



---

Ontario  
Road  
Safety  
Annual  
Report

---

1993

1993

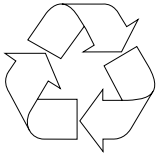
Ontario  
Road Safety  
Annual Report

---

'93

Ontario  
Road Safety  
Annual  
Report

---



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

Copies of this document can be obtained from:

Publications Services Section  
5th Floor  
880 Bay Street  
Toronto, Ontario  
M7A 1N8

Telephone (416) 326-5300  
Toll-free (800) 668-9938  
TDD (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 office for the latest copy of the Driver's Handbook and other driver manuals and leaflets, or call the ministry at (800) 739-4949. 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 this data in this publication, please contact the Safety Research Office at (416) 235-3585.

Produced by:  
Safety Research Office  
Safety Policy Branch  
Ministry of Transportation  
1201 Wilson Avenue  
East Building, Main Floor  
Downsview, Ontario  
M3M 1J8

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

2nd printing - PDF format

ISSN # 0832-8269

---

**Table of Contents - 1993**


---

			Page
Contents			ii
List of Tables and Figures			iii
Section	1	Overview	1
	1a	Synopsis	2
	1b	Selected Characteristics of Motor Vehicle Accidents	3
	1c	Health Perspective	4
Section	2	The People	5
	2a	People in Accidents	6
		Persons Killed and Injured	6
		Drivers	9
		Alcohol	9
		Driver Action	11
		Seat Belts and Child Restraints	12
		Pedestrians	13
	2b	Putting the People in Context	14
		Injury Rates	14
		Driver Population	14
Section	3	The Accident	19
	3a	Types of Accidents	20
		Accident Classes and Rates	20
	3b	Time and Environment	23
	3c	The Accident Location	26
Section	4	Place of Accident in Ontario	29
		Geographical Location-Estimated Population, Accident Information & Vehicle Registrations	30
Section	5	The Vehicle	45
	5a	Vehicles in Accidents	46
		Vehicle Type	46
		Condition, Model Year	46
		Insurance Status	47
	5b	Putting the Vehicle in Context	49
		Vehicle Population	49
		Damage Level	50
Section	6	Vehicles of Special Interest	51
	6a	Motorcycles	52
	6b	School Vehicles	53
	6c	Trucks	54
	6d	Off-Road Vehicles	55
	6e	Motorized Snow Vehicles	56
	6f	Bicycles	57
Section	7	Conviction and Suspension Data	59
	7a	Conviction Data	60
	7b	Suspension Data	61
Section	8	Appendix	63
	8a	Glossary of Terms	64

---

**List of Tables and Figures - 1993**

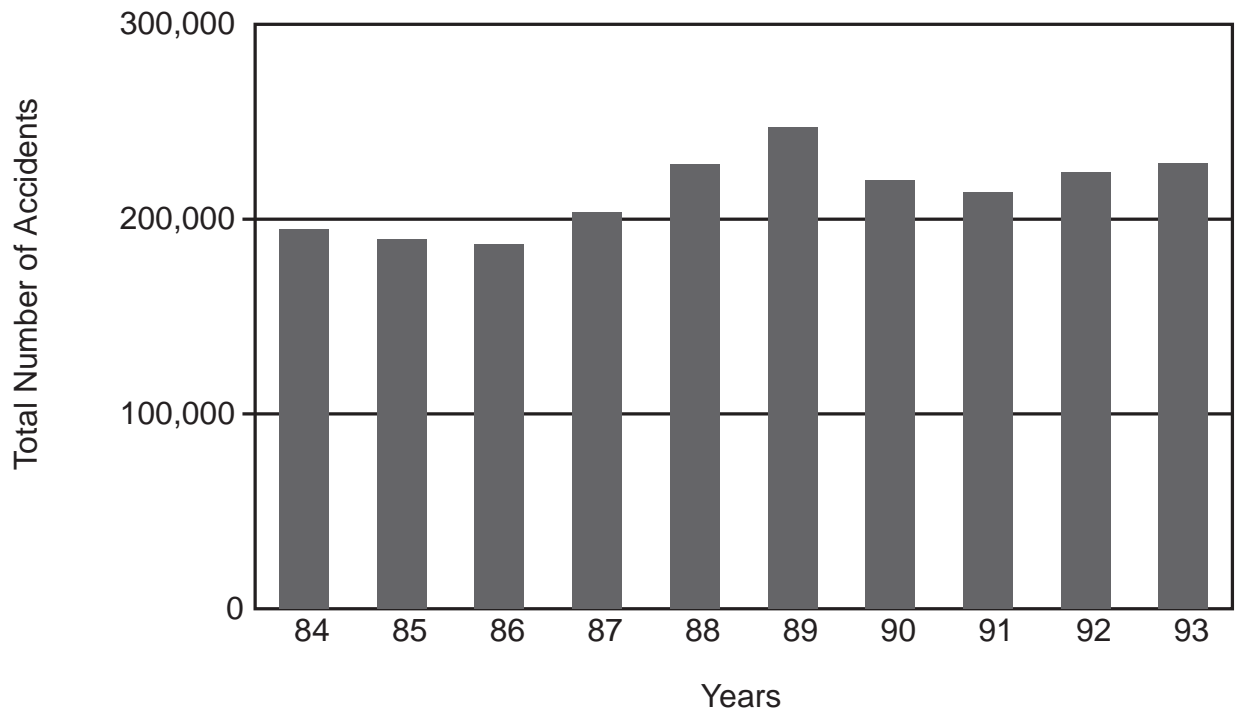
Table	Title	Page
2.1	Category of Involved Person by Severity of Injury in Fatal and Personal Injury Accidents	6
2.2	Category of Persons Killed by Age Groups	7
2.3	Category of Persons Injured by Age Groups	8
2.4	Sex of Driver by Class of Accident	9
2.5	Driver Condition by Class of Accident	9
2.6	Driver Age by Driver Condition in all Accidents	10
2.7	Recorded Occurrence of Alcohol in Drivers Killed	10
2.8	Apparent Driver Action by Class of Accident	11
2.9	Severity of Driver Injury by Seat Belt Usage	11
2.10	Severity of Passenger Injury by Seat Belt Usage	12
2.11	Restraint Use for Children (0 - 4 Years) Killed	12
2.12	Restraint Use for Children (0 - 4 Years) Injured 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 1984 - 1993	14
2.16	Sex of Driver Population by Age Groups	14
2.17	Driver Population Age Groups 1984 - 1993	15
2.18	Driver Licence Class by Sex	15
2.19	Licensed Drivers, Total Accidents, Persons Killed and Injured 1931 - 1993	16
2.20	Original Licences Issued 1989 - 1993	17
2.21	Temporary Licence Permits Issued for Class L's and Class R's 1989 - 1993	17
2.22	Driver Age Groups - Number Licensed, Accident Involvement and Per Cent Involved in Accidents	18
3.1	Class of Accident 1984 - 1993	20
3.2	Accident Rate Per One Million Kilometres Travelled 1984 - 1993	20
3.3	Motor Vehicles Involved in Accidents Based on Initial Impact	21
3.4	Initial Impact Type by Class of Accident	22
3.5	Month of Occurrence by Class of Accident	23
3.6	Day of Week by Class of Accident	23
3.7	Hour of Occurrence by Class of Accident	24
3.8	Statutory Holidays, Holiday Weekends - Fatal Accidents, Persons Killed and Persons Injured	25
3.9	Light Condition by Class of Accident	25
3.10	Visibility by Class of Accident	25
3.11	Road Jurisdiction by Class of Accident	26
3.12	Road Jurisdiction for All Accidents 1984 - 1993	26
3.13	Road Location by Class of Accident	27
3.14	Road Surface Condition by Class of Accident	27
4.1	Place of Accident - Estimated Population, Class of Accident, Persons Killed, Injured & Vehicle Registrations	30
5.1	Type of Vehicle Involved in All Accidents	46
5.2	Condition of Vehicle by Class of Accident	47
5.3	Model Year of Vehicle by Class of Accident	47
5.4	Insurance Status of Vehicle by Class of Accident	48
5.5	Vehicle Population by Type of Vehicle	49
5.6	Selected Types of Vehicles by Model Year	49
5.7	Vehicle Damage Level	50

List of Tables and Figures (cont'd)		Page
6.1	Motorcyclists Killed and Injured 1989 - 1993	52
6.2	Selected Factors Relevant to Fatal Motorcycle Accidents	52
6.3	Pupils Transported Daily, Total Accidents and Injury Rate per 100,000 Pupils - School Years 1988/89 - 1992/93	53
6.4	School Vehicle Type by Nature of Accident 1992/93	53
6.5	Pupil Injury by Accident Event and Vehicle Type 1992/93	53
6.6	Class of Truck Accident 1989 - 1993	54
6.7	Driver Licence Class Required by Class of Truck Accident	54
6.8	Driver Licence Class Required, Accidents, Registered Trucks and Rates	54
6.9	Selected Factors Relevant to Fatal Truck Accidents	54
6.10	Accident Location by Off-Road Vehicle Drivers Killed and Injured 1989 - 1993	55
6.11	Accident Location by Off-Road Vehicle Passengers Killed and Injured 1989 - 1993	55
6.12	Registered Off-Road Vehicles 1989 - 1993	55
6.13	Selected Factors Relevant to All Off-Road Vehicle Accidents	55
6.14	Accident Location by Motorized Snow Vehicle Drivers Killed and Injured - Riding Seasons 88/89 - 92/93	56
6.15	Accident Location by Motorized Snow Vehicle Passengers Killed and Injured - Riding Seasons 88/89 - 92/93	56
6.16	Registered Motorized Snow Vehicles	56
6.17	Selected Factors Relevant to All Motorized Snow Vehicle Accidents	56
6.18	Bicyclists Killed and Injured 1984 - 1993	57
6.19	Age of Bicyclist by Light Condition	57
6.20	Selected Factors Relevant to All Bicycle Accidents	57
7.1	Summary of Motor Vehicle Related Convictions	60
7.2	Motor Vehicle Convictions Related to the Highway Traffic Act - 1993	60
7.3	Motor Vehicle Convictions Related to the Criminal Code	60
7.4	Mandatory Suspensions Related to Criminal Code Convictions Issued	61
7.5	Mandatory Suspensions Related to Criminal Code Convictions at Year End	61
7.6	Demerit Point Suspensions by Driver Age	62
Figure	Title	
1	Total Number of Accidents in Ontario, 1984 -1993	1
1a	Per Cent of Hospital Admissions by Vehicle Type	3
2	Number of Involved Persons in Accidents by Severity of Injury	5
3	Accidents Per One Million Kilometres Travelled in Ontario, 1984 - 1993	19
5	Vehicle Population by Vehicle Class in Ontario - 1993	45
7	Per Cent of Motor Vehicle Related Convictions in Ontario - 1993	59

1

Overview

Total Number of Accidents in Ontario - 1984 to 1993



**1a. Synopsis**

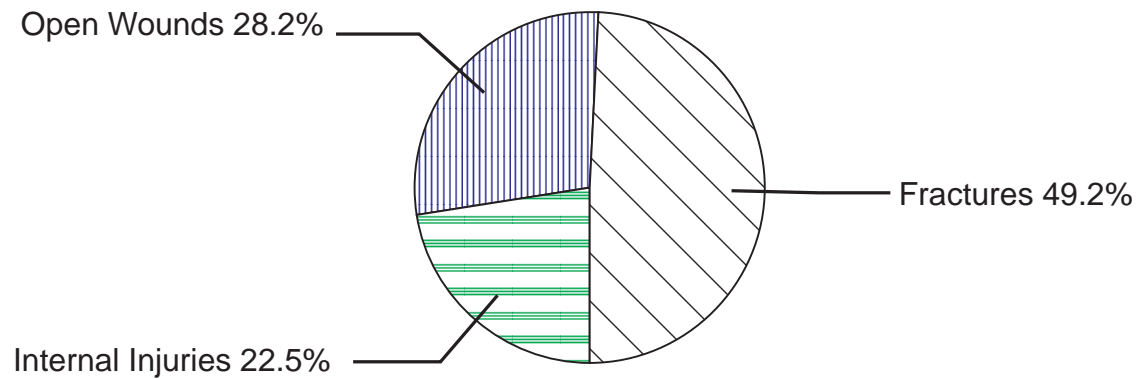
## Selected Statistics

Total Reportable Accidents	228,834
Total Drivers Involved in Accidents	405,065
Total Vehicles Involved in Accidents	424,171
Fatal Accidents	987
Personal Injury Accidents	58,932
Property Damage Accidents	168,915
Persons Killed	1,135
Drivers Killed	686
Drivers Killed (Impaired or Had Been Drinking)	227
Passengers Killed	296
Pedestrians Killed	146
Other Road Users Killed	7
Persons Injured	91,149
Estimated Ontario Population (1991)	9,624,670
Licensed Drivers	6,823,428
Registered Motor Vehicles	6,329,052
Estimated Vehicle Kilometers Travelled (in millions)	75,292
Number of Persons Killed in Motor Vehicle Accidents per 100,000 People in Ontario	11.8
Number of Persons Killed in Motor Vehicle Accidents per 100 Million Kilometers Travelled	1.5
Accident Rate per 100 Million Kilometers Travelled	303.9
Fatal Accident Rate per 100 Million Kilometers Travelled	1.3

## 1b. Selected Characteristics of Motor Vehicle Accidents in 1993

On January 1, 1988 a new Motor Vehicle Accident Report Form was introduced. These data includes the changes which were made on the form used by the police forces in Ontario, which forms the basis for the accident statistics compiled 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 Vehicle Accidents - 1993



Does not add to 100 per cent due to rounding.



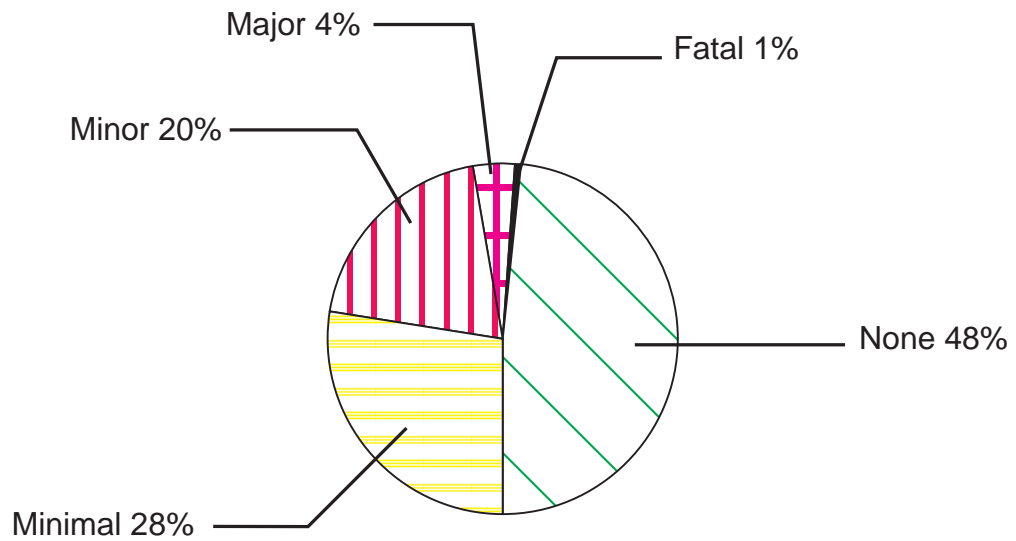
## 1c. The Health Perspective

Selected Diagnoses of Motor Vehicle Accident Injuries Hospitalized in Ontario, 1992/93		
	Hospital Admissions	Hospital Days of Stay
Fracture of skull	588	7,659
Fracture of neck and trunk	1,535	21,066
Fracture of upper limb	679	3,804
Fracture of lower limb	1,613	19,787
Dislocation, sprains and strains	419	1,741
Intracranial injury, excluding those with skull fracture	1,502	21,879
Internal injury of chest, abdomen and pelvis	711	6,431
Open wound of head, neck and trunk	293	973
Open wound of upper limb	60	270
Open wound of lower limb	86	814
Other injuries, burns and traumatic complications	2,330	70,922
<b>Total Admissions and Days</b>	<b>9,816</b>	<b>155,346</b>

Selected Surgical Procedures for Motor Vehicle Accident Injuries Hospitalized in Ontario, 1993		
	Hospital Admissions	Hospital Days of Stay
Operations on skull, brain and cerebral meninges	164	6,124
Operations on spinal cord and canal structures	68	1,191
Operations on nose, mouth and pharynx	69	328
Operations on chest wall, pleura, mediastinum and diaphragm	121	1,484
Operations on bone marrow and spleen	90	1,503
Operations on kidney	62	293
Operation on facial bones and joints	185	1,525
Reduction of fracture and dislocation	1,927	22,837
Repair and plastic operations on joint structures	156	3,072
Operations on skin and subcutaneous tissue	591	3,545
Other surgical procedure	690	10,420
Sub-total of surgical admission and days	4,123	52,322
No surgical procedures reported	5,693	103,024
<b>Total Admissions and Days</b>	<b>9,816</b>	<b>155,346</b>

**2 The People**

Per Cent of of Involved in Accidents by Severity of Injury - 1993



Does not add to 100 per cent due to rounding.

## 2a. People in Accidents

Table 2.1 Category of Involved Person by Severity of Injury  
in Fatal and Personal Injury Accidents 1993

Category of Involved Person	Severity of Injury					Total
	None	Minimal	Minor	Major	Fatal	
Drivers	52,551	28,122	18,330	3,176	595	102,774
Passenger*	32,536	16,525	11,948	2,045	296	63,350
Pedestrian	165	1,980	2,466	735	146	5,492
Cyclist	51	1,703	1,388	199	31	3,372
Cyclist Passenger	9	60	40	7	-	116
All Terrain Vehicle Driver	6	7	8	8	3	32
All Terrain Vehicle Passenger	3	3	1	-	1	8
Snow Vehicle Driver	4	14	10	16	3	47
Snow Vehicle Passenger	4	3	4	10	-	21
Motorcycle Driver	128	543	821	342	54	1,888
Motorcycle Passenger	36	130	196	73	5	440
Moped Driver	7	14	5	1	-	27
Moped Passenger	2	5	-	-	-	7
Hanger On	35	39	32	21	-	127
Other	959	63	50	6	1	1,079
<b>Total</b>	<b>86,496</b>	<b>49,211</b>	<b>35,299</b>	<b>6,639</b>	<b>1,135</b>	<b>178,780</b>

\* Includes bus passengers

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

Fatal	Person killed immediately or within 30 days of the motor vehicle accident.
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 accident. Includes minor abrasions, bruises and complaint of pain.
None	Uninjured person.

Table 2.2 Category of Person Killed by Age Groups 1993

Category of Person	Age Groups																Total
	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	
Drivers	-	-	1	10	7	14	20	15	66	143	114	77	43	42	42	1	595
Passenger*	12	10	16	13	12	19	19	10	34	46	26	16	19	24	20	-	296
Pedestrian	4	7	13	1	1	3	4	1	7	15	12	10	23	20	25	-	146
Cyclist	1	4	7	1	-	-	-	-	3	8	2	-	2	2	1	-	31
Cyclist Passenger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ATV Driver	-	-	-	1	-	-	-	-	1	1	-	-	-	-	-	-	3
ATV Passenger	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Snow Vehicle Driver	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	3
Snow Vehicle Passenger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Motorcycle Driver	-	-	1	1	1	-	1	4	16	16	6	6	2	-	-	-	54
Motorcycle Passenger	-	-	-	1	-	-	1	-	1	1	1	-	-	-	-	-	5
Moped Driver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moped Passenger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
<b>Total</b>	<b>17</b>	<b>21</b>	<b>39</b>	<b>28</b>	<b>21</b>	<b>36</b>	<b>45</b>	<b>30</b>	<b>129</b>	<b>230</b>	<b>161</b>	<b>110</b>	<b>89</b>	<b>90</b>	<b>88</b>	<b>1</b>	<b>1,135</b>

\* Includes 1 hanger on  
UK = Unknown

Table 2.3 Category of Persons Injured by Age Groups 1993

Category of	Age Groups																Total	
	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		
Person																		
Driver	44	7	65	818	1,190	1,341	1,349	1,374	5,554	14,138	10,425	6,435	3,639	2,182	993	74	49,628	
Passenger*	1,458	1,987	2,969	1,105	1,177	1,070	1,118	967	3,123	5,436	3,286	2,419	1,796	1,409	762	502	30,584	
Pedestrian	150	563	780	117	117	109	116	89	372	769	588	394	334	321	262	100	5,181	
Cyclist	34	302	825	109	97	86	76	104	351	579	249	131	64	31	12	240	3,290	
Cyclist Passenger	-	12	38	1	4	5	7	4	10	21	8	8	1	2	1	1	123	
ATV Driver	-	1	9	1	-	3	-	-	1	1	1	-	3	1	1	1	23	
ATV Passenger	-	1	2	-	-	-	-	-	1	-	-	-	-	-	-	-	4	
Snow Vehicle Driver	-	-	6	-	7	3	2	-	8	11	2	1	-	-	-	-	40	
Snow Vehicle Passenger	-	1	4	3	1	1	1	-	2	1	2	-	1	-	-	-	17	
Motorcycle Driver	2	-	14	31	68	82	84	105	387	487	286	118	24	8	4	6	1,706	
Motorcycle Passenger	-	2	16	17	31	19	34	22	97	105	45	11	1	1	-	6	407	
Moped Driver	-	-	1	-	-	1	-	-	6	4	1	4	1	2	-	-	20	
Moped Passenger	-	-	-	-	-	1	-	-	2	-	2	-	-	-	-	-	5	
Other	4	1	2	3	2	3	1	2	6	31	23	12	13	9	1	8	121	
Total	1,692	2,877	4,731	2,205	2,694	2,724	2,788	2,667	9,920	21,583	14,918	9,533	5,877	3,966	2,036	938	91,149	

\* Includes 92 hangers on

Table 2.4 Sex of Driver by  
Class of Accident 1993

Sex of Driver	Class of Accident			Total
	Fatal	Personal Injury	Property Damage	
Male	1,299	72,156	207,457	280,912
Female	381	35,113	84,959	120,453
Unknown	8	729	2,963	3,700
Total	1,688	107,998	295,379	405,065

Table 2.5 Driver Condition by  
Class of Accident 1993

Condition of Driver	Class of Accident			Total
	Fatal	Personal Injury	Property Damage	
Normal	1,137	88,158	236,758	326,053
Had Been Drinking	82	3,013	4,290	7,385
Ability Impaired -				
Alcohol over .08	210	1,774	2,594	4,578
Ability Impaired Alcohol	29	750	874	1,653
Ability Impaired Drugs	4	70	99	173
Fatigue	22	647	770	1,439
Medical Physical Defect	23	481	413	917
Inattentive	53	5,709	12,679	18,441
Other	6	215	493	714
Unknown	122	7,181	36,409	43,712
Total	1,688	107,998	295,379	405,065

Had Been Drinking      Driver had consumed alcohol 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%.

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.

Table 2.6 Driver Age by Driver Condition In all Accidents 1993\*

Driver Age	Driver Condition						Total
	Normal	Had	Impaired	Ability	Other	Unknown	
		Been	Alcohol	Impaired			
		Drinking	over .08	Alcohol			
Under 16	1,395	14	4	1	251	147	1,812
16	5,143	63	11	9	532	295	6,053
17	7,880	133	43	8	705	458	9,227
18	8,655	190	86	14	790	582	10,317
19	8,326	293	103	27	694	588	10,031
20	8,545	301	126	41	663	558	10,234
21-24	35,161	1,295	561	204	2,346	2,654	42,221
25-34	91,943	2,489	1,609	595	5,553	7,024	109,213
35-44	69,135	1,379	1,123	430	3,721	4,746	80,534
45-54	43,200	664	538	188	2,310	2,899	49,799
55-64	24,671	269	244	64	1,616	1,580	28,444
65-74	14,355	120	95	30	1,249	932	16,781
75 & over	6,006	24	21	7	897	416	7,371
Unknown	1,638	151	14	35	357	20,833	23,028
Total	326,053	7,385	4,578	1,653	21,684	43,712	405,065

\* Includes bicyclists, drivers of all-terrain vehicles, etc.

Table 2.7 Recorded Occurrence of Alcohol  
In Drivers Killed 1993\*

Recorded Occurrence	Drivers	Drivers
	Number	%
Apparently Normal	356	61.1
Had Been Drinking	45	7.7
Alcohol over .08	175	30.0
Ability Impaired Alcohol	7	1.2
Total	583	100.0

\* Excludes cases where alcohol usage was unknown and where driver condition was other than normal or alcohol involved.

Table 2.8 Apparent Driver Action by  
Class of Accident 1993

Apparent Driver Action	Class of Accident			Total
	Fatal	Personal Injury	Property Damage	
Driving Properly	729	49,923	131,866	182,518
Following Too Close	7	7,794	21,187	28,988
Speed Too Fast	134	1,773	2,393	4,300
Speed Too Fast for Conditions	133	7,141	19,391	26,665
Speed Too Slow	2	63	189	254
Improper Turn	20	3,719	13,042	16,781
Disobey Traffic Control	67	5,286	8,067	13,420
Fail to Yield				
Right of Way	110	10,896	29,838	40,844
Improper Passing	31	901	3,664	4,596
Lost Control	199	8,313	20,965	29,477
Wrong Way on				
One Way Road	5	127	246	378
Improper Lane Change	14	1,873	10,136	12,023
Other*	188	7,216	17,295	24,699
Unknown	49	2,973	17,100	20,122
<b>Total</b>	<b>1,688</b>	<b>107,998</b>	<b>295,379</b>	<b>405,065</b>

\* Includes actions defined as careless driving, inattentive driving, fell asleep, hit and run, wrong side of road, improper parking, impaired, illegally parked, dangerous driving, inexperience, etc.

Table 2.9 Seat Belt Usage by Severity of Driver Injury in Fatal and Personal Injury Accidents 1993

Safety Equipment Used	Severity of Injury					Total
	Killed	Major	Minor	Minimal	Not Injured	
Seat Belt Used	299	2162	15,824	26,042	44,224	88,551
Other Equipment*	2	38	159	159	75	433
Equipment Not used	228	610	1,336	884	684	3,742
No Safety Equipment	1	10	42	51	89	193
Use Unknown	65	356	969	986	7,479	9,855
<b>Total</b>	<b>595</b>	<b>3,176</b>	<b>18,330</b>	<b>28,122</b>	<b>52,551</b>	<b>102,774</b>

\* Other equipment includes helmets, including construction, motorcycle helmets, etc. worn in a motor vehicle. It also includes the use of airbags. Seat belts usage in conjunction with airbag deployment is unknown.



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

Table 2.10 Seat Belt Usage by Severity of Passenger Injury in Fatal and Personal Injury Accidents 1993

Safety Equipment Used	Severity of Injury					Total
	Killed	Major	Minor	Minimal	Not Injured	
Seat Belt Used	163	1290	9,172	13,859	23,449	47,933
Child Safety Seat Used Incorrectly	1	3	20	23	93	140
Child Safety Seat Used Correctly	5	22	191	384	1,932	2,534
Other Equipment*		6	26	20	50	102
Equipment Not used	90	465	1,416	999	812	3,782
No Safety Equipment	5	81	518	576	1,163	2,343
Use Unknown	32	190	590	619	4,945	6,376
<b>Total</b>	<b>296</b>	<b>2,057</b>	<b>11,933</b>	<b>16,480</b>	<b>32,444</b>	<b>63,210</b>

Table 2.11 Restraints Use for Children (0 - 4 Years) Killed in Accidents 1989-1993

Year	Child Restraint Used	Child Restraint	Lap/Lap &	Restraint	Available	Use	Total
	Used Correctly	Used Incorrectly	Shoulder Belt	Not Available	Not Used	Unknown	
1989	6	2	3	2	-	5	18
1990	5	1	7	-	3	4	20
1991	2	1	5	1	3	1	13
1992	8	4	4	3	2	-	21
1993	5	1	5	1	-	-	12

Table 2.12 Restraint Use for Children (0 - 4 Years) Involved in Fatal and Personal Injury Accidents by Severity of Injury 1993

Restraint Used	Injury Level		
	Major / Fatal %	Minimal/Minor %	No Injuries %
Child Restraint Used Correctly	31.7	38.7	49.5
Child Restraint Used Incorrectly	4.9	2.5	2.3
Lap/Lap-Shoulder Belt	39.0	47.8	41.4
Not Available	6.1	3.8	2.2
Available/Not Used	13.4	4.8	1.5
Other	-	-	-
Unknown	4.9	2.3	2.9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

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 1993

Condition of Pedestrian	Killed	Injured
Normal	61	3374
Had Been Drinking	7	313
Ability Impaired Alcohol over .08	19	24
Ability Impaired Alcohol	1	97
Ability Impaired Drugs	1	13
Fatigue	-	5
Medical or Physical Defect	6	77
Inattentive	15	667
Other	4	71
Unknown	32	540
Total	146	5,181

Table 2.14 Apparent Pedestrian Action  
by Severity of Injury 1993

Apparent Pedestrian Action	Killed	Injured
Crossing Intersection With Right of Way	12	1,243
Crossing Intersection Without Right of Way	22	818
Crossing Intersection No Traffic Control	33	462
Crossing Pedestrian Crossover	2	142
Crossing Marked Crosswalk Without Right of Way	2	104
Walking on Roadway With Traffic	7	120
Walking on Roadway Against Traffic	5	86
On Sidewalk or Shoulder	13	378
Playing or Working on Highway	2	97
Coming from Behind Parked Vehicle or Object	2	238
Running onto Roadway	21	696
Getting On/Off School Bus*	-	16
Getting On/Off Vehicle	-	76
Pushing/Working on Vehicle	2	55
Other	23	650
Unknown	-	-
Total	146	5,181

\* Calendar Year

## 2b. Putting the People in Context

Table 2.15 Category of Persons Killed and Injured 1984-1993

Year	Ontario												
	Population	Driver		Passenger*		Pedestrian		All Others		Persons Killed		Persons Injured	
	(Est.)									In All Classes		In All Classes	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Number	Rate Per 100,000	Number	Rate Per 100,000
1984	9,024,000	460	48,674	282	31,865	189	5,767	201	10,924	1,132	12.5	97,230	1,077.5
1985	9,066,000	502	55,859	333	35,717	182	6,099	174	11,494	1,191	13.1	109,169	1,204.2
1986	9,181,900	511	57,233	289	34,915	153	5,781	149	10,910	1,102	12.0	108,839	1,185.4
1987	9,270,700	545	64,588	318	39,596	187	5,939	179	10,966	1,229	13.3	121,089	1,306.2
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

\* Excludes Motorcycle passengers, which are included with 'All Others'.

Table 2.16 Sex of Driver Population by Age Groups 1993

Sex of Driver	Age Groups							Total
	16-19	20-24	25-34	35-44	45-54	55-64	65+	
Male	176,735	333,987	880,480	821,007	613,299	433,594	440,741	3,699,843
Female	149,654	287,947	775,093	745,076	523,066	325,246	317,503	3,123,585
Total	326,389	621,934	1,655,573	1,566,083	1,136,365	758,840	758,244	6,823,428

Table 2.17 Driver Population by Age Groups 1984-1993

Year	Age Groups							Total
	16-19	20-24	25-34	35-44	45-54	55-64	65+	
1984	300,364	689,476	1,396,560	1,155,421	806,207	671,271	494,612	5,513,911
1985	293,908	687,467	1,443,327	1,205,614	820,397	685,640	524,069	5,660,422
1986	295,107	676,283	1,494,658	1,257,724	840,322	697,254	556,451	5,817,799
1987	305,886	662,357	1,544,926	1,306,853	866,022	708,865	583,196	5,978,105
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

Table 2.18 Driver Licence Class by Sex 1993

Licence Class	Driver Sex				Total	%
	Male	%	Female	%		
A	76,721	2.07	938	.03	77,659	1.14
AM	27,423	.74	147	.00	27,570	.40
AB	3,910	.11	306	.01	4,216	.06
AC	11,552	.31	198	.01	11,750	.17
ABM	2,083	.06	110	.00	2,193	.03
ACM	6,072	.16	65	.00	6,137	.09
B	17,118	.46	16,013	.51	33,131	.49
BM	4,800	a.13	942	.03	5,742	.08
C	7,004	.19	458	.01	7,462	.11
CM	2,056	.06	60	.00	2,116	.03
D	203,301	5.49	10,407	.33	213,708	3.13
DM	48,519	1.31	689	.02	49,208	.72
DE	116	.00	19	0.00	135	.00
DF	2,178	.06	91	.00	2,269	.03
DEM	31	0.00	1	0.00	32	0.00
DFM	1,029	.03	16	0.00	1,045	.02
E	1,475	.04	2,437	.08	3,912	.06
EM	210	.01	70	.00	280	.00
F	8,316	.22	5,266	.17	13,582	.20
FM	2,225	.06	321	.01	2,546	.04
G	2,924,940	79.06	3,033,946	97.13	5,958,886	87.33
GM	345,690	9.34	50,587	1.62	396,277	5.81
M	3,074	.08	498	.02	3,572	.05
Total	3,699,843	54.22	3,123,585	45.78	6,823,428	100.00

Table 2.19 Licensed Drivers, Total Accidents, Persons Killed and Injured 1931-1993

Year	Licensed	Total	Persons	Persons
	Drivers	Accidents	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

Table 2.19 Licensed Drivers, Total Accidents, Persons Killed and Injured 1931-1993 **Continued**

Year	Licensed	Total	Persons	Persons
	Drivers	Accidents	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

Table 2.20 Original Licences Issued  
1989-1993

Year	Original Licences
1989	279,814
1990	267,894
1991	252,821
1992	227,434
1993	246,387

Table 2.21 Temporary Licence Permits  
Issued for Class L's and  
Class R's 1989-1993

Year	Licence Permits	
	L	R
1989	320,921	27,167
1990	301,569	24,828
1991	324,418	27,740
1992	299,064	22,251
1993	286,619	N/A*

\* Data not available due to a change in collection method.

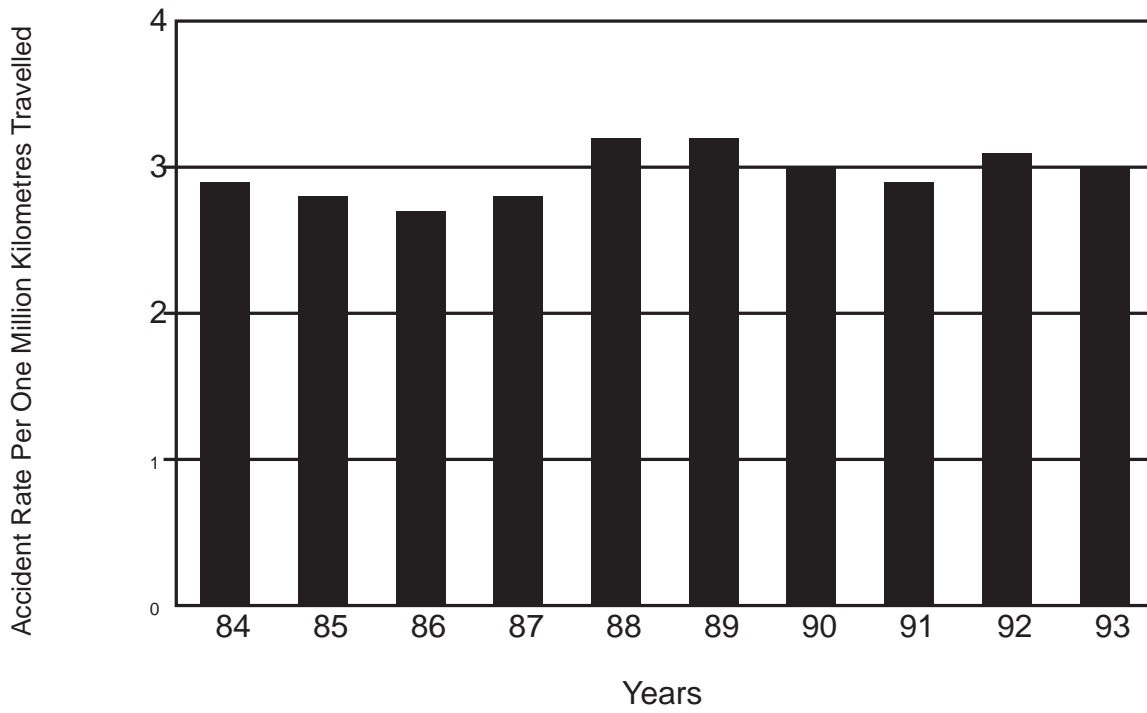
Table 2.22 Driver Age Groups - Number Licensed, Accident Involvement and  
Per Cent Involved in Accidents 1993

Drivers Age	Drivers Licensed			Drivers Involved in Accidents*			% of Drivers of Each Age Involved in Accidents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 16	-	-	-	344	106	450	-	-	-
16	21,619	17,663	39,282	3,701	2,220	5,921	17.1	12.6	15.1
17	44,380	37,787	82,167	5,865	3,230	9,095	13.2	8.5	11.1
18	53,113	45,410	98,523	6,688	3,511	10,199	12.6	7.7	10.4
19	57,623	48,794	106,417	6,629	3,300	9,929	11.5	6.8	9.3
20	60,123	51,100	111,223	6,847	3,261	10,108	11.4	6.4	9.1
21-24	273,864	236,847	510,711	28,423	13,330	41,753	10.4	5.6	8.2
25-34	880,480	775,093	1,655,573	74,975	33,260	108,235	8.5	4.3	6.5
35-44	821,007	745,076	1,566,083	52,703	27,146	79,849	6.4	3.6	5.1
45-54	613,299	523,066	1,136,365	34,030	15,359	49,389	5.5	2.9	4.3
55-64	433,594	325,246	758,840	20,624	7,609	28,233	4.8	2.3	3.7
65-74	313,564	233,767	547,331	11,622	5,056	16,678	3.7	2.2	3.0
75 & over	127,177	83,736	210,913	5,169	2,175	7,344	4.1	2.6	3.5
Unknown	-	-	-	-	-	3,496	-	-	-
Total	3,699,843	3,123,585	6,823,428	257,620	119,563	380,679	7.0	3.8	5.6

\* This table excludes drivers of non motor vehicles, i. e. bicyclists, snow vehicle operators, etc.

**3 The Accident**

Accident Rate Per One Million Kilometre Travelled in Ontario - 1984 to 1993





### 3a. Types of Accidents

Table 3.1 Class of Accident 1984-1993

Year	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
1984	1,011	66,101	127,670	194,782
1985	1,036	73,840	114,874	189,750
1986	951	73,703	112,632	187,286
1987	1,085	80,432	121,914	203,431
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

Table 3.2 Accident Rate Per One Million  
Kilometers Travelled 1984-1993

Year	Accident Rate
1984	2.9
1985	2.8
1986	2.7
1987	2.8
1988	3.2
1989	3.2
1990	3.0
1991	2.9
1992	3.1
1993	3.0

Table 3.3 Motor Vehicles Involved in Accidents Based on Initial Impact 1993\*

Motor Vehicle in Accident Involving	Class of Accident			Total
	Fatal	Personal Injury	Property Damage	
Moveable Objects:				
Other Motor Vehicles	1,029	82,089	243,776	326,894
Unattended Vehicles	22	825	15,905	16,752
Pedestrian	134	4,600	100	4,834
Cyclist	32	3,358	398	3,788
Railway Train	7	32	39	78
Street Car	-	48	240	288
Farm Tractor	1	48	108	157
Animal Domestic	3	95	538	636
Animal Wild	4	347	6,655	7,006
Other Moveable Objects	5	69	189	263
Sub-total	1,237	91,511	267,948	360,696
Fixed Objects:				
Cable Guide Rail	2	91	493	586
Concrete Guide Rail	-	209	509	718
Steel Guide Rail	6	300	1,308	1,614
Pole (Utility Tower)	5	547	1,537	2,089
Pole (Sign/Parking Meter)	3	141	827	971
Fence/Noise Barrier	-	47	281	328
Culvert	1	25	54	80
Bridge Support	-	50	124	174
Rock Face	-	27	48	75
Snow Bank or Drift	2	80	254	336
Ditch	9	426	810	1,245
Curb	19	750	2,106	2,875
Crash Cushion		14	32	46
Building or Wall	2	48	187	237
Water Course	-	3	4	7
Construction Marker	-	11	47	58
Tree, Shrub, or Stump	7	183	423	613
Other Fixed Object	9	274	1,361	1,644
Sub-total	65	3,226	10,405	13,696
Other Events:				
Ran Off Road	193	4,869	8,690	13,752
Skidding/Sliding	176	7,106	18,035	25,317
Jackknifing	-	33	138	171
Load Spill	-	16	76	92
Fire/Explosion	-	16	515	531
Submersion	-	1	3	4
Rollover	7	344	403	754
Debris on Road	5	106	680	791
Debris off Vehicle	5	86	789	880
Other Non-Collision Event	39	2,146	5,302	7,487
Sub-total	425	14,723	34,631	49,779
Total	1,727	109,460	312,984	424,171

\* Table 3.3 reflects the number of motor vehicles involved in accidents by initial impact.

Table 3.4 Initial Impact Type  
by Class of Accident 1993

Initial Impact Type	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
Approaching	253	1,876	2,492	4,621
Angle	126	7,985	17,311	25,422
Rear End	56	14,371	34,276	48,703
Sideswipe	25	3,308	18,391	21,724
Turning Movement	50	11,705	36,142	47,897
Single Motor Vehicle Unattended	21	841	16,024	16,886
Single Motor Vehicle Other	456	18,704	41,875	61,035
Other	-	141	2,399	2,540
Unknown	-	1	5	6
Total	987	58,932	168,915	228,834

**3b. Time and Environment**

Table 3.5 Month of Occurrence by Class of Accident 1993

Month of Occurrence	Class of Accident						Total	%
	Fatal		Personal		Property			
		%	Injury	%	Damage	%		
January	65	6.6	4,874	8.3	16,977	10.1	21,916	9.6
February	68	6.9	4,380	7.4	16,003	9.5	20,451	8.9
March	62	6.3	4,037	6.9	14,384	8.5	18,483	8.1
April	65	6.6	4,030	6.8	10,804	6.4	14,899	6.5
May	84	8.5	4,794	8.1	11,540	6.8	16,418	7.2
June	68	6.9	5,354	9.1	12,836	7.6	18,258	8.0
July	106	10.7	5,244	8.9	12,344	7.3	17,694	7.7
August	103	10.4	5,452	9.3	12,221	7.2	17,776	7.8
September	90	9.1	5,279	9.0	13,640	8.1	19,009	8.3
October	101	10.2	5,200	8.8	14,311	8.5	19,612	8.6
November	89	9.0	4,956	8.4	16,364	9.7	21,409	9.4
December	86	8.7	5,332	9.0	17,491	10.4	22,909	10.0
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

Table 3.6 Day of Week by Class of Accident 1993

Day of Occurrence	Class of Accident						Total	%
	Fatal		Personal		Property			
		%	Injury	%	Damage	%		
Monday	107	10.8	7,689	13.0	22,197	13.1	29,993	13.1
Tuesday	129	13.1	8,011	13.6	23,074	13.7	31,214	13.6
Wednesday	103	10.4	7,966	13.5	23,820	14.1	31,889	13.9
Thursday	138	14.0	8,716	14.8	24,408	14.4	33,262	14.5
Friday	181	18.3	10,414	17.7	30,899	18.3	41,494	18.1
Saturday	184	18.6	9,095	15.4	25,694	15.2	34,973	15.3
Sunday	145	14.7	7,041	11.9	18,823	11.1	26,009	11.4
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

Table 3.7 Hour of Occurrence by Class of Accident 1993

Hour of Occurrence A.M.	Class of Accident						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
12 to 1 a.m.	37	3.7	1,215	2.1	3,268	1.9	4,520	2.0
1 to 2 a.m.	49	5.0	1,480	2.5	3,787	2.2	5,316	2.3
2 to 3 a.m.	37	3.7	983	1.7	2,627	1.6	3,647	1.6
3 to 4 a.m.	21	2.1	614	1.0	1,567	0.9	2,202	1.0
4 to 5 a.m.	11	1.1	394	0.7	1,201	0.7	1,606	0.7
5 to 6 a.m.	16	1.6	450	0.8	1,393	0.8	1,859	0.8
Sub total	171	17.3	5,136	8.7	13,843	8.2	19,150	8.4
6 to 7 a.m.	30	3.0	1,077	1.8	3,171	1.9	4,278	1.9
7 to 8 a.m.	43	4.4	2,000	3.4	6,187	3.7	8,230	3.6
8 to 9 a.m.	45	4.6	3,179	5.4	9,492	5.6	12,716	5.6
9 to 10 a.m.	24	2.4	2,321	3.9	7,435	4.4	9,780	4.3
10 to 11 a.m.	30	3.0	2,541	4.3	7,751	4.6	10,322	4.5
11 to 12 noon	39	4.0	3,137	5.3	9,044	5.4	12,220	5.3
Sub total	211	21.4	14,255	24.2	43,080	25.5	57,546	25.1
Hour of Occurrence P.M.								
12 to 1 p.m.	37	3.7	3,481	5.9	10,259	6.1	13,777	6.0
1 to 2 p.m.	43	4.4	3,477	5.9	9,974	5.9	13,494	5.9
2 to 3 p.m.	47	4.8	3,646	6.2	10,484	6.2	14,177	6.2
3 to 4 p.m.	61	6.2	4,726	8.0	12,796	7.6	17,583	7.7
4 to 5 p.m.	55	5.6	4,888	8.3	13,627	8.1	18,570	8.1
5 to 6 p.m.	73	7.4	4,590	7.8	12,740	7.5	17,403	7.6
Sub total	316	32.0	24,808	42.1	69,880	41.4	95,004	41.5
6 to 7 p.m.	68	6.9	3,652	6.2	9,954	5.9	13,674	6.0
7 to 8 p.m.	43	4.4	2,966	5.0	8,124	4.8	11,133	4.9
8 to 9 p.m.	39	4.0	2,352	4.0	6,388	3.8	8,779	3.8
9 to 10 p.m.	42	4.3	2,220	3.8	6,092	3.6	8,354	3.7
10 to 11 p.m.	40	4.1	1,731	2.9	4,960	2.9	6,731	2.9
11 to 12 midnight	50	5.1	1,590	2.7	4,527	2.7	6,167	2.7
Sub total	282	28.6	14,511	24.6	40,045	23.7	54,838	24.0
Unknown	7	0.7	222	0.4	2,067	1.2	2,296	1.0
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

Table 3.8 Statutory Holidays, Holiday Weekends - Fatal Accidents, Persons Killed and Injured 1993

Statutory Holiday	Number of Fatal Accidents	Drivers		Passengers		Others		Total	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Easter Weekend	8	5	3	3	3	-	-	8	6
Victoria Day	7	6	5	3	4	-	-	9	9
Canada Day	7	6	-	-	2	1	-	7	2
Civic Holiday (Simcoe Day)	7	4	6	3	10	-	-	7	16
Labour Day	16	11	6	9	14	2	-	22	20
Thanksgiving Day	14	11	11	5	25	1	1	17	37
Christmas/Boxing Day	5	4	5	3	9	-	-	7	14

Table 3.9 Light Condition by Class of Accident 1993

Light Condition	Class of Accident						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Daylight	511	51.8	40,256	68.3	112,587	66.7	153,354	67.0
Dawn	14	1.4	736	1.2	2,289	1.4	3,039	1.3
Dusk	43	4.4	1,993	3.4	6,089	3.6	8,125	3.6
Darkness	419	42.5	15,926	27.0	47,732	28.3	64,077	28.0
Other	-	-	21	-	218	0.1	239	0.1
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

Table 3.10 Visibility by Class of Accident 1993

Visibility	Class of Accident						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Clear	717	72.6	45,143	76.6	123,777	73.3	169,637	74.1
Rain	125	12.7	7,844	13.3	22,157	13.1	30,126	13.2
Snow	101	10.2	4,178	7.1	17,092	10.1	21,371	9.3
Freezing Rain	15	1.5	526	0.9	1,832	1.1	2,373	1.0
Drifting Snow	8	0.8	427	0.7	1,569	0.9	2,004	0.9
Strong Wind	2	0.2	108	0.2	356	0.2	466	0.2
Fog, Mist, Smoke, or Dust	17	1.7	599	1.0	1,428	0.8	2,044	0.9
Other	2	0.2	107	0.2	704	0.4	813	0.4
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

### 3c. The Accident Location

Table 3.11 Road Jurisdiction by Class of Accident 1993

Road Jurisdiction	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
Municipal (Excl. Twp. Rd.)	192	29,397	89,832	119,421
Provincial Highway	429	12,950	34,896	48,275
Township	103	2,872	7,692	10,667
County or District	123	2,617	6,336	9,076
Regional Municipality	135	10,774	29,321	40,230
Federal	5	230	628	863
Other	-	92	210	302
<b>Total</b>	<b>987</b>	<b>58,932</b>	<b>168,915</b>	<b>228,834</b>

Table 3.12 Road Jurisdiction for All Accidents 1984-1993

Road Jurisdiction	Year										Total
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
Municipal	136,456	128,809	120,799	135,949	159,228	139,926	117,218	112,651	117,800	119,421	1,288,257
Provincial	36,110	38,976	38,002	40,825	44,772	48,944	43,513	44,234	46,537	48,275	430,188
Township	11,628	10,562	10,092	10,460	12,277	11,882	10,684	10,332	10,777	10,667	109,361
County or District	6,248	7,002	7,027	7,024	7,527	8,773	8,582	8,482	9,186	9,076	78,927
Regional Municipality*	3,393	3,166	10,185	7,863	3,620	36,237	39,004	36,956	38,810	40,230	219,464
Federal**	-	-	-	-	748	940	913	769	899	863	5,132
Other	947	1,235	1,181	1,310	226	336	274	245	240	302	6,296
<b>Total</b>	<b>194,782</b>	<b>189,750</b>	<b>187,286</b>	<b>203,431</b>	<b>228,398</b>	<b>247,038</b>	<b>220,188</b>	<b>213,669</b>	<b>224,249</b>	<b>228,834</b>	<b>2,137,625</b>

\* Some accidents occurring on regional municipal roads were recorded as occurring on municipal roads prior to 1989.

\*\* Since January 1, 1988 the accident report form allows the recording of jurisdiction for federal roads.

Table 3.13 Road Location by Class of Accident 1993

Road Location	Class of Accident						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Non-intersection	647	65.6	21,950	37.2	68,352	40.5	90,949	39.7
Intersection Related	86	8.7	11,735	19.9	35,357	20.9	47,178	20.6
In Intersection	163	16.5	17,536	29.8	36,604	21.7	54,303	23.7
At/Near Private Drive	67	6.8	6,889	11.7	26,129	15.5	33,085	14.5
At Railway	8	0.8	119	0.2	282	0.2	409	0.2
Underpass or Tunnel	1	0.1	85	0.1	383	0.2	469	0.2
Overpass or Bridge	15	1.5	458	0.8	1,332	0.8	1,805	0.8
Other	-	-	160	0.3	476	0.3	636	0.3
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0

Table 3.14 Road Surface Condition by Class of Accident 1993

Road Surface Condition	Class of Accident						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Dry	654	66.3	37,472	63.6	99,298	58.8	137,424	60.1
Wet	188	19.0	13,402	22.7	37,679	22.3	51,269	22.4
Loose Snow	34	3.4	1,813	3.1	8,179	4.8	10,026	4.4
Slush	30	3.0	1,291	2.2	4,813	2.8	6,134	2.7
Packed Snow	19	1.9	1,478	2.5	6,866	4.1	8,363	3.7
Ice	54	5.5	2,938	5.0	10,372	6.1	13,364	5.8
Mud	-	-	19	-	76	-	95	-
Loose Sand or Gravel	6	0.6	364	0.6	806	0.5	1,176	0.5
Spilled Liquid	-	-	25	-	50	-	75	-
Other	2	0.2	130	0.2	776	0.5	908	0.4
Total	987	100.0	58,932	100.0	168,915	100.0	228,834	100.0





1993

Ontario  
Road Safety  
Annual Report

Place of  
Accident in  
Ontario

29

**4**

**Place of Accident in Ontario**



#### 4. Place of Accident in Ontario

Table 4.1 Place of Accident - Estimated Population, Class of Accident, Persons, Killed, Persons Injured and Vehicle Registrations 1993

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal	Property	Killed	Injured	
		Accidents		Injury	Damage			
ONTARIO	9,624,670	228,834	987	58,932	168,915	1,135	91,149	6,329,052
BLIND RIVER, T	3,913	53	-	11	42	-	14	
ELLIOT LAKE, C	M 13,391	97	-	18	79	-	25	
MICHIPICOTEN, TP	M 4,139	1	-	-	1	-	-	
SAULT STE MARIE, C	M 79,366	1,693	2	435	1,256	2	631	
PROVINCIAL HIGHWAY	-	783	17	235	531	19	414	
OTHER AREAS	15,737	289	2	83	204	2	131	
ALGOMA	116,546	2,916	21	782	2,113	23	1,215	87,036
BRANTFORD, C	M 77,713	1,824	6	413	1,405	6	607	
BRANTFORD, TP	6,327	2	-	1	1	-	1	
PARIS, T	M 8,242	99	1	20	78	1	25	
PROVINCIAL HIGHWAY	-	423	2	130	291	2	229	
OTHER AREAS	13,057	391	4	113	274	4	190	
BRANT	105,339	2,739	13	677	2,049	13	1,052	73,019
AMABEL, TP	3,548	3	-	1	2	-	1	
BRANT, TP	3,255	1	-	-	1	-	-	
CARRICK, TP	2,308	3	-	1	2	-	3	
CHESLEY, T	1,855	6	-	1	5	-	1	
KINCARDINE, T	M 2,944	72	-	9	63	-	13	
PORT ELGIN, T	M 6,490	83	-	24	59	-	41	
SAUGEEN, TP	1,737	1	-	-	1	-	-	
SOUTHAMPTON, T	M 2,940	29	-	8	21	-	11	
WALKERTON, T	M 4,788	50	-	10	40	-	15	
WIARTON, T	2,237	28	1	8	19	1	8	

Legend

T	town	Other Areas -	Jurisdictions	M	Municipal Police Force
C	city		with less than		
VL	Village		1,500 population		
TP	township				

\* Source: Ontario Ministry of Municipal Affairs Municipal Directory 1991.

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

The method used in determining the population is different from previous methods used.

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal	Property	Killed	Injured	
		Accidents		Injury	Damage			
PROVINCIAL HIGHWAY	-	240	3	63	174	3	127	
OTHER AREAS	28,981	599	5	169	425	5	278	
BRUCE	61,083	1,115	9	294	812	9	498	49,591
COCHRANE, T	4,403	48	-	12	36	-	19	
HEARST, T	5,962	72	-	11	61	-	13	
IROQUOIS FALLS, T	5,823	41	-	7	34	-	10	
KAPUSKASING, T	M 10,328	109	-	19	90	-	27	
SMOOTH ROCK FALLS, T	2,004	19	-	-	19	-	-	
TIMMINS, C	M 46,697	690	2	218	470	2	310	
PROVINCIAL HIGHWAY	-	591	11	183	397	13	285	
OTHER AREAS	10,213	242	1	60	181	1	87	
COCHRANE	85,430	1,812	14	510	1,288	16	751	60,612
AMARANTH, TP	3,146	4	-	-	4	-	-	
EAST GARAFRAXA, TP	2,037	1	-	-	1	-	-	
MELANCTHON, TP	2,320	1	-	-	1	-	-	
MONO, TP	5,766	4	-	-	4	-	-	
ORANGEVILLE, T	M 17,227	316	1	55	260	1	81	
SHELBURNE, T	M 3,352	35	-	6	29	-	11	
PROVINCIAL HIGHWAY	-	297	4	84	209	5	167	
OTHER AREAS	4,928	407	8	99	300	10	172	
DUFFERIN	38,776	1,065	13	244	808	16	431	28,811
MORRISBURG, VL	2,301	22	-	3	19	-	3	
MOUNTAIN, TP	3,223	2	-	-	2	-	-	
WILLIAMSBURGH, TP	3,211	1	-	1	-	-	1	
WINCHESTER, TP	3,279	21	-	3	18	-	5	
WINCHESTER, VL	2,261	5	-	2	3	-	2	
PROVINCIAL HIGHWAY	-	170	1	58	111	1	105	(Veh. Reg.
OTHER AREAS	5,832	201	4	45	152	4	72	included in
DUNDAS	20,107	422	5	112	305	5	188	Stormont)
AJAX, T	54,542	547	1	158	388	1	232	
BROCK, TP	10,530	89	-	14	75	-	21	
NEWCASTLE, T	47,262	251	-	65	186	-	89	
OSHAWA, C	123,681	2,201	5	550	1,646	5	825	
PICKERING, T	64,946	685	1	155	529	1	218	
SCUGOG, TP	17,053	179	2	42	135	2	73	
UXBRIDGE, TP	13,241	194	1	51	142	2	85	
WHITBY, T	59,152	1,010	5	259	746	8	408	
PROVINCIAL HIGHWAY	-	1,834	14	516	1,304	15	888	
OTHER AREAS	-	748	2	190	556	2	289	

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured	
DURHAM	390,407	7,738	31	2,000	5,707	36	3,128	264,249
ALDBOROUGH, TP	3,627	2	-	-	2	-	-	
AYLMER, T	M 5,965	91	-	12	79	-	14	
BAYHAM, TP	4,097	1	-	-	1	-	-	
MALAHIDE, TP	5,587	3	-	-	3	-	-	
PORT STANLEY, VL	2,033	17	-	5	12	-	6	
ST THOMAS, C	M 29,558	417	-	104	313	-	139	
YARMOUTH, TP	7,605	3	-	1	2	-	2	
PROVINCIAL HIGHWAY	-	442	6	144	292	7	257	
OTHER AREAS	14,264	466	13	144	309	15	235	
ELGIN	72,736	1,442	19	410	1,013	22	653	56,546
AMHERSTBURG, T	M 8,808	81	-	23	58	-	33	
ANDERDON, TP	M 5,469	14	-	5	9	-	9	
BELLE RIVER, T	4,172	21	-	6	15	-	9	
COLCHESTER SOUTH, TP	M 5,262	3	-	-	3	-	-	
ESSEX, T	M 6,601	61	-	6	55	-	6	
GOSFIELD NORTH, TP	4,200	1	-	1	-	-	1	
HARROW, T	2,510	27	-	5	22	-	6	
KINGSVILLE, T	M 5,779	54	-	15	39	-	15	
LEAMINGTON, T	M 13,984	346	2	53	291	2	63	
MAIDSTONE, TP	9,755	6	-	1	5	-	2	
MALDEN, TP	3,099	8	-	4	4	-	7	
MERSEA, TP	M 8,355	4	-	3	1	-	4	
ROCHESTER, TP	4,382	1	-	-	1	-	-	
ST CLAIR BEACH, VL	M 3,542	25	-	5	20	-	5	
SANDWICH SOUTH, TP	5,554	4	-	1	3	-	1	
SANDWICH WEST, TP**	M 16,616	1	-	1	-	-	1	
TECUMSEH, T	10,432	96	1	37	58	1	56	
TILBURY NORTH, TP	3,266	2	-	-	2	-	-	
TILBURY WEST, TP	1,677	2	-	1	1	-	1	
WINDSOR, C	M 190,954	4,741	4	1,281	3,456	4	1,876	
PROVINCIAL HIGHWAY	-	647	10	210	427	15	371	
OTHER AREAS	11,571	1,026	18	332	676	19	504	
ESSEX	325,988	7,171	35	1,990	5,146	41	2,970	210,269
KINGSTON, C	M 60,930	1,307	1	372	934	1	518	
KINGSTON, TP	37,412	28	-	7	21	-	7	

\*\* Now called Town of Lasalle.

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured	
LOUGHBOROUGH, TP	4,133	3	-	-	3	-	-	
PITTSBURGH, TP	11,416	3	-	-	3	-	-	
PORTLAND, TP	4,345	1	-	1	-	-	2	
PROVINCIAL HIGHWAY	-	749	8	208	533	11	377	
OTHER AREAS	11,231	825	4	225	596	4	375	
FRONTENAC	129,467	2,916	13	813	2,090	16	1,279	83,745
ALEXANDRIA, T	M 3,194	68	-	18	50	-	27	
CHARLOTTENBURGH, TP	7,499	1	-	-	1	-	-	
KENYON, TP	3,286	3	-	1	2	-	2	
LANCASTER, TP	3,447	4	-	-	4	-	-	
PROVINCIAL HIGHWAY	-	317	3	103	211	3	164	(Veh. Reg.
OTHER AREAS	4,483	225	3	65	157	3	102	included in
GLENGARRY	21,909	618	6	187	425	6	295	Stormont)
AUGUSTA, TP	7,115	2	-	-	2	-	-	
KEMPTVILLE, T	M 2,437	22	-	8	14	-	10	
PRESCOTT, T	M 4,189	73	-	23	50	-	30	
PROVINCIAL HIGHWAY	-	326	5	83	238	7	171	(Veh. Reg.
OTHER AREAS	15,391	366	1	81	284	1	130	included in
GRENVILLE	29,132	789	6	195	588	8	341	Leeds)
BENTINCK, TP	3,383	1	-	-	1	-	-	
COLLINGWOOD, TP	2,915	4	-	2	2	-	2	
DURHAM, T	M 2,511	36	-	5	31	-	5	
EGREMONT, TP	2,264	2	-	1	1	-	2	
GLENELG, TP	1,811	1	-	1	-	-	1	
HANOVER, T	M 6,187	87	-	27	60	-	39	
HOLLAND, TP	2,663	1	-	-	1	-	-	
MEAFORD, T	M 4,182	37	-	10	27	-	18	
NORMANBY, TP	2,592	5	-	1	4	-	3	
OWEN SOUND, C	M 20,809	353	-	102	251	-	141	
ST VINCENT, TP	2,217	1	-	1	-	-	4	
SARAWAK, TP	2,743	1	-	1	-	-	1	
SULLIVAN, TP	2,536	2	-	-	2	-	-	
SYDENHAM, TP	2,890	1	-	1	-	-	5	
THORNBURY, T	M 1,566	14	-	3	11	-	4	
PROVINCIAL HIGHWAY	-	449	4	116	329	4	218	
OTHER AREAS	18,742	710	9	185	516	10	311	
GREY	80,011	1,705	13	456	1,236	14	754	55,244
DELHI, TP	1,930	160	2	45	113	2	68	
DUNNVILLE, T	11,766	145	4	45	96	4	84	

Table 4.1

Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured	
HALDIMAND, T	19,880	142	-	54	88	-	83	
NANTICOKE, C	21,759	237	6	71	160	6	118	
NORFOLK, TP	10,883	74	-	28	46	-	36	
SIMCOE, T	14,715	355	-	70	285	-	112	
PROVINCIAL HIGHWAY	-	398	10	142	246	10	247	
OTHER AREAS	13,000	399	5	122	272	5	179	
HALDIMAND-NORFOLK	93,933	1,910	27	577	1,306	27	927	75,101
ANSON, HINDON & MINDEN, TP	2,902	12	-	2	10	-	2	
DYSART ET AL, TP	4,346	9	-	5	4	-	5	
PROVINCIAL HIGHWAY	-	250	1	68	181	1	104	
OTHER AREAS	5,781	226	1	49	176	1	74	
HALIBURTON	13,029	497	2	124	371	2	185	11,538
BURLINGTON, C	125,260	1,449	6	367	1,076	7	542	
HALTON HILLS, T	35,496	487	2	129	356	2	182	
MILTON, T	30,138	539	1	148	390	1	241	
OAKVILLE, T	109,718	1,214	1	265	948	1	382	
PROVINCIAL HIGHWAY	-	2,094	8	509	1,577	10	881	
OTHER AREAS	-	94	-	22	72	-	31	
HALTON	300,612	5,877	18	1,440	4,419	21	2,259	211,989
BANCROFT, VL	2,335	48	-	8	40	-	11	
BELLEVILLE, C	M 35,169	993	-	238	755	-	323	
DESERONTO, T	M 1,810	12	-	3	9	-	4	
FRANKFORD, VL	2,051	11	-	5	6	-	7	
HUNGERFORD, TP	2,880	1	-	1	-	-	2	
HUNTINGDON, TP	2,146	1	-	1	-	-	1	
MADOC, TP	1,742	2	-	-	2	-	-	
MARMORA LAKE, TP	1,801	2	-	1	1	-	1	
SIDNEY, TP	16,338	7	-	1	6	-	4	
STIRLING, VL	M 2,050	10	-	2	8	-	3	
THURLOW, TP	7,267	3	-	2	1	-	7	
TRENTON, C	M 16,065	315	1	88	226	1	141	
TWEED, VL	1,510	31	-	8	23	-	10	
TYENDINAGA, TP	2,990	1	-	-	1	-	-	
PROVINCIAL HIGHWAY	-	799	10	258	531	14	455	
OTHER AREAS	14,245	671	3	187	481	4	274	
HASTINGS	110,399	2,907	14	803	2,090	19	1,243	88,698
CLINTON, T	M 3,183	61	-	7	54	-	8	
EXETER, T	M 4,264	54	-	11	43	-	13	
GODERICH, T	M 7,399	145	1	24	120	2	30	

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal Injury	Property Damage	Killed	Injured	
		Accidents						
GODERICH, TP	2,494	4	-	-	4	-	-	
HOWICK, TP	3,429	2	-	-	2	-	-	
SEAFORTH, T	M 2,285	23	-	4	19	-	8	
STEPHEN, TP	4,326	1	-	-	1	-	-	
TUCKERSMITH, TP	3,078	1	-	-	1	-	-	
WINGHAM, T	M 3,003	37	-	9	28	-	10	
PROVINCIAL HIGHWAY	-	287	9	85	193	10	172	
OTHER AREAS	25,081	427	6	106	315	6	165	
HURON	58,542	1,042	16	246	780	18	406	39,573
DRYDEN, T	M 6,257	116	-	19	97	-	24	
IGNACE, TP	1,770	2	-	-	2	-	-	
JAFFRAY MELICK, T	3,862	14	-	1	13	-	1	
KEEWATIN, T	2,052	34	-	7	27	-	7	
KENORA, T	M 9,570	314	-	63	251	-	95	
RED LAKE, TP	2,084	2	-	-	2	-	-	
SIOUX LOOKOUT, T	3,082	48	1	14	33	1	20	
PROVINCIAL HIGHWAY	-	829	7	210	612	8	346	
OTHER AREAS	6,903	257	2	64	191	2	99	
KENORA	35,580	1,616	10	378	1,228	11	592	37,271
BLENHEIM, T	4,570	71	-	13	58	-	19	
CHATHAM, C	M 42,800	785	-	210	575	-	283	
CHATHAM, TP	6,340	2	-	1	1	-	1	
DRESDEN, T	M 2,626	2	-	1	1	-	2	
HARWICH, TP	5,993	1	-	-	1	-	-	
RALEIGH, TP	5,451	3	-	-	3	-	-	
RIDGETOWN, T	3,204	31	-	10	21	-	16	
ROMNEY, TP	1,937	2	-	1	1	-	2	
TILBURY, T	M 4,294	53	-	11	42	-	13	
TILBURY EAST, TP	2,298	2	-	-	2	-	-	
WALLACEBURG, T	M 11,684	155	-	34	121	-	38	
WHEATLEY, VL	1,533	12	-	3	9	-	6	
PROVINCIAL HIGHWAY	-	361	11	114	236	11	224	
OTHER AREAS	13,885	512	-	202	310	-	292	
KENT	106,615	1,992	11	600	1,381	11	896	78,480
BOSANQUET, TP	4,901	4	-	1	3	-	1	
BROOKE, TP	1,862	3	-	2	1	-	5	
FOREST, T	2,769	25	2	3	20	2	3	
MOORE, TP	10,432	2	-	2	-	-	4	
PETROLIA, T	M 4,510	57	1	10	46	1	14	



Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured	
PLYMPTON, TP	5,116	1	-	-	1	-	-	
POINT EDWARD, VL	M 2,323	20	-	11	9	-	20	
SARNIA, C	M 72,684	1,403	1	322	1,080	1	485	
WYOMING, VL	1,988	11	-	1	10	-	2	
PROVINCIAL HIGHWAY	-	355	7	103	245	8	166	
OTHER AREAS	17,418	459	6	138	315	7	234	
LAMBTON	124,003	2,340	17	593	1,730	19	934	88,605
ALMONTE, T	4,249	38	-	11	27	-	15	
BECKWITH, TP	4,211	1	-	-	1	-	-	
CARLETON PLACE, T	M 7,080	121	-	21	100	-	26	
DRUMMOND, TP	2,658	2	-	-	2	-	-	
PAKENHAM, TP	1,767	2	-	-	2	-	-	
PERTH, T	M 5,438	142	-	20	122	-	33	
RAMSAY, TP	3,719	3	-	-	3	-	-	
SMITHS FALLS, T	M 9,235	247	-	51	196	-	75	
PROVINCIAL HIGHWAY	-	369	4	82	283	6	150	
OTHER AREAS	14,632	510	1	115	394	1	150	
LANARK	52,989	1,435	5	300	1,130	7	449	39,034
BROCKVILLE, C	M 21,207	517	1	97	419	1	133	
CROSBY SOUTH, TP	1,649	3	-	-	3	-	-	
ELIZABETHTOWN, TP	7,021	1	-	-	1	-	-	
ELMSLEY SOUTH, TP	3,080	2	-	-	2	-	-	
F LEEDS & LANSDOWNE, TP	4,638	6	-	2	4	-	3	
GANANOQUE, T	M 4,988	87	1	25	61	1	41	
R LEEDS & LANSDOWNE, TP	2,569	3	-	1	2	-	1	
R YONGE & ESCOTT, TP	1,768	2	-	-	2	-	-	(Veh. Reg.
PROVINCIAL HIGHWAY	-	563	5	172	386	10	305	includes
OTHER AREAS	10,703	458	6	137	315	6	205	Grenville)
LEEDS	57,623	1,642	13	434	1,195	18	688	65,263
CAMDEN EAST, TP	4,270	1	-	1	-	-	1	
N FREDERICKSBURGH, TP	2,991	1	-	1	-	-	1	
NAPANEE, T	4,849	145	1	34	110	1	54	
PROVINCIAL HIGHWAY	-	401	4	135	262	4	253	
OTHER AREAS	22,320	340	4	102	234	5	152	
LENNOX & ADDINGTON	34,430	888	9	273	606	10	461	23,356
PROVINCIAL HIGHWAY	-	168	2	43	123	2	62	
OTHER AREAS	7,069	161	1	42	118	1	77	
MANITOULIN	7,069	329	3	85	241	3	139	8,714
ADELAIDE, TP	1,958	1	-	-	1	-	-	

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal Injury	Property Damage	Killed	Injured	
		Accidents						
BIDDULPH, TP	2,138	1	-	-	1	-	-	
CARADOC, TP	6,043	3	-	1	2	-	1	
DELAWARE, TP	2,450	2	-	-	2	-	-	
EKFRID, TP	2,141	1	-	-	1	-	-	
GLENCOE, VL	2,062	17	-	7	10	-	8	
LOBO, TP	5,426	2	-	-	2	-	-	
LONDON, C	M 310,698	6,056	10	2,007	4,039	12	2,975	
LONDON, TP	5,322	1	-	1	-	-	1	
LUCAN, VL	1,810	19	-	4	15	-	5	
MCGILLIVRAY, TP	1,861	1	-	-	1	-	-	
NORTH DORCHESTER, TP	7,817	5	-	2	3	-	2	
STRATHROY, T	M 10,370	107	1	26	80	1	31	
WESTMINSTER, T	6,563	1	-	-	1	-	-	
PROVINCIAL HIGHWAY	-	785	12	231	542	13	429	
OTHER AREAS	3,542	771	14	249	508	16	432	
MIDDLESEX	370,201	7,773	37	2,528	5,208	42	3,884	238,848
BRACEBRIDGE, T	10,912	187	-	45	142	-	68	
GRAVENHURST, T	8,953	108	-	26	82	-	30	
HUNTSVILLE, T	13,404	138	-	30	108	-	33	
LAKE OF BAYS MUSKOKA, TP	2,526	3	-	-	3	-	-	
MUSKOKA LAKES, TP	5,236	40	-	13	27	-	20	
PROVINCIAL HIGHWAY	-	671	6	168	497	10	287	
OTHER AREAS	2,018	369	-	96	273	-	154	
MUSKOKA	43,049	1,516	6	378	1,132	10	592	36,487
FORT ERIE, T	25,495	381	2	112	267	2	190	
GRIMSBY, T	18,057	207	1	54	152	1	83	
LINCOLN, T	16,523	241	2	49	190	2	87	
NIAGARA ON THE LAKE, T	12,410	164	1	37	126	1	65	
NIAGARA FALLS, C	74,633	1,720	5	380	1,335	5	574	
PELHAM, T	13,319	144	2	44	98	2	69	
PORT COLBORNE, C	18,627	262	-	59	203	-	100	
ST CATHARINES, C	124,689	2,567	8	521	2,038	9	736	
THOROLD, C	17,542	230	2	48	180	2	86	
WAINFLEET, TP	6,040	62	2	21	39	2	31	
WELLAND, C	47,525	987	1	214	772	2	342	
WEST LINCOLN, TP	10,536	112	-	33	79	-	49	
PROVINCIAL HIGHWAY	-	1,640	24	463	1,153	24	780	
OTHER AREAS	-	456	2	97	357	2	142	
NIAGARA	385,396	9,173	52	2,132	6,989	54	3,334	265,813

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal Injury	Property Damage	Killed	Injured	
		Accidents						
BONFIELD, TP	1,863	2	-	-	2	-	-	
CALDWELL, TP	1,583	1	-	-	1	-	-	
EAST FERRIS, TP	3,919	1	-	-	1	-	-	
MATTAWA T	2,413	25	-	5	20	-	10	
NORTH BAY C	M 54,611	782	3	203	576	3	317	
SPRINGER, TP	2,445	2	-	1	1	-	2	
STURGEON FALLS, T	M 5,952	84	-	21	63	-	26	
PROVINCIAL HIGHWAY	-	779	8	237	534	9	415	
OTHER AREAS	5,813	192	1	57	134	1	87	
NIPISSING	78,599	1,868	12	524	1,332	13	857	56,476
BRIGHTON, TP	3,285	6	-	2	4	-	2	
BRIGHTON, T	4,108	34	-	9	25	-	16	
CAMPBELLFORD, T	3,395	31	-	10	21	-	10	
COBOURG, T	M 14,643	250	-	63	187	-	95	
COLBORNE, VL	1,971	20	-	4	16	-	7	
HALDIMAND, TP	4,041	4	-	1	3	-	1	
HAMILTON, TP	9,211	1	-	-	1	-	-	
HOPE, TP	3,561	1	-	-	1	-	-	
MURRAY, TP	6,520	2	-	-	2	-	-	
PERCY, TP	3,082	1	-	-	1	-	-	
PORT HOPE, T	M 11,198	112	-	25	87	-	36	
SEYMOUR, TP	4,036	4	-	2	2	-	4	
PROVINCIAL HIGHWAY	-	784	14	309	461	16	539	
OTHER AREAS	4,918	532	8	141	383	8	232	
NORTHUMBERLAND	73,969	1,782	22	566	1,194	24	942	51,453
CUMBERLAND, TP	39,520	167	-	51	116	-	81	
WEST CARLETON, TP	14,366	131	1	45	85	1	72	
GLOUCESTER, C	M 99,277	1,281	3	281	997	3	369	
GOULBOURN, TP	15,573	154	-	46	108	-	71	
RIDEAU, TP	11,426	129	1	32	96	2	45	
KANATA, C	35,866	550	-	96	454	-	150	
NEPEAN, C	M 105,582	1,864	3	413	1,448	4	623	
OSGOODE, TP	13,541	161	1	61	99	1	100	
OTTAWA, C	M 308,366	8,577	13	2,265	6,299	15	3,088	
ROCKCLIFFE PARK, VL	2,328	21	-	4	17	-	4	
VANIER, C	18,053	436	3	100	333	3	129	
PROVINCIAL HIGHWAY	-	2,141	7	584	1,550	8	969	
OTHER AREAS	-	1,171	7	285	879	8	418	
OTTAWA-CARLETON	663,898	16,783	39	4,263	12,481	45	6,119	387,870

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations	
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured		
INGERSOLL, T	M	8,935	153	-	28	125	-	39	
NORWICH, TP	M	9,991	24	1	6	17	1	6	
S WEST OXFORD, TP		8,283	4	-	-	4	-	-	
TILLSONBURG, T	M	11,718	182	1	60	121	1	87	
WOODSTOCK, C	M	29,029	663	1	169	493	1	247	
E ZORRA-TAVISTOCK, TP	M	7,081	2	-	1	1	-	2	
ZORRA, TP		8,057	1	-	-	1	-	-	
PROVINCIAL HIGHWAY		-	680	9	183	488	12	321	
OTHER AREAS		6,912	569	9	187	373	11	312	
OXFORD		90,006	2,278	21	634	1,623	26	1,014	67,572
HIMSWORTH NORTH, TP		2,913	1	-	-	1	-	-	
MCDOUGALL, TP		1,995	3	-	-	3	-	-	
PROVINCIAL HIGHWAY		-	703	10	185	508	13	328	
OTHER AREAS		27,616	447	2	121	324	2	175	
PARRY SOUND		32,524	1,154	12	306	836	15	503	33,191
BRAMPTON, C		217,892	3,574	8	808	2,758	10	1,257	
CALEDON, T		33,538	668	6	195	467	13	312	
MISSISSAUGA, C		434,093	7,159	17	1,529	5,613	18	2,282	
PROVINCIAL HIGHWAY		-	3,187	15	885	2,287	19	1,420	
OTHER AREAS		-	301	1	63	237	1	93	
PEEL		685,523	14,889	47	3,480	11,362	61	5,364	472,574
LISTOWEL, T	M	5,382	106	-	17	89	-	26	
MITCHELL, T		3,366	51	-	6	45	-	7	
ST MARYS, T	M	5,482	53	-	6	47	-	6	
STRATFORD, C	M	27,311	518	1	101	416	1	139	
PROVINCIAL HIGHWAY		-	269	6	85	178	7	168	
OTHER AREAS		27,709	405	7	116	282	12	185	
PERTH		69,250	1,402	14	331	1,057	20	531	47,493
BELMONT & METHUEN, TP		2,794	2	-	1	1	-	2	
CAVAN, TP		5,300	1	-	-	1	-	-	
DOURO, TP		3,514	1	-	-	1	-	-	
ENNISMORE, TP		4,124	1	-	-	1	-	-	
LAKEFIELD, VL	M	2,456	31	-	6	25	-	9	
OTONABEE, TP		4,977	1	-	1	-	-	1	
PETERBOROUGH, C	M	67,823	1,066	1	402	663	2	587	
SMITH, TP		8,504	2	-	-	2	-	-	
PROVINCIAL HIGHWAY		-	519	3	184	332	4	314	
OTHER AREAS		16,496	628	9	190	429	9	288	
PETERBOROUGH		115,988	2,252	13	784	1,455	15	1,201	81,195

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total Accidents	Fatal	Personal Injury	Property Damage	Killed	Injured	
ALFRED, TP	1,999	2	-	-	2	-	-	
HAWKESBURY, T	M 9,547	268	-	44	224	-	56	
E HAWKESBURY, TP	3,090	4	-	-	4	-	-	
W HAWKESBURY, TP	2,862	2	-	-	2	-	-	
LORIGNAL, VL	2,052	6	-	2	4	-	2	
PLANTAGENET SOUTH, TP	1,650	4	-	1	3	-	1	
VANKLEEK HILL, T	1,940	19	-	5	14	-	6	(Veh. Reg.
PROVINCIAL HIGHWAY	-	247	3	67	177	3	124	includes
OTHER AREAS	8,435	275	10	82	183	11	122	Russell)
PRESCOTT	31,575	827	13	201	613	14	311	56,061
AMELIASBURG, TP	5,154	1	-	-	1	-	-	
HALLOWELL, TP	4,168	1	-	-	1	-	-	
PICTON, T	4,067	83	-	17	66	-	25	
PROVINCIAL HIGHWAY	-	113	1	25	87	1	41	
OTHER AREAS	8,876	276	4	51	221	6	73	
PRINCE EDWARD	22,265	474	5	93	376	7	139	17,282
ATIKOKAN, TP	M 3,805	9	-	-	9	-	-	
FORT FRANCES, T	M 8,682	215	1	36	178	1	54	
PROVINCIAL HIGHWAY	-	278	1	69	208	1	106	
OTHER AREAS	6,316	126	2	16	108	2	24	
RAINY RIVER	18,803	628	4	121	503	4	184	24,042
ARNPRIOR, T	6,095	103	1	17	85	2	23	
DEEP RIVER, T	M 4,175	23	-	8	15	-	8	
MCNAB, TP	5,233	1	-	-	1	-	-	
PEMBROKE, C	M 13,379	342	-	89	253	-	148	
PEMBROKE, TP	1,757	1	-	-	1	-	-	
PETAWAWA, TP	8,145	1	-	-	1	-	-	
PETAWAWA, VL	5,291	9	-	2	7	-	4	
RENFREW, T	M 7,837	133	-	40	93	-	56	
PROVINCIAL HIGHWAY	-	612	10	195	407	11	367	
OTHER AREAS	35,423	723	4	192	527	5	300	
RENFREW	87,335	1,948	15	543	1,390	18	906	67,258
CAMBRIDGE, TP	5,641	1	-	-	1	-	-	
CASSELMAN, VL	2,341	20	1	4	15	2	9	
CLARENCE, TP	8,834	3	-	2	1	-	2	
ROCKLAND, T	6,448	73	-	11	62	-	12	
RUSSELL, TP	10,416	2	-	1	1	-	1	
PROVINCIAL HIGHWAY	-	141	2	32	107	2	52	(Veh. Reg.
OTHER AREAS	-	343	4	87	252	4	116	included in
RUSSELL	33,680	583	7	137	439	8	192	Prescott)

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle
		Total		Personal	Property			Registrations
		Accidents	Fatal	Injury	Damage	Killed	Injured	
ADJALA, TP	4,356	2	-	-	2	-	-	
BARRIE, C	M 60,870	1,333	3	283	1,047	3	427	
BRADFORD W GWILLIMBURY, T	16,585	218	-	59	159	-	83	
COLLINGWOOD, T	M 12,667	253	1	62	190	1	103	
ELMVALE, VL	1,691	24	-	2	22	-	3	
ESSA, TP	13,142	4	-	1	3	-	1	
INNISFIL, T	M 20,618	158	1	49	108	1	88	
MARA, TP	4,819	1	-	-	1	-	-	
MEDONTE, TP	5,581	3	-	1	2	-	1	
MIDLAND, T	M 13,114	255	1	73	181	1	108	
NEW TECUMSETH, T***	19,282	167	-	46	121	-	58	
ORILLIA, TP	7,934	4	-	-	4	-	-	
ORILLIA, C	M 24,062	544	1	124	419	1	184	
PENETANGUISHENE, T	M 6,051	65	-	16	49	-	23	
PORT MCNICOLL, VL	2,046	15	-	6	9	-	8	
STAYNER, T	3,713	36	-	7	29	-	16	
TAY, TP	6,289	2	-	-	2	-	-	
TINY, TP	8,552	4	-	1	3	-	1	
VESPRA, TP	7,604	4	-	1	3	-	6	
WASAGA BEACH, T	5,798	120	-	39	81	-	53	
PROVINCIAL HIGHWAY	-	1,963	12	543	1,408	17	1,024	
OTHER AREAS	29,588	1,494	22	464	1,008	25	735	
SIMCOE	274,362	6,669	41	1,777	4,851	49	2,922	211,043
CORNWALL, C	46,619	1,275	2	320	953	2	508	(Veh. Reg.
PROVINCIAL HIGHWAY	-	277	1	71	205	1	127	incl. Dundas
OTHER AREAS	16,791	224	3	66	155	3	88	& Glengarry)
STORMONT	63,410	1,776	6	457	1,313	6	723	73,617
CAPREOL, T	3,684	35	-	5	30	-	8	
ESPANOLA, T	M 5,312	55	1	14	40	1	18	
NICKEL CENTRE, T	11,815	88	1	33	54	1	53	
ONAPING FALLS, T	5,303	11	-	1	10	-	1	
RAYSIDE-BALFOUR, T	14,606	151	-	38	113	-	58	
SUDBURY, C	M 90,402	2,610	6	709	1,895	6	1,071	
VALLEY EAST, T	21,149	250	-	90	160	-	156	
WALDEN, T	9,411	108	2	23	83	2	30	
PROVINCIAL HIGHWAY	-	914	10	283	621	12	494	
OTHER AREAS	11,799	415	1	96	318	1	134	
SUDBURY	173,481	4,637	21	1,292	3,324	23	2,023	126,496

\*\*\* Amalgamation of the following areas: Beeton, Alliston, Tottenham, Tecumseth.

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal Injury	Property Damage	Killed	Injured	
		Accidents						
GERALDTON, T	2,461	25	-	4	21	-	4	
LONGLAC, T	1,925	13	-	2	11	-	2	
MANITOUWADGE, TP	3,719	21	-	2	19	-	2	
MARATHON, T	M 4,838	33	-	7	26	-	15	
NIPIGON, TP	2,253	15	-	1	14	-	1	
OLIVER, TP	2,376	3	-	1	2	-	1	
SCHREIBER, TP	1,865	4	-	3	1	-	4	
TERRACE BAY, TP	M 2,430	7	-	-	7	-	-	
THUNDER BAY, C	M 110,289	2,810	3	636	2,171	3	941	
PROVINCIAL HIGHWAY	-	1,064	16	278	770	19	480	
OTHER AREAS	10,200	371	1	96	274	1	143	
THUNDER BAY	142,356	4,366	20	1,030	3,316	23	1,593	115,684
ENGLEHART, T	1,702	9	-	2	7	-	2	
HAILEYBURY, T	4,819	46	-	7	39	-	9	
KIRKLAND LAKE, T	M 10,638	151	-	33	118	-	49	
NEW LISKEARD, T	M 5,406	139	-	22	117	-	42	
PROVINCIAL HIGHWAY	-	398	10	138	250	13	228	
OTHER AREAS	12,667	134	1	30	103	1	42	
TIMISKAMING	35,232	877	11	232	634	14	372	27,235
EAST YORK, BOROUGH	97,250	801	-	181	620	-	250	
ETOBICOKE, C	295,915	5,034	6	1,464	3,564	9	2,217	
NORTH YORK, C	541,796	11,144	8	3,034	8,102	8	4,951	
SCARBOROUGH, C	485,240	10,213	17	2,653	7,543	18	4,119	
TORONTO, C	598,939	21,096	32	4,989	16,075	33	6,955	
YORK, C	132,290	1,286	1	296	989	1	407	
PROVINCIAL HIGHWAY	-	8,478	8	1,662	6,808	10	2,575	
TORONTO, METRO	M 2,151,430	58,052	72	14,279	43,701	79	21,474	1,111,718
BOBCAYGEON, VL	2,327	22	-	1	21	-	1	
ELDON, TP	2,731	1	-	-	1	-	-	
EMILY, TP	6,110	8	-	1	7	-	1	
FENELON, TP	5,493	2	-	1	1	-	3	
FENELON FALLS, VL	1,799	37	-	9	28	-	32	
LINDSAY, T	M 16,206	331	-	83	248	-	118	
MANVERS, TP	5,006	1	-	-	1	-	-	
MARIPOSA, TP	6,568	1	-	-	1	-	-	
SOMERVILLE, TP	1,872	2	-	1	1	-	1	
VERULAM, TP	3,689	4	-	-	4	-	-	
PROVINCIAL HIGHWAY	-	519	11	152	356	12	291	
OTHER AREAS	8,976	566	5	147	414	6	218	
VICTORIA	60,777	1,494	16	395	1,083	18	665	49,027

Table 4.1 Continued

Location	Estimated Population (1991)*	Class of Accident				Persons		Motor Vehicle Registrations
		Total	Fatal	Personal	Property	Killed	Injured	
		Accidents		Injury	Damage			
NORTH DUMFRIES, TP	6,541	91	1	24	66	1	48	
CAMBRIDGE, C	89,953	1,562	3	416	1,143	3	622	
KITCHENER, C	163,923	3,063	5	751	2,307	5	1,154	
WATERLOO, C	72,062	1,203	4	298	901	4	453	
WELLESLEY, TP	8,021	27	-	7	20	-	13	
WILMOT, TP	12,699	136	1	44	91	1	65	
WOOLWICH, TP	17,131	186	-	64	122	-	120	
PROVINCIAL HIGHWAY	-	969	10	267	692	14	502	
OTHER AREAS	-	323	-	81	242	-	119	
WATERLOO	370,330	7,560	24	1,952	5,584	28	3,096	239,523
ARTHUR, TP	2,456	4	-	1	3	-	2	
ARTHUR, VL	2,033	24	-	7	17	-	8	
ELORA, VL	3,119	35	-	7	28	-	8	
ERAMOSA, TP	5,789	2	-	-	2	-	-	
ERIN, TP	7,263	9	-	2	7	-	2	
ERIN, VL	2,400	34	-	10	24	-	14	
FERGUS, T	M 7,657	91	-	21	70	-	30	
WEST GARAFRAXA, TP	3,147	1	-	-	1	-	-	
GUELPH, C	M 85,625	1,324	1	474	849	1	711	
GUELPH, TP	3,122	3	-	1	2	-	1	
HARRISTON, T	M 1,946	22	-	6	16	-	6	
MARYBOROUGH, TP	2,565	2	-	-	2	-	-	
MOUNT FOREST, T	4,095	66	1	10	55	1	13	
NICHOL, TP	3,907	1	-	1	-	-	1	
PALMERSTON, T	M 2,273	23	-	4	19	-	6	
PEEL, TP	4,238	1	-	-	1	-	-	
PILKINGTON, TP	2,337	5	-	-	5	-	-	
PUSLINCH, TP	4,843	2	-	-	2	-	-	
PROVINCIAL HIGHWAY	-	960	17	235	708	22	436	
OTHER AREAS	5,294	918	13	225	680	16	376	
WELLINGTON	154,109	3,527	32	1,004	2,491	40	1,614	107,045
ANCASTER, T	22,107	223	-	81	142	-	108	
DUNDAS, T	21,632	227	1	73	153	1	104	
FLAMBOROUGH, T	29,281	221	-	60	161	-	96	
GLANBROOK, TP	9,691	70	-	27	43	-	34	
HAMILTON, C	316,897	6,234	8	1,914	4,312	8	2,827	
STONEY CREEK, C	49,204	454	1	135	318	1	212	
PROVINCIAL HIGHWAY	-	1,593	17	433	1,143	19	830	
OTHER AREAS	-	111	1	26	84	2	44	
HAMILTON-WENTWORTH	448,812	9,133	28	2,749	6,356	31	4,255	263,313



Table 4.1 Continued

Location	Estimated	Class of Accident				Persons		Motor Vehicle
	Population	Total		Personal	Property			Registrations
	(1991)*	Accidents	Fatal	Injury	Damage	Killed	Injured	
AURORA, T	27,840	367	3	77	287	3	121	
GEORGINA, T	27,838	322	1	76	245	1	119	
E GWILLIMBURY, T	17,346	255	6	63	186	6	99	
KING, TP	17,444	275	3	51	221	3	81	
MARKHAM, T	145,325	1,977	4	323	1,650	4	463	
NEWMARKET, T	42,932	606	-	122	484	-	205	
RICHMOND HILL, T	74,007	970	2	158	810	2	233	
VAUGHAN, C	106,460	1,619	11	286	1,322	13	460	
WHITCHURCH STOUFFVILLE, T	17,403	222	4	53	165	4	89	
PROVINCIAL HIGHWAY	-	3,449	20	932	2,497	21	1,620	
OTHER AREAS	-	428	-	80	348	-	116	
YORK	476,595	10,490	54	2,221	8,215	57	3,606	356,537

Legend	T	town	Other Areas -	Jurisdictions	M Municipal Police Force
	C	city		with less than	
	VL	Village		1,500 population	
	TP	township			

\* Source: Ontario Ministry of Municipal Affairs Municipal Directory 1991.

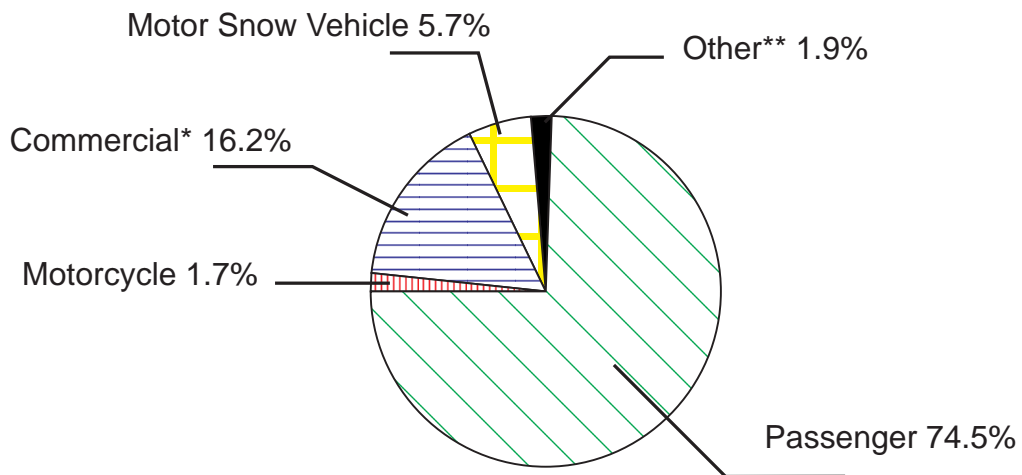
Population data in this table refers to persons residing in a municipality on a permanent basis.

The method used in determining the population is different from previous methods used.

## 5

## The Vehicle

## Vehicle Population by Vehicle Class in Ontario - 1993



\* Excludes Single Application Vehicle Registration (SAVR).

\*\* Other - includes mopeds, buses, and off-road vehicles.

Does not add to 100 per cent due to rounding.

**5a. Vehicles in Accidents**

Table 5.1 Type of Vehicle Involved in All Accidents 1993

Type of Vehicle	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
Passenger Car	1,041	80,639	229,073	310,753
Passenger Car & Trailer	3	134	536	673
Truck	444	19,608	63,183	83,235
Truck & Trailer	17	458	1,822	2,297
Tractor & Semi-trailer	77	1,282	4,331	5,690
Motorcycle	65	1,917	616	2,598
Bus	11	632	1,727	2,370
School Bus/Vehicle	5	242	967	1,214
Other - Or not Known	13	716	9,314	10,043
Non Motor Vehicle	51	3,832	1,415	5,298
<b>Total</b>	<b>1,727</b>	<b>109,460</b>	<b>312,984</b>	<b>424,171</b>

In 1988, major revisions were made in the recording of motor vehicle accident 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 that of the years previous to 1988.

More detailed information for some vehicles is provided in the Vehicles of Special Interest Section (Chapter 6).

Table 5.2 Condition of Vehicle by  
Class of Accident 1993

Condition of Vehicle	Class of Accident			Total
		Personal	Property	
	Fatal	Injury	Damage	
No Apparent Defect	1,615	104,325	288,028	393,968
Service Brakes Defective	2	270	454	726
Steering Defective	-	35	68	103
Tire Puncture or Blow Out	6	141	352	499
Tire Tread Insufficient	4	93	132	229
Headlamps Defective	2	23	25	50
Other Lamps or Reflectors Defective	-	34	104	138
Engine Controls Defective	-	30	80	110
Wheels or Suspension Defective	1	25	115	141
Vision Obscured	-	4	16	20
Trailer Hitch Defective	2	1	30	33
Other Defects	33	687	1,969	2,689
Unknown	62	3,792	21,611	25,465
Total	1,727	109,460	312,984	424,171

Table 5.3 Model Year of Vehicle by Class of  
Accident 1993

Model Year of Vehicle	Class of Accident			Total
		Personal	Property	
	Fatal	Injury	Damage	
1994	6	310	1,018	1,334
1993	102	5,563	16,745	22,410
1992	145	8,024	23,880	32,049
1991	136	7,815	23,391	31,342
1990	142	8,732	25,953	34,827
1989	143	9,947	29,642	39,732
1988	167	10,463	31,081	41,711
1987	154	9,471	27,109	36,734
1986	119	9,999	27,524	37,642
1985	135	8,563	23,468	32,166
1984 and earlier	423	24,398	65,136	89,957
Unknown	55	6,176	18,037	24,268
Total	1,727	109,461	312,984	424,172

Table 5.4 Insurance Status of Vehicle by Class of Accident 1993

Insurance	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
Insured	1,579	99,936	287,691	389,206
Not Insured	75	2,468	2,711	5,254
Unknown	73	7,056	22,582	29,711
Total	1,727	109,460	312,984	424,171

## 5b. Putting the Vehicle in Context

Table 5.5 Vehicle Population by  
Type of Vehicle 1993

Vehicle Class	
Passenger	5,001,680
Motorcycle	111,587
Moped	3,720
Commercial*	1,047,989
Bus	19,332
School Bus	9,433
Motorized Snow Vehicle	383,083
Off-Road Vehicle	97,104
Road Building Machinery	854
Permanent Apparatus	3,667
Farm Trucks	33,686
Total	6,712,135

\* Excludes Single Application Vehicle Registrations (SAVR - 21,642 vehicles).

Table 5.6 Selected Types of Vehicles by Model Year 1993

Vehicle Class	Model Years											Total
	94	93	92	91	90	89	88	87	86	85	84+	
Passenger	77,578	347,151	397,335	382,447	405,485	447,520	466,647	425,462	457,608	387,428	1,207,019	5,001,680
Motorcycle	291	3,205	3,037	2,823	3,197	3,434	3,712	3,816	6,882	9,555	71,635	111,587
Moped	-	11	12	24	27	25	15	58	54	50	3,444	3,720
Commercial*	15,793	56,556	59,981	60,818	83,022	102,765	117,409	91,156	90,541	73,647	334,388	1,086,076
Bus	324	1,744	2,219	2,247	2,787	2,935	2,989	2,856	2,092	1,902	6,790	28,885
Motorized Snow Vehicle	10,964	13,372	10,940	15,685	17,467	17,387	15,269	12,231	9,839	8,227	251,702	383,083
Off-Road Vehicle	666	4,526	4,762	4,869	5,744	4,674	4,100	7,672	12,063	11,240	36,788	97,104
Total	105,616	426,565	478,286	468,913	517,729	578,740	610,141	543,251	579,079	492,049	1,911,766	6,712,135

\* Includes Commercial, Road Building, Permanent Apparatus, and Farm Trucks. Excludes Single Application Vehicle Registrations (SAVR - 21,642 vehicles).

Table 5.7 Vehicle Damage Level 1993

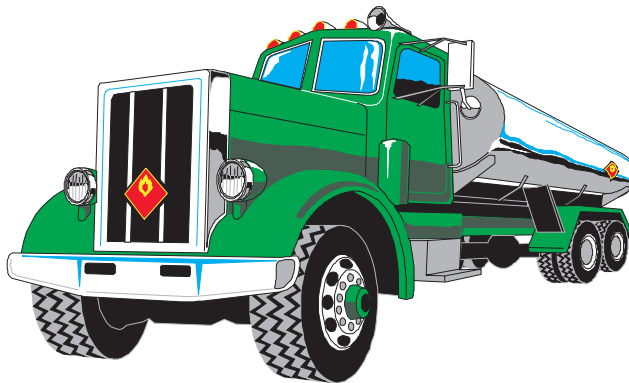
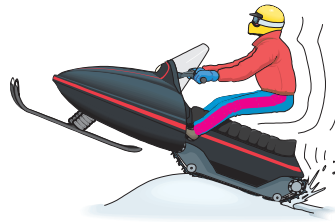
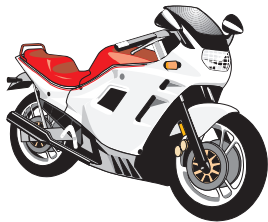
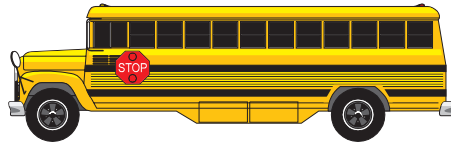
Damage	Class of Accident			Total
	Fatal	Personal	Property	
		Injury	Damage	
None	92	10,449	19,195	29,736
Light	177	27,840	129,259	157,276
Moderate	208	28,957	105,498	134,663
Severe	281	24,872	30,034	55,187
Demolished	932	12,730	5,572	19,234
Unknown	37	4,612	23,426	28,075
Total	1,727	109,460	312,984	424,171

## Vehicle Damage

None	No visible damage.
Light	Slight or superficial damage. Includes scratches, small dents, 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 requirements law. Vehicle can be driven off road or 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.

6

Vehicles of Special Interest





**6a. Motorcycles**

Table 6.1 Motorcyclists\*  
Killed and Injured  
1989-1993

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1989	78	2,945	8	599
1990	68	2,392	6	580
1991	55	2,183	9	487
1992	55	1,814	6	404
1993	54	1,706	5	398

\* Excludes moped drivers and passengers.

Table 6.2 Selected Factors Relevant to Fatal Motorcycle Accidents 1993	
Factors	%
Unlicensed Motorcycle Drivers	16
Under 25 years Old	44
Alcohol Used	
Ability Impaired Alcohol > .08	35
Had Been Drinking	6
Unknown	13
Helmet Not Worn (Fatalities)	21
Motorcycle Driver Error	
Speed Too Fast/Lost Control	60
Other Error	13
Single Vehicle Accidents	45
Day/Night	42/58
Weekend	40

**6b. School Vehicles**

Table 6.3 Pupils Transported Daily, Total Accidents and Injury Rate per 100,000 Pupils -  
School Years 1988/89-1992/93

	School Year	Pupils		Total		Injury Rate per 100,000 Pupils	
		Transported		Number of		FataIs	Non-Fatal
		Daily		Accidents			
	1988/89	751,153		1,259		0.3	27
	1989/90	771,729		1,444		0.1	30
	1990/91	789,963		1,315		0.4	32
	1991/92	794,941		1,194		0.2	18
	1992/93	796,347		1,174		-	20

Table 6.4 School Vehicle Type by Nature of  
Accident 1992/93

School Vehicle Type	Nature of Accident				Total Number of Accidents	Five Year Total (1988/89 1992/93)
	Fatal	Pupil Injury	Non-Pupil Injury	Property Damage		
School Bus	5	62	132	808	1,007	5,418
School Van	1	15	11	116	143	815
Other School Vehicles	-	2	3	19	24	153
Total Accidents	6	79	146	943	1,174	6,384

Table 6.5 Pupil Injury by Accident Event and Vehicle Type 1992/93

School Vehicle Type	Accident Event						Total		Five Year Total	
	Crossing Road		Within School Vehicle		Other		Killed	Injured	(1988/89 1992/93)	
	Killed	Injured	Killed	Injured	Killed	Injured			Killed	Injured
School Bus	-	3	-	131	-	9	-	143	6	883
School Van	-	-	-	15	-	1	-	16	-	97
Other School Vehicles	-	-	-	1	-	-	-	1	1	30
Total	-	3	-	147	-	10	-	160	7	1,010

**6c. Trucks**Table 6.6 Class of Truck Accident  
1989-1993

Year	Class of Accident			Total
		Personal	Property	
	Fatal	Injury	Damage	
1989	466	19,959	50,085	70,510
1990	393	16,493	45,570	62,456
1991	389	13,843	41,694	55,926
1992	361	13,563	43,330	57,254
1993	419	13,312	42,915	56,646
Total	2,028	77,170	223,594	302,792

Table 6.7 Driver Licence Class Required  
by Class of Truck Accident 1993

Driver Licence Required	Class of Accident			Total
		Personal	Property	
	Fatal	Injury	Damage	
G	264	11,079	35,052	46,395
D	52	708	2,775	3,535
A*	103	1,525	5,088	6,716
Total	419	13,312	42,915	56,646

\* Includes truck/trailer combinations requiring a Class "A" licence.

Table 6.8 Driver Licence Class Required -  
Accidents, Registered Trucks and  
Accident Rate 1993

Driver Licence Required	Accidents	Registered Vehicles	Accident Rate
G	46,395	954,966	4.9
D	3,535	52,564	6.7
A*	6,716	100,188 **	6.7
Total	56,646	1,107,718	5.1

\* Tractor/trailer combination only.

\*\* Includes vehicles registered under the SAVR system.

Table 6.9 Selected Factors Relevant to Fatal  
Truck Accidents 1993

Factors	Driver Licence Required		
	Class G	Class D	Class A
Driver Condition in Fatal Accidents:			
Alcohol Involved	22.7%	1.9%	1.0%
Driving Properly	45.8%	65.4%	67.0%
Single Vehicle	37.1%	21.2%	14.6%
Vehicle Defect Present*	2.7%	3.8%	6.8%
Urban Area	27.3%	26.9%	8.7%
Daylight	60.6%	80.8%	55.3%

\* Excludes unknown category

Data for truck/trailer combinations requiring Class "A" driver licence are not reported separately in the Vehicle Registration System.

Class G trucks refer to trucks that have a gross vehicle weight less than 11,000 kilograms i.e. pickups.

**6d. Off-road Vehicles**

Table 6.10 Accident Location  
by Off-Road Vehicle Drivers  
Killed and Injured 1989-1993

Location	Killed					Injured				
	1989	1990	1991	1992	1993	1989	1990	1991	1992	1993
On-Highway	-	-	4	-	3	24	31	34	36	22
Off-Highway	10	3	5	2	2	124	135	139	67	68
Total	10	3	9	2	5	148	166	173	103	90

Table 6.11 Accident Location  
by Off-Road Vehicle Passengers  
Killed and Injured 1989-1993

Location	Killed					Injured				
	1989	1990	1991	1992	1993	1989	1990	1991	1992	1993
On-Highway	-	-	1	-	1	10	10	9	9	4
Off-Highway	-	-	-	2	-	36	43	44	17	17
Total	-	-	1	2	1	46	53	53	26	21

Table 6.12 Registered Off-Road  
Vehicle 1989-1993

Year	Vehicles Registered
1989	74,316
1990	70,274
1991	86,259
1992	92,020
1993	97,104

Table 6.13 Selected Factors Relevant to  
All Off-Road Vehicle  
Accidents 1993

Factors	%
Drivers Under 25 Years of Age	60
Alcohol Used	19
Speeding	24
Helmet Not Worn	54
Daytime	73
Two-Wheeled	21
Three-Wheeled	22
Four-Wheeled	57

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.

**6e. Motorized Snow Vehicles**

Table 6.14 Accident Location by Motorized Snow Vehicle Drivers Killed and Injured -  
Riding Seasons 1988/89-1992/93

Location	Killed					Injured				
	88/89	89/90	90/91	91/92	92/93	88/89	89/90	90/91	91/92	92/93
On-Highway	2	2	5	1	3	63	51	37	61	37
Off-Highway	27	31	24	11	22	246	250	279	195	121
Total	29	33	29	12	25	309	301	316	256	158
% on-Highway	7	6	17	8	12	20	17	12	24	23

Table 6.15 Accident Location by Motorized Snow Vehicle Passengers Killed and Injured -  
Riding Seasons 1988/89-1992/93

Location	Killed					Injured				
	88/89	89/90	90/91	91/92	92/93	88/89	89/90	90/91	91/92	92/93
On-Highway	1	-	1	1	-	21	15	7	29	16
Off-Highway	4	5	7	4	2	84	101	98	97	82
Total	5	5	8	5	2	105	116	105	126	98

Table 6.16 Registered Motorized  
Snow Vehicles 1989-1993

Year	Vehicles Registered
1989	308,373
1990	328,343
1991	346,932
1992	366,730
1993	383,083

Table 6.17 Selected Factors Relevant to  
All Motorized Snow Vehicle  
Accidents 1992/93

Factors	%
Unlicensed Operators	14
Rider Error; Speed too Fast	38
Alcohol Used	26
Surface Condition; Icy or Packed Snow	50

## 6f. Bicycles

Table 6.18 Bicyclists\*  
Killed and Injured  
1989-1993

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1989	33	4,020	-	139
1990	29	3,518	-	172
1991	27	3,797	-	178
1992	27	3,333	-	168
1993	31	3,290	-	123

\* Only accidents involving a bicycle and a motor vehicle or a street-car are required to be reported. These tables do not include bicycle only bicycle/bicycle or bicycle/pedestrian accidents.

Table 6.20 Selected Factors  
Relevant to  
All Bicycle Accidents 1993

Factors	%
Driving Properly (Bicyclist)	42
Driving Properly (Motor Vehicle Driver)	48
Intersection Related	60
Going Ahead (Bicyclist)	81
Alcohol Related (Bicyclist)	3
No Apparent Vehicle Defect (Bicycle)	88
Clear Visibility	93
Weekend	19

Table 6.19 Age of Bicyclist\* Involved in Accidents by  
Light Condition 1993

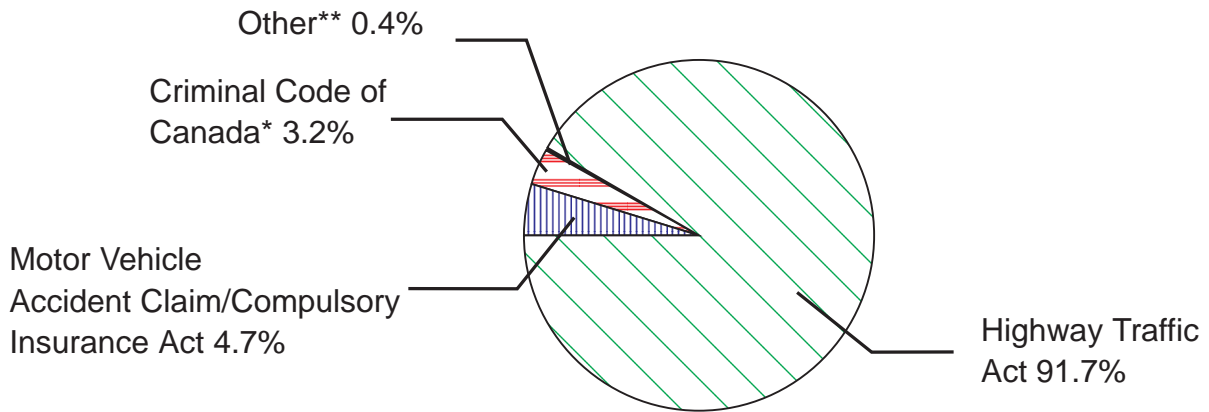
Light Condition	Age Groups						UK	Total
	0 - 5	6 - 15	16 - 30	31 - 60	61+			
Daylight	296	1,152	1,098	567	72	82	3,267	
Dawn	2	4	10	8	-	-	24	
Dusk	21	49	57	28	1	4	160	
Dark	45	80	260	111	7	11	514	
Total	364	1,285	1,425	714	80	97	3,965	

\* Only accidents involving a bicycle and a motor vehicle or a streetcar are required to be reported. These tables do not include bicycle only, bicycle/bicycle or bicycle/pedestrian accidents.



**7 Conviction and Suspension Data**

Per Cent of Motor Vehicle Convictions in Ontario - 1993



\* 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.

Does not add to 100 per cent due to rounding.



**7a. Conviction Data**

Table 7.1 Summary of Motor Vehicle  
Related Convictions 1993

Convictions**	Number
Highway Traffic Act	849,275
Regulation H.T.A	1,381
Criminal Code of Canada*	30,060
Municipal By-Law	576
Motor Vehicle Accident Claim/Compulsory Insurance Act**	43,423
Motorized Snow Vehicles Act	1,268
Off-Road Vehicle	559
Total	926,542

\* This figure does not include 321 convictions for young offenders under the Criminal Code.

Table 7.2 Motor Vehicle Convictions  
Related to the  
Highway Traffic Act 1993

Convictions	Number
Equipment	15,521
Administrative*	85,006
Seat Belt (Driver & Passenger)**	70,884
Other Non-Pointable Convictions ***	9,818
Speeding (< 16km/h, non-pointable)	230,047
Pointable Speeding	222,894
Other Pointable Convictions (2 - 4 pt)	141,715
Other Pointable Convictions (5 - 7 pt)	11,918
Driving While Suspended	12,297
Total	800,100

\* Non-moving, weight, vehicle registration, licence renewal, etc..

\*\* Failure to wear seat belt convictions registered against passengers over 16 are no longer included.

\*\*\* Now includes some out of province convictions.

Table 7.3 Motor Vehicle Convictions  
Related to the  
Criminal Code 1993\*

Convictions	Number
Alcohol Related**	25,220
Criminal Negligence	36
Fail to Remain at Accident	872
Driving While Disqualified	2,856
Dangerous Driving	1,076
Motor Manslaughter	-
Total	30,060

\* Does not include Missing Value convictions for young offenders.

\*\* Includes some out of province convictions.

**7b. Suspension Data**

Table 7.4 Mandatory Suspensions Related to  
Criminal Code Convictions  
Issued 1993

Suspensions	3 Months	6 Months	1 Year	2 Years	3 Years	Total
Criminal Negligence	-	-	10	16	8	34
Fail to Remain	-	-	427	292	148	867
Dangerous Driving	-	-	456	396	214	1,066
Impaired Driving	-	-	4,905	5,708	3,224	13,837
Blood/Alcohol over .08	-	-	3,684	3,915	2,042	9,641
Failure to Provide Breath Sample	-	-	645	652	358	1,655
Failure to Provide Roadside Breath Sample	-	-	-	-	-	-
Drive while Disqualified or Prohibited	-	-	1,703	1,027	115	2,845
Total	-	-	11,830	12,006	6,109	29,945

New federal and provincial laws relating to drinking and driving took effect December 20, 1985. Individuals convicted of offences which occurred prior to that date are not subject to the longer minimum mandatory suspension periods of the new laws. Previous minimum suspension periods were 3 months for a first conviction, 6 months for the second conviction within five years and 3 years for a third conviction within five years. The current minimum suspension periods are 1 year for a first conviction, 2 years for a second conviction within five years and 3 years for a third conviction within five years.

Table 7.5 Mandatory Suspensions Related to  
Criminal Code Convictions at Year End 1993\*\*

Suspensions	3 Months	6 Months	1 Year	2 Years	3 Years	Total
Criminal Negligence	1	3	26	62	20	112
Fail to Remain	-	-	502	516	340	1,358
Dangerous Driving	-	-	681	730	469	1,880
Impaired Driving	-	-	6,238	8,533	5,187	19,958
Blood/Alcohol over .08	-	-	4,398	5,870	3,242	13,510
Failure to Provide Breath Sample	-	-	796	1,138	741	2,675
Failure to Provide Roadside Breath Sample	-	-	-	-	-	-
Drive while Disqualified or Prohibited	-	-	4,155	3,193	202	7,550
Total	1	3	16,796	20,042	10,201	47,043

\*\* This table reflects the suspensions in effect at year end. The total exceeds the number of suspensions issued in 1993 due to the fact that some suspensions are in effect for more than one year.

Table 7.6 Demerit Point Suspensions by DriverAge 1993

DriverAge	Demerit Point Suspensions		
		Non-Probationary	Non-Probationary
		First	Second
	Probationary	Accumulation	Accumulation
16	298	-	-
17	1,406	-	-
18	1,674	1	-
19	996	23	-
20-24	2,514	379	31
25-34	2,290	428	28
35-44	656	135	7
45-54	157	47	4
55-64	32	11	1
65-74	11	4	-
75 +	3	1	-
Total	10,037	1,029	71

Newly licensed drivers are covered by the probationary licence system until they have successfully completed two one-year periods of suspension-free driving. Probationary drivers are suspended for 30 days after accumulating 6 or more demerit points.

Non-probationary 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.

---

## 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 millilitres of blood.

**Alcohol Involved:**

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

**Class L Driver's Licence:**

The learner's licence that allows the holder to drive any motor vehicle that requires a class G driver's licence (e.g. an automobile) on the road, providing that the holder of a class G licence or any other higher licence class (A,B,C,D,E and F) is occupying the seat beside him/her for the purpose of giving instruction.

**Class R Driver's Licence:**

The learner's licence that allows the holder to operate a motorcycle for the purposes of training. Class R licensed motorcyclists are prohibited from nighttime riding, carrying passengers and traveling on high speed highways with exceptions of Highways 11 and 17.

**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 by-law.

**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 accident.

**Fatal Accident:**

A motor vehicle accident in which at least one person sustains bodily injuries resulting in death.\*

**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.

**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 Traveled:**

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 Accident:**

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-HighwayAccidents:**

An off-highway accident 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-HighwayAccidents:**

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

**Pedestrian:**

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

**Personal InjuryAccident:**

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

**Property DamageAccident:**

A motor vehicle accident 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.

**ReportableAccident:**

Any fatal or injury accident, or any accident in which there is any damage to public property or damage to private property in excess of a monetary value prescribed in law.\*\*

**Suspension:**

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

\*Prior to January 1, 1982, fatal accident statistics included deaths attributed to accidental injuries up to one year after the accident. Since that date, only deaths from injuries within thirty days of the accident have been included .

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

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.