

Ontario
Road
Safety
Annual
Report

1997 Ontario
Road Safety
Annual Report

'97 Ontario Road Safety Annual Report



Cette publication technique n'est disponible qu'en anglais.

Copies of this document can be obtained from:

Publications Ontario

880 Bay Street Toronto, Ontario M7A 1N8

Telephone (416) 326-5300 Toll-free (800) 668-9938 TTY (800) 268-7095

If you are seeking information on how to reduce your risk of being in a collision, visit your local Ministry of Transportation (MTO) office for the latest copy of the Official Driver's Handbook, call General Publishing at (800) 387-0141 or (416) 445-3333 or from the Ministry of Transportation web site http://www.mto.gov.on.ca. For all other driver manuals and leaflets call (416) 235-3473 or for MTO information call (800) 268-4686. In addition, you may wish to borrow a road safety video from the Ontario Safety League (416) 620-1720.

Many of the publications are available at automotive retail outlets and book stores.

For more information on the data in this publication, please contact the Road Safety Program Office at (416) 235-3585.

Produced by: Road Safety Program Office Road User Safety Branch Ministry of Transportation 1201 Wilson Avenue Building A, Main Floor, Room 215 Toronto, Ontario M3M 1J8

Phone: (416) 235-3585 Fax: (416) 235-3633

Ontario Road Safety Annual Report

		Table of Contents - 1997	Page
	Conte		ii
		Tables and Figures	iii
Section	1	Overview	1
	1a	Synopsis Salarted Characteristics of Mater Valsials Callisians	2
	1b	Selected Characteristics of Motor Vehicle Collisions	3
	1c	Health Perspective	4
Section	2	The People	5
	2a	People in Collisions	6
		Persons Killed and Injured	6
		Drivers Alcohol	9
		Driver Action	9
		Seat Belts and Child Restraints	12
		Pedestrians	13
	2b	Putting the People in Context	14
	20	Injury Rates	14
		Driver Population	14
Section	3	The Collision	21
000000	3a	Types of Collisions	22
		Collision Classes and Rates	23
	3b	Time and Environment	25
	3c	The Collision Location	28
Section	4	Place of Collision in Ontario	31
	·	Geographical Location-Estimated Population, Collision Information & Vehicle Registrations	32
Section	5	The Vehicle	47
	5a	Vehicles in Collisions	48
		Vehicle Type	48
		Condition, Model Year	49
		Insurance Status	50
	5b	Putting the Vehicle in Context	51
		Vehicle Population	51
		Damage Level	52
Section	6	Vehicles of Special Interest	53
	6a	Motorcycles	54
	6b	School Vehicles	55
	6c	Trucks	56
	6d	Off-Road Vehicles	57
	6 e	Motorized Snow Vehicles	58
	6f	Bicycles	59
Section	7	Conviction, Offense and Suspension Data	61
	7a	Conviction Data	62
	7b	Offense and Suspension Data	63
Section	8	Appendix	65
	8a	Glossary of Terms	65
	8a	Acknowledgements	68

Road Safety Annual Report

	List of Tables and Figures - 1997	
Table	Title	Page
2.1	Category of Involved Person by Severity of Injury in Fatal and Personal Injury Collisions	6
2.2	Category of Persons Killed by Age Groups	7
2.3	Category of Persons Injured by Age Groups	8
2.4	Sex of Driver by Class of Collision	9
2.5	Driver Condition by Class of Collision	9
2.6	Driver Age by Driver Condition in all Collisions	10
2.7	Recorded Driver Condition in Drivers Killed	10
2.8	Apparent Driver Action by Class of Collision	11
2.9	Seat Belt Usage by Severity of Driver Injury in Fatal and Personal Injury Collisions	11
2.10	Seat Belt Usage by Severity of Passenger Injury in Fatal and Personal Injury Collisions	12
2.11	Restraint Use for Children (0 - 4 Years) Killed 1993 - 1997	12
2.12	Restraint Use for Children (0 - 4 Years) Involved in Fatal and Personal Injury Collisions by Severity of Injury	12
2.13	Pedestrian Condition by Severity of Injury	13
2.14	Apparent Pedestrian Action by Severity of Injury	13
2.15	Category of Persons Killed and Injured 1988 - 1997	14
2.16	Sex of Driver Population by Age Groups	14
2.17	Driver Population Age Groups 1988 - 1997	14
2.18	Driver Licence Class by Sex	15
2.19	Licensed Drivers, Total Collisions, Persons Killed and Injured 1931 - 1997	17
2.20	Driver Age Groups - Number Licensed, Collision Involvement and Per Cent Involved in Collisions	19
3.1	Class of Collision 1988 - 1997	22
3.2	Collision Rate Per One Million Kilometres Traveled 1988 - 1997	22
3.3	Motor Vehicles Involved in Collisions Based on Initial Impact	23
3.4	Initial Impact Type by Class of Collision	24
3.5	Month of Occurrence by Class of Collision	25
3.6	Day of Week by Class of Collision	25
3.7	Hour of Occurrence by Class of Collision	26
3.8	Statutory Holidays, Holiday Weekends - Fatal Collisions, Persons Killed and Persons Injured	27
3.9	Light Condition by Class of Collision	27
3.10	Visibility by Class of Collision	27
3.11	Road Jurisdiction by Class of Collision	28
3.12	Road Jurisdiction for All Collisions 1988 - 1997	28
3.13	Road Location by Class of Collision	29
3.14	Road Surface Condition by Class of Collision	29
4.1	Place of Collision - Estimated Population, Class of Collision, Persons Killed, Injured & Vehicle Registrations	32
5.1	Type of Vehicle Involved in All Collisions	48
5.2	Condition of Vehicle by Class of Collision	49
5.3	Model Year of Vehicle by Class of Collision	42
5.4	Insurance Status of Vehicle by Class of Collision	50
5.5	Vehicle Population by Type of Vehicle	51
5.6	Selected Types of Vehicles by Model Year	51
5.7	Vehicle Damage Level	52

Ontario Road Safety Annual Report

List of	Tables and Figures (cont'd)	Page
6.1	Motorcyclists Killed and Injured 1993 - 1997	54
6.2	Selected Factors Relevant to Fatal Motorcycle Collisions	54
6.3	Pupils Transported Daily, Total Collisions and Injury Rate per 100,000 Pupils - School Years 1992/93 - 1995/96	55
6.4	School Vehicle Type by Nature of Collision 1996/97	55
6.5	Pupil Injury by Collision Event and Vehicle Type 1996/97	55
6.6	Class of Truck Collision - Number of Trucks 1993 - 1997	56
6.7	Driver Licence Class Required by Class of Truck Collision - Number of Trucks	56
6.8	Driver Licence Class Required, Trucks, Registered Trucks and Collision Rates	56
6.9	Selected Factors Relevant to Fatal Truck Collisions	56
6.10	Collision Location by Off-Road Vehicle Drivers Killed and Injured 1993 - 1997	57
6.11	Collision Location by Off-Road Vehicle Passengers Killed and Injured 1993 - 1997	57
6.12	Registered Off-Road Vehicles 1993 - 1997	57
6.13	Selected Factors Relevant to All Off-Road Vehicle Collisions	57
6.14	Collision Location by Motorized Snow Vehicle Drivers Killed and Injured - Riding Seasons 1992/93 - 1996/97	58
6.15	Collision Location by Motorized Snow Vehicle Passengers Killed and Injured - Riding Seasons 1992/93 - 1996/97	58
6.16	Selected Factors Relevant to All Registered Motorized Snow Vehicles 1993 - 1997	58
6.17	Selected Factors Relevant to All Motorized Snow Vehicle Collisions 1996/97	58
6.18	Bicyclists Killed and Injured 1993 - 1997	59
6.19	Age of Bicyclist by Light Condition	59
6.20	Selected Factors Relevant to All Bicycle Collisions	59
7.1	Summary of Motor Vehicle Related Convictions	62
7.2	Motor Vehicle Convictions Related to the Highway Traffic Act	62
7.3	Motor Vehicle Convictions Related to the Criminal Code	62
7.4	Number of Convicted Drivers with Criminal Code of Canada Offenses, 1992 to 1996	63
7.5	Adminstrative Driver License Suspensions Monthly Suspensions Issued	63
7.6	Demerit Point Suspensions by Driver Age	64
Figure	Title	
1	Total Number of Collisions in Ontario, 1988 - 1997	1
1b	Per Cent of Hospital Admissions by Injury Type	3
2	Per Cent of Involved Persons in Collisions by Severity of Injury	5
3	Collision Rate Per One Million Kilometres Traveled in Ontario, 1988 - 1997	21
5	Vehicle Population by Vehicle Class in Ontario - 1997	47
7	Per Cent of Motor Vehicle Related Convictions in Ontario - 1997	61

1997 Ontario
Road Safety
Annual Report

'97 Ontario Road Safety Annual Report



Cette publication technique n'est disponible qu'en anglais.

Copies of this document can be obtained from:

Publications Ontario

880 Bay Street Toronto, Ontario M7A 1N8

Telephone (416) 326-5300 Toll-free (800) 668-9938 TTY (800) 268-7095

If you are seeking information on how to reduce your risk of being in a collision, visit your local Ministry of Transportation (MTO) office for the latest copy of the Official Driver's Handbook, call General Publishing at (800) 387-0141 or (416) 445-3333 or from the Ministry of Transportation web site http://www.mto.gov.on.ca. For all other driver manuals and leaflets call (416) 235-3473 or for MTO information call (800) 268-4686. In addition, you may wish to borrow a road safety video from the Ontario Safety League (416) 620-1720.

Many of the publications are available at automotive retail outlets and book stores.

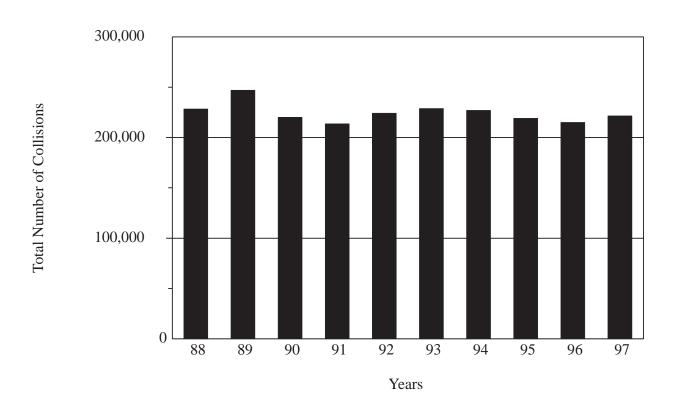
For more information on the data in this publication, please contact the Road Safety Program Office at (416) 235-3585.

Produced by: Road Safety Program Office Road User Safety Branch Ministry of Transportation 1201 Wilson Avenue Building A, Main Floor, Room 215 Toronto, Ontario M3M 1J8

Phone: (416) 235-3585 Fax: (416) 235-3633

1 Overview

Total Number of Collisions in Ontario - 1988 to 1997



1a. Synopsis

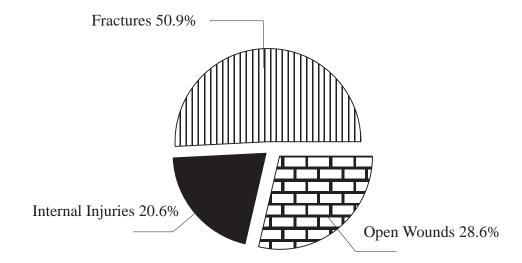
Selected Statistics	
Total Reportable Collisions	221,500
Total Drivers Involved in Collisions	396,704
Total Vehicles Involved in Collisions	413,077
Fatal Collisions	807
Personal Injury Collisions	56,121
Property Damage Collisions	164,572
Persons Killed	899
Drivers Killed	535
Drivers Killed (Impaired or Had Been Drinking)	134
Passengers Killed	227
Pedestrians Killed	133
Other Road Users Killed	6
Persons Injured	85,527
Estimated Ontario Population (1997)	11,500,329
Licensed Drivers	7,537,607
Registered Motor Vehicles	6,592,484
Estimated Vehicle Kilometres Traveled (in millions)	81,732
Number of Persons Killed in Motor Vehicle Collisions per 100,000 People in Ontario	7.8
Number of Persons Killed in Motor Vehicle Collisions per 100 Million Kilometres Traveled	1.1
Collision Rate per 100 Million Kilometres Traveled	271.0
Fatal Collision Rate per 100 Million Kilometres Traveled	1.0

1997

1b. Selected Characteristics of Motor Vehicle Collisions

On January 1, 1988 a new Motor Vehicle Accident Report (MVAR) form was introduced. The data includes the changes which were made to the form used by the police forces in Ontario, which forms the basis for the collision statistics complied by the province of Ontario. This has resulted in changes in the ways in which the data are compiled. As a result, some of the information may not be directly comparable to data from years prior to 1988.

Per Cent of Hospital Admissions by Injury Type - 1997



Ontario Road Safety Annual Report

1c. The Health Perspective

Selected Diagnoses of Motor	
Vehicle Collision Injuries	
Hospitalized in Ontario, 1996/97	

Hospital	Hospital
Admissions	Days of Stay
451	5,011
1,329	12,741
491	2,308
1,394	13,541
259	1,008
1,025	7,526
560	6,146
182	513
38	177
50	390
1,933	34,883
7,712	84,244
	Admissions 451 1,329 491 1,394 259 1,025 560 182 38 50 1,933

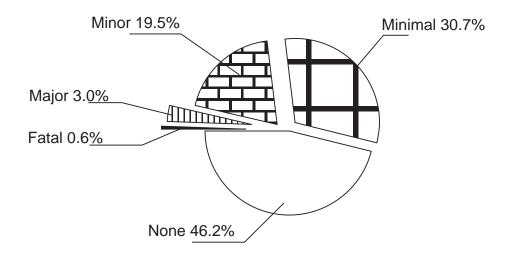
Selected Surgical Procedures for Motor Vehicle Collision Injuries Hospitalized in Ontario, 1997

	Hospital	Hospital
Selected Procedure	Admissions	Days of Stay
Operations on skull, brain		
and cerebral meninges	119	2,811
Operations on spinal cord		
and canal structures	58	1,042
Operations on nose, mouth		
and pharynx	33	167
Operations on chest wall,		
pleura, mediastinum and		
diaphragm	119	2,517
Operations on bone marrow		
and spleen	85	1,492
Operations on kidney	25	113
Operation on facial bones		
and joints	141	1,014
Reduction of fracture		
and dislocation	1,676	16,674
Repair and plastic		
operations on joint		
structures	150	2,473
Operations on skin and		
subcutaneous tissue	390	2,301
Other surgical procedure	546	9,258
Sub-total of surgical		
admission and days	3,342	39,862
No surgical procedures		
reported	4,370	44,382
Total Admissions and Days	7,712	84,244

1997	Ontario Road Safety Annual Report	The People	5

2 The People

Per Cent of Involved Persons in Collisions by Severity of Injury - 1997



1997	Ontario	
	Road Safety	
	Annual Report	l

The People

6

2a. People in Collisions

Table 2.1 Category of Involved Person by Severity of Injury
in Fatal and Personal Injury Collisions 1997

Category of	Severity of Injury					Total
Involved Person	None	Minimal	Minor	Major	Fatal	
Drivers	47,005	28,870	16,713	2,278	474	95,340
Passenger*	26,269	16,368	10,014	1,476	224	54,351
Pedestrian	120	2,102	2,452	600	133	5,407
Cyclist	47	1,491	1,347	159	22	3,066
Cyclist Passenger	10	51	37	10	1	109
All Terrain Vehicle Driver	8	10	6	4	1	29
All Terrain Vehicle Passenger	5	8	5	3	0	21
Snow Vehicle Driver	9	23	25	22	1	80
Snow Vehicle Passenger	5	5	12	5	3	30
Motorcycle Driver	65	307	516	170	36	1,094
Motorcycle Passenger	24	72	124	59	2	281
Moped Driver	3	1	5	1	1	11
Moped Passenger	0	1	0	0	0	1
Hanger On	22	23	29	11	0	85
Other	670	54	50	8	1	783
Total	74,262	49,386	31,335	4,806	899	160,688

^{*} Includes bus passengers.

Due to a change in the method of tabulating collision statistics this table excludes individuals involved in property damage only collisions.

Fatal Person killed immediately or within 30 days of the motor vehicle collision.

Major Person admitted to hospital. Includes person admitted for observation.

Minor Person went to hospital and was treated in the emergency room but was not admitted.

Minimal Person did not go to hospital when leaving the scene of the collision. Includes minor abrasions, bruises and

complaint of pain.

None Uninjured person.

Total

UK

75+

These are deaths in Highway Traffic Act (HTA) reportable collisions only. For more information on special vehicles see Chapter 6.

Category of Person Killed by Age Groups 1997

10-15

21-24

25-34

35-44

45-54

55-64

65-74

Age Groups

0-4

5-9

Table 2.2

Category of

Person

Drivers

Cyclist

Passenger

Pedestrian

ATV Driver

ATV Passenger

Snow Vehicle Driver

Motorcycle Driver

Moped Passenger

Moped Driver

Other

Total

Snow Vehicle Passenger

Motorcycle Passenger

Cyclist Passenger

Category of	Age Grou	ps															Total
Person	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UK	
Driver	4	1	53	224	852	1,112	1,164	1,215	4,584	12,511	11,320	7,450	3,788	2,241	1,257	85	47,861
Passenger*	1,171	1,846	2,491	819	974	1,009	927	817	2,576	4,668	3,346	2,532	1,631	1,378	866	864	27,915
Pedestrian	174	413	799	123	118	99	102	107	370	765	652	472	337	266	229	128	5,154
Cyclist	29	252	663	94	72	78	76	79	226	536	379	172	82	39	12	208	2,997
Cyclist Passenger	4	6	21	8	0	3	1	4	11	23	10	7	2	0	0	1	101
ATV Driver	0	1	5	2	0	0	2	0	1	4	1	2	1	1	0	0	20
ATV Passenger	2	0	6	0	0	0	1	0	1	4	0	1	1	0	0	0	16
Snow Vehicle Driver	0	1	12	7	7	5	3	1	9	15	5	1	2	2	0	0	70
Snow Vehicle Passenger	0	4	6	3	3	1	2	1	0	3	1	0	0	0	0	0	24
Motorcycle Driver	0	0	9	25	37	26	36	32	142	316	190	135	31	9	0	5	993
Motorcycle Passenger	1	3	10	9	8	11	8	10	41	57	44	31	14	2	0	6	255
Moped Driver	0	0	0	1	0	1	0	0	0	1	0	2	2	0	0	0	7

0

0

2,072 2,349

0

3

0

2,323 2,269 7,969 18,915 15,972 10,816

0

0

11

0

12

0

0

5,900 3,943 2,369

0

0

14

1,311 85,527

1

113

Moped Passenger

Other

Total

Table 2.3

These are injuries in Highway Traffic Act (HTA) reportable collisions only. For more information on special vehicles see Chapter 6.

1,316

Category of Persons Injured by Age Groups 1997

0

1,390 2,533

0

4,080

^{*} Includes 63 Hangers On

a

Table 2.4	Sex of Driver by
	Class of Collision 1997

Sex of	Class o	Total		
Driver		Personal	Property	
	Fatal	Injury	Damage	
Male	1,044	69,230	199,757	270,031
Female	293	35,897	87,373	123,563
Unknown*	2	534	2,574	3,110
Total	1,339	105,661	289,704	396,704

Fatal Collision

A motor vehicle collision in which at least one person sustains bodily injuries resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to accidental injuries up to one year after the collision. Since that date, only deaths from injuries within thirty days of the collision have been included.

Ontario

Road Safety

Annual Report

Personal Injury Collision

A motor vehicle collision in which at least one person involved sustains bodily injuries not resulting in death.

Collision

Property Damage A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property including damage to the motor vehicle or its load.

The minimum reportable level for property damage only collision rose from \$200 to \$400 on January 1, 1978 and rose again to \$700 on January 1, 1985.

On January 1, 1997 Collision Self-Reporting for property damage only collisions was introduced. See Appendix for more explanation about Collision Self-Reporting.

Table 2.5	Driver Condition by	
	Class of Collision 1997	

Condition of	Class of	Collision		Total
Driver		Personal	Property	
	Fatal	Injury	Damage	
Normal	929	85,834	234,824	321,587
Had Been Drinking	65	2,073	3,079	5,217
Ability Impaired -				
Alcohol over .08	131	1,142	1,983	3,256
Ability Impaired Alcohol	17	590	677	1,284
Ability Impaired Drugs	14	56	94	164
Fatigue	15	542	875	1,432
Medical Physical Defect	8	471	453	932
Inattentive	45	6,312	11,690	18,047
Other	6	245	547	798
Unknown*	109	8,396	35,482	43,987
Total	1,339	105,661	289,704	396,704

Had Been Drinking

Driver had consumed alcohol according to the police but his/her physical condition was not

legally impaired.

Ability Impaired Alcohol Over .08

Driver had consumed alcohol and upon testing was found to have a blood alcohol level in excess of 80 mg%. Eighty mg alcohol per 100 ml of blood is the legal limit in the

province of Ontario.

Ability Impaired Alcohol

Driver had consumed sufficient alcohol to warrant being charged with a drinking

and driving offence.

Inattentive

Driver was operating a motor vehicle without due care and attention or placing less than full concentration on driving, e.g., changing radio stations, consuming food, reading, talking on phone or two-way radio, using headphones.

^{*} This includes situations where the enforcement officer is unable to make a determinations e.g. hit and run.

Table 2.6 Driver Age by Driver Condition In all Collisions 1997*

Ontario

Road Safety

Annual Report

Driver	Driv	er Condition					Total
Age		Had	Impaired	Ability			
		Been	Alcohol	Impaired			
	Normal	Drinking	over .08	Alcohol	Other	Unknown	
Under 16	1,059	17	5	2	225	158	1,466
16	1,549	23	12	3	188	144	1,919
17	6,229	67	29	10	623	394	7,352
18	7,313	130	53	20	791	541	8,848
19	7,178	224	68	34	680	541	8,725
20	7,338	226	96	33	641	534	8,868
21-24	29,503	820	370	113	2,105	2,212	35,123
25-34	82,884	1,544	960	381	4,729	6,248	96,746
35-44	76,841	1,114	903	380	4,070	5,471	88,779
45-54	51,195	561	478	177	2,843	3,551	58,805
55-64	26,676	242	178	65	1,620	1,731	30,512
65-74	15,432	106	69	30	1,361	1,018	18,016
75 & over	7,331	24	19	2	1,112	556	9,044
Unknown	1,059	119	16	34	385	20,888	22,501
Total	321,587	5,217	3,256	1,284	21,373	43,987	396,704

^{*} Includes all drivers in Highway Traffic Act (HTA) reportable collisions.

Table 2.7	Recorded Occurrence of Driver					
	Condition In Drivers Killed 1997*					
Recorded	Number of	Drivers				
Occurrence	Drivers	%				
Normal	320	59.7				
Had Been Drinking	27	5.0				
Ability Impaired -						
Alcohol over .08	100	18.7				
Ability Impaired Alcohol	7	1.3				
Ability Impaired Drugs	14	2.6				
Fatigue	7	1.3				
Medical Physical Defect	5	0.9				
Inattentive	15	2.8				
Other	3	0.6				
Unknown	38	7.1				
Total	536	100.0				

^{*} In previous years Table 2.7 only included fatally injured drivers who were either normal or had been drinking. In order to better examine the other pre-crash factors related to deaths of all drivers this table has now been expanded to include the driver conditions of fatally injured drivers. These data can be recombined into the older format by recalculating the percentages based on only the alcohol and normal driver's data.

Table 2.8	Apparent Dr	iver Action by							
	Class of Collision 1997								
Apparent	Class of Col	Class of Collision							
Driver		Personal	Property						
Action	Fatal	Injury	Damage						
Driving Properly	566	50,560	142,072	193,198					
Following Too Close	9	9,318	19,206	28,533					
Speed Too Fast	68	1,150	1,576	2,794					
Speed Too Fast for									
Conditions	76	5,023	14,624	19,723					
Speed Too Slow	0	45	206	251					
Improper Turn	19	3,584	10,508	14,111					
Disobey Traffic Control	63	4,855	6,485	11,403					
Fail to Yield									
Right of Way	93	11,005	23,934	35,032					
Improper Passing	25	698	2,510	3,233					
Lost Control	192	7,762	20,220	28,174					
Wrong Way on									
One Way Road	4	142	174	320					
Improper Lane Change	13	1,645	7,801	9,459					
Other*	122	6,590	16,987	23,699					
Unknown	89	3,284	23,401	26,774					
Total	1,339	105,661	289,704	396,704					

Ontario

Road Safety

Annual Report

Table 2.9	Seat Belt Usage by Severity of Driver Injury in Fatal and Personal Injury Collisions 1997							
Safety Equipment	Severity of Injury							
Used								
	Killed	Major	Minor	Minimal	Not Injured	Total		
Seat Belt Used	273	1,622	14,337	26,242	41,685	84,159		
Other Equipment*	15	67	405	463	236	1,186		
Equipment Not used	129	287	714	374	301	1,805		
No Safety Equipment	2	7	42	36	54	141		
Use Unknown	55	295	1,215	1,755	4,729	8,049		
Total	474	2,278	16,713	28,870	47,005	95,340		

^{*} Other equipment includes helmets, including construction, motorcycle helmets, etc. It also includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

^{*} Includes actions defined as careless driving, inattentive driving, fell asleep, wrong side of road, improper parking, impaired, illegally parked, dangerous driving, inexperience, etc.

The tables on this page include only seat belt usage in collisions in which there were personal injuries or fatalities. Property damage only collisions are excluded. ORSARs published prior to 1988, included seat belt usage in all collisions.

Table 2.10	Seat Belt Usage by Severity of Passenger Injury in Fatal and Personal Injury Collisions 1997							
Safety Equipment	Severity of Injury							
Used								
	Killed	Major	Minor	Minimal	Not Injured	Total		
Seat Belt Used	118	923	7,826	14,071	21,411	44,349		
Child Safety Seat								
Used Incorrectly	0	2	20	20	78	120		
Child Safety Seat								
Used Correctly	8	17	144	329	1,502	2,000		
Other Equipment*	3	24	136	103	79	345		
Equipment Not used	63	281	798	488	386	2,016		
No Safety Equipment	5	67	454	547	757	1,830		
Use Unknown	27	168	622	757	2,011	3,585		
Total	224	1,482	10,000	16,315	26,224	54,245		

^{*} Other equipment includes helmets, including construction, motorcycle helmets, etc. It also includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

Table 2.11 Restraints Use for Children (0 - 4 Years) Killed in Collisions 1993-1997

Year	Child Restraint	Child Restraint	Lap/Lap &	Restraint	Available	Use	Total
Used	Used Correctly	Used Incorrectly	Shoulder Belt	Not Available	Not Used	Unknown	
1993	5	1	5	1	0	0	12
1994	5	0	4	1	2	1	13
1995	5	2	10	1	2	0	20
1996	3	1	1	0	1	0	6
1997	8	0	4	0	2	2	16

Table 2.12 Restraint Use for Children (0 - 4 Years)

Involved in Fatal and Personal Injury Collisions by Severity of Injury 1997

Restraint Used	Injury Level						
	Major / Fatal %	Minimal/Minor %	No Injuries %				
Child Restraint Used Correctly	32.9	37.4	43.3				
Child Restraint Used Incorrectly	2.7	3.5	2.2				
Lap/Lap-Shoulder Belt	37.0	48.0	47.1				
Not Available	-	2.9	1.7				
Available/Not Used	20.5	3.5	1.0				
Other	1.4	0.4	0.2				
Unknown	5.5	4.4	4.4				
Total	100.0	100.0	100.0				

It is known from observation surveys that many child safety seats are not used correctly. This is not clear in these tables since children are often removed from the child safety seat before the police officer arrives on the scene. Both correct installation of the seats according to the manufacturer's instructions and correct use of the device in the vehicle are important for the child's protection.

Table 2.13	Pedestrian Condition by
	Severity of Injury 1997

Condition of Pedestrian	Killed	Injured
Normal	69	3,360
Had Been Drinking	4	285
Ability Impaired Alcohol over .08	18	15
Ability Impaired Alcohol	5	93
Ability Impaired Drugs	3	13
Fatigue	0	3
Medical or Physical Defect	7	74
Inattentive	11	632
Other	2	76
Unknown	14	603
Total	133	5,154

Table 2.14	Apparent Pedestrian Action
	by Severity of Injury 1997

The

People

Apparent Pedestrian Action	Killed	Injured
Crossing Intersection With Right of Way	11	1,453
Crossing Intersection Without Right of Way	23	826
Crossing Intersection No Traffic Control*	31	441
Crossing Pedestrian Crossover	1	139
Crossing Marked Crosswalk Without Right of Way	2	99
Walking on Roadway With Traffic	6	137
Walking on Roadway Against Traffic	4	73
On Sidewalk or Shoulder	15	346
Playing or Working on Highway	0	72
Coming from Behind Parked Vehicle or Object	2	161
Running onto Roadway	12	594
Getting On/Off School Bus**	1	3
Getting On/Off Vehicle	0	76
Pushing/Working on Vehicle	0	38
Other	25	696
Unknown	0	0
Total	133	5,154

^{*} Calender Year

^{**} While crossing at an uncontrolled intersection or a non-intersection without trafffic control.

Annual Report

2b. Putting the People in Context

Table 2.15	Category of Persons K	Killed and Injured 1988-1997

Year	Ontario												
	Population	I	Driver	Pas	senger*	Ped	destrian	Al	l Others	Perso	ns Killed	Person	s Injured
	(Est.)									In Al	l Classes	In Al	I Classes
											Rate Per		Rate Per
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Number	100,000	Number	100,000
1988	9,439,600	563	63,339	350	39,157	186	6,344	138	9,318	1,237	13.1	118,158	1,251.7
1989	9,598,600	627	66,334	369	39,950	161	6,187	129	8,181	1,286	13.4	120,652	1,257.0
1990	9,743,300	540	55,073	321	33,606	154	5,839	105	7,057	1,120	11.5	101,575	1,042.5
1991	10,084,900	542	48,021	298	30,230	157	5,352	105	6,916	1,102	10.9	90,519	897.6
1992	10,098,600	548	49,259	317	30,567	140	5,177	85	6,022	1,090	10.8	91,025	901.4
1993	10,813,200	595	49,628	296	30,584	146	5,181	98	5,756	1,135	10.5	91,149	842.9
1994	10,927,800	508	49,632	273	29,570	127	5,344	91	5,484	999	9.1	90,030	823.9
1995	11,100,000	527	49,916	276	29,440	126	5,261	70	4,955	999	9.0	89,572	807.0
1996	11,320,456	459	49,614	270	28,997	144	5,336	55	4,458	928	8.2	88,405	780.9
1997	11,500,329	474	47,861	224	27,915	133	5,154	68	4,597	899	7.8	85,527	743.7

 $^{^{\}star}$ Excludes motorcycle passengers, which are included with "All Others".

Table 2.16 Sex of Driver Population by Age Groups 1997

Sex of	Age Groups								
Driver	16-19	20-24	25-34	35-44	45-54	55-64	65+		
Male	211,910	329,767	843,170	931,966	720,190	465,498	525,529	4,028,030	
Female	182,602	294,765	768,538	857,144	640,365	372,108	394,055	3,509,577	
Total	394,512	624,532	1,611,708	1,789,110	1,360,555	837,606	919,584	7,537,607	

Table 2.17 Driver Population by Age Groups 1988-1997

Year	Age Groups							Total
	16-19	20-24	25-34	35-44	45-54	55-64	65+	
1988	310,764	643,691	1,588,516	1,353,841	898,103	714,266	608,931	6,118,112
1989	323,109	631,470	1,634,187	1,409,053	931,991	720,788	639,826	6,290,424
1990	322,542	629,478	1,666,474	1,467,699	964,925	728,380	669,385	6,448,883
1991	319,584	627,931	1,673,502	1,501,765	1,018,365	736,652	696,432	6,574,231
1992	314,685	623,707	1,665,433	1,528,726	1,082,883	745,759	727,568	6,688,761
1993	326,389	621,934	1,655,573	1,566,083	1,136,365	758,840	758,244	6,823,428
1994	358,817	622,704	1,645,962	1,611,972	1,190,442	770,882	783,181	6,983,960
1995	360,847	614,094	1,621,989	1,659,749	1,240,072	782,871	806,396	7,086,018
1996	361,571	612,060	1,608,567	1,717,050	1,297,289	805,486	856,144	7,258,167
1997	394,512	624,532	1,611,708	1,789,110	1,360,555	837,606	919,584	7,537,607

Table 2.18

Driver Licence Class by Sex 1997

Licence	Driver	Sov			Total	%
Class	Male	%	Female	%	Total	70
A	83,188	2.07	1,383	.04	84,571	1.12
AB	4,254	.11	412	.01	4,666	.06
ABM	2,344	.06	122	.00	2,466	.03
ABM1	23	0.00	6	0.00	29	0.00
ABM2	72	.00	10	0.00	82	.00
AC	14,466	.36	377	.01	14,843	.20
ACM	7,419	.18	98	.00	7,517	.10
ACM1	104	.00	2	0.00	106	.00
ACM2	236	.00	3	0.00	239	.00
AM	29,062	.72	180	.01	29,242	.39
AM1	504	.01	6	0.00	510	.01
AM2	940	.02	19	0.00	959	.01
B	16,125	.40	15,380	.44	31,505	.42
BM	4,539	.11	889	.03	5,428	.07
BM1	52	.00	29	0.00	81	.00
BM2	124	.00	65	.00	189	.00
C	5,825	.14	431	.00	6,256	.00
CM	1,766	.04	54	.00	1,820	.00
CM1	1,700	0.00	2	0.00	20	0.00
CM2	43	.00	7	0.00	50	0.00
				.39		
D	213,655	5.30	13,719		227,374	3.02
DE	107	.00	14	0.00	121	.00
DEM	30	0.00	1	0.00	31	0.00
DEM1	0	.00	1	0.00	1	0.00
DEM2	2	0.00	0	.00	2	0.00
DF	2,131	.05	84	.00	2,215	.03
DFM	975	.02	18	0.00	993	.01
DFM1	17	0.00	1	0.00	18	0.00
DFM2	24	0.00	1	0.00	25	0.00
DM	52,582	1.31	925	.03	53,507	.71
DM1	636	.02	20	0.00	656	.01
DM2	1,270	.03	67	.00	1,337	.02
E	1,294	.03	2,126	.06	3,420	.05
EM	193	.00	50	.00	243	.00
EM1	3	0.00	3	0.00	6	0.00
EM2	5	0.00	7	0.00	12	0.00

Ontario Road Safety Annual Report

People

Table 2.18	Driver	Contin	Continued			
Licence	Driver	Sex			Total	%
Class	Male	%	Female	%		
F	7,601	.19	5,027	.14	12,628	.17
FM	1,789	.04	283	.01	2,072	.03
FM1	32	.00	14	.00	46	.00
FM2	91	.00	21	0.00	112	.00
G	2,822,391	70.07	3,016,759	85.96	5,839,150	77.47
G1	134,247	3.33	169,902	4.84	304,149	4.04
G1M	102	.00	17	0.00	119	.00
G1M1	623	.02	61	.00	684	.01
G1M2	522	.01	66	.00	588	.01
G2	245,247	6.09	222,829	6.35	468,076	6.21
G2M	682	.02	85	.00	767	.01
G2M1	1,904	.05	140	.00	2,044	.03
G2M2	2,763	.07	195	.01	2,958	.04
GM	335,779	8.34	51,441	1.47	387,220	5.14
GM1	10,372	.26	2,020	.06	12,392	.16
GM2	17,363	.43	3,787	.11	21,150	.28
M	1,473	.04	284	.01	1,757	.02
M1	398	.01	41	.00	439	.01
M2	623	.02	93	.00	716	.01
Other	0	.00	0	.00	0	.00
Total	4,028,030	100	3,509,577	100	7,537,607	100

Table 2.19	Licensed Drivers, Total Collisions, Persons Killed and Injured 1931-1997						
Year	Licensed	Total	Persons	Persons			
	Drivers	Collisions	Killed	Injured			
1931	666,266	9,241	571	8,494			
1932	648,710	9,171	502	8,231			
1933	638,710	8,634	403	7,877			
1934	665,743	9,645	512	8,990			
1935	707,457	10,648	560	9,839			
1936	755,765	11,388	546	10,251			
1937	802,765	13,906	766	12,092			
1938	866,729	13,715	640	11,683			
1939	899,572	13,710	652	11,638			
1940	937,551	16,921	716	13,715			
1941	986,773	18,167	801	14,275			
1942	961,883	13,490	567	10,205			
1943	919,457	11,025	549	8,628			
1944	905,650	11,004	498	8,373			
1945	971,852	13,458	598	9,804			
1946	1,087,445	17,356	688	12,228			
1947	1,144,291	22,293	734	13,056			
1948	1,209,408	27,406	740	14,970			
1949	1,278,584	34,472	830	17,469			
1950	1,366,388	43,681	791	19,940			
1951	1,461,538	54,920	949	22,557			
1952	1,556,559	58,515	1,010	23,643			
1953	1,656,259	65,866	1,082	24,353			
1954	1,747,567	62,509	1,045	24,607			
1955	1,856,845	63,219	1,111	26,246			
1956	1,967,789	71,399	1,180	28,626			
1957	2,088,551	76,302	1,279	30,414			
1958	2,176,417	76,884	1,112	30,106			
1959	2,270,246	81,518	1,187	31,602			
1960	2,355,567	87,186	1,166	34,436			
1961	2,414,615	85,577	1,268	37,146			
1962	2,469,425	94,231	1,383	41,766			
1963	2,555,015	104,919	1,421	47,801			
1964	2,694,023	111,232	1,424	54,560			
1965	2,739,138	128,462	1,611	60,917			
1966	2,821,648	139,781	1,596	65,210			
1967	3,004,654	145,008	1,719	67,280			
1968	3,128,509	155,127	1,586	71,520			
1969	3,247,979	169,395	1,683	74,902			
1970	3,422,892	141,609	1,535	75,126			
1971	3,563,197	158,831	1,769	84,650			
1972	3,688,541	189,494	1,934	95,181			

The People

Table 2.19	Licensed Drivers, Total Co	Licensed Drivers, Total Collisions, Persons Killed and Injured 1931-1997							
Year	Licensed	Total	Persons	Persons					
	Drivers	Collisions	Killed	Injured					
1973	3,841,628	193,021	1,959	97,790					
1974	3,972,980	204,271	1,748	98,673					
1975	4,160,623	213,689	1,800	97,034					
1976	4,315,925	211,865	1,511	83,736					
1977	4,562,903	218,567	1,420	95,664					
1978	4,725,546	186,363	1,450	94,979					
1979	4,858,351	197,196	1,560	101,321					
1980	4,993,531	196,501	1,508	101,367					
1981	5,123,177	198,372	1,445	100,321					
1982	5,247,198	187,943	1,138	92,815					
1983	5,380,259	181,999	1,204	91,706					
1984	5,513,911	194,782	1,132	97,230					
1985	5,660,422	189,750	1,191	109,169					
1986	5,817,799	187,286	1,102	108,839					
1987	5,978,105	203,431	1,229	121,089					
1988	6,118,112	228,398	1,237	118,158					
1989	6,290,424	247,038	1,286	120,652					
1990	6,448,883	220,188	1,120	101,575					
1991	6,574,231	213,669	1,102	90,519					
1992	6,688,761	224,249	1,090	91,025					
1993	6,823,428	228,834	1,135	91,149					
1994*	6,983,960	226,996	999	90,030					
1995	7,086,018	219,085	999	89,572					
1996	7,258,167	215,024	929	88,445					
1997	7,537,607	221,500	899	85,527					

 $^{^{\}star}$ Graduated Licensing System (GLS) began on April 1, 1994. See Appendix for further details on GLS.

The People

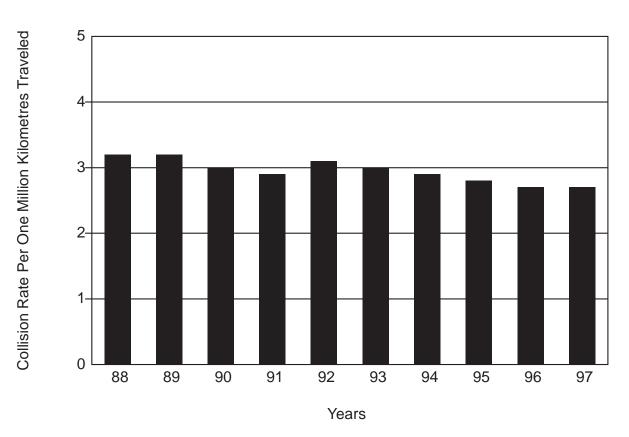
Table 2.20 Driver Age Groups - Number Licensed, Collision Involvement and Per Cent Involved in Collisions 1997

Drivers		Drive	rs Licensed	Drivers Involved			% of Drivers of Each Age		
Age				in Collisions*			Involved in Collisions		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 16	-	-	-	273	73	346	-	-	-
16	41,104	34,633	75,737	1,161	616	1,777	2.8	1.8	2.3
17	53,017	45,706	98,723	4,632	2,612	7,244	8.7	5.7	7.3
18	57,727	49,997	107,724	5,605	3,128	8,733	9.7	6.3	8.1
19	60,062	52,266	112,328	5,680	2,935	8,615	9.5	5.6	7.7
20	62,890	55,055	117,945	5,855	2,907	8,762	9.3	5.3	7.4
21-24	266,877	239,710	506,587	22,780	12,003	34,783	8.5	5.0	6.9
25-34	843,170	768,538	1,611,708	64,129	31,685	95,814	7.6	4.1	5.9
35-44	931,966	857,144	1,789,110	57,655	30,244	87,899	6.2	3.5	4.9
45-54	720,190	640,365	1,360,555	38,767	19,482	58,249	5.4	3.0	4.3
55-64	465,498	372,108	837,606	21,593	8,657	30,250	4.6	2.3	3.6
65-74	349,965	265,214	615,179	12,571	5,330	17,901	3.6	2.0	2.9
75 & over	175,564	128,841	304,405	6,065	2,952	9,017	3.5	2.3	3.0
Unknown	-	-	-	-	-	33,001	-	-	-
Total	4,028,030	3,509,577	7,537,607	246,766	122,624	402,391	6.1	3.5	5.3

^{*} This table excludes drivers of non-motor vehicles, i. e. bicyclists, snow vehicle operators, and ATVs etc.

3 The Collision

Collision Rate Per One Million Kilometres Traveled in Ontario - 1988 to 1997



22

Ontario

Year	Class of Coll	Total		
		Personal	Property	
	Fatal	Injury	Damage	
1988	1,076	76,724	150,598	228,398
1989	1,106	77,852	168,080	247,038
1990	959	65,912	153,317	220,188
1991	956	59,242	153,471	213,669
1992	942	58,889	164,418	224,249
1993	987	58,932	168,915	228,834
1994	875	58,525	167,596	226,996
1995	860	58,273	159,952	219,085
1996	816	57,791	156,417	215,024
1997	807	56,121	164,572	221,500

Table 3.2 Coll	Collision Rate Per One Million			
Kilo	Kilometers Traveled 1988-1997			
Year	Collision Rate			
1988	3.2			
1989	3.2			
1990	3.0			
1991	2.9			
1992	3.1			
1993	3.0			
1994	2.9			
1995	2.8			
1996	2.7			
1997	2.7			

The

Collision

Table 3.3 Motor Vehicles Involved in Collisions Based on Initial Impact 1997	*
------------------------------------------------------------------------------	---

Motor Vehicle in	Class	of Collision		Tota	
Collision Involving		Personal	Property		
Moveable Objects:	Fatal	Injury	Damage		
Other Motor Vehicles	815	83,838	241,117	325,770	
Unattended Vehicles	8	733	13,674	14,415	
Pedestrian	122	4,582	158	4,862	
Cyclist	22	3,035	446	3,503	
Railway Train	8	21	34	63	
Street Car	0	49	263	312	
Farm Tractor	2	43	106	151	
Animal Domestic	0	81	587	668	
Animal Wild	5	413	7,347	7,765	
Other Moveable Objects	1	49	214	264	
Sub-total	983	92,844	263,946	357,773	
Fixed Objects:					
Cable Guide Rail	2	64	373	439	
Concrete Guide Rail	1	199	514	714	
Steel Guide Rail	4	212	893	1,109	
Pole (Utility Tower)	9	421	1,420	1,850	
Pole (Sign/Parking Meter)	1	114	747	862	
Fence/Noise Barrier	0	28	234	262	
Culvert	0	17	48	65	
Bridge Support	4	27	117	148	
Rock Face	0	22	23	45	
Snow Bank or Drift	2	67	298	367	
Ditch	9	361	695	1,065	
Curb	9	508	1,548	2,065	
Crash Cushion	1	16	28	45	
Building or Wall	0	35	166	201	
Water Course	1	0	8	ç	
Construction Marker	0	12	55	67	
Tree, Shrub, or Stump	5	121	391	517	
Other Fixed Object	4	230	1,299	1,533	
Sub-total	52	2,454	8,857	11,363	
Other Events:					
Ran Off Road	122	3,679	7,505	11,306	
Skidding/Sliding	158	5,762	17,111	23,031	
Jackknifing	0	29	119	148	
Load Spill	0	8	76	84	
Fire/Explosion	1	8	435	444	
Submersion	0	2	2		
Rollover	4	234	337	575	
Debris on Road	6	87	708	801	
Debris off Vehicle	4	117	1,050	1,171	
Other Non-Collision Event	32	1,655	4,690	6,377	
Sub-total	327	11,581	32,033	43,941	
Total	1,362	106,879	304,836	413,077	

Table 3.3 reflects the first event only for each vehicle in the collision.

Table 3.4	Initial Impact Type								
by Class of Collision 1997									
Initial Impact Type	Class of Collision			Total					
		Personal	Property						
	Fatal	Injury	Damage						
Approaching	170	1,489	2,209	3,868					
Angle	101	7,617	16,191	23,909					
Rear End	36	15,858	37,047	52,941					
Sideswipe	46	3,130	19,540	22,716					
Turning Movement	69	11,536	34,058	45,663					
Single Motor Vehicle Unattended	10	710	13,918	14,638					
Single Motor Vehicle Other	374	15,635	39,143	55,152					
Other	1	145	2,456	2,602					
Unknown	0	1	10	11					
Total	807	56,121	164,572	221,500					

3b. Time and Environment

Ontario

Road Safety Annual Report

Table 3.5	Month of Occur	rence by Class	of Collision	1997				
Month of	CI	ass of Collisio	n				Total	%
Occurrence			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
January	63	7.8	5,158	9.2	20,117	12.2	25,338	11.4
February	60	7.4	3,735	6.7	12,823	7.8	16,618	7.5
March	61	7.6	4,090	7.3	13,497	8.2	17,648	8.0
April	52	6.4	3,720	6.6	10,211	6.2	13,983	6.3
May	71	8.8	4,728	8.4	12,121	7.4	16,920	7.6
June	70	8.7	5,205	9.3	12,810	7.8	18,085	8.2
July	72	8.9	5,054	9.0	11,952	7.3	17,078	7.7
August	91	11.3	5,027	9.0	12,085	7.3	17,203	7.8
September	69	8.6	4,729	8.4	12,304	7.5	17,102	7.7
October	79	9.8	4,877	8.7	13,980	8.5	18,936	8.5
November	63	7.8	5,102	9.1	17,128	10.4	22,293	10.1
December	56	6.9	4,696	8.4	15,544	9.4	20,296	9.2
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.6	Day of Week by	Day of Week by Class of Collision 1997							
Day of	Class of Collision							%	
Occurrence			Personal		Property				
	Fatal	%	Injury	%	Damage	%			
Monday	95	11.8	7,534	13.4	21,928	13.3	29,557	13.3	
Tuesday	91	11.3	7,906	14.1	23,102	14.0	31,099	14.0	
Wednesday	99	12.3	8,180	14.6	24,299	14.8	32,578	14.7	
Thursday	93	11.5	8,255	14.7	24,687	15.0	33,035	14.9	
Friday	148	18.3	9,547	17.0	30,019	18.2	39,714	17.9	
Saturday	143	17.7	8,412	15.0	23,763	14.4	32,318	14.6	
Sunday	138	17.1	6,287	11.2	16,774	10.2	23,199	10.5	
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0	

Ontario

Road Safety Annual Report

Table 3.7	Hour of Occurrer	nce by Clas	s of Collision 1	997					
Hour of	Clas	Class of Collision							
Occurrence A.M.			Personal		Property				
	Fatal	%	Injury	%	Damage	%			
12 to 1 a.m.	31	3.8	882	1.6	2,831	1.7	3,744	1.7	
1 to 2 a.m.	28	3.5	853	1.5	2,529	1.5	3,410	1.5	
2 to 3 a.m.	30	3.7	971	1.7	2,633	1.6	3,634	1.6	
3 to 4 a.m.	33	4.1	685	1.2	1,921	1.2	2,639	1.2	
4 to 5 a.m.	18	2.2	387	0.7	1,325	0.8	1,730	8.0	
5 to 6 a.m.	17	2.1	428	0.8	1,628	1.0	2,073	0.9	
Sub total	157	19.5	4,206	7.5	12,867	7.8	17,230	7.8	
6 to 7 a.m.	20	2.5	1,069	1.9	3,443	2.1	4,532	2.0	
7 to 8 a.m.	23	2.9	1,994	3.6	6,349	3.9	8,366	3.8	
8 to 9 a.m.	26	3.2	3,093	5.5	9,917	6.0	13,036	5.9	
9 to 10 a.m.	26	3.2	2,318	4.1	7,448	4.5	9,792	4.4	
10 to 11 a.m.	33	4.1	2,400	4.3	7,546	4.6	9,979	4.5	
11 to 12 noon	33	4.1	3,065	5.5	8,881	5.4	11,979	5.4	
Sub total	161	20.0	13,939	24.8	43,584	26.5	57,684	26.0	
Hour of									
Occurrence P.M.									
12 to 1 p.m.	33	4.1	3,346	6.0	9,595	5.8	12,974	5.9	
1 to 2 p.m.	29	3.6	3,252	5.8	9,553	5.8	12,834	5.8	
2 to 3 p.m.	57	7.1	3,578	6.4	9,991	6.1	13,626	6.2	
3 to 4 p.m.	51	6.3	4,704	8.4	12,358	7.5	17,113	7.7	
4 to 5 p.m.	39	4.8	4,736	8.4	12,973	7.9	17,748	8.0	
5 to 6 p.m.	52	6.4	4,552	8.1	12,882	7.8	17,486	7.9	
Sub total	261	32.3	24,168	43.1	67,352	40.9	91,781	41.4	
6 to 7 p.m.	47	5.8	3,672	6.5	10,078	6.1	13,797	6.2	
7 to 8 p.m.	27	3.3	2,879	5.1	7,796	4.7	10,702	4.8	
8 to 9 p.m.	27	3.3	2,092	3.7	6,123	3.7	8,242	3.7	
9 to 10 p.m.	46	5.7	1,959	3.5	5,775	3.5	7,780	3.5	
10 to 11 p.m.	39	4.8	1,649	2.9	4,976	3.0	6,664	3.0	
11 to 12 midnight	36	4.5	1,299	2.3	4,393	2.7	5,728	2.6	
Sub total	222	27.5	13,550	24.1	39,141	23.8	52,913	23.9	
Unknown	6	0.7	258	0.5	1,628	1.0	1,892	0.9	
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0	

Total

27

221,500

100.0

100.0

Table 3.8	Statutory	Holidays,	Holiday	Weekends -	Fatal Collisions,	Persons Killed and Injured	1997
-----------	-----------	-----------	---------	------------	-------------------	----------------------------	------

Ontario Road Safety

807

100.0

Annual Report

Statutory	Number of Fatal	Drivers		Pas	ssengers	0	thers	Total	
Holiday*	Collisions	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Easter Weekend	12	6	10	5	11	1	0	12	21
Victoria Day	11	8	4	3	7	2	0	13	11
Canada Day	3	3	1	-	1	1	0	4	2
Civic Holiday (Simcoe Day)	15	7	12	7	13	5	3	19	28
Labour Day	17	8	7	5	9	4	1	17	17
Thanksgiving Day	13	12	7	7	18	0	0	19	25
Christmas/Boxing Day	4	1	5	6	6	0	0	7	11

^{*} Actual length may vary depending on day holiday falls on. If holiday falls on a weekend then holiday includes the entire weekend.

Table 3.9	Light Condition	by Class of	Collision 1997	l .				
Light	Cla	ss of Collis	ion				Total	%
Condition			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Daylight	424	52.5	39,434	70.3	110,210	67.0	150,068	67.8
Dawn	11	1.4	698	1.2	2,763	1.7	3,472	1.6
Dusk	20	2.5	1,784	3.2	5,619	3.4	7,423	3.4
Darkness	352	43.6	14,182	25.3	45,703	27.8	60,237	27.2
Other	0	-	23	-	277	0.2	300	0.1

56,121

100.0

164,572

Table 3.10 V	isibility by Clas	s of Collisi	on 1997					
Visibility	Class of	Collision					Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Clear	627	77.7	43,197	77.0	120,682	73.3	164,506	74.3
Rain	74	9.2	6,498	11.6	18,183	11.0	24,755	11.2
Snow	70	8.7	4,615	8.2	18,722	11.4	23,407	10.6
Freezing Rain	8	1.0	622	1.1	2,592	1.6	3,222	1.5
Drifting Snow	3	0.4	470	0.8	1,680	1.0	2,153	1.0
Strong Wind	5	0.6	176	0.3	605	0.4	786	0.4
Fog, Mist, Smoke, or Dust	15	1.9	419	0.7	1,356	0.8	1,790	0.8
Other	5	0.6	124	0.2	752	0.5	881	0.4
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

The Collision Location 3c.

Table 3.11	Road Jurisdiction by Class of Collision 1997								
Road	CI	Total							
Jurisdiction		Personal	Property						
	Fatal	Injury	Damage						
Municipal (Excl.Twp. Rd.)	179	31,496	91,748	123,423					
Provincial Highway	320	10,307	31,320	41,947					
Township	77	2,328	7,152	9,557					
County or District	88	2,508	6,978	9,574					
Regional Municipality	139	9,334	26,868	36,341					
Federal	3	108	393	504					
Other	1	40	113	154					
Total	807	56,121	164,572	221,500					

Table 3.12 Road Jurisdiction for All Collisions 1988-1997											
Road	Year										Total
Jurisdiction	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
Municipal*	159,228	139,926	117,218	112,651	117,800	119,421	117,478	114,848	112,980	123,423	1,234,973
Provincial	44,772	48,944	43,513	44,234	46,537	48,275	48,895	46,365	46,867	41,947	460,349
Township	12,277	11,882	10,684	10,332	10,777	10,667	10,497	9,774	9,236	9,557	105,683
County or District	7,527	8,773	8,582	8,482	9,186	9,076	8,839	8,815	8,381	9,574	87,235
Regional Municipality*	3,620	36,237	39,004	36,956	38,810	40,230	40,165	38,279	36,738	36,341	346,380
Federal**	748	940	913	769	899	863	825	753	662	504	7,876
Other	226	336	274	245	240	302	297	251	160	154	2,485
Total	228,398	247,038	220,188	213,669	224,249	228,834	226,996	219,085	215,024	221,500	2,244,981

Some collisions occurring on regional municipal roads were recorded as occurring on municipal roads prior to 1989.
 Since January 1, 1988 the Motor Vehicle Accident Report form allows recording of jurisdiction for federal roads.

Total

807

100.0

Table 3.13	Road Location b	y Class of	Collision 1997					
Road Location	Class of	Collision					Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Non-intersection	498	61.7	20,271	36.1	66,630	40.5	87,399	39.5
Intersection Related	87	10.8	11,989	21.4	34,587	21.0	46,663	21.1
In Intersection	148	18.3	16,887	30.1	35,172	21.4	52,207	23.6
At/Near Private Drive	48	5.9	6,344	11.3	26,020	15.8	32,412	14.6
At Railway	9	1.1	93	0.2	283	0.2	385	0.2
Underpass or Tunnel	2	0.2	85	0.2	227	0.1	314	0.1
Overpass or Bridge	12	1.5	337	0.6	1,215	0.7	1,564	0.7
Other	3	0.4	115	0.2	438	0.3	556	0.3

56,121

100.0

164,572

100.0

221,500

100.0

Table 3.14	Table 3.14 Road Surface Condition by Class of Collision 1997									
Road Surface	Class of	Collision					Total	%		
Condition			Personal		Property					
	Fatal	%	Injury	%	Damage	%				
Dry	534	66.2	36,501	65.0	97,233	59.1	134,268	60.6		
Wet	143	17.7	11,686	20.8	34,396	20.9	46,225	20.9		
Loose Snow	23	2.9	1,921	3.4	8,688	5.3	10,632	4.8		
Slush	27	3.3	1,536	2.7	5,517	3.4	7,080	3.2		
Packed Snow	26	3.2	1,404	2.5	6,835	4.2	8,265	3.7		
Ice	35	4.3	2,598	4.6	10,371	6.3	13,004	5.9		
Mud	0	-	11	-	93	0.1	104	-		
Loose Sand or Gravel	12	1.5	288	0.5	739	0.4	1,039	0.5		
Spilled Liquid	0	-	23	-	40	-	63	-		
Other	7	0.9	153	0.3	660	0.4	820	0.4		
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0		

Ontario

Place of

Ontario

Collision in

Place of Collision in Ontario 4



4. Place of Collision in Ontario

1997

Table 4.1

Location		Estimated	Class	of Collis	sion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Ontario		10,302,807	221,500	807	56,121	164,572	899	85,527	6,592,484
Blind River, T		3,911	35	0	11	24	0	13	
Elliot Lake, C	М	12,387	97	0	20	77	0	31	
Sault Ste Marie, C	M	81,476	1,659	1	379	1,279	1	562	
Provincial Highway		-	625	11	163	451	16	320	
Other Areas		19,768	237	0	43	194	0	74	
Algoma		117,542	2,653	12	616	2,025	17	1,000	89,122
Brantford, C	М	81,074	1,595	2	332	1,261	2	474	
Brantford, Tp		6,241	21	0	6	15	0	14	
Burford, Tp		5,712	3	0	0	3	0	0	
Paris, T	М	8,552	82	0	17	65	0	21	
Provincial Highway		-	255	2	70	183	2	129	
Other Areas		8,066	417	6	151	260	6	237	
Brant		109,645	2,373	10	576	1,787	10	875	74,554
Amabel, Tp		3,577	2	0	0	2	0	0	
Brant, Tp		3,267	1	0	0	1	0	0	
Chesley, T		1,815	8	0	3	5	0	4	
Culross, Tp		1,647	1	0	0	1	0	0	
Kincardine, Tp		2,894	63	0	14	49	0	16	
Port Elgin, T	M	6,772	72	0	19	53	0	32	
Southhampton, T	M	3,118	16	0	2	14	0	2	
Walkerton, T	М	4,735	54	0	13	41	0	17	
Wiarton, T		2,350	16	0	4	12	0	17	
Provincial Highway		-	213	3	43	167	4	67	
Other Areas		31,588	547	8	125	414	9	218	
Bruce		61,763	993	11	223	759	13	373	49,295

Legend	T	town	Other Areas -	Jurisdictions	M Muncipal Police Force
	С	city		with less than	
	VI	village		1,500 population	
	Тр	township			

^{*} Source: Ontario Ministry of Municipal Affairs Municipal Directory 1997.

Population data in this table refers to persons residing in a municipality on a permanent basis.

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations Injury Damage (1997)* Collisions Fatal Killed Injured Cumberland, Tp 44,630 Gloucester, C 106,900 M Goulbourn, Tp 19,350 Kanata, C 49,000 Nepean, C M 1,404 1,046 116,000 Osgoode, Tp 15,207 Ottawa, C 4,691 M 317,000 6,208 1,510 2,063 Rideau, Tp 12,106 Rockcliffe Park, VI 2,183 Vanier, C 17,562 West Carleton, Tp 16,000 Provincial Highway 1,524 1,159 Other Areas Ottawa-Carleton 715,938 12,481 2,934 9,518 4,279 388,582 Cochrane, T 4,357 Hearst, T 5,529 Iroquois Falls, T 5,581 Kapuskasing, T M 9,658 Smooth Rock Falls, T 1,877 Timmins, C M 45,816 Provincial Highway Other Areas 10,689 Cochrane 83,507 1,627 1,188 67,126 Amaranth, Tp 3,247 East Garafraxa, Tp 2,037 Melancthon, Tp 2,286 Mono, Tp 5,980 Mulmur, Tp 2,509 Orangeville, T M 21,373 Shelburne, T M 3,450 Provincial Highway Other Areas 2,537 Dufferin 43,419 1,043 32,072 Morrisburg, VI 2,362 Winchester, Tp 3,445 Winchester, VI 2,275 Provincial Highway (Veh. Reg. Other Areas 11,229 included in **Dundas** 19,311 Stormont)

Collision in

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations (1997)* Collisions Fatal Killed Injured Injury Damage Ajax, T 58,854 Brock, Tp 10,991 Clarington 61,305 Oshawa, C 133,500 2,214 1,615 Pickering, T 70,733 17,880 Scugog, Tp Uxbridge, Tp 14,672 67,325 Whitby, T Provincial Highway 1.740 1,309 Other Areas Durham 435,260 7,667 1,967 5,676 3,020 289,633 Aldborough, Tp 3,772 Aylmer, T 6,275 M Bayham, Tp 4,152 2,279 Dunwich, Tp Malahide, Tp 5,671 2.183 Port Stanley, VI Southwold, Tp 4,431 St Thomas, C M 29,758 7,994 Yarmouth, Tp Provincial Highway Other Areas 7,839 Elgin 74,354 1,237 58,254 Amherstburg, T M 9,905 Anderdon, Tp M 5,725 Belle River, T 4,353 Colchester South, Tp M 5,625 Essex, T M 6,745 Gosfield South, Tp 7,604 Harrow, T 2,656 Kingsville, T M 5,841 Leamington, T M 14,982 Maidstone, Tp 10,764 3,220 Malden, Tp 8,787 Mersea, Tp M Rochester, Tp 4,465 Sandwich South, Tp 6,475 St Clair Beach, VI M 3,669 Tecumseh, T 11,913 Tilbury North, Tp 3,469 Windsor, C M 195,627 4,544 1,076 3,459 1,547

Owen Sound, C

St Vincent, Tp

Sullivan, Tp

M

20,399

2,296

2,655

Ontario Road Safety **Annual Report**

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations Damage (1997)* Collisions Fatal Killed Injured Injury Provincial Highway Other Areas 29,383 1,108 Essex 1,671 5,192 341,208 6,892 2,502 224,849 Kingston, C 1,021 M 59,624 Kingston, Tp 39,679 Loughborough, Tp 4,436 Pittsburgh, Tp 10,675 4,529 Portland, Tp Storrington, Tp 3,914 Provincial Highway Other Areas 7,866 Frontenac 130,723 2,365 1,773 83,571 Alexandria, T 3,272 M Charlottenburgh, Tp 7,670 Kenyon, Tp 3,336 Lancaster, Tp 3,684 Lochiel, Tp 2.921 Provincial Highway (Veh. Reg. Other Areas 1,580 included in Glengarry 22,463 Stormont) Augusta, Tp 7,285 Cardinal, VI 1,580 M Edwardsburg, Tp 4,566 Kemptville, T M 2,721 Oxford On Rideau, Tp 6,333 Prescott, T M 3,999 South Gower, Tp 2,280 Provincial Highway (Veh. Reg. Other Areas 2,450 included in Grenville 31,214 Leeds) Bentick, Tp 3,396 Durham, T M 2,546 Egremont, Tp 2,391 Hanover, T M 6,710 Holland, Tp 2,800 Keppel, Tp 3,751 Meaford, T 4,330 M Normanby, Tp 2,550

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations (1997)* Injury Damage Collisions Fatal Killed Injured Sydenham, Tp 2,997 Thornbury, T 1,647 M Provincial Highway Other Areas 23,492 Grey 81,960 1,568 1,151 55,970 Delhi, Tp 15,134 Dunnville, T 11,908 Haldimand, T 20,824 Nanticoke, C 22,401 Norfolk, Tp 11,096 Simcoe, T 15,538 Provincial Highway Other Areas Haldimand-Norfolk 96,901 1,639 1,210 77,777 Anson, Hindon & Minden, Tp 3,160 Dysart Et Al, Tp 4,702 Provincial Highway Other Areas 6,033 Haliburton 13,895 12,115 Burlington, C 1,510 1,093 128,453 Halton Hills, T 40,173 Milton, T 30,278 Oakville, T 118,063 1,245 Provincial Highway 2,131 1,656 Other Areas Halton 316,967 6,121 1,454 4.649 2,263 229,274 2,340 Bancroft, T Belleville, C 34,954 M Deseronto, T M 1,728 Frankford, VI 2,012 Hungerford, Tp 3,024 Huntingdon, Tp 2,216 Madoc, Tp 1,831 Marmora Lake, Tp 2,054 Rawdon, Tp 2,618 Sidney, Tp 15,926 Stirling, VI 1,998 M Thurlow, Tp 7,327 Trenton, C M 16,908 Tyendinaga, Tp 3,201 Provincial Highway

Table 4.1		Continued							
Location		Estimated	Class	of Collis	sion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Other Areas		13,530	800	9	192	599	9	289	
Hastings		111,667	2,591	18	607	1,966	19	961	89,051
Clinton, T	М	3,183	37	1	5	31	1	5	
Colborne, Tp		2,030	2	0	0	2	0	0	
Exeter, T	М	4,384	77	0	17	60	0	25	
Goderich, T	M	7,500	118	0	21	97	0	32	
Goderich, Tp		2,607	9	0	2	7	0	2	
Howick, Tp		3,546	2	0	1	1	0	1	
Morris, Tp		1,771	1	0	0	1	0	0	
Seaforth, T	M	2,316	19	0	1	18	0	2	
Stanley, Tp		1,613	1	0	0	1	0	0	
Stephen, Tp		4,182	2	0	1	1	0	1	
Tuckersmith, Tp		3,036	2	0	0	2	0	0	
Turnberry, Tp		1,739	3	0	1	2	0	1	
Wingham, T	M	2,921	32	0	5	27	0	9	
Provincial Highway		-	265	1	69	195	1	130	
Other Areas		18,451	471	9	120	342	10	207	
Huron		59,279	1,041	11	243	787	12	415	40,609
Dryden, T	M	6,300	100	0	10	90	0	17	
Ignace, Tp		1,770	5	0	1	4	0	1	
Jaffray Melick, T		4,012	21	0	1	20	0	1	
Keewatin, T		1,994	25	0	3	22	0	4	
Kenora, T	M	9,715	195	0	23	172	0	34	
Red Lake, Tp		2,061	5	0	0	5	0	0	
Sioux Lookout, T		3,400	44	0	8	36	0	8	
Provincial Highway		-	677	9	141	527	10	227	
Other Areas		6,582	210	0	49	161	0	68	
Kenora		35,834	1,282	9	236	1,037	10	360	38,996
Blenheim, T		4,567	55	0	5	50	0	7	<u>-</u>
Camden, Tp		2,067	1	0	0	1	0	0	
Chatham, C	M	43,555	774	2		570	2	276	
Chatham, Tp		6,059		0		2	0	2	
Harwich, Tp		6,116		0		5	0	0	
Howard, Tp		2,249	2	0	2	0	0	3	
Raleigh, Tp		5,209	4	0		3	0	1	
Ridgetown, T		3,234	27	0		18	0	15	
Romney, Tp		1,946		0		1	0	0	
Tilbury East, Tp		2,282		0		1	0	2	
Tilbury, T	M	4,254	53	0		45	0	14	
Wallaceburg, T	M	10,992		0		94	0	33	
Wheatley, VI		1,557		0		10	0	2	
		1,007							

Collision in

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations Injury (1997)* Collisions Fatal Killed Injured Damage Provincial Highway Other Areas 11,708 Kent 105,795 1,856 1,351 80,000 Bosanquet, Tp 4,899 Brooke, Tp 1,877 Enniskillen, Tp 3,159 Forest, T 2,795 Moore, Tp 10,684 Petrolia, T M 4.809 Plympton, Tp 5,116 Point Edward, VI 2,277 M Sarnia, C M 69,657 1,047 Wyoming, VI 2,077 Provincial Highway Other Areas 14,790 Lambton 122,140 1,930 1,413 87,863 Bathurst, Tp 2.971 Beckwith, Tp 4,689 Carleton Place, T M 7,483 Drummond, Tp 2,866 Mississippi Mills, T 10,235 Montague, Tp 3,557 Perth, T M 5,524 Smiths Falls, T M 9,001 Provincial Highway Other Areas 8,958 Lanark 55,284 1,225 41,063 Bastard & S Burgess, Tp 2,508 Brockville, C M 21,103 Elizabethtown, Tp 7,497 F Leeds & Lansdowne, Tp 4,798 Front Of Yonge, Tp 2,337 Gananoque, T M 4,973 2,236 Kitley, Tp R Leeds & Lansdowne, Tp 2,689 Rear Of Yonge & Escott, Tp 1,883 South Crosby, Tp 1,771 South Elmsley, Tp 3,312 Provincial Highway Other Areas 4,056 Leeds 59,163 1,335 1,000 66,979

Annual Report

Ontario

Table 4.1 Continued Location **Estimated Class of Collision** Persons Motor Vehicle **Population** Total Personal **Property** Registrations Injury Collisions Fatal Killed Injured (1997)*Damage Ernestown, Tp 12,177 N Fredericksburgh, Tp 3,095 Napanee, T 4,955 Provincial Highway Other Areas 16,096 Lennox & Addington 36,323 24,106 Provincial Highway Other Areas 7,279 Manitoulin 7,279 9,623 Adelaide, Tp 2,000 2,194 Biddulph, Tp Caradoc, Tp 6,117 Delaware, Tp 2,465 Ekfrid, Tp 2,202 Glencoe, VI 2,054 Lobo, Tp 5,464 London, C 3,412 M 325,437 7.144 2,303 4.824 London, Tp 4,741 Lucan, VI 1,950 Mcgillivray, Tp 1,843 North Dorchester, Tp 8,144 10,981 Strathroy, T M West Nissouri, Tp 3,524 Provincial Highway Other Areas 8,008 Middlesex 387,124 8.707 2.726 5.945 4,118 242,303 Bracebridge, T 14,100 Gravenhurst, T 8,941 Huntsville, T 18,000 Lake Of Bays, Tp 2,588 Muskoka Lakes, Tp 5,715 Provincial Highway Other Areas 2,074 Muskoka 1,079 51,418 1,376 38,438 Fort Erie, T 26,221 Grimsby, T 18,925 Lincoln, T 19,000 Niagara Falls, C 76,895 Niagara On The Lake, T 12,695 1,632 1,245 Pelham, T 13,956 Port Colborne, C 18,389

Zorra, Tp

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations Collisions Fatal Killed Injured (1997)*Injury Damage St Catharines, C 130,000 2,113 1,672 Thorold, C 18,000 Wainfleet, Tp 6,139 Welland, C 47,423 West Lincoln, Tp 11,060 Provincial Highway 1,459 1,033 Other Areas 398,703 8,162 6,174 269,184 Niagara 1,954 3,046 Caldwell, Tp 1,569 East Ferris, Tp 4,153 Mattawa, T 2,472 North Bay C M 56,000 Springer, Tp 2,434 M Sturgeon Falls, T 6,161 Provincial Highway Other Areas 5,752 **Nipissing** 1.242 80,568 1,635 57,553 Brighton, Tp 3,418 4,199 Brighton, T Campbellford, T 3,305 Cobourg, T M 15,037 Colborne, VI 1,971 Cramahe, Tp 3,060 Haldimand, Tp 4,131 Hamilton, Tp 9,470 Hope, Tp 3,612 Murray, Tp 6,841 Percy, Tp 3,082 Port Hope, T M 11,040 Seymour, Tp 4,226 Provincial Highway Other Areas 2,079 1,004 Northumberland 75,471 1,432 54,205 Blandford-Blenheim, Tp 7,157 East Zorra-Tavistock, Tp 7,370 Ingersoll, T M 9,545 Norwich, Tp 10,302 M S West Oxford, Tp 8,427 Tillsonburg, T M 12,729 Woodstock, C M 31,252

8,182

Ontario Road Safety Annual Report

Table 4.1 Continued

Table 4.1		Continued							
Location		Estimated	Class	of Collis	ion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Provincial Highway		-	497	9	121	367	12	231	I
Other Areas		0	536	11	144	381	13	278	
Oxford		94,964	1,945	20	494	1,431	25	835	69,373
Himsworth North, Tp		2,993	1	0	0	1	0	0	
Mcdougall, Tp		2,162	5	0	3	2	0	4	
Perry, Tp		2,023	2	0	1	1	0	1	
Provincial Highway		-	634	9	173	452	10	320	
Other Areas		26,436	366	1	78	287	1	110	
Parry Sound		33,614	1,008	10	255	743	11	435	34,642
Brampton, C		278,160	3,926	5	812	3,109	5	1,276	
Caledon, T		39,832	736	5	155	576	5	227	
Mississauga, C		559,000	7,482	18	1,349	6,115	20	1,989	
Provincial Highway		-	3,261	9	659	2,593	9	1,043	
Other Areas		0	410	0	33	377	0	45	
Peel		876,992	15,815	37	3,008	12,770	39	4,580	537,905
Listowel, T	М	5,262	62	0	12	50	0	15	
Mitchell, T		3,518	41	0	12	29	0	17	
St Marys, T	М	5,493	50	0	8	42	0	11	
Stratford, C	М	28,700	563	0	130	433	0	201	
Provincial Highway		-	259	2	69	188	3	124	
Other Areas		27,896	411	4	105	302	5	189	
Perth		70,869	1,386	6	336	1,044	8	557	48,195
Belmont & Methuen, Tp		2,877	1	0	0	1	0	0	
Cavan, Tp		5,344	3	0	1	2	0	1	
Douro, Tp		3,524	3	0	1	2	0	1	
Dummer, Tp		2,847	4	0	0	4	0	0	
Ennismore, Tp		4,239	1	0	0	1	0	0	
Harvey, Tp		3,059	2	0	1	1	0	1	
Lakefield, VI		2,387	26	1	5	20	1	8	
Otonabee, Tp		5,060	3	0	1	2	0	1	
Peterborough, C	М	66,494	927	4	318	605	4	453	
Smith, Tp		8,692	10	0	4	6	0	4	
Provincial Highway		-	418	4	110	304	5	177	
Other Areas		11,401	603	1	181	421	1	276	
Peterborough		115,924	2,001	10	622	1,369	11	922	83,229
Alfred & Plantagenet, Tp		4,004	7	0	3	4	0	3	
Hawkesbury, T	М	9,871	216	0	32	184	0	38	
E Hawkesbury, Tp		3,153	3	0	1	2	0	1	
W Hawkesbury, Tp		2,957	6	0	3	3	0	3	
L'Orignal, VI		1,971	6	0	2	4	0	2	
Russell, Tp		11,417	5	0	1	4	0	3	

Annual Repo

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations (1997)* Damage Collisions Fatal Killed Injured Injury Vankleek Hill, T 1,941 Provincial Highway Other Areas 4,252 Prescott 49,699 58,456 Ameliasburg, Tp 5,235 Hallowell, Tp 4,101 Hillier, Tp 1,700 Picton, T 4,077 Provincial Highway Other Areas 7,633 Prince Edward 17,846 22,746 Atikokan, Tp M 3,632 Fort Frances, T M 8,514 Provincial Highway Other Areas 6,429 Rainy River 18,575 17,700 Alice & Fraser, Tp 3,955 Arnprior, T 6,376 Deep River, T M 4,278 Horton, Tp 2,325 Mcnab, Tp 5,523 Pembroke, C M 13,445 Petawawa, Tp 8,430 Petawawa, VI 6,016 Renfrew, T M 7,665 Westmeath, Tp 2.442 Wilberforce, Tp 1,796 Provincial Highway Other Areas 28,350 Renfrew 90,601 1,580 1,198 68,082 Cambridge, Tp 6,002 Clarence, Tp 10,069 Provincial Highway (Veh. Reg. Other Areas included in 1,441 Russell 17,512 Prescott) Adjala-Tosorontio, Tp 8,896 1,322 Barrie, C M 71,413 1,596 Bradford W Gwillimbury, T M 18,222 Collingwood, T M 14,673 Essa, Tp 15,745 Innisfil, T M 22,523

Ontario Road Safety Annual Report

Table 4.1 Continued

Table 4.1		Continued							
Location		Estimated	Class	of Collis	ion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Midland, T	М	14,284	270	0	66	204	0	112	I
New Tecumseth, T		20,767	178	0	31	147	0	42	
Orillia, C		27,384	517	0	100	417	0	153	
Oro-Medonite, Tp		15,516	4	0	0	4	0	0	
Penetanguishene, T	М	6,948	78	0	10	68	0	13	
Tay, Tp		10,058	10	0	3	7	0	3	
Tiny, Tp		8,204	7	0	2	5	0	5	
Wasaga Beach, T		7,463	152	1	44	107	1	73	
Provincial Highway		-	1,952	12	423	1,517	15	783	
Other Areas		43,406	1,815	12	445	1,358	14	732	
Simcoe		305,502	7,310	29	1,566	5,715	37	2,581	232,875
Cornwall, C	М	46,802	766	2	189	575	2	278	
Provincial Highway		-	214	1	59	154	1	100	
Other Areas		441	185	2	41	142	2	57	
Stormont		64,384	1,165	5	289	871	5	435	72,194
Capreol, T		3,621	31	0	9	22	0	10	
Espanola, T		5,144	40	1	10	29	1	14	
Nickel Centre, T		12,129	70	0	24	46	0	38	
Onaping Falls, T		5,068	11	0	4	7	0	4	
Rayside-Balfour, T		15,039	77	1	21	55	1	26	
Sudbury, C	М	87,087	1,773	4	458	1,311	4	680	
Valley East, T		22,102	170	3	63	104	3	114	
Walden, T		9,753	54	1	15	38	1	26	
Provincial Highway		-	733	11	222	500	11	408	
Other Areas		11,885	509	0	132	377	0	206	
Sudbury		171,828	3,468	21	958	2,489	21	1,526	129,642
Geraldton, T		2,578	26	0	5	21	0	6	
Longlac, T		1,833	18	0	2	16	0	3	
Manitouwadge, Tp		3,554	12	1	1	10	1	2	
Marathon, T	М	4,702	24	0	4	20	0	6	
Nipigon, Tp		2,095	6	0	0	6	0	0	
Oliver, Tp		2,488	1	0	0	1	0	0	
Paipoonge, Tp		3,064	2	0	2	0	0	3	
Schreiber, Tp		1,762	4	0	0	4	0	0	
Shuniah, Tp		2,144	4	0	2	2	0	4	
Terrace Bay, Tp		2,309	13	0	2	11	0	3	
Thunder Bay, C	M	113,562	2,075	1	447	1,627	1	647	
Provincial Highway		-	877	16	203	658	16	341	
Other Areas		8,962	305	1	47	257	1	80	
Thunder Bay		149,053	3,367	19	715	2,633	19	1,095	116,196

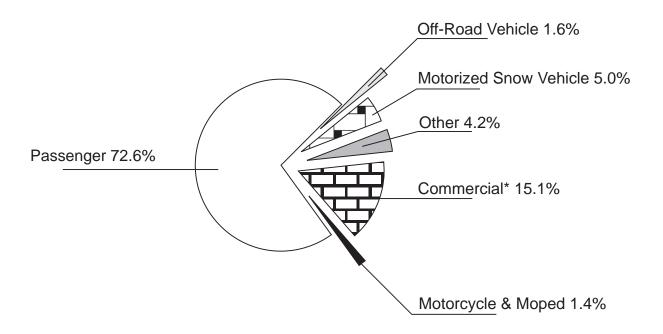
Table 4.1		Continued							
Location		Estimated	Class	of Collis	sion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Englehart, T		1,655	12	0	2	10	0	4	
Haileybury, T		4,666	48	0	5	43	0	7	
Kirkland Lake, T	M	10,330	115	0	24	91	0	37	
New Liskeard, T	M	4,986	96	0	17	79	0	25	
Provincial Highway		-	300	3	77	220	3	136	
Other Areas		12,372	134	0	32	102	0	45	
Timiskaming		34,009	705	3	157	545	3	254	27,427
East York, Borough		98,594	1,021	2	314	705	2	457	
Etobicoke, C		309,993	5,322	3	1,594	3,725	3	2,410	
North York, C		557,869	13,486	11	3,992	9,483	11	6,214	
Scarborough, C		507,680	10,667	18	3,520	7,129	18	5,292	
Toronto, C		635,395	24,164	35	6,451	17,678	36	8,867	
York, C		138,080	856	0	305	551	0	485	
Provincial Highway		-	7,706	17	2,091	5,598	18	3,218	
Other Areas		0	0	0	0	0	0	0	
Toronto, Metro	M	2,247,611	63,222	86	18,267	44,869	88	26,943	1,103,814
Bobcaygeon, VI		2,472	15	0	3	12	0	4	
Eldon, Tp		2,804	1	0	1	0	0	1	
Emily, Tp		6,254	2	0	0	2	0	0	
Fenelon Falls, VI		1,806	19	0	3	16	0	3	
Lindsay, T	M	17,000	280	0	67	213	0	91	
Manvers, Tp		5,157	4	0	0	4	0	0	
Mariposa, Tp		6,839	2	0	1	1	0	4	
Somerville, Tp		2,092	6	0	2	4	0	2	
Verulam, Tp		5,075	5	0	1	4	0	1	
Provincial Highway		-	429	5	111	313	5	192	
Other Areas		15,003	620	7	153	460	7	227	
Victoria		64,502	1,383	12	342	1,029	12	525	51,478
North Dumfries, Tp		7,090	108	3	22	83	4	32	
Cambridge, C		99,000	1,849	3	397	1,449	3	591	
Kitchener, C		183,200	3,493	9	748	2,736	9	1,092	
Waterloo, C		89,663	1,504	3	325	1,176	5	474	
Wellesley, Tp		8,370	37	0	12	25	0	18	
Wilmot, Tp		13,135	123	0	25	98	0	41	
Woolwich, Tp		16,711	242	1	70	171	1	112	
Provincial Highway		-	1,005	5	214	786	5	335	
Other Areas		0	331	2	85	244	2	120	
Waterloo		417,169	8,692	26	1,898	6,768	29	2,815	254,622
Arthur, Tp		2,472	4	0	3	1	0	7	
Arthur, VI		1,960	23	0	3	20	0	3	
Elora, VI		3,116	17	0	3	14	0	6	

Table 4.1 Continued Location **Estimated** Class of Collision Persons Motor Vehicle **Population** Total Personal **Property** Registrations (1997)* Collisions Killed Injured Fatal Injury Damage Eramosa, Tp 5,764 Erin, Tp 7,468 Erin, VI 2,414 Fergus, T M 8,008 West Garafraxa, Tp 3,341 Guelph, C M 93,400 1,229 Guelph, Tp 3,045 Harriston, T Μ 1,900 Maryborough, Tp 2,573 Minto, Tp 2,357 Mount Forest, T 4,164 Nichol, Tp 3,999 Palmerston, T M 2,400 Peel, Tp 4,294 Pilkington, Tp 2,400 Puslinch, Tp 4.607 Provincial Highway Other Areas 3,169 Wellington 162,851 3,276 2,355 1,436 114,904 Ancaster, T 22,810 Dundas, T 22,154 Flamborough, T 33,381 Glanbrook, Tp 10,238 Hamilton, C 4,450 1,620 2,819 318,500 2,429 Stoney Creek, C 51,865 Provincial Highway 1,190 Other Areas Hamilton-Wentworth 458,948 6,813 2,405 4,381 3,706 268,028 Aurora, T 33,595 E Gwillimbury, T 18,023 Georgina, T 30,802 King, Tp 17,504 Markham, T 164,376 2,640 2,243 Newmarket, T 49,645 Richmond Hill, T 100,000 1,230 1,040 131,720 2,072 1,677 Vaughan, C Whitchurch-Stouffville, T 18,500 Provincial Highway 3,146 2,632 Other Areas York 564,165 11,962 2,083 9,837 3,275 398,146

1997	Ontario	The	47
	Road Safety	Vehicle	
	Annual Report		

5 The Vehicle

Vehicle Population by Vehicle Class in Ontario - 1997



Other includes bus, school bus, road building machinery, permanent apparatus and farm trucks.

 $^{^{\}star}$ Commercial excludes Single Application Vehicle Registration (SAVR - $27,\!295$ vehicles).

1997	Ontario	The	
	Road Safety	Vehicle	
	Annual Report		

5a. Vehicles in Collisions

Table 5.1	Type of Vehicle Involved	in All Collisions 199	97	
Type of Vehicle	Class of Collision			Total
		Personal	Property	
	Fatal	Injury	Damage	
Passenger Car	778	76,492	211,424	288,694
Passenger Car & Trailer	1	122	465	588
Truck	362	21,900	70,852	93,114
Truck & Trailer	27	507	1,937	2,471
Tractor & Semi-trailer	91	1,303	5,173	6,567
Motorcycle	41	1,151	436	1,628
Bus	7	619	1,633	2,259
School Bus/Vehicle	5	234	905	1,144
Other - Or Not Known	7	1,016	10,391	11,414
Non Motor Vehicle	43	3,535	1,620	5,198
Total	1,362	106,879	304,836	413,077

In 1988, major revisions were made in the recording of motor vehicle collision data. The above table now reflects a consolidation of various types of vehicles and/or trailers. Therefore, valid conclusions cannot be made when comparing these data to those of the years previous to 1988.

More detailed information for some vehicles is provided in the Vehicles of Special Interest Section.

Ontario Road Safety Annual Report

Table 5.2 Condition of Vehicle by

Class of Collision 1997

Condition of Vehicle	Clas	s of Collis	ion	Total
		Personal	Property	
	Fatal	Injury	Damage	
No Apparent Defect	1,258	100,991	271,576	373,825
Service Brakes Defective	9	170	258	437
Steering Defective	0	17	33	50
Tire Puncture or Blow Out	1	59	152	212
Tire Tread Insufficient	6	38	60	104
Headlamps Defective	1	7	17	25
Other Lamps or Reflectors Defective	9 0	24	62	86
Engine Controls Defective	0	15	55	70
Wheels or Suspension Defective	0	11	87	98
Vision Obscured	0	9	26	35
Trailer Hitch Defective	0	2	6	8
Other Defects	19	665	5,182	5,866
Unknown	68	4,871	27,322	32,261
Total	1,362	106,879	304,836	413,077

Table 5.3	Model Year of Vehicle by Class of
	Collision 1997

Model Year of Vehicle	Clas	s of Collis	ion	Total
		Personal	Property	
	Fatal	Injury	Damage	
1998	13	610	2,088	2,711
1997	90	6,083	18,357	24,530
1996	76	6,294	18,916	25,286
1995	96	7,475	22,905	30,476
1994	83	6,781	20,409	27,273
1993	91	6,793	20,842	27,726
1992	94	7,285	21,013	28,392
1991	67	7,247	20,687	28,001
1990	116	7,919	22,556	30,591
1989	103	8,646	24,458	33,207
1988 and earlier	484	35,524	94,349	130,357
Unknown	49	6,222	18,256	24,527
Total	1,362	106,879	304,836	413,077

1997 Ontario
Road Safety
Annual Report

The Vehicle

50

able 5.4	Insurance Status of Vehicle by Class of Collision 1997							
	Insurance	CI	Class of Collision					
			Personal	Property				
		Fatal	Injury	Damage				
	Insured	1,250	98,258	278,716	378,224			
	Not Insured	48	2,424	2,623	5,095			
	Unknown	64	6,197	23,497	29,758			
	Total	1,362	106,879	304,836	413,077			

5b. Putting the Vehicle in Context

Table 5.5	Vehicle Population by Type of Vehicle 1997				
	Vehicle Class				
	Passenger	5,222,698			
	Motorcycle	94,886			
	Moped	3,154			
	Commercial*	1,087,832			
	Bus	18,915			
	School Bus	8,378			
	Motorized Snow Vehicle	362,561			
	Off-Road Vehicle	117,438			
	Road Building Machinery	691			
	Permanent Apparatus	3,322			
	Farm Trucks	35,170			
	Total	6,955,045			

Table 5.6 Selected Types of Vehicles by Model Year 1997												
Vehicle Class Model Years												
	98	97	96	95	94	93	92	91	90	89	88+	Total
Passenger	122,903	388,086	305,512	363,672	340,837	358,124	386,679	369,586	387,009	409,635	1,790,655	5,222,698
Motorcycle	437	3,491	3,326	2,723	2,603	2,805	2,332	2,100	2,283	2,462	70,324	94,886
Moped	6	7	7	4	18	12	4	13	13	20	3,050	3,154
Commercial*	25,426	79,856	56,942	72,550	67,523	54,716	55,885	56,516	76,367	92,656	488,578	1,127,015
Bus	213	1,599	2,069	1,971	1,380	1,590	2,032	2,150	2,534	2,480	9,275	27,293
Motorized Snow Vehicle	11,374	16,490	15,186	14,573	14,590	12,304	9,713	13,360	14,639	14,041	226,291	362,561
Off-Road Vehicle	1,512	4,075	5,222	5,218	4,287	5,185	4,886	4,922	5,741	4,702	71,688	117,438
Total	161,871	493,604	388,264	460,711	431,238	434,736	461,531	448,647	488,586	525,996	2.659.861	6.955.045

 $^{^{\}star}$ Excludes Single Application Vehicle Registrations (SAVR - 27,295 vehicles).

The Vehicle

52

Table 5.7	Table 5.7 Vehicle Damage Level 1997							
Damage	Clas	Class of Collision						
	Fatal	Injury	Damage					
None	69	10,171	20,183	30,423				
Light	137	29,831	127,824	157,792				
Moderate	132	28,996	95,583	124,711				
Severe	232	22,484	27,796	50,512				
Demolished	733	10,386	5,135	16,254				
Unknown	59	59 5,011 28,315						
Total	1,362	106,879	304,836	413,077				

Vehicle Damage

None No visible damage.

Light Slight or superficial damage. Includes scratches, small

dents, and minor cracks in glass, that do not affect safety or

performance of vehicle.

Moderate Unsafe conditions result from damage. Vehicle must be

repaired to make its condition meet the requirements of the law. Vehicle can be driven off road or a limited distance, but

doing so would be unsafe.

Severe Vehicle cannot be driven. Requires towing. Would

normally be repaired.

Demolished Vehicle damaged to the extent that repairs would

not be acceptable.

Ontario Road Safety Annual Report Vehicles of Special

Interest

53

6 Vehicles of Special Interest



Interest

6a. Motorcycles

Table 6.1	Motorcyclists*	
	Killed and Injured	
	1993-1997	

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1993	54	1,706	5	398
1994	50	1,526	4	324
1995	37	1,309	4	289
1996	27	1,006	2	244
1997	36	993	2	255

 $^{^{\}star}$ Excludes moped drivers and passengers.

Table 6.2	Selected Factors	
	Relevant to Fatal Motorcycle	e
	Collisions 1997	
Factors (not mut	undly evaluation	0/
Factors (not mut		%
Unlicensed Motor	cycle Drivers	8
Under 25 years O	ld	33
Alcohol Used		
Ability Impaired	Alcohol > .08	18
Had Been Drinki	ng	3
Unknown		10
Helmet Not Worn	(Fatalities)	8
Motorcycle Driver	Error	
Speed Too Fast/	Lost Control	50
Other Error		5
Single Vehicle Co	llisions	31
Day/Night		56/44
Weekend		36

6b. School Vehicles

1997

Table 6.3	Pupils Transported	Pupils Transported Daily, Total Collisions and Injury Rate per 100,000 Pupils -							
	School Years 1992/9	93-1996/97							
	School Year	Pupils	Total	Injury Rate p	er 100,000 Pupils				
		Transported	Number of						
		Daily*	Collisions	Fatals	Non-Fatal				
	1992/93	796,347	1,174	-	20				
	1993/94	798,926	1,293	0.4	27				
	1994/95	816,273	1,018	0.1	21				
	1995/96	Not Available	1,091	Not Available	Not Available				
	1996/97	Not Available	1,046	Not Available	Not Available				

^{*} Since the 1995/96 school year these numbers are no longer available.

Table 6.4	School Vehicle Type by Nature of
	Collision 1996/97

School Vehicle	Nature of Collision				Total	Five Year Total
Туре		Pupil	Non-Pupil	Property	Number of	(1992/93
	Fatal	Injury	Injury	Damage	Collisions	1996/97)
School Bus	4	54	101	745	904	4,883
School Van	0	10	11	70	91	583
Other School Vehic	les 0	5	5	41	51	156
Total	4	69	117	856	1,046	5,622

Table 6.5 Pupil Injury by Collision Event and Vehicle Type 1996/97 (Number of Persons)

School Vehicle	Collision	Collision Event					Total		Five Y	'ear Total
Туре	Crossin	ng	Within		Other					(1992/93
	Road		School	Vehicle						1996/97)
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
School Bus	1	0	0	121	1	3	2	124	6	740
School Van	0	0	0	7	0	1	0	8	0	57
Other School Vehicles	0	0	0	2	0	0	0	2	0	11
Total	1	0	0	130	1	4	2	134	6	808

Vehicles of Special Interest 56

6c. Trucks

Table 6.6 Class of Truck Collision
- Number of Trucks 1993-1997

Year	Clas	s of Collisi	Collision		
		Personal	Property		
	Fatal	Injury	Damage		
1993	419	13,312	42,915	56,646	
1994	326	13,335	43,906	57,567	
1995	365	12,647	40,487	53,499	
1996	320	12,377	39,595	52,292	
1997	342	12,062	38,519	50,923	
Total	1,772	63,733	205,422	270,927	

Table 6.7	Driver Licence Class Required	
	by Class of Truck Collision	
	- Number of Trucks 1997	

Driver Licence	Clas	Class of Collision		
Required		Personal Property		
	Fatal	Injury	Damage	
G	207	10,062	31,024	41,293
D	33	599	2,475	3,107
A*	102	1,401	5,020	6,523
Total	342	12,062	38,519	50,923

^{*} Includes truck/trailer combinations requiring a Class "A" licence.

Table 6.8	Driver Licence Class Required -
	Truck in Collisions, Registered Trucks
	and Collision Rate 1997

Driver Licence	Trucks in	Registered	Truck
Required	Collisions	Trucks	Involvement*
G	41,293	984,355	4.2
D	3,107	49,580	6.3
A**	6,523	120,375 ***	5.4
Total	50,923	1,154,310	4.4

^{*} Number of trucks in collisions per 100 registered trucks.

	Truck	Collisions 199	7	
Factors in		Drive	r Licence Re	quired
Fatal Collision	ons:	Class G	Class D	Class A

Fatal Collisions:	Class G	Class D	Class A
Drivers			
Alcohol Involved	24.2%	-	1.0%
Driving Properly	45.4%	63.6%	71.6%
Collisions			
Single Vehicle	31.4%	30.3%	16.7%
Urban Area	28.5%	51.5%	9.8%
Daylight	59.4%	78.8%	55.9%
Vehicles			
Vehicle Defect Present*	3.4%	9.1%	1.0%

^{*} Excludes unknown category.

^{**} Tractor/trailer combination only.

^{***}Includes vehicles registered under SAVR - 27,295.

Ontario
Road Safety
Annual Report

Vehicles of Special Interest 57

6d. Off-Road Vehicles

1997

For the purposes of this publication, off-road vehicles include dune buggies, off-road motorcycles (dirt bikes), and three and four wheeled all-terrain vehicles. Off-road vehicles were first required to be registered on June 1, 1984 (one time registration requirement).

Table 6.10	Collision Location
	by Off-Road Vehicle Drivers
	Killed and Injured 1993-1997

Location	Killed					Injured				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
On-Highway	3	3	0	0	1	22	22	23	20	19
Off-Highway	2	3	6	5	3	68	63	74	46	41
Total	5	6	6	5	4	90	85	97	66	60

Table 6.11	Collision Location
	by Off-Road Vehicle Passengers
	Killed and Injured 1993-1997

Location	Killed					Injured				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
On-Highway	1	0	0	0	0	4	6	5	6	15
Off-Highway	0	0	0	0	1	17	23	23	9	19
Total	1	0	0	0	1	21	29	28	15	34

Table 6.12	Registered Off-Road	
	Vehicle 1993-1997	
Year	Vehicles Registered	
1993	97,104	
1994	101,954	
1995	106,677	
1996	111,344	
1997	117,438	

Table 6.13	Selected Factors Relevant t	0
	All Off-Road Vehicle	
	Collisions 1997	
Factoria		0/
Factors		%
Drivers Under 2	25 Years of Age	55
Alcohol Used		18
Speeding		23
Helmet Not Wo	rn	53
Daytime		80
Two-Wheeled		13
Three-Wheeled		13
Four-Wheeled		75

6e. Motorized Snow Vehicles

Table 6.14 Collision Location by Motorized Snow Vehicle* Drivers Killed and Injured - Riding Seasons 1992/93-1996/97

Location	Killed					Injured				
	92/93	93/94	94/95	95/96	96/97	92/93	93/94	94/95	95/96	96/97
On-Highway	3	2	6	3	2	37	62	36	73	72
Off-Highway	22	9	22	25	19	121	237	243	304	259
Total	25	11	28	28	21	158	299	279	377	331
% On-Highway	12	18	21	11	10	23	21	13	19	22

Table 6.15 Collision Location by Motorized Snow Vehicle* Passengers Killed and Injured - Riding Seasons 1992/93-1996/97

Location	Killed					Injured				
	92/93	93/94	94/95	95/96	96/97	92/93	93/94	94/95	95/96	96/97
On-Highway	0	1	0	0	3	16	25	17	33	20
Off-Highway	2	3	2	2	2	82	63	62	103	61
Total	2	4	2	2	5	98	88	79	136	81

Table 6.16	Registered Motorized				
	Snow Vehicles 1993-1997				
Year	Registered Motorized				
	Snow Vehicles				
1993	383,083				
1994	391,847				
1995	339,803				
1996	361,596				
1997	362,561				

Table 6.17	Selected Factors Relevant to	All					
	Motorized Snow Vehicle* Collisions 1996/97						
Factors (not m	utually exclusive)	%					
Unlicensed Ope	rators	9					
Rider Error; Spe	ed too Fast	35					
Alcohol Used		22					
Surface Condition	on; Icy or Packed Snow	55					

^{*} The numbers in these tables are captured under the Motorized Snow Vehicle Act (MVSA) and the Highway Traffic Act (HTA) therefore they are not comparable with the numbers in Tables 2.2 and 2.3 which are HTA reportable collisions only.

1997	Ontario
	Road Safety
	Annual Report

Vehicles of Special Interest 59

6f. Bicycles

Only collisions involving a bicycle and a moving motor vehicle or a streetcar are required to be reported. These tables do not include bicycle only bicycle/bicycle or bicycle/pedestrian collisions.

Table 6.18	Bicyclists	
	Killed and Injured	
	1993-1997	

	Drivers	Passengers		
Killed	Injured	Killed	Injured	
31	3,290	0	123	
27	3,283	0	107	
19	2,983	0	105	
20	2,863	0	109	
22	2,997	1	101	
	31 27 19 20	Killed Injured 31 3,290 27 3,283 19 2,983 20 2,863	Killed Injured Killed 31 3,290 0 27 3,283 0 19 2,983 0 20 2,863 0	

Table 6.20	Selected Factors	
	Relevant to	
	All Bicycle Collisions 1997	
Factors		%
Driving Proper	ly (Bicyclist)	39
Driving Proper	ly (Motor Vehicle Driver)	49
Intersection R	elated	64
Going Ahead	(Bicyclist)	81
Alcohol Relate	ed (Bicyclist)	3
No Apparent \	/ehicle Defect (Bicycle)	88
Clear Visibility	1	93
Weekend		20

Table 6.19	Age of Bicyclist Involved in Collisions by
	Light Condition 1997

Light	Age Groups						
Condition	0 - 5	6 - 15	16 - 30	31 - 60	61+	UK	Total
Daylight	285	916	918	768	87	60	3,034
Dawn	0	1	7	8	0	3	19
Dusk	12	38	44	38	5	3	140
Dark	43	79	198	142	7	5	474
Total	340	1,034	1,167	956	99	71	3,667



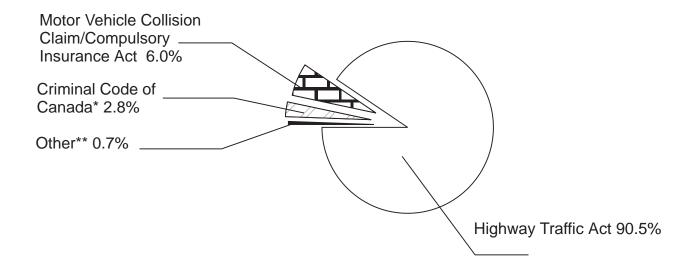
1997	Ontario	
	Road Safety	
	Annual Report	

Conviction,
Offence and
Suspension
Data

61

7 Conviction, Offence and Suspension Data

Per Cent of Motor Vehicle Convictions in Ontario - 1997



^{*} This figure does not include convictions for young offenders under the Criminal Code.

^{**} Includes Municipal By-Law, Motorized Snow Vehicles Act, Off-Road Vehicles Act convictions and H.T.A. Regulation convictions.

7a. **Conviction Data**

Table 7.1	Summary of Motor Vehicle	
	Related Convictions 1997	
Convictions*		Number
Highway Traffic Act		845,887
Regulation H.T.A		1,033
Criminal Code of Ca	anada**	26,114
Municipal By-Law		2,288
Motor Vehicle Collis	ion Claim/Compulsory Insurance Act**	55,962
Motorized Snow Ve	hicles Act	1,033
Off-Road Vehicle		2,300
Other		720
Total		935,337

Table 7.2

Motor Vehicle Convictions

Related to the				
Highway Traffic Act 1997				
Convictions	Number			
Equipment	17,321			
Administrative*	112,751			
Seat Belt (Driver & Passenger)**	53,227			
Other Non-Pointable Convictions**	10,831			
Speeding (< 16km/h, non-pointable)	255,936			
Pointable Speeding	230,804			
Other Pointable Convictions (2 - 4 pt)	122,660			
Other Pointable Convictions (5 - 7 pt)	7,758			
Driving While Suspended	12,250			
Total	823,538			

^{*} Non-moving, weight, vehicle registration, licence renewal, etc. ** Includes some out of province convictions.

Table 7.3	Motor Vehicle Convictions
	Related to the
	Criminal Code 1997

Convictions*	Number
Alcohol Related**	21,979
Criminal Negligence	31
Fail to Remain at Collision	647
Driving While Disqualified	2,487
Dangerous Driving	970
Total	26,114

^{*} Does not include 432 convictions for young offenders.

 ^{*} Includes some out of province convictions.
 ** This figure does not include 432 convictions for young offenders under the Criminal Code.

^{**} Includes some out of province convictions.

Data

63

Ontario Road Safety Annual Report

7b. Offence Data

Table 7.4 Number of Con	Number of Convicted Drivers* with Criminal Code of Canada Offenses,							
During the Specified Years 1992 to 1996 ¹								
Conviction Type	1992	1993	1994	1995	1996			
Criminal Negligence	38	44	39	35	23			
Fail to Remain	919	816	786	709	617			
Dangerous Driving	1,193	1,134	1,200	1,156	981			
Impaired Driving	14,434	13,877	13,388	12,518	11,649			
Blood/Alcohol over 80 mg%	12,329	9,135	8,982	8,892	8,450			
Fail to Provide Breath Sample	1,971	1,519	1,545	1,526	1,382			
Driving While Disqualified	3,157	2,840	2,662	2,419	2,509			
Total	34,041	29,365	28,602	27,255	25,611			

^{*} Does not represent unique drivers, the same driver can be represented in this table more than once.

As of December 31, 1997 there were 16,665 Criminal Code Offenses recorded. The 1997 breakdown will be updated in the 1998 annual report to accommondate the lag time in the recording of offenses (offenses are only recorded upon a conviction).

Adminstrative Driver License Suspension			
Monthly Suspensions Issued 1997			
1996*	1997		
-	1,310		
-	1,595		
-	1,898		
-	1,810		
-	2,068		
-	1,978		
-	1,887		
-	1,450		
-	1,679		
-	1,747		
-	1,769		
2,013	1,820		
2,013	21,011		
	1996*		

The Administrative Driver's Licence Suspension (ADLS) started in Ontario on November 29, 1996. The first complete month of suspensions shown in this table is, therefore, December, 1996.

From August 5th to 15th, 1997, ADLS suspensions were not issued due to cessation in ADLS.

Re-issuing of suspensions resumed on August 15, 1997.

See Appendix for details on the ADLS.

Data for Table 7.4 presents the number of offenses recorded as of December 31, 1997. Table 7.4 has been revised to report the number of drivers that committed a specific Criminal Code Offence (CCC) in the specified year. This table is not comparable to Table 7.4 from earlier annual reports.

Ontario
Road Safety
Annual Report

Conviction, Offence and Suspension Data

64

7c. Suspension Data

1997

Table 7.6 Demerit Point Suspensions by Driver Age 1997							
Driver Age	Demerit P	oint Suspensions					
		Novice	Novice	Regular	Regular		
		First	Second	First	Second		
	Probationary	Accumulation	Accumulation	Accumulation	Accumulation		
16	0	2	0	0	0		
17	0	68	1	0	0		
18	1	278	10	1	0		
19	56	256	15	16	0		
20-24	310	320	35	293	22		
25-34	183	201	21	396	24		
35-44	35	70	1	151	5		
45-54	8	20	2	56	5		
55-64	1	4	0	8	1		
65-74	0	1	0	2	1		
75 +	0	0	0	0	0		
Total	594	1,220	85	923	58		

Since 1994 novice drivers have been under the new graduated licensing system. These drivers are subject to escalating actions from a warning letter at 2 to 5 points, an interview at 6 to 8 points and a 60 day suspension for a first accumulation of 9 points. After a first suspension, the points are reduced to 4 and if they attain 9 points again the subsequent suspension is 6 months.

Regular drivers are suspended for 30 days on the first accumulation of 15 demerit points and are suspended for 6 months on the second accumulation of 15 points within 2 years.

Until 1994 newly licensed drivers were covered by the probationary licence system until they had successfully completed two one-year periods of suspension-free driving. Probationary drivers were suspended for 30 days after accumulating 6 or more demerit points. The probationary licensing system ended on March 31, 1994. Drivers were grandfathered into the system by the new graduated licensing system.

1997	Ontario	Appendix	65
	Road Safety		
	Annual Report		

8 Appendix

8a. Glossary

Ability Impaired Alcohol:

Driving while one's ability is impaired by alcohol or driving with a blood alcohol concentration exceeding 80 milligrams in 100 milliliters of blood.

Administrative Driver Licence Suspension (ADLS):

This program, designed to reduce drinking and driving, started November 29, 1996. Under this program, provincial law permits the immediate suspension of a driver's licence for 90 days upon evidence gathered by a police officer that the driver (a) was shown to have a concentration of alcohol in excess of 80 milligrams per 100 millilitres of blood or (b) the driver failed or refused to provide a breath or blood sample.

Alcohol Involved:

This category includes both drivers reported as ability impaired by alcohol and drivers reported as "had been drinking".

Class G1 Driver's Licence:

A holder of a Class G1 driver's licence:

- must have a zero blood alcohol content while driving.
- must have only one passenger in the front seat. That person, the accompanying driver, must be a fully licensed driver (Class A, B, C, D, E, F and G) with at least four years driving experience. That person's blood alcohol content must be less than .05.
- unless accompanied by a licensed driving instructor, must not drive on Ontario's "400-series" highways or on high speed expressways such as the Queen Elizabeth Way, the Don Valley Parkway, E.C. Row Expressway and the Conestoga Parkway.
- must limit the number of back seat passengers they carry to the number of seat belts in the back seats of the vehicle.
- must not drive between the hours of midnight and 5 a.m.
- may drive Class G vehicle only.

Level One lasts 12 months, but that time can be reduced to eight months by completing an approved driver education course. For information about approved courses contact any Ministry of Transportation licensing office. At the end of this level, drivers must pass a road test before proceeding to Level Two.

Class G2 Driver's Licence:

A holder of a Class G2 driver's licence:

- must have a zero blood alcohol content while driving.
- is allowed to drive any motor vehicle that requires a Class G driver's licence (e.g. an automobile) on the road.
- must limit the number of back seat passengers they carry to the number of seat belts in the back seats of the vehicle.

Level Two lasts 12 months. After completing this level, drivers will be eligible to take a comprehensive test to qualify for full licence privileges.

Class M1 Motorcycle Driver's Licence:

A holder of a Class M1 motorcycle driver's licence:

- allows the holder to operate a motorcycle for the purposes of training.
- must have a zero blood alcohol content while driving.
- is only allowed to drive during daylight hours (one-half hour before sunrise to one-half hour after sunset).
- is only allowed to drive on roads with speed limits of 80 km/h or less, except where there is no other route you can drive. You may drive on highways 11, 17, 61, 69, 71, 101, 102, 144, and 655.
- may not carry passengers.

Level One lasts at least 60 days, and the licence is valid for 90 days. Level One drivers must pass a motorcycle road test before proceeding to Level Two. Alternatively, during Level One they may take an approved motorcycle safety course that includes a road test, instead of the ministry road test.

1997	Ontario Road Safety		Appendix	66
1	•	I	1	
	Annual Report			

Class M2 Motorcycle Driver's Licence:

A holder of a Class M2 motorcycle driver's licence:

- must have a zero blood alcohol content while driving.

After completing Level Two, drivers will be eligible to take a comprehensive test to qualify for full licence privileges.

Conviction:

Awarded when a person pleads guilty to, or is found guilty of, an offence related to a motor vehicle under any Act of the Ontario Legislature or its accompanying regulations, under the Parliament of Canada or any accompanying order, or under any municipal bylaw.

Driver:

Unless specified otherwise, any person, whether licensed or not, considered to be in care and control of a vehicle at the time of an collision.

Had Been Drinking:

Driving after having drunk an amount of alcohol not considered sufficient to be legally impaired or with a measured blood alcohol count of greater than zero but less than 80 milligrams. Blood alcohol concentration between .05 and .08 results in a 12 hour suspension.

Highway:

A common and public highway, street, avenue etc., any part of which is intended for public use or used by the general public for the passage of vehicles and including the area between the property lines.

Kilometres Travelled:

Vehicle fleet mileage is estimated on the basis of taxed gasoline and motor fuel sales. Total litres sold are converted to kilometres traveled based on a conversion factor of 22.0 kilometres per gallon.

Major Injury

A non-fatal injury severe enough to require that the injured person be admitted to hospital, even if for observation only.

Minimal Injury:

A non-fatal injury, including minor abrasions and bruises, which does not necessitate the injured person going to a hospital.

Minor Injury:

A non-fatal injury requiring medical treatment at a hospital emergency room, but not requiring hospitalization of the involved person.

Motor Vehicle Collision:

Any incident in which bodily injury or damage to property is sustained as a result of the movement of a motor vehicle, or of its load while a motor vehicle is in motion.

Off-Highway Collisions:

An off-highway collision involving any of the motorized vehicles which are covered by legislation under the Highway Traffic Act, the Motorized Snow Vehicles Act, and the Off-Road Vehicles Act.

On-Highway Collisions:

A motor vehicle collision which occurs on the highway between the property lines.

Pedestrian:

Any person not riding in or on a vehicle involved in a motor vehicle collision.

Fatal Collision:

A motor vehicle collision in which at least one person sustains bodily injuries resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to accidental injuries up to one year after the collision. Since that date, only deaths from injuries within thirty days of the collision have been included.

1997	Ontario	Appendix	67
	Road Safety		
	Annual Report		

Personal Injury Collision:

A motor vehicle collision in which at least one person involved sustains bodily injuries not resulting in death.

Property Damage Collision:

A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property* including damage to the motor vehicle or its load.

Reportable Collision:

Any injury collision, or property damage to private property in excess of a monetary value prescribed by regulation.*

Self-Reporting of a Collision:

Self-reporting of a Collision. Under a new section of the Highway Traffic Act [§199 (1.1)], when one is in a collision in which there is only property damage (no injury or death, and, among other conditions, no criminal activities such as impaired driving) the involved person(s) may report the collision immediately by proceeding with one's vehicle to a Collision Reporting Centre. Self-Reporting of a collison was introduced on January 1, 1997.

Suspension:

Withdrawal of a drivers' privilege to operate motor vehicle for a prescribed period of time.

* The minimum reportable level for property damage only collision rose from \$200 to \$400 on January 1, 1978 and rose again to \$700 on January 1, 1985.

1997	Ontario	Appendix	68
	Road Safety		

8b. Acknowledgement

The Ministry of Transportation would like to acknowledge the following offices for their assistance:

Annual Report

Office of the Chief Coroner

The Ministry of the Solicitor General and Correctional Services

Revenue Control Unit

Motor Fuels and Tabacco Tax Branch Ministry of Finance

Knowledgement Management Unit

Information Planning and Evaluation Branch Ministry of Health

Information Planning & Court Statistics

Program Development Branch Ministry of the Attorney General

This publication may be reproduced, reprinted, stored and transmitted, and may be used in whole or in part, provided that such reproduction or storage is intended only for personal or educational use and not for monetary gains of any kind. In any application, or for financial gain, express prior written permission of the Ministry of Transportation is required.