak periods by direction of travel. Eastbound traffic is the dominant direction in the morning peak period and westbound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show similar patterns of growth. Traffic volumes eastbound in the morning peak are similar to traffic volumes westbound in the afternoon peak.

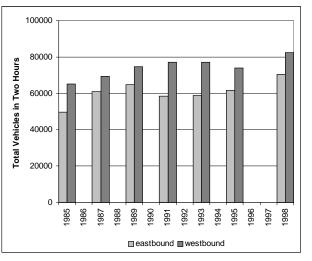
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perioc	ł	A	Afternoon F	Peak Perio	d
	East	bound	West	bound	Eastb	bound	West	bound
	total annual		total	annual	total	annual	total	annual
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase
1985	64020		43445		49729		65139	
1987	71730	5.9%	51271	8.6%	60902	10.7%	69416	3.2%
1989	73728	1.4%	51631	0.4%	64671	3.0%	74758	3.8%
1991	73351	-0.3%	50593	-1.0%	58280	-5.1%	77197	1.6%
1993	72731	-0.4%	48730	-1.9%	58704	0.4%	76985	-0.1%
1995	74779	1.4%	53987	5.3%	61693	2.5%	73805	-2.1%
1998	81747	3.0%	58805	2.9%	70418	4.5%	82378	3.7%

Morning Peak Period (7:00 to 9:00 A.M)

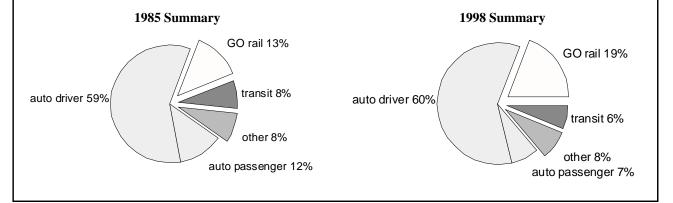


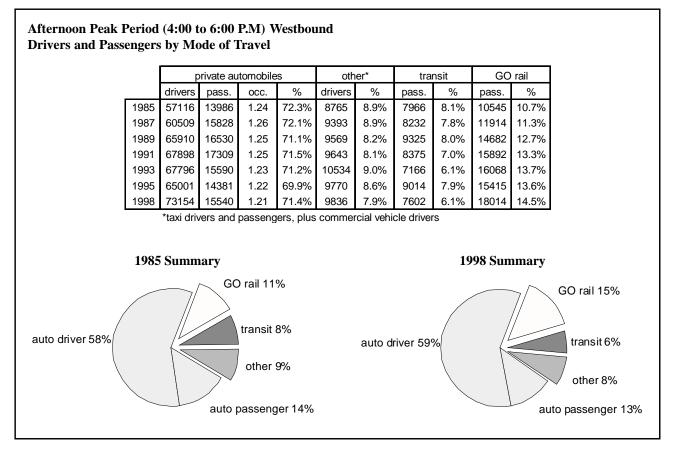


Peel-Toronto Screenline

Morning Peak Period (7:00 to 9:00 A.M) Eastbound Drivers and Passengers by Mode of Travel

	p	orivate au	tomobile	s	oth	other*		transit		GO rail	
	drivers pass. occ. %			drivers	%	pass.	%	pass.	%		
1985	56311	11577	1.21	71.2%	7810	8.2%	7197	7.5%	12431	13.0%	
1987	61981	11644	1.19	69.4%	9901	9.3%	8900	8.4%	13658	12.9%	
1989	63581	11856	1.19	67.0%	10772	9.6%	9042	8.0%	17276	15.4%	
1991	63828	11597	1.18	67.0%	9333	8.3%	7890	7.0%	19890	17.7%	
1993	63823	11696	1.18	67.7%	9644	8.6%	6294	5.6%	20115	18.0%	
1995	65374	10221	1.16	67.5%	10053	9.0%	6726	6.0%	19559	17.5%	
1998	72440	9040	1.12	67.2%	9408	7.8%	7290	6.0%	23153	19.1%	
	*taxi driv	ers and	passeng	ers, plus	commer	cial vehi	cle drive	S			





Peel-Simcoe-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 southeastern 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. A total of 13 cordon count stations were counted in the years 1985, 12 were counted in 1987, 14 were counted in 1989, 1991, 1993 and 1995, and 13 were counted in 1998. There is no GO rail service across this screenline.

The table and graphs on this page describe total vehicles (excluding bicycles) crossing the screenline in the morning and afternoon peak periods by direction of travel.

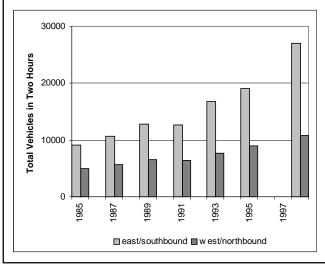
East(south)bound traffic is the dominant direction in the morning peak period and west(north)bound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show similar patterns of growth with consistently more traffic in the afternoon. Traffic volumes eastbound in the morning peak are slightly smaller than the traffic volumes westbound in the afternoon peak. Significant growth occurred in 1998 following the opening of the 407ETR.

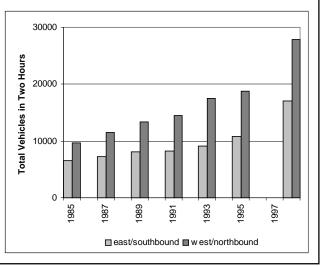
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perioc	1	A	Afternoon F	Peak Perio	d
	east/sou	ithbound	west/nor	thbound	east/sou	Ithbound	west/northbound	
	total	annual	total	annual	total	annual	total	annual
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase
1985	9049		5004		6531		9710	
1987	10720	8.8%	5678	6.5%	7241	5.3%	11461	8.6%
1989	12855	9.5%	6577	7.6%	8051	5.4%	13391	8.1%
1991	12645	-0.8%	6430	-1.1%	8222	1.1%	14432	3.8%
1993	16800	15.3%	7629	8.9%	9113	5.3%	17500	10.1%
1995	19088	6.6%	9015	8.7%	10797	8.8%	18727	3.4%
1998	27035	12.3%	15539	19.9%	17017	16.4%	27830	14.1%

Morning Peak Period (7:00 to 9:00 A.M)



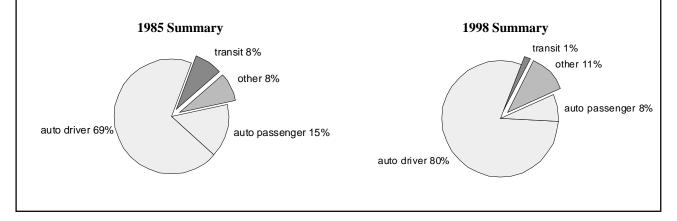


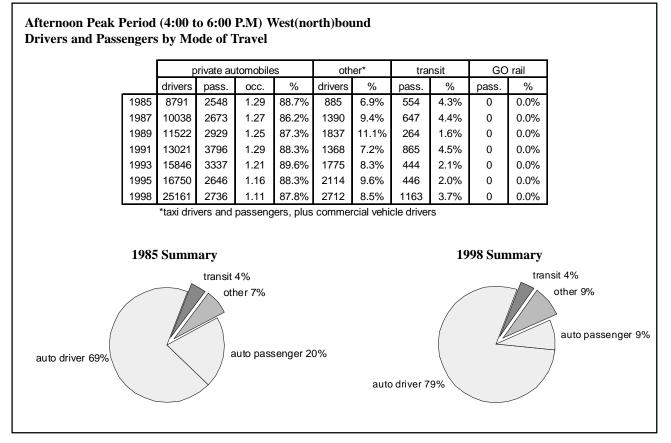
Peel-Simcoe-York Screenline

Morning Peak Period (7:00 to 9:00 A.M) East(south)bound Drivers and Passengers by Mode of Travel

	p	orivate au	tomobile	s	other*		transit		GO rail	
	drivers	pass.	occ.	%	drivers	%	pass.	%	pass.	%
1985	8082	1743	1.22	84.3%	928	8.0%	905	7.8%	0	0.0%
1987	9470	1855	1.20	83.0%	1202	8.8%	1111	8.1%	0	0.0%
1989	11339	2087	1.18	86.6%	1480	9.6%	589	3.8%	0	0.0%
1991	11179	2030	1.18	86.0%	1429	9.3%	717	4.7%	0	0.0%
1993	15078	2193	1.15	86.4%	1840	9.2%	878	4.4%	0	0.0%
1995	16869	2053	1.12	85.3%	2429	10.9%	836	3.8%	0	0.0%
1998	23986	2313	1.10	87.7%	3257	10.9%	425	1.4%	0	0.0%

*taxi drivers and passengers, plus commercial vehicle drivers





Steeles Avenue Screenline

This screenline is located along Steeles Avenue at the northern boundary of the City of Toronto and is coincident with the southern boundary of the Regional Municipality of York. The potential for vehicles double crossing the jurisdictional boundary is very high as Steeles Avenue is a major thoroughfare. Counts are taken on the northern side of Steeles Avenue to minimize the impact of these double crossings. The screenline includes all major roads crossing the boundary in the north-south direction. A total of 31 cordon count stations were counted in the year 1985, 35 were counted in 1987, 39 were counted in 1989, 42 were counted in 1991, 45 were counted in 1993 and 1995 and 43 were counted in 1998, which include appropriate locations on the GO rail lines.

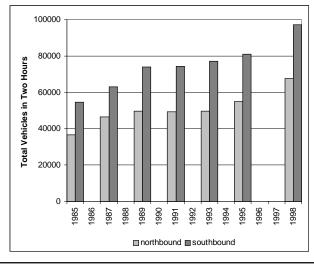
The table and graphs on this page describe total vehicles (excluding bicycles and rail vehicles) crossing the screenline in the morning and afternoon peak periods by direction of travel. Southbound traffic is the dominant direction in the morning peak period and northbound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show similar patterns of growth with consistently more traffic in the afternoon. Traffic volumes southbound in the morning peak are very similar in magnitude to the traffic volumes northbound in the afternoon peak. Any differences may be attributed to the constant definition of a two hour time window.

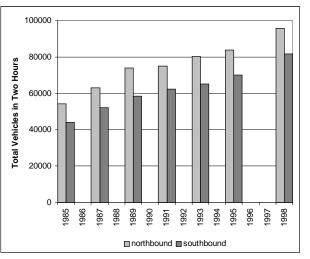
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Period	ł	A	Afternoon F	Peak Perio	d
	Northbound		South	bound	North	bound	Southbound	
	total annual		total	annual	total	annual	total	annual
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase
1985	36773		54535		54357		43984	
1987	46360	12.3%	63196	7.6%	63198	7.8%	52199	8.9%
1989	49701	3.5%	74027	8.2%	73801	8.1%	58546	5.9%
1991	49254	-0.5%	74314	0.2%	75171	0.9%	62289	3.1%
1993	49795	0.5%	77287	2.0%	80338	3.4%	64988	2.1%
1995	54756	4.9%	80999	2.4%	83700	2.1%	69918	3.7%
1998	67646	7.3%	97137	6.2%	95945	4.7%	81664	5.3%

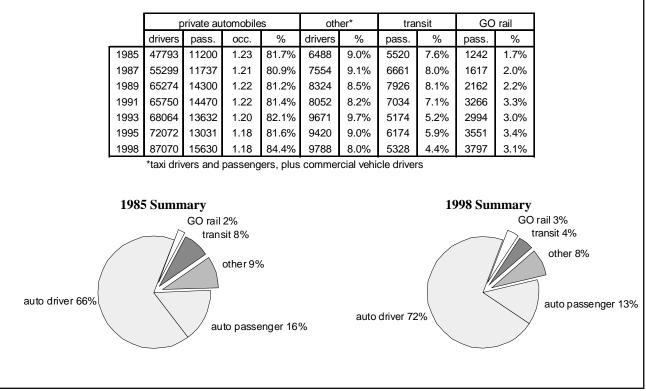
Morning Peak Period (7:00 to 9:00 A.M)

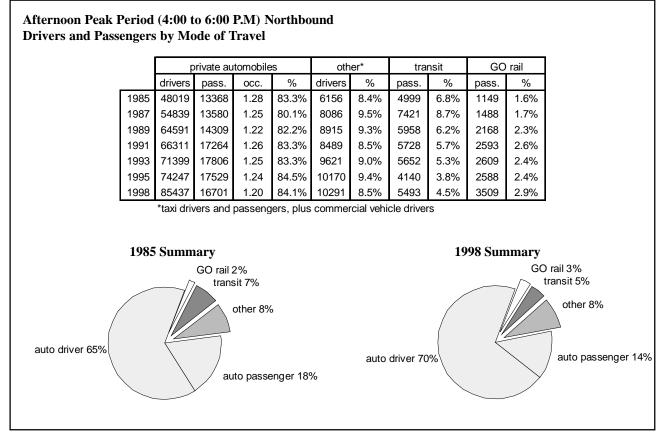




Steeles Avenue Screenline

Morning Peak Period (7:00 to 9:00 A.M) Southbound Drivers and Passengers by Mode of Travel





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 between the City of Toronto and the Regional Municipality of Durham and includes all major roads crossing the boundary in the east-west direction. A total of 3 cordon count stations were counted in the years 1985, and 1987, 6 were counted in 1989, 1991, 1993, 1995, and 1998. GO rail passenger counts were determined separately and are not included in the station count.

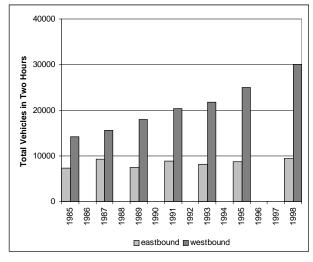
The table and graphs on this page describe total vehicles (excluding bicycles and rail vehicles) crossing the screenline in the morning and afternoon peak periods by direction of travel. Westbound traffic is the dominant direction in the morning peak period and eastbound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show similar patterns of growth with consistently more traffic in the afternoon. Traffic volumes eastbound in the morning peak are similar to traffic volumes westbound in the afternoon peak until recent counts where growth in the morning peak periods exceeds the afternoon peak. Any differences may be attributed to the constant definition of a two hour time window and the dominance of traffic on Provincial Highway 401 in the counts.

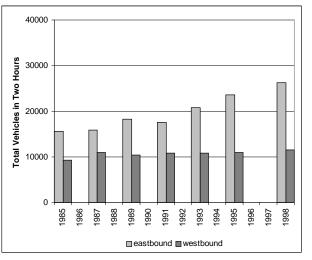
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

					Afternoon Dook Deried					
		Morning P	eak Perioc	1	Afternoon Peak Period					
	Eastb	bound	West	bound	Eastb	bound	West	bound		
	total	annual	total	annual	total	annual	total	annual		
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase		
1985	7355		14170		15567		9300			
1987	9262	12.2%	15624	5.0%	15915	1.1%	10976	8.6%		
1989	7507	-10.0%	18019	7.4%	18199	6.9%	10419	-2.6%		
1991	8853	8.6%	20349	6.3%	17552	-1.8%	10820	1.9%		
1993	8099	-4.4%	21810	3.5%	20731	8.7%	10875	0.3%		
1995	8715	3.7%	25031	7.1%	23578	6.6%	10947	0.3%		
1998	9429	2.7%	30004	6.2%	26182	3.6%	11568	1.9%		

Morning Peak Period (7:00 to 9:00 A.M)



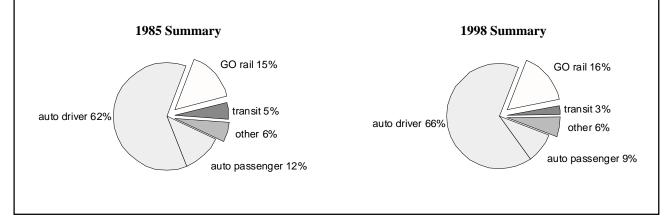


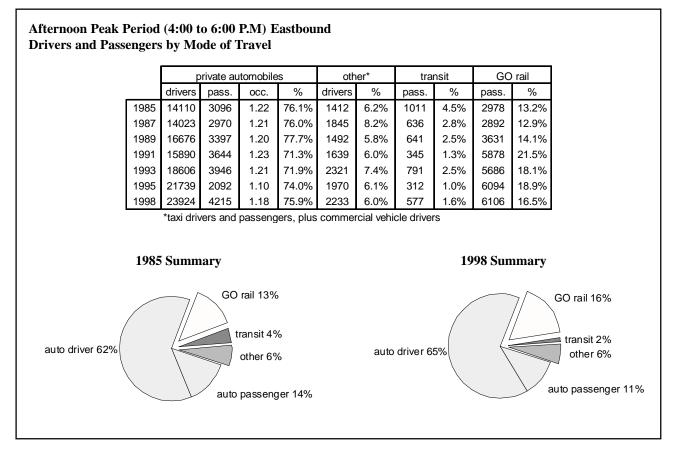
Durham-Toronto Screenline

Morning Peak Period (7:00 to 9:00 A.M) Westbound Drivers and Passengers by Mode of Travel

private automobiles				other*		transit		GO rail		
	drivers	pass.	OCC.	%	drivers	%	pass.	%	pass.	%
1985	12890	2504	1.19	74.1%	1233	5.9%	1004	4.8%	3154	15.2%
1987	14218	2466	1.17	74.7%	1350	6.0%	1002	4.5%	3305	14.8%
1989	16282	2626	1.16	71.8%	1699	6.5%	801	3.0%	4926	18.7%
1991	18394	3548	1.19	70.4%	1916	6.1%	590	1.9%	6729	21.6%
1993	19829	2863	1.14	70.2%	2085	6.4%	471	1.5%	7078	21.9%
1995	22601	2756	1.12	71.6%	2698	7.6%	865	2.4%	6487	18.3%
1998	27351	3817	1.14	75.1%	2612	6.3%	1046	2.5%	6679	16.1%

*taxi drivers and passengers, plus commercial vehicle drivers





Durham-York Screenline

This screenline is located at the eastern boundary of the Regional Municipality of York where it is coincident 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. A total of 5 cordon count stations were counted in the year 1985, 6 in 1987, 8 in 1989, 12 in 1991, 9 in 1993, 10 in 1995 and 6 were counted in 1998. GO rail service is not provided across this screenline.

The table and graphs on this page describe total vehicles (excluding bicycles) crossing the screenline in the morning

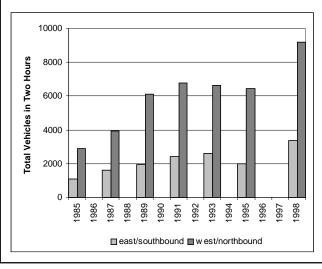
and afternoon peak periods by direction of travel. West and northbound traffic is the dominant direction in the morning peak period and east and southbound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show similar patterns of growth until the recent rapid growth in the morning peak period. Traffic volumes eastbound in the morning peak are similar to traffic volumes westbound in the afternoon peak until the most recent count where traffic in the morning peak is significantly larger.

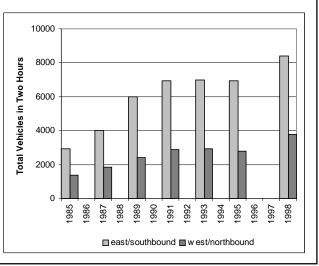
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1985 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perioc	1	Afternoon Peak Period				
	east(south)bound		west(north)bound		east(south)bound		west(north)bound		
	total annual		total	annual	total	annual	total	annual	
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase	
1985	1081		2872		2943		1365		
1987	1600	21.7%	3947	17.2%	4021	16.9%	1856	16.6%	
1989	1934	9.9%	6097	24.3%	5996	22.1%	2396	13.6%	
1991	2438	12.3%	6788	5.5%	6946	7.6%	2884	9.7%	
1993	2616	3.6%	6625	-1.2%	6986	0.3%	2904	0.3%	
1995	1995	-12.7%	6463	-1.2%	6947	-0.3%	2801	-1.8%	
1998	3360	19.0%	9196	12.5%	8384	6.5%	3792	10.6%	

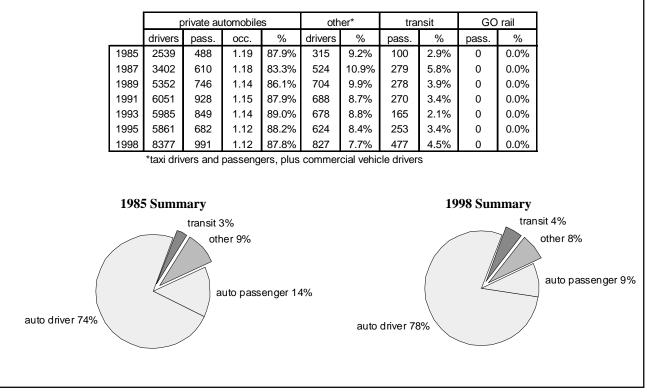
Morning Peak Period (7:00 to 9:00 A.M)

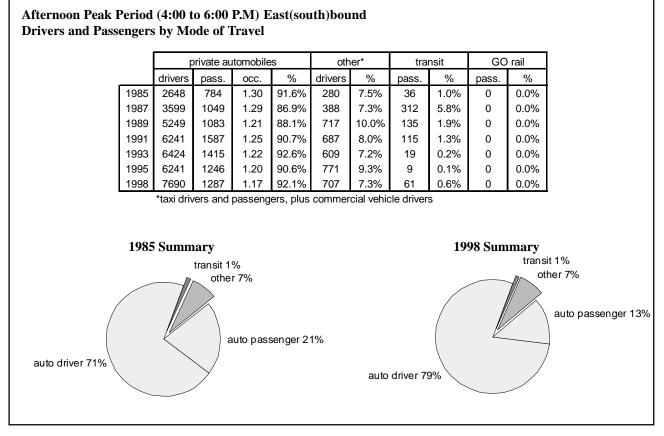




Durham-York Screenline

Morning Peak Period (7:00 to 9:00 A.M) West(north)bound Drivers and Passengers by Mode of Travel





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. A total of 32 cordon count stations were counted in the years 1989, 1991 and 1996, 33 were counted in 1998. GO Transit does not provide rail service across this screenline.

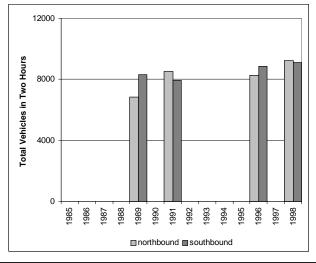
The table and graphs on this page describe total vehicles (excluding bicycles) crossing the screenline in the morning and afternoon peak periods by direction of travel. The two directions of flow, northbound and southbound, are very similar in many of the count summaries in both the morning and afternoon peak periods. However, over the entire count period, southbound flows were slightly larger in the morning and northbound flows larger in the afternoon. Morning and afternoon peak periods show different patterns of growth with consistently more traffic in the afternoon.

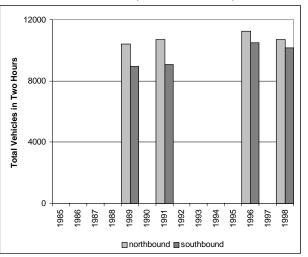
Southbound traffic in the morning and northbound traffic in the afternoon were chosen as the basis for more detailed analysis of mode of travel. The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1989 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

		Morning P	eak Perio	d	Afternoon Peak Period				
	Northbound total annual		Southbound		Northbound		Southbound		
			total	annual	total	annual	total	annual	
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase	
1989	6835		8306		10412		8928		
1991	8510	11.6%	7926	-2.3%	10709	1.4%	9085	0.9%	
1996	8268	-0.6%	8854	2.2%	11231	1.0%	10500	2.9%	
1998	9223	5.6%	9095	1.4%	10689	-2.4%	10147	-1.7%	

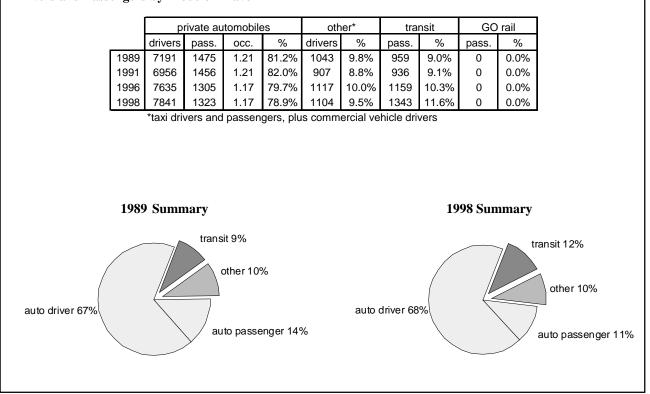
Morning Peak Period (7:00 to 9:00 A.M)

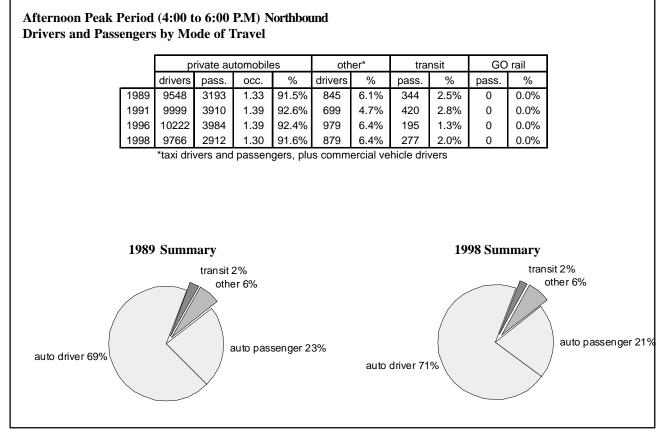




Durham South (Taunton Road) Screenline

Morning Peak Period (7:00 to 9:00 A.M) Southbound Drivers and Passengers by Mode of Travel





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. A total of 6 cordon count stations were counted in the years 1989, 1991, 1996 and 1998. GO rail service is not provided across this screenline.

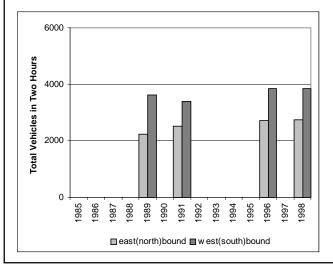
The table and graphs on this page describe total vehicles (excluding bicycles) crossing the screenline in the morning and afternoon peak periods by direction of travel. West and southbound traffic is the dominant direction in the morning peak period and east and northbound traffic is the dominant direction in the afternoon peak period. Morning and afternoon peak periods show dissimilar patterns of growth with consistently more traffic in the afternoon. Traffic volumes west(south)bound in the morning peak are consistently smaller than east(north)bound traffic volumes in the afternoon peak.

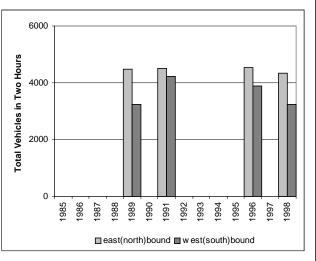
The set of graphs and tables on the following page describe the modes of transport used by all persons crossing the screenline in the peak direction for both the morning and afternoon peak periods. The mode 'transit' contains only bus passengers as neither streetcar nor subway modes cross this screenline. A comparison is made in the composition of person travel in the years 1989 and 1998.

Total Vehicles by Time of Day and Direction of Travel Estimated Rates of Annual Growth

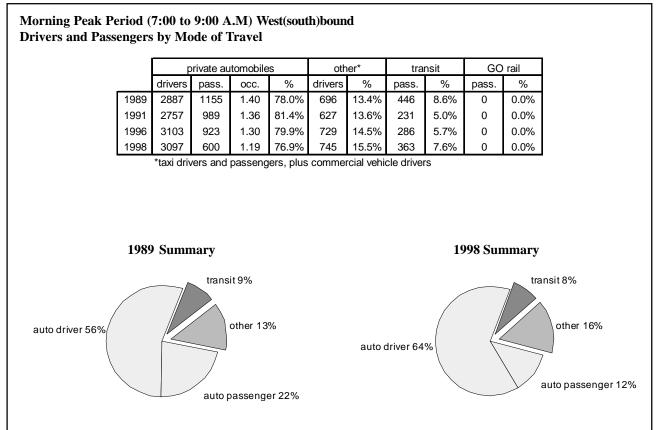
		Morning P	eak Perioc	1	Afternoon Peak Period				
	East(north)bound total annual		West(south)bound		East(north)bound		West(south)bound		
			total	annual	total	annual	total	annual	
	vehicles	increase	vehicles	increase	vehicles	increase	vehicles	increase	
1989	2233		3609		4476		3253		
1991	2513	6.1%	3397	-3.0%	4503	0.3%	4217	13.9%	
1996	2721	1.6%	3848	2.5%	4530	0.1%	3897	-1.6%	
1998	2748	0.5%	3857	0.1%	4342	-2.1%	3249	-8.7%	

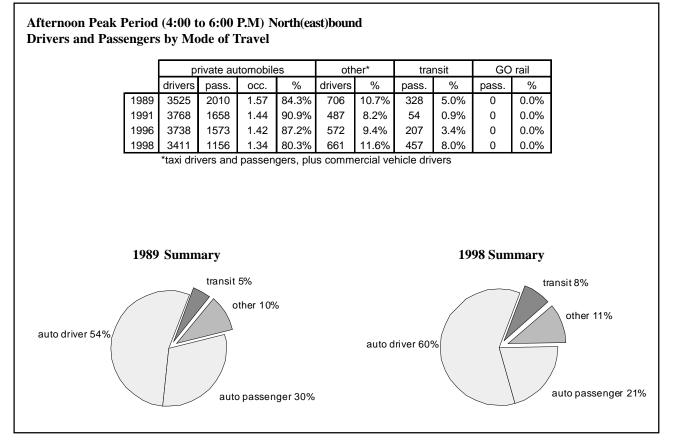
Morning Peak Period (7:00 to 9:00 A.M)





Durham East Screenline





Cordon Count Information

pages 2-5

• Halton West Screenline

• Halton South 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:

Elizabeth Szymanski (905) 825-6123 X7213

pages 6-9

• 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:

Rick Warner (905) 791-9400 X4352

pages 10, 11, 14, 15, 16, 17

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

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 counts in this Region, please contact:

Loy-Sai Cheah (416) 392-8572

pages 12, 13, 18, 19

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:

John Barnes (905) 764-6346 X5030

pages 20-23

- 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:

Jeff Brooks (905) 436-6612

GO Transit Information

Data on these pages relating to GO Rail ridership were provided in various forms by the office of GO Rail from their regular ridership counts. For more information on counts on the GO Transit system, please contact: Dan Francey (416) 869-3600 X5478