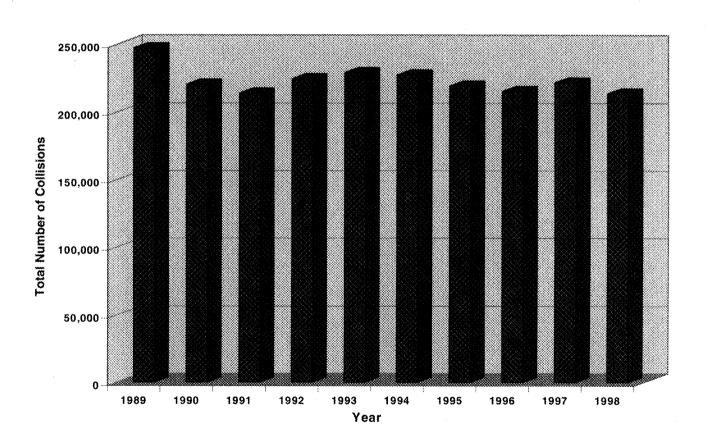
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## 1 Overview

## Total Number of Collisions in Ontario - 1989 to 1998



# 1a. Synopsis

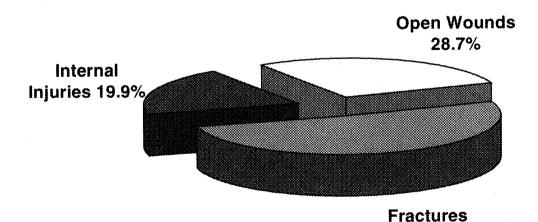
Selected Statistics	
Total Reportable Collisions	213,356
Total Drivers Involved in Collisions	386,818
Total Vehicles Involved in Collisions	401,546
Fatal Collisions	768
Personal Injury Collisions	55,441
Property Damage Collisions	157,147
Persons Killed	854
Drivers Killed (excludes All Terrain Vehicle Drivers)	507
Drivers Killed (Impaired or Had Been Drinking)	112
Passengers Killed	225
Pedestrians Killed	121
Other Road Users Killed	2
Persons Injured	83,192
Estimated Ontario Population (1998)	11,675,497
Licensed Drivers	7,727,756
Registered Motor Vehicles	6,812,770
Estimated Vehicle Kilometres Travelled (in millions)	84,478
Number of Persons Killed in Motor Vehicle Collisions per 100,000 People in Ontario	7.3
Number of Persons Killed in Motor Vehicle Collisions per 100 Million Kilometres Travelled	1.0
Collision Rate per 100 Million Kilometres Travelled	252.6
atal Collision Rate per 100 Million Kilometres Travelled	0.9

51.5%

## 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 - 1998



#### 1c. The Health Perspective

Ontario

Road Safety Annual Report

Selected Diagnoses of Motor
Vehicle Collision Injuries
Hospitalized in Ontario, 1997/98

	Hospital	Hospital
Selected Diagnoses	Admissions	Days of Stay
Fracture of skull	497	4,994
Fracture of neck and trunk	1,307	13,187
Fracture of upper limb	574	2,732
Fracture of lower limb	1,506	14,461
Dislocation, sprains	***************************************	
and strains	265	995
Intracranial injury,		
excluding those with		**************
skull fracture	965	8,899
Internal injury of chest,		
abdomen and pelvis	639	6,231
Open wound of head, neck		·····
and trunk	192	445
Open wound of upper limb	45	202
Open wound of lower limb	58	517
Other injuries, burns and		
traumatic complications	2,013	36,896
Total Admissions and Days	8,061	89,559

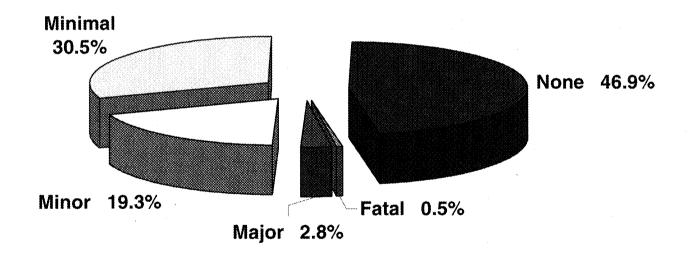
## Selected Surgical Procedures for Motor Vehicle Collision Injuries Hospitalized in Ontario, 1998

	Hospital	Hospital
Selected Procedure	Admissions	Days of Stay
Operations on skull, brain		***************************************
and cerebral meninges	148	3,407
Operations on spinal cord		***********
and canal structures	54	1,099
Operations on nose, mouth		
and pharynx	40	204
Operations on chest wall,		***************************************
pleura, mediastinum and	*******************************	**************************************
diaphragm	150	1,635
Operations on bone marrow		
and spleen	83	1,313
Operations on kidney	20	215
Operation on facial bones		
and joints	137	964
Reduction of fracture	*****************************	
and dislocation	1,832	18,468
Repair and plastic		***************************************
operations on joint	***************************************	
structures	149	2,465
Operations on skin and		***************************************
subcutaneous tissue	416	2,909
Other surgical procedure	619	10,683
Sub-total of surgical		*****
admission and days	3,648	43,362
lo surgical procedures		
reported	4,413	46,197
otal Admissions and Days	8,061	89,559

The People

## 2 The People

# Per Cent of Involved Persons in Collisions by Severity of Injury - 1998



## 2a. People in Collisions

Table 2.1	Category of Involved Person by Severity of Injury
	in Fatal and Personal Injury Collisions ** 1998

Category of	Severity of Injury					Total
Involved Person	None	Minimal	Minor	Major	Fatal	***************************************
Driver	47,119	28,486	16,504	2,098	437	94,644
Passenger*	25,996	15,633	9,473	1,257	222	52,581
Pedestrian	109	1,985	2,402	591	121	5,208
Cyclist	39	1,601	1,230	163	36	3,069
Cyclist Passenger	12	63	59	6	0	140
All Terrain Vehicle Driver	11	3	16	6	1	37
All Terrain Vehicle Passenger	2	1	3	7	0	. 13
Snow Vehicle Driver	2	5	13	7	1	28
Snow Vehicle Passenger	2	5	4	1	0	12
Motorcycle Driver	51	321	553	194	32	1,151
Motorcycle Passenger	23	75	138	50	3	289
Moped Driver	5	6	6	1	1	19
Moped Passenger	2	0	1	1	0	4
Hanger On	26	33	34	10	0	103
Other	713	67	69	11	0	860
Total	74,112	48,284	30,505	4,403	854	158,158

^{*} 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.

^{**}HTA (Highway Traffic Act) reportable. For more information on special vehicles, see Chapter 6.

Table 2.2	Category of Person Killed by	Person	Killed by	Age Groups 1998	ps 1330												
Category of	Age Groups																Total
Person	4	5-9	10-15	<b>4</b>	11	<b>\$</b>	5	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	š	
Driver	0	0	2	0	00	4	=	21	ස	窓	74	69	44	44	37	0	437
Passenger*	∞	80	16	မ	80	တ	တ	16	22	8	Ø	£	14	17	18	2	222
Pedestrian	m	4	4	2	2	, س	2	-	4	G	17	80	19	48	25	0	121
Bicyclist	0	3	7		0		0	0	2	တ	1	0	-	3	-		38
Bicycle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Terrain Vehicle Driver	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	-
All Terrain Vehicle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Snow Vehicle Driver	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	-
Snow Vehicle Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycle Driver	0	0	0	0	0	0	-	0	ည	16	2	က	-	-	0	0	32
Motorcycle Passenger	0	0	0	0	-	0	0	0	*	0		0	0	0	0	0	~
Moped Driver	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0	
Moped Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	Ŧ	5	53	တ	<b>€</b>	4	2	38	23	152	128	ති	52	25	ž	٠٠,	854

* Includes hangers on

UK = Unknown

HTA (Highway Traffic Act) reportable collisions. For more information on special vehicles, see Chapter 6.

Category of Persons Injured by Age Groups 1998

Table 2.3

Person         0-4         5-9         10-15           Driver         7         4         52           Driver         7         4         52           Passenger*         1,092         1,844         2,386           Pedestrian         132         389         74           Bicyclist         17         212         686           Bicyclist         3         7         34           All Terrain Vehicle Driver         0         0         8           All Terrain Vehicle Passenger         0         1         6           Snow Vehicle Priver         0         1         2           Snow Vehicle Passenger         0         1         2	4 7	16 17												•
7 4 1,092 1,844 132 389 17 212 3 7 0 0 nrger 0 1			28	9	20	21-24	25-34	35.44	45.54	55. 64	65.74	75.	2	Cra
1,092 1,844 132 389 17 212 3 7 0 0 Inger 0 1		30 926	-	1.196	1 234	4 405	11 630	11 211	7 454	3 000	2 077	2	5 8	
132 389 17 212 3 7 0 0 Inger 0 1				990	770	2 457	200	400	£ 6	770'0	4,611	207,	8	47,088
132 369 17 212 3 7 0 0 11 10ger 0 1				5	0 / /	704'7	717'4	3,240	7,280	- - - - -	1,317	833	756	26,422
17 212 3 7 0 0 nger 0 1		113	8	9	35	311	692	939	495	333	284	789	137	4.978
3 7 0 0 mger 0 1		92 100	79	66	89	254	477	357	179	95	9	75.	214	2 994
0 0 mger 0 1	34	7 4	0	-	5	13	28	16	7	4	67	;  -		128
nger 0 1 0 1 0 1 0 0 1 0 0 1	80	3 2	0	-	2	5	3	-	c	c	) c	- c	) <	200
Snow Vehicle Driver 0 1 2 Snow Vehicle Passenger 0 1 2	9	0	-	0	+	0	-	O	C	c	0	0	0	3 =
Snow Vehicle Passenger 0 1 2	2	5 2	-	0	-	2	σ	-	, -	,	o   c	> c	0	- 36
	2	1 2	-	-	С	c	+	c	.   -	۰   د	) c	>	0	3
Motorcycle Driver	10 0	30 10	24	35	, 5	> 5	- 20	>   6	-	>	>	>	>	2
				3	3	3	323	Q.	161	& &	ග	<del></del>	7	1,068
Motorcycle Passenger U 6 11	_	10 11	=	5	4	ઝ	89	22	36	7	-	0	7.	269
Moped Driver 0 0 0	0	0 0	0	0	0	-	9	2	0	e	-	C	·   c	
Moped Passenger 0 0 1		0 0	0	0	0	0	-	0	0	0	C	c	> c	2 6
Other 0 6 5	5	1 5	3	2	3	80	22	23	18	14	oc.	0	2/2	454
Total 1,251 2,471 3,947	1,303	3 2,086	2,367	2,370	2,212	7,734	17,481	15,777	10.629	5.918	3.960	2 447	1 230	82 402

HTA (Highway Traffic Act) reportable collisions. For more information on special vehicles, see Chapter 6.

* Includes hangers on

Table 2.4	Sex of Driver by	
	Class of Collision 1998	

Sex of	Class	Class of Collision				
Driver		Personal	Property			
	Fatal	Injury	Damage			
Male	974	68,173	192,404	261,551		
Female	305	36,456	85,280	122,041		
Unknown*	4	508	2,714	3,226		
Total	1,283	105,137	280,398	386,818		

#### **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.

#### 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. As of January 1, 1998 the minimum reportable level for property damage only collisions is \$1,000.

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 1998

Condition of	Class o	Class of Collision			
Driver		Personal	Property		
	Fatal	Injury	Damage	***************************************	
Normal	809	85,343	224,381	310,533	
Had Been Drinking	59	1,797	2,794	4,650	
Ability Impaired -					
Alcohol over .08	112	1,020	1,708	2,840	
Ability Impaired Alcohol	11	544	666	1,221	
Ability Impaired Drugs	25	69	92	186	
Fatigue	21	637	941	1,599	
Medical/Physical Disability	16	523	441	980	
Inattentive	61	6,803	12,105	18,969	
Other	5	288	575	868	
Unknown*	. 164	8,113	36,695	44,972	
Total	1,283	105,137	280,398	386,818	

## **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 .08 grams of alcohol per 100 millilitres of blood.

### **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 determination e.g. hit and run.

Table 2.6 Driver Age by Driver Condition In all Collisions 1998*

Driver	Dri	ver Condition					Total
Age		Had	Impaired	Ability			
		Been	Alcohol	Impaired			
	Normal	Drinking	over .08	Alcohol	Other	Unknown	
Under 16	1,040	20	8	3	239	130	1,440
16	1,477	29	6	5	196	134	1,847
17	6,607	66	26	10	748	436	7,893
18	7,542	140	47	26	814	570	9,139
19	7,446	194	68	29	728	614	9,079
20	7,144	208	106	26	683	640	8,807
21-24	28,984	748	336	141.	2,326	2,324	34,859
25-34	76,384	1,278	786	371	4,883	6,234	89,936
35-44	74,255	1,015	797	325	4,346	5,935	86,673
45-54	50,614	508	396	167	2,975	3,636	58,296
55-64	25,788	199	160	64	1,761	1,850	29,822
65-74	14,715	104	78	25	1,403	1,127	17,452
75 & over	7,575	37	14	6	1,152	624	9,408
Unknown	962	104	12	23	348	20,718	22,167
Total	310,533	4,650	2,840	1,221	22,602	44,972	386,818

^{*} Includes bicyclists, drivers of all-terrain vehicles, etc.

Table 2.7	Recorded Occurrence of Driver				
	Condition in Drivers Killed 1998*				
Recorded	Number of				
Occurrence	Drivers	%			
Normal	224	44.1			
Had Been Drinking	24	4.7			
Ability Impaired -		*****			
Alcohol over .08	83	16.3			
Ability Impaired Alcohol	5	1.0			
Ability Impaired Drugs	25	4.9			
Fatigue	7	1.4			
Medical/Physical Disability	12	2.4			
Inattentive	17	3.3			
Other	4	0.8			
Unknown	107	21.1			
Total	508	100.0			

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.

* In previous years Table 2.7 only included fatally injured drivers who were either normal or had been drinking. In order to better

^{*} Total includes Snow Vehicle Drivers killed in HTA reportable collisions

The People

Table 2.8	Apparent Driver Action by						
	Class of Coll	ision 1998					
Apparent	Class of Coll	Total					
Driver		Personal	Property				
Action	Fatal	Injury	Damage				
Driving Properly	541	50,504	135,748	186,793			
Following Too Close	5	10,560	21,235	31,800			
Speed Too Fast	70	1,216	1,594	2,880			
Speed Too Fast for				1			
Conditions	62	3,953	10,656	14,671			
Speed Too Slow	3	56	171	230			
Improper Turn	29	3,829	10,630	14,488			
Disobey Traffic Control	71	4,769	5,992	10,832			
Fail to Yield							
Right of Way	86	10,856	23,687	34,629			
Improper Passing	24	724	2,410	3,158			
Lost Control	173	7,161	16,513	23,847			
Wrong Way on			,				
One Way Road	4	118	154	276			
Improper Lane Change	11	1,677	7,691	9,379			
Other*	141	6,794	17,446	24,381			
Unknown	63	2,920	26,471	29,454			
Total	1,283	105,137	280,398	386,818			

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

Table 2.9	Seat Belt Usage by Se					
Safety Equipment	Severity of Injury		•			
Used						
***	Killed	Major	Minor	Minimal	Not Injured	Total
Seat Belt Used	253	1,521	14,108	25,863	41,948	83,693
Other Equipment*	7	52	456	503	232	1,250
Equipment Not used	117	286	650	322	279	1,654
No Safety Equipment	0	6	38	41	51	136
Use Unknown	60	233	1,252	1,757	4,609	7,911
Total	437	2,098	16,504	28,486	47,119	94,644

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

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 Se	verity of Passenge	er Injury in Fatal	and Personal Inj	ury Collisions 1998	
Safety Equipment	Severity of Injury					
Used		******************************	******	·		
	Killed	Major	Minor	Minimal	Not Injured	Total
Seat Belt Used	126	820	7,507	13,683	21,624	43,760
Child Safety Seat Used Incorrectly	0	3	18	28	75	124
Child Safety Seat Used Correctly	2	13	144	349	1,577	2,085
Other Equipment*	1	25	122	118	70	336
Equipment Not used	59	229	700	398	304	1,690
No Safety Equipment	7	44	339	414	575	1,379
Use Unknown	27	129	619	625	1,734	3,134
Total	222	1,263	9,449	15,615	25,959	52,508

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

Table 2.11 Restra	aint Use for Children	(0 - 4 Years) Killed in (	Collisions 1994-1998
-------------------	-----------------------	---------------------------	----------------------

Year	Child Restraint	<b>Child Restraint</b>	Lap/Lap &	Restraint	Available	Use	Total
Used	Used Correctly	Used Incorrectly	Shoulder Belt	Not Available	Not Used	Unknown	
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
1998	2	0	6	0	0	0	8

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

involved in Fatal and Personal Injury Collisions by Severity of Injury 19	}9{	8
---------------------------------------------------------------------------	-----	---

Restraint Used	Injury Level					
	Major / Fatal %	Minimal/Minor %	No Injuries %			
Child Restraint Used Correctly	22.7	41.5	45.8			
Child Restraint Used Incorrectly	5.7	4.1	2.1			
Lap/Lap-Shoulder Belt	41.5	46.6	47.0			
Not Available	7.5	2.0	1.2			
Available/Not Used	15.1	2.2	0.5			
Other	´ 1.9	0.8	0.1			
Unknown	5.6	2.8	3.3			
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 1998

Condition of Pedestrian	Killed	Injured
Normal	41	3,348
Had Been Drinking	6	246
Ability Impaired Alcohol over .08	13	14
Ability Impaired Alcohol	4	65
Ability Impaired Drugs	4	8
Fatigue	0	5
Medical or Physical Defect	3	91
Inattentive	18	618
Other	0	68
Unknown	32	515
Total	121	4.978

Table 2.14	Apparent Pedestrian Action	
	by Severity of Injury 1998	

Apparent Pedestrian Action	Killed	Injured
Crossing Intersection With Right of Way	14	1,519
Crossing Intersection Without Right of Way	22	788
Crossing Intersection No Traffic Control	11	341
Crossing Pedestrian Crossover	3	134
Crossing Marked Crosswalk Without Right of Way	4	94
Walking on Roadway With Traffic	10	114
Walking on Roadway Against Traffic	2	53
On Sidewalk or Shoulder	4	302
Playing or Working on Highway	2	100
Coming from Behind Parked Vehicle or Object	4	192
Running onto Roadway	10	594
Getting On/Off School Bus*	0	15
Getting On/Off Vehicle	0	60
Pushing/Working on Vehicle	3	23
Other	32	649
Unknown	0	0
Total	121	4.978

^{*} Calender Year

1998

## 2b. Putting the People in Context

Table 2.15 Ca	ategory of Persons Killed and Injured	1988-1998
---------------	---------------------------------------	-----------

Year	Ontario						*******						,
***************************************	Population		Driver	Pas	ssenger*	Pe	destrian	A	ll Others	Perso	ons Killed	Persor	ns Injured
	(Est.)**			*******						In A	II Classes	In A	II 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
1998	11,675,497	437	47,088	222	26,422	121	4,978	74	4,704	854	7.3	83,192	712.5

^{*} Excludes motorcycle passengers, who are included with "All Others".

^{**} Source: Ministry of Finance

Table 2.16	Sex of Driver	Population b	y Age	Groups 1998	j.
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Sex of	Age Grou	ıps		***		***************************************		Total
Driver	16-19	20-24	25-34	35-44	45-54	55-64	65+	
Male	221,583	334,097	831,226	962,043	746,227	481,152	543,502	4,119,830
Female	191,006	299,956	762,518	883,431	669,031	391,274	410,710	3,607,926
Total	412,589	634,053	1,593,744	1,845,474	1,415,258	872,426	954,212	7,727,756

Table 2.17 Driver Population by Age Groups 1988-1998

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
1998	412,589	634,053	1,593,744	1,845,474	1,415,258	872,426	954,212	7,727,756

The People

Table 2.18	Driver	Licence Class by	Sex 1998			
Licence	Driver	Sex			Total	%
Class	Male	%	Female	%		
A	85,567	2.08	1,547	.04	87,114	1.13
AB	4,314	.10	438	.01	4,752	.06
ABM	2,416	.06	128	.00	2,544	.03
ABM1	26	.00	9	.00	35	.00
ABM2	90	.00	16	.00	106	.00
AC	15,649	.38	457	.01	16,106	.21
ACM	7,826	.19	99	.00	7,925	.10
ACM1	137	.00.	2	.00	139	.00
ACM2	337	.01	4	.00	341	.00
AM	29,279	.71	196	.01	29,475	.38
AM1	611	.01	9	,00	620	.01
AM2	1,308	.03	21	.00	1,329	.02
B	16,016	.39	15,440	.43	31,456	.41
BM	4,509	.11	897	.02	5,406	.07
BM1	62	.00 -	32	.00	94	.00
BM2	166	.00	94	.00	260	.00
С	5,768	.14	463	.01	6,231	.08
CM	1,735	.04	. 55	.00	1,790	.02
CM1	17	.00	2	.00	19	.00
CM2	62	.00	7	.00	69	.00
D	215,668	5.23	14,571	.40	230,239	2.98
DE	102	.00	15	.00	117	.00
DEM	27	.00	1	.00	28	.00
DEM1	0	.00	1	.00	1	.00
DEM2	2	.00	0	.00	2	.00
DF	2,130	.05	95	.00	2,225	.03
DFM	960	.02	17	.00	977	.01
DFM1	17	.00	1	.00	18	.00.
DFM2	33	.00	2	.00	35	.00
DM	53,526	1.30	970	.03	54,496	.71
DM1	778	.02	29	.00	807	.01
DM2	1,685	.04	83	.00	1,768	.02
E	1,226	.03	2,083	.06	3,309	.04
EM	183	.00	49	.00	232	.00
EM1	1	.00	3	.00	4 .	.00.
EM2	5	.00	7	.00	12	.00

Table 2.18	Drive	Con	Continued			
Licence	Drive	er Sex		Total	%	
Class	Male	%	Female	%		
F	7,315	.18	4,977	.14	12,292	.16
FM	1,703	.04	251	.01	1,954	.03
FM1	41	.00	16	.00	57	.00
FM2	120	.00	22	.00	142	.00
G	2,814,197	68.31	3,020,524	83.72	5,834,721	75.50
G1	156,348	3.80	202,597	5.62	358,945	4.64
G1M	97	.00	20	.00	117	.00
G1M1	883	.02	88	.00	971	.01
G1M2	573	.01	80	.00	653	.01
G2	307,524	7.46	281,109	7.79	588,633	7.62
G2M	715	.02	94	.00	809	.01
G2M1	2,652	.06	219	.01	2,871	.04
G2M2	3,733	.09	269	.01	4,002	.05
GM	334,956	8.13	51,975	1,44	386,931	5.01
GM1	12,426	.30	2,573	.07	14,999	.19
GM2	21,942	.53	4,839	.13	26,781	.35
M	1,294	.03	257	.01	1,551	.02
<b>M</b> 1	397	.01	59	.00	456	.01
A2	676	.02	114	.00	790	.01
Other	0	.00	0	.00	0	.00
otal	4,119,830	100	3,607,926	100	7,727,756	100

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People

Table 2.19	Licensed Drivers, Total Co				
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	74,90	
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	95,18	

Table 2.19 Licensed Drivers, Total Collisions, Persons Killed and Injured 1931-1998

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
978	4,725,546	186,363	1,450	94,979
979	4,858,351	197,196	1,560	101,321
980	4,993,531	196,501	1,508	101,367
981	5,123,177	198,372	1,445	100,321
982	5,247,198	187,943	1,138	92,815
983	5,380,259	181,999	1,204	91,706
984	5,513,911	194,782	1,132	97,230
985	5,660,422	189,750	1,191	109,169
986	5,817,799	187,286	1,102	108,839
987	5,978,105	203,431	1,229	121,089
1988	6,118,112	228,398	1,237	118,158
989	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
994*	6,983,960	226,996	999	90,030
995	7,086,018	219,085	999	89,572
996	7,258,167	215,024	929	88,445
997	7,537,607	221,500	899	85,527
998	7,727,756	213,356	854	83,192

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

Table 2.20 Driver Age Groups - Number Licensed, Collision Involvement and Per Cent Involved in Collisions 1998

<b>Drivers</b>	Drivers Licensed Drivers Involved				s involved	9/	of Drivers of I	Each Age			
Age					in Collisions*			Involved in Collision			
	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Under 16	<u>-</u>	-		245	82	327	_	-	•		
16	44,525	37,056	81,581	1,122	589	1,711	2.5	1.6	2.1		
17	53,983	46,713	100,696	4,946	2,806	7,752	9.2	6.0	7.7		
18	60,371	52,576	112,947	5,904	3,128	9,032	9.8	5.9	8.0		
19	62,704	54,661	117,365	5,886	3,105	8,991	9.4	5.7	7.7		
20	63,578	55,767	119,345	5,820	2,888	8,708	9.2	5.2	7.3		
21-24	270,519	244,189	514,708	22,650	11,832	34,482	8.4	4.8	6.7		
25-34	831,226	762,518	1,593,744	59,274	29,826	89,100	7.1	3.9	5.6		
35-44	962,043	883,431	1,845,474	55,758	30,094	85,852	5.8	3.4	4.7		
45-54	746,227	669,031	1,415,258	38,080	19,654	57,734	5.1	2.9	4.1		
55-64	481,152	391,274	872,426	20,946	8,615	29,561	4.4	2.2	3.4		
65-74	356,434	270,557	626,991	11,978	5,367	17,345	3.4	2.0	2.8		
75 & over	187,068	140,153	327,221	6,173	3,182	9,355	3.3	2.3	2.9		
Unknown	-			31,216	3	31,219	•	*	R		
Total	4,119,830	3,607,926	7,727,756	269,998	121,171	391,169	6.6	3.4	5.1		

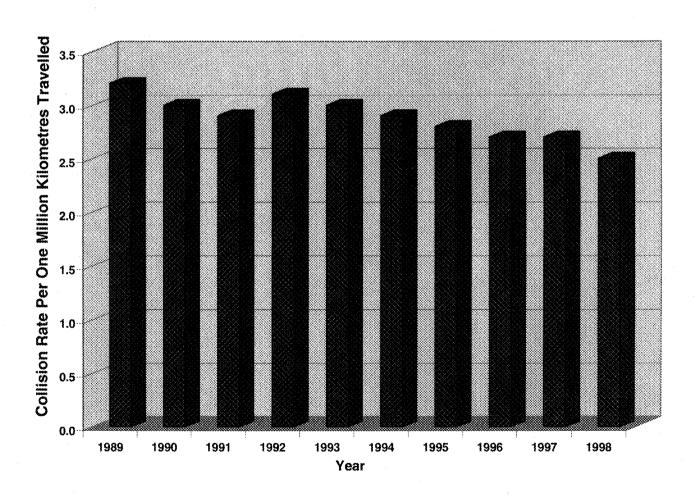
^{*} This table includes collisions with parked vehicles and excludes drivers of non-motor vehicles, i. e. bicyclists, snow vehicle operators, etc.

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## 3 The Collision

# Collision Rate Per One Million Kilometres Travelled in Ontario - 1989 to 1998



## 3a. Types of Collisions

Class of Collision 1988-1998

860

816

807

768

Table 3.1

1995

1996

1997

1998

Year	Class of Colli	Class of Collision						
		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				

58,273

57,791

56,121

55,441

159,952

156,417

164,572

157,147

219,085

215,024

221,500

213,356

Table 3.2	Collision Rate Per One Million									
	Kilometres Travelled 1988-1998									
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									
1998	2.5									

The

Collision

Table 3.3 Motor Vehicles Involved in Collisions Based on Initial Impact 1998*

Motor Vehicle in	Class	of Collision	·····	Total
Collision Involving		Personal	Property	
Moveable Objects:	Fatal	Injury	Damage	
Other Motor Vehicles	789	84,423	237,759	322,971
Unattended Vehicles	6	632	12,260	12,898
Pedestrian	115	4,461	139	4,715
Cyclist	37	3,113	418	3,568
Railway Train	11	16	38	65
Street Car	0	64	327	391
Farm Tractor	2	46	78	126
Domestic Animal	1	95	572	668
Wild Animal	3	405	7,856	8,264
Other Moveable Objects	3	37	145	185
Sub-total	967	93,292	259,592	353,851
Fixed Objects:				
Cable Guide Rail	0	60	335	395
Concrete Guide Rail	2	169	462	633
Steel Guide Rail	2	195	715	912
Pole (Utility Tower)	10	391	1,284	1,685
Pole (Sign/Parking Meter)	2	116	712	830
Fence/Noise Barrier	1	41	194	236
Culvert	1	27	28	56
Bridge Support	1	27	96	124
Rock Face	1	13	35	49
Snow Bank or Drift	0	28	91	119
Ditch	15	348	647	1,010
Curb	7	497	1,485	1,989
Crash Cushion	0	14	37	51
Building or Wall	1	39	161	201
Water Course	0	1	9	10
Construction Marker	0	3	43	46
Tree, Shrub, or Stump	3	126	388	517
Other Fixed Object	6	238	1,326	1,570
Sub-total	52	2,333	8,048	10,433
Other Events:				
Ran Off Road	129	3,734	7,093	10,956
Skidding/Sliding	123	4,763	12,788	17,674
Jack-knifing	1	29	106	136
Load Spill	0	9	52	61
Fire/Explosion	0	7	312	319
Submersion	0	2	3	5
Rollover	4	220	309	533
Debris on Road	1	109	709	819
Debris off Vehicle	2	120	850	972
Other Non-Collision Event	24	1,642	4,121	5,787
Sub-total	284	10,635	26,343	37,262
Total	1,303	106,260	293,983	401,546

^{*} Table 3.3 reflects the number of motor vehicles involved in collisions by initial impact.

Total

213,356

Table 3.4	Initial Impact Type									
	by Class of Collision 199	by Class of Collision 1998								
Initial Impact Type	Class of Collision			Total						
		Personal	Property	*******						
	Fatal	Injury	Damage							
Approaching	133	1,124	1,581	2,838						
Angle	110	7,265	15,054	22,429						
Rear End	32	17,007	39,179	56,218						
Sideswipe	63	2,802	17,655	20,520						
Turning Movement	69	11,633	33,720	45,422						
With Unattended Motor Vehicle	8	655	12,387	13,050						
Single Motor Vehicle	353	14,815	35,137	50,305						
Other	0	137	2,428	2,565						
Unknown	0	3	6	9						

768

55,441

157,147

#### **Time and Environment** 3b.

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Table 3.5	Month of Occurrence by Class of Collision 1998											
Month of	Clas	Total	%									
Occurrence	· · · · · · · · · · · · · · · · · · ·	<u>-</u>	Personal		Property							
	Fatal	%	Injury	%	Damage	%						
January	53	6.9	4,709	8.5	16,508	10.5	21,270	10.0				
February	44	5.7	3,233	5.8	9,025	5.7	12,302	5.8				
March	48	6.3	4,269	7.7	13,408	8.5	17,725	8.3				
April	47	6.1	3,918	7.1	10,108	6.4	14,073	6.6				
May	56	7.3	4,923	8.9	12,410	7.9	17,389	8.2				
June	55	7.2	5,085	9.2	12,535	8.0	17,675	8.3				
July	77	10.0	4,969	9.0	11,845	7.5	16,891	7.9				
August	82	10.7	4,982	9.0	12,060	7.7	17,124	8.0				
September	84	10.9	4,922	8.9	12,642	8.0	17,648	8.3				
October	75	9.8	4,986	9.0	14,449	9.2	19,510	9.1				
November	67	8.7	4,482	8.1	14,741	9.4	19,290	9.0				
December	80	10.4	4,963	9.0	17,416	11,1	22,459	10.5				
Total	768	100	55,441	100	157,147	100	213,356	100.0				

Table 3.6	Day of Week by Cla	ass of Collisio	on 1998					
Day of	Cla	Total	%					
Occurrence			Personal		Property			**************************************
	Fatal	%	Injury	%	Damage	%		
Monday	89	11.6	7,575	13.7	21,592	13.7	29,256	13.7
Tuesday	96	12.5	8,399	15.1	24,212	15.4	32,707	15.3
Wednesday	93	12.1	8,173	14.7	22,723	14.5	30,989	14.5
Thursday	99	12.9	8,448	15.2	25,193	16.0	33,740	15.8
Friday	116	15.1	8,938	16.1	25,865	16.5	34,919	16.4
Saturday	150	19.5	7,790	14.2	21,555	13.7	29,495	13.8
Sunday	125	16.3	6,118	11.0	16,007	10.2	22,250	10.4
Total	768	100.0	55,441	100.0	157,147	100.0	213,356	100.0

Table 3.7	Hour of Occurrence	e by Class	of Collision 1998	******************				
Hour of	Clas	s of Collisio	ท				Total	%
Occurrence A.M.			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
12 to 1 a.m.	17	2.2	831	1.5	2,469	1.6	3,317	1.6
1 to 2 a.m.	29	3.8	709	1.3	2,311	1.5	3,049	1.4
2 to 3 a.m.	35	4.6	801	1.4	2,341	1.5	3,177	1.5
3 to 4 a.m.	25	3.3	634	1.1	1,863	1.2	2,522	1,2
4 to 5 a.m.	19	2.5	370	0.7	1,253	0.8	1,642	0.8
5 to 6 a.m.	21	2.6	444	0.8	1,521	1.0	1,986	0.9
Sub tojai	146	19	3,789	5.5	11,758	7.6	15 593	7.6
6 to 7 a.m.	25	3.3	1,072	1.9	3,447	2.2	4,544	2.1
7 to 8 a.m.	28	3.6	2,037	3.7	5,991	3.8	8,056	3.8
8 to 9 a.m.	15	2.0	3,263	5.9	9,622	6.1	12,900	6.0
9 to 10 a.m.	24	3.1	2,373	4.3	6,999	4.5	9,396	4.4
10 to 11 a.m.	29	3.8	2,289	4.1	7,195	4.6	9,513	4.5
11 to 12 noon	29	3.7	2,925	5.3	8,340	5.3	11,294	5.3
Sub total	194	19.5	13,999	25.2	41,594	25.5	55,703	25.1
Hour of							~	
Occurrence P.M.		~~~~				~~~~~~~~~~		
12 to 1 p.m.	33	4.3	3,423	6.2	9,441	6.0	12,897	6.0
1 to 2 p.m.	30	3.9	3,363	6.1	9,170	5.8	12,563	5.9
2 to 3 p.m.	37	4.8	3,616	6.5	9,515	6.1	13,168	6.2
3 to 4 p.m.	55	7.2	4,677	8.4	11,992	7.6	16,724	7.8
4 to 5 p.m.	41	5.3	4,514	8.1	12,286	7.8	16,841	7.9
5 to 6 p.m.	42	5.5	4,690	8.5	12,765	8.1	17,497	8.2
Sub total	238	31.0	24,283	43.4	65,169	41.4	89,690	42.0
5 to 7 p.m.	48	6.3	3,783	6.8	10,142	6.5	13,973	6.5
7 to 8 p.m.	48	6.3	2,862	5.2	7,511	4.8	10,421	4.9
8 to 9 p.m.	35	4.6	1,976	3.6	5,624	3.6	7,635	3.6
9 to 10 p.m.	34	4.4	1,848	3.3	5,324	3.4	7,206	3.4
10 to 11 p.m.	36	4.7	1,417	2.6	4,645	3.0	6,098	2.9
11 to 12 midnight	27	3.4	1,219	2.1	3,758	2.2	5,004	2.3
Sub total	228	29.7	13,105	23.6	37 004	23.5	70.73	23.6
Jnknown	6	0.8	305	0.6	1,622	1.0	1,933	0.9
ctai	768	190.0	55,441	100.0	157.147	190.0	215,350	100.0

The Collision

Table 3.8 Statutory Holidays, Holiday Weekends - Fatal Collisions, Persons Killed and Injured 1998

Statutory	Number of Fatal	Fatal Drivers		Passengers		Others		Total	
Holiday*	Collisions	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Easter Weekend	6	. 4	5	2	5	0	0	6	10
Victoria Day	8	6	4	4	9	0	0	10	13
Canada Day	6	5	4	1	5	0	0	6	9
Civic Holiday (Simcoe Day)	14	9	8	4	18	1	1	14	27
Labour Day	20	12	8	5	15	4	3	21	26
Thanksgiving Day	. 13	9	9	4	13	1	0	14	22
Christmas/Boxing Day	6	3	6	5	2	0	0	8	8

^{*} Actual length may vary depending on the calendar year. For certain holidays, it might include the whole weekend.

Table 3.9	Light Condition b							
Light	Cla	Total	%					
Condition			Personal		Property			
	Fatal	%	Injury	%	Damage	%		~~~~~~~~~ <del>~</del>
Daylight	404	52.7	39,643	71.5	106,628	67.8	146,675	68.7
Dawn	14	1.8	673	1.2	2,607	1.7	3,294	1.5
Dusk	28	3.6	1,659	3.0	5,325	3.4	7,012	3.3
Darkness	322	41.9	13,449	24.3	42,315	26.9	56,086	26.3
Other	0	0.0	17	0.0	272	0.2	289	0.1
Total	768	100.0	55,441	100.0	157,147	100.0	213,356	100.0

Table 3.10	Visibility by Clas	s of Collisio	n 1998		••••••		*************************	
Visibility	Class of	Total	%					
			Personal		Property			
	Fatal	%	Injury	%	Damage	%	***************************************	
Clear	640	83.4	44,404	80.2	120,850	76.9	165,894	77.8
Rain	60	7.8	7,266	13.1	20,399	13.0	27,725	13.0
Snow	40	5.2	2,455	4.4	10,416	6.6	12,911	6.1
Freezing Rain	8	1.0	522	0.9	2,176	1.4	2,706	1.3
Drifting Snow	0	0.0	205	0.4	778	0.5	983	0.5
Strong Wind	7	0.9	75	0.1	383	0.2	465	0.2
Fog, Mist, Smoke, or Dust	11	1.4	415	0.7	1,503	1.0	1,929	0.9
Other	2	0.3	99	0.2	642	0.4	743	0.3
Total	768	100.0	55,441	100.0	157,147	100.0	213,356	100.0

## 3c. The Collision Location

Table 3.11	Road Jurisdiction by Class of Collision 1998								
Road	Cl	Total							
Jurisdiction		Personal	Property	•••••					
	Fatal	Injury	Damage						
Municipal (Excl.Twp. Rd.)	206	32,349	90,557	123,112					
Provincial Highway	221	8,395	24,974	33,590					
Township	71	2,190	6,435	8,696					
County or District	103	2,760	8,251	11,114					
Regional Municipality	160	9,628	26,507	36,295					
Federal	3	79	310	392					
Other	4	40	113	157					
Total	768	55,441	157,147	213,356					

Table 3.12	Road Juris	diction for	All Collisi	ons 1988-1	998							
Road	Year			***************************************	~~~~~~~~~		222200000000000000000000000000000000000					Total
Jurisdiction*	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
Municipal	159,228	139,926	117,218	112,651	117,800	119,421	117,478	114,848	112,980	123,423	123,112	1,358,085
Provincial	44,772	48,944	43,513	44,234	46,537	48,275	48,895	46,365	46,867	41,947	33,590	493,939
Township	12,277	11,882	10,684	10,332	10,777	10,667	10,497	9,774	9,236	9,557	8,696	114,379
County or District	7,527	8,773	8,582	8,482	9,186	9,076	8,839	8,815	8,381	9,574	11,114	98,349
Regional Municipality	3,620	36,237	39,004	36,956	38,810	40,230	40,165	38,279	36,738	36,341	36,295	382,675
Federal**	748	940	913	769	899	863	825	753	662	504	392	8,268
Other	226	336	274	245	240	302	297	251	160	154	157	2.642
Total	228,398	247,038	220,188	213,669	224,249	228,834	226,996	219,085	215,024	221,500	213,356	2,458,337

^{*} Collisions may not be comaparable across the different years due to transfer of highways between jurisdictions.

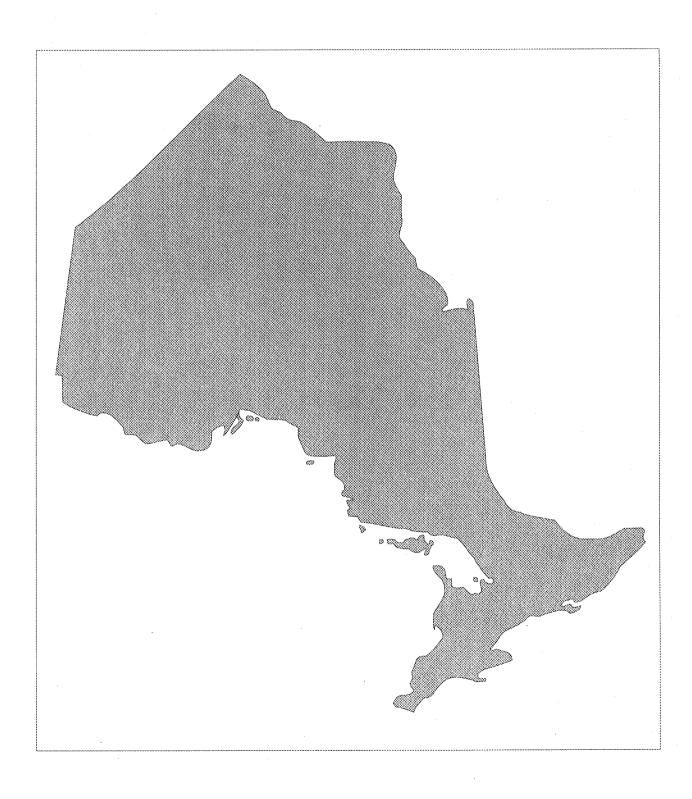
^{**} Since January 1, 1988, the Motor Vehicle Accident Report form allows the recording of jurisdiction for federal roads.

The Collision

Table 3.13	Collision Locatio	n by Class o	of Collision 1998					
Road Location	Class of	Collision		**************			Total	%
***************************************			Personal		Property		,	
	Fatal	%	Injury	%	Damage	%		
Non-intersection	437	56.8	19,015	34.3	60,792	38.6	80,244	37.6
Intersection Related	88	11.5	12,966	23.4	35,437	22.6	48,491	22.7
At Intersection	163	21.2	16,352	29.5	33,823	21.5	50,338	23.6
At/Near Private Drive	56	7.3	6,477	11.7	24,928	15.9	31,461	14.7
At Railway	12	1.6	96	0.2	302	0.2	410	0.2
Underpass or Tunnel	0	0.0	69	0.1	287	0.2	356	0.2
Overpass or Bridge	12	1.6	359	0.6	990	0.6	1,361	0.6
Other	0	0.0	107	0.2	588	0.4	695	0.3
Total	768	100.0	55 441	100.0	157.147	100.0	213.356	100.0

Table 3.14	Road Surface Co	ndition by C	lass of Collision	า 1998				
Road Surface	Class of	Collision					Total	%
Condition			Personal	•	Property			
	Fatal	%	Injury	%	Damage	%		
Dry	569	74.1	40,116	72.3	107,315	68.3	148,000	69.4
Wet	120	15.6	10,798	19.5	31,227	19.9	42,145	19.8
Loose Snow	18	2.3	1,010	1.8	4,585	2.9	5,613	2.6
Slush	13	1.7	777	1.4	3,094	2.0	3,884	1.8
Packed Snow	13	1.7	640	1.2	3,308	2.1	3,961	1.9
lce	25	3.3	1,657	3.0	6,234	4.0	7,916	3.7
Mud	0	0.0	7	0.0	68	0.0	75	0.0
Loose Sand or Gravel	3	0.4	314	0.6	807	0.5	1,124	0.5
Spilled Liquid	0	0.0	22	0.0	43	0.0	65	0.0
Other	7	0.9	100	0.2	466	0.3	573	0.3
Total	768	100.0	55,441	100.0	157,147	100.0	213,356	100.0

# 4 Place of Collision in Ontario



Place of Collision in Ontario

## 4. Place of Collision in Ontario

Ta	hl	۵	A	1

Location	Estimated		Class	of Collisi	on			Persons	Motor Vehicle	
		Population	Total		Personal	Property	*******		Registrations	
		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	······································	
ONTARIO		10,341,673	213,356	768	55,441	157,147	854	83,192	6,812,770**	
BLIND RIVER, T		3,521	29	0	10	19	0	14		
ELLIOT LAKE, C	М	11,565	62	0	16	46	0	19	******	
MICHIPICOTEN, TP	М	3,419	1	0	1	0	0	2		
SAULT STE. MARIE, C	М	75,463	1,421	0	353	1,068	0	527		
THESSALON, T		1,335	7	0	1	6	0	1		
PROVINCIAL HIGHWAY		*****	562	10	160	392	10	266		
OTHER AREAS	***************************************	13,422	220	1	50	169	1	77		
ALGOMA		108,725	2,302	11	591	1,700	11	906	88,353	
BRANTFORD, C	М	80,436	1,568	1	346	1,221	1	496		
BRANTFORD, TP	***************************************	6,234	54	1	17	36	1	27		
BURFORD, TP		5,763	19	0	8	11	0	16	***************************************	
PARIS, T	М	8,653	72	0	20	52	0	21	~~~~	
PROVINCIAL HIGHWAY			200	4	57	139	4	119		
OTHER AREAS	~~~~	8,321	329	4	89	236	4	154	~~~~	
BRANT		109,407	2,242	10	537	1,695	10	833	76,778	
AMABEL, TP		3,664	25	1	5	19	1	8		
BRANT, TP		3,213	26	1	9	16	1	14		
CHESLEY, T		1,781	9	0	3	6	0	3		
(INCARDINE, T	М	6,277	67	0	 11	56	0	15		
PORT ELGIN, T	М	6,618	. 69	0	19	50	0	26		
AUGEEN, TP		1,775	21	0	4	17	0	5		
OUTHHAMPTON, T	M	2,994	23	0	6	17	0	9		
VALKERTON, T	M	4,752	50	0	15	35	0	22		
VIARTON, T		2,214	28	0	7	21	0	8		
ROVINCIAL HIGHWAY		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	187	1	65	121	1	123		
THER AREAS		28,280	447	6	108	333	<del>-</del> 7			
RUCE		61,568	952	9	252	691	10	167 <b>400</b>	49,814	
OCHRANE, T		4,357	49	0	9				43,614	
EARST, T	*************	5,471	67	0 0		40	0	13		
APUSKASING, T	М	9,501	89		16	51	0	22	The state of the s	
MOOTH ROCK FALLS, T	191	1,823	5	1	20	68	1	24		
MMINS, C	M	45,845	594	0 1	100	5	0	0		
ROVINCIAL HIGHWAY	141	70,040	~~~~		186	407	2	274		
THER AREAS		15,274	334	5	93	236	5	150		
OCHRANE		55,274 <b>52,271</b>	223 <b>1,361</b>	2 9	62 <b>386</b>	159 <b>968</b>	5 <b>13</b>	97 <b>580</b>	63,516	

Table 4.1* Continued

Location		Estimated	Clase	of Collis	ion		Persons	Motor Vehicle	
MOVEMENT CONTRACTOR CO		Population	Total	UI COM	Personal	Property		reisons	Registrations
		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	vediananous
AMARANTH, TP	1	3,234	44	1	14	29	1	19	
MELANCTHON, TP		2,360	14	0	6	8	0	9	
MONO, T		6,045	59	0	18	41	0	29	
MULMUR, TP	····	2,627	42	0	12	30	0	27	
ORANGEVILLE, T	M	20,142	267	0	51	216	0	81	
SHELBURNE, T	M	3,375	52	1	4	47	3	4	
PROVINCIAL HIGHWAY			169	2	43	124	2	74	
OTHER AREAS		4,511	252	4	79	169	5	135	
DUFFERIN		42,294	899	8	227	664	11	378	33,087
AJAX, T		63,552	626	2	167	457	2	234	
BROCK, TP	***************************************	11,637	113	2	29	82	2	53	
OSHAWA, C	******	131,952	2,005	4	566	1,435	6	830	
PICKERING, T	•••••	76,440	885	3	227	655	3	333	
SCUGOG, TP		18,505	250	3	69	178	3	114	
UXBRIDGE, TP		15,810	232	1	63	168	1	97	
WHITBY, T		73,303	916	9	255	652	9	375	
PROVINCIAL HIGHWAY	*		1,334	11	294	1,029	12	464	
OTHER AREAS		58,712	733	4	216	513	5	334	
DURHAM		449,911	7,094	39	1,886	5,169	43	2,834	301,599
AYLMER, T	М	6,476	64	0	14	50	0	18	
BAYHAM, TP	**-	5,725	46	0	11	35	0	18	
MALAHIDE, TP		8,039	65	. 3	19	43	3	31	
ST THOMAS, C	М	31,107	361	2	105	254	2	161	
SOUTHWOLD, TP		4,215	34	1	8	25	1	16	
PROVINCIAL HIGHWAY		***************************************	203	2	68	133	2	121	
OTHER AREAS		20,178	409	4	97	308	4	169	
ELGIN		75,740	1.182	12	322	848	12	534	59,643
AMHERSTBURG, T	М	19,303	121	2	33	86	2	43	
COLCHESTER SOUTH, TP	М	5,829	31	0	6.	25	0	10	<del></del>
ESSEX, T	М	6,789	124	0	23	101	0	32	
HARROW, T		2,734	29	0	5	24	0	6	
KINGSVILLE, T	М	5,938	38	0	12	26	0	14	
EAMINGTON, T	М	16,151	282	0	41	241	0	60	
MERSEA, TP	М	8,891	61	0	17	44	0	33	,
ROCHESTER, TP		4,407	10	0	2	8	0	2	***************************************
ST CLAIR BEACH, VL	M	3,700	9	0	0	9	0	0	

NANTICOKE, C

NORFOLK, TP

OTHER AREAS

PROVINCIAL HIGHWAY

SIMCOE, T

Ontario Road Safety Annual Report Place of Collision in Ontario 

Table 4.1*	-	C	ontinued	*****					
Location		Estimated	Class	of Collis	ion			Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
e de meno metado de menoramento, tras en tras de menos personas que contrago en proprio proprio que que que qu		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
SANDWICH SOUTH, TP	<del>-</del>	6,783	81	0	9	72	0	22	
TECUMSEH, T		12,979	132	.0	27	105	0	37	
TILBURY NORTH, TP		3,500	14	0	5	9	0	7	
TILBURY WEST, TP		1,778	4	0	1	3	0	1	
WINDSOR, C	M	200,062	4,539	5	1,015	3,519	5	1,435	
PROVINCIAL HIGHWAY			304	6	121	177	7	219	***************************************
OTHER AREAS		53,413	1,037	15	339	683	16	534	
ESSEX		352,257	6,816	28	1,656	5,132	30	2,455	231,476
(INGSTON, C	М	110,327	1,468	4	361	1,103	7	496	
PROVINCIAL HIGHWAY			288	2	84	202	2	144	
OTHER AREAS		21,327	553	2	150	401	2	207	***************************************
FRONTENAC		131,654	2,309	8	595	1,706	11	847	85,208
BENTINCK, TP		3,422	34	0	7	27	0	11	
DURHAM, T	М	2,507	23	0	9	14	0	18	anganadaga adagi sai sahuri sabagan ku kundagi sa kuti sabagila. Vi Anciba kuti attisiin kuti d
GLENELG, TP		2,092	14	0	4	10	0	6	
HANOVER, T	М	6,525	90	0	23	67	0	34	
HOLLAND, TP		2,840	28	0	8	20	0	18	* ** * * * * * * * * * * * * * * * * *
KEPPEL, TP		4,355	23	1	9	13	1	13	
MEAFORD, T	М	4,399	34	1	11	22	1	16	
VORMANBY, TP		2,534	28	0	5	23	0	5	
OSPREY, TP		2,099	14	0	5	9	0	13	
OWEN SOUND, C	М	20,380	269	1	76	192	1	113	
PROTON, TP		1,868	15	0	4	11	0	6	energy group op group on mensengeled actual actual actual to the first of the first
SULLIVAN, TP		2,644	18	0	8	10	0	16	
SYDENHAM, TP		3,017	22	0	5	17	0	8	
PROVINCIAL HIGHWAY			300	2	77	221	2	138	
OTHER AREAS		23,888	538	4	158	376	4	246	
REY		82,570	1,450	9	409	1,032	9	661	57,026
ELHI, TP		15,154	197	2	62	133	2	100	
DUNNVILLE, T	***************************************	11,781	129	1	38	90	1	58	
HALDIMAND, T		21,670	158	3	50	105	3	76	

22,000

11,019

14,623

Table 4.1*			Continued						
Location	<u>T</u>	Estimated	Class	of Collis	ion		••	Persons	Motor Vehicle
		Population	Total		Personal	Property	· .		Registrations
		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
HALDIMAND-NORFOLK		96,247	1,498	10	431	1,055	10	672	79,300
ANSON,HINDON & MINDEN, T		3,185	37	0	9	28	. 0	10	
DYSART ET AL, TP		4,671	20	0	2	18	0	4	
PROVINCIAL HIGHWAY			154	2	41	111	2	85	
OTHER AREAS		6,086	167	0	34	133	0	45	
HALIBURTON		13,942	378	•	86	290	2	144	12,304
BURLINGTON, C		132,772	1,549	5	405	1,139	5	613	
HALTON HILLS, T		41,540	413	1	103	309	1	135	
MILTON, T		31,406	525	. 5	145	375	5	229	
OAKVILLE, T		123,895	1,395	2	313	1,080	3	477	
PROVINCIAL HIGHWAY			1,633	7	372	1,254	.8	643	
OTHER AREAS		0	49	0	14	35	0	24	•••••
HALTON		329,613	5,564	20	1,352	4,192	22	2,121	239,057
ANCASTER, T	***************************************	23,920	260	1	76	183	1	121	
DUNDAS, T		23,036	154	0	61	93	0	101	•••••
FLAMBOROUGH, T		33,604	213	0	69	144	0	124	
GLANBROOK, TP	******	10,625	93	1	30	62	1	43	
HAMILTON, C		316,190	3,933	5	1,595	2,333	5	2,285	******
STONEY CREEK, C		54,166	445	4	189	252	5	286	
PROVINCIAL HIGHWAY		************************	789	10	254	525	12	417	
OTHER AREAS		0	76	0	32	44	0	49	
HAMILTON-WENTWORTH		461,541	5,963	21	2,306	3,636	24	3,426	275,171
BANCROFT, T	**************	2,264	60	0	13	47	0	23	
BELLEVILLE, C	М	42,722	833	1	179	653	1	295	
DESERONTO, T	М	1,651	12	0	1	11	0	1	
MARMORA LAKE, TP	***************************************	2,234	5	0	1	4	0	1	
TYENDINAGA, TP		3,355	49	0	15	34	0	32	
PROVINCIAL HIGHWAY		~	520	4	134	382	4	226	
OTHER AREAS		66,417	887	5	230	652	5	350	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
HASTINGS		118,643	2,366	10	573	1,783	10	928	90,923
CLINTON, T	М	3,040	34	0	4	30	0	6	
COLBORNE, TP		2,106	4	0	1	3	0	1	
EXETER, T	М	4,354	. 67	0	16	51	0	33	
GODERICH, T	М	7,428	113	0	20	93	0	29	
GODERICH, TP		2,630	16	0	5	11	0	10	
GREY, TP		1,966	18	0	10	8	0	14	

PROVINCIAL HIGHWAY

Ontario Road Safety **Annual Report**  Place of Collision in Ontario

**Table 4.1*** Continued Persons **Motor Vehicle** Location **Estimated Class of Collision** Registrations Population Total Personal **Property** (1998)* Collisions Fatal Damage Killed Injured Injury HOWICK, TP 3,495 MORRIS, TP 1,770 SEAFORTH, T 2.288 М STEPHEN, TP 4,245 TUCKERSMITH, TP 3.038 TURNBERRY, TP 1,741 WINGHAM, T М 2.883 PROVINCIAL HIGHWAY OTHER AREAS 17,764 HERON 58 748 41.158 DRYDEN, C 7.731 М IGNACE, TP 1,499 JAFFRAY AND MELICK, TP 3.970 KEEWATIN, T 1,986 9,488 KENORA, T RED LAKE, T 4.082 SIOUX LOOKOUT, T 4,757 PROVINCIAL HIGHWAY OTHER AREAS 2,861 39,315 KENORA 36,374 1,228 Š PROVINCIAL HIGHWAY OTHER AREAS 103.277 1.479 1.030 1,137 KENT 103,277 1,648 81,136 BOSANQUET, T 5,282 BROOKE, TP 1,827 ENNISKILLEN, TP 3,212 FOREST, T 2,849 MOORE, TP 10.776 PETROLIA, T М 4,792 PLYMPTON, TP 5,038 POINT EDWARD, VL М 2.237 M SARNIA-CLEARWATER, C 70,383 SOMBRA, TP 4,149 WARWICK, TP 4,060 WYOMING, VL 2,051 

Place of Collision in Ontario

Table 4.1* Continued **Motor Vehicle** Class of Collision **Estimated Persons** Location Registrations **Population** Total Personal Property (1998)*Collisions Fatal Injury Damage Killed Injured OTHER AREAS 10.109 NIPISSING 80,379 1.064 1,461 57 135 BRIGHTON, TP 3,518 BRIGHTON, T 4.401 COBOURG, T М 15,426 COLBORNE, VL 1.876 CRAMAHE, TP 3,239 HALDIMAND, TP 4,195 HOPE, TP 3.562 PERCY, TP 3,098 PORT HOPE, T 10,962 PROVINCIAL HIGHWAY OTHER AREAS 19.228 **NORTHUMBERLAND** 69,505 1,279 55,118 CUMBERLAND, TP 47,044 WEST CARLETON, TP 16,286 GLOUCESTER, C 104,397 1,118 М GOULBOURN, TP 19,902 KANATA, C 48.014 NEPEAN, C 116,928 1,407 1,062 М OSGOODE, TP 15.845 OTTAWA, C Μ 321.955 5,705 1,492 4,205 2,072 RIDEAU, TP 12,231 ROCKCLIFFE PARK, VL 2,191 VANIER, C 17,771 PROVINCIAL HIGHWAY 1.170 OTHER AREAS 400,175 OTTAWA-CARLETON 8,624 4,103 722,564 11,500 2,843 INGERSOLL, T M 9.955 S WEST OXFORD, TP 8,378 TILLSONBURG, T М 13,523 WOODSTOCK, C М 32.347 ZORRA, TP 8,107 PROVINCIAL HIGHWAY OTHER AREAS 25,054 OXFORD 1,343 70,885 97,364 1,821 

Place of Collision in Ontario

Table 4.1* Continued

Location		Estimated	Class	of Collis	ion		ang ang panggangan ang panggan ang manana da da ang da da da da	Persons	Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
MCDOUGALL, TP	,	2,177	11	0	4	7	0	7	
PERRY, TP	***	1,987	12	0	1	11	0	1	
PROVINCIAL HIGHWAY			607	9	166	432	11	277	
OTHER AREAS		29,101	308	3	68	237	4	99	
PARRY SOUND		33,265	938	12	239	687	15	384	34,611
BRAMPTON, C		260,498	3,744	13	796	2,935	13	1,264	
CALEDON, T		39,837	785	6	182	597	6	304	
MISSISSAUGA, C		529,160	6,696	13	1,259	5,424	13	1,815	
PROVINCIAL HIGHWAY			2,682	10	508	2,164	12	802	
OTHER AREAS		0	325	2	25	298	2	50	
PEEL		829,495	14,232	44	2,770	11,418	46	4,235	568,238
ST. MARYS, T	М	5,776	53	0	14	39	0	15	
STRATFORD, C	М	28,002	468	1	114	353	1	175	
PROVINCIAL HIGHWAY			151	2	48	101	3	96	'
OTHER AREAS		36,284	502	8	144	350	10	256	
PERTH		70,062	1,174	11	320	843	14	542	49,024
LAKEFIELD, VL	М	2,321	17	0	6	- 11	0	7	
PETERBOROUGH, C	М	68,748	. 898	0	353	545	0	546	
PROVINCIAL HIGHWAY			301	2	88	211	2	153	
OTHER AREAS		46,918	694	3	196	495	3	296	
PETERBOROUGH		117,987	1,910	5	643	1,262	5	1,002	85,122
CASSELMAN, VL		2,838	26	0	1	25	0	1	
EAST HAWKESBURY, TP		3,242	14	0	5	9	0	8	
HAWKESBURY, T	М	10,266	203	0	32	171	0	37	
RUSSELL, TP		11,652	44	1	11	32	1	17	
PROVINCIAL HIGHWAY			148	0	45	103	0	75	
OTHER AREAS		45,633	587	4	153	430	4	216	
PRESCOTT & RUSSELL		73,631	1,022	5	247	770	5	354	60,623
PROVINCIAL HIGHWAY			55	1	18	36	-, 1	27	
OTHER AREAS		22,795	442	2	88	352	3	133	
PRINCE EDWARD		22,795	497	3	106	388	4	160	18,217
ATIKOKAN, TP	М	3,493	19	0	3	16	0	3	
FORT FRANCES, T	M	8,312	143	0	21	122	0	29	
PROVINCIAL HIGHWAY			184	2	47	135	2	87	
OTHER AREAS		6,392	68	1	14	53	2	18	
RAINY RIVER		18,197	414	3	85	326	4	137	17,719

Table 4.1*	Continued

ocation		Estimated	Class	of Collis	ion			Persons	Motor Vehicle
,		Population	Total		Personal	Property			Registrations
		(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
ALICE & FRASER, TP		4,043	17	0	5	12	0	13	
ARNPRIOR, T		6,552	. 74	0	10	64	0	17	
DEEP RIVER, T	М	4,203	9	0	0	9	0	0	
HORTON, TP		2,443	14	0	3	11	0	6	
PEMBROKE, C	М	13,492	218	1	51	166	1	69	
PETAWAWA, T		15,075	39	0	11	28	0	12	
RENFREW, T	М	7,642	98	0	31	67	0	47	
WESTMEATH, TP		2,584	14	0	3	11	0	4	
WILBERFORCE, TP		1,834	11	0	4	7	0	5	
PROVINCIAL HIGHWAY			404	6	131	267	6	246	***************************************
OTHER AREAS		34,679	531	1	125	405	1	193	
RENFREW		92,547	1,429	8	374	1,047	8	612	69,358
BARRIE, C	М	78,965	1,825	1	304	1,520	1	461	
COLLINGWOOD, T	М	15,745	242	3	60	179	3	92	
SSA, TP		15,904	69	0	11	58	0	17	
LOS, TP		0	2	0	0	2	0	0	
NNISFIL, T	M	24,853	178	3	43	132	4	69	
MDLAND, T	М	16,406	257	0	67	190	0	91	
ORILLIA, C	M	27,882	479	3	102	374	4	160	
INY, TP	*****************	8,875	71	0	20	51	0	33	
VASAGA BEACH, T		9,710	138	- 0	32	106	0	50	
PROVINCIAL HIGHWAY			1,421	8	323	1,090	8	552	
OTHER AREAS		131,326	2,110	10	556	1,544	12	921	
SIMCOE		329,666	6,792	28	1,518	5,246	32	2,446	242,745
CORNWALL, C	М	46,651	789	0	200	589	0	296	
PROVINCIAL HIGHWAY			371	8	108	255	9	185	
OTHER AREAS	*****	61,951	770	7	163	600	<u>-</u>	234	
TORMONT, DUNDAS & GLEN	GARRY	108,602	1,930	15	471	1,444	16	715	73.634
CAPREOL, T		3,620	18	0	2	16	0	4	
SPANOLA, T	M	5,306	41	0	9	32	n	11	
IICKEL CENTRE, T		12,604	42	0	6	36	0	9	
DNAPING FALLS, T		5,183	12	1	2	9	1	2	
RAYSIDE-BALFOUR, T		15,224	. 42	1	10	31	1	21	
SUDBURY, C	M	91,056	1,607	5	440	1,162	5	659	
ALLEY EAST, T		22,959	160	1	75	84	1	135	
VALDEN, T	***************************************	9,895	54	,	21	33		30	

Place of Collision in Ontario

Continued **Table 4.1* Motor Vehicle Class of Collision Persons** Location **Estimated** Registrations **Population** Total Personal **Property** (1998) Collisions Fatal Injury Damage Killed Injured PROVINCIAL HIGHWAY OTHER AREAS 11.588 SUDBURY 2 998 2,112 1.383 128,059 177,435 GERALDTON, T 2.555 LONGLAC, T 1.769 MANITOUWADGE, TP 3,229 MARATHON, T М 4.648 NIPIGON, TP 2.021 SCHREIBER, TP 1,626 TERRACE BAY, TP М 2,189 THUNDER BAY, C М 115,419 1,426 PROVINCIAL HIGHWAY OTHER AREAS 13.533 2,521 1,204 THUNDER BAY 146,989 3,834 115,178 ENGLEHART, T 1,615 HAILEYBURY, T 4,545 KIRKLAND LAKE, T M 10.098 NEW LISKEARD, T М 4,856 PROVINCIAL HIGHWAY OTHER AREAS 11,967 TIMISKAMING 33,081 × 27.022 TORONTO, C. M 2.262,100 57.676 16,749 40,855 23,987 PROVINCIAL HIGHWAY 8,148 1,967 6,173 2,868 OTHER AREAS TORONTO 2,262,100 66.070 18,770 47,220 26,938 1.136,257 BOBCAYGEON, VL 2,575 ELDON, TP 2,887 EMILY, TP 6,362 FENELON, TP 5,593 FENELON FALLS, VL 1,806 LINDSAY, T М 16.815 MANVERS, TP 5,283 MARIPOSA, TP 6.929 SOMERVILLE, TP 2,066 VERULAM, TP 4,108 PROVINCIAL HIGHWAY 

Place of Collision in Ontario

Continued **Table 4.1* Motor Vehicle** Class of Collision Persons **Estimated** Location **Property** Registrations Total Personal **Population** Killed Injured  $(1998)^4$ Collisions Fatal Injury Damage OTHER AREAS 9,627. 1,347 × × 52,510 64.051 **VICTORIA** 1,442 CAMBRIDGE, C 99,825 1,898 2,483 1,103 KITCHENER, C 175.623 3,251 7,761 NORTH DUMFRIES, TP 1,074 1,400 83,318 WATERLOO, C WELLESLEY, TP 8.385 13,607 WILMOT, TP WOOLWICH, TP 16,939 PROVINCIAL HIGHWAY OTHER AREAS 405,458 3.020 263.44 8 245 1 990 6.230 WATERLOO ARTHUR, TP 2.417 ARTHUR, VL 2,033 ELORA, VL 3,126 5.767 ERAMOSA, TP 9,923 ERIN, T FERGUS, T М 8,410 WEST GARAFRAXA, TP 3.501 GUELPH, C M 92,130 1,217 GUELPH, TP 3.140 1,809 HARRISTON, T M MARYBOROUGH, TP 2.566 MINTO, TP 2.385 4,192 MOUNT FOREST, T 3,900 NICHOL, TP PALMERSTON, T 2.215 PILKINGTON, TP 2,447 4,731 PUSLINCH, TP PROVINCIAL HIGHWAY 7,325 OTHER AREAS 1,470 119,046 162.017 2.986 2.036 WELLINGTON 34,411 AURORA, T GEORGINA, T 32,652 E GWILLIMBURY, T 18,518 17,686 KING, TP

Place of Collision in Ontario 44

Table 4.1*	Continued							
Location	Estimated Class of Collision						Persons	Motor Vehicle
	Population	Total		Personal	Property			Registrations
	(1998)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
MARKHAM, T	162,527	3,029	3	458	2,568	3	710	
NEWMARKET, T	55,079	885	2	148	735	2	219	
RICHMOND HILL, T	93,819	1,578	4	231	1,343	4	347	
VAUGHAN, C	129,019	2,739	11	488	2,240	12	731	
WHITCHURCH STOUFFVILLE, T	18,642	226	5	66	155	6	109	
PROVINCIAL HIGHWAY		1,714	7	312	1,395	9	485	
OTHER AREAS	0	448	0	29	419	0	38	
YORK	562,353	12,055	33	2,056	9,966	37	3,149	426,033

Legend	T	town	Other Areas -	Jurisdiction	M	Municipal Police Force
	С	city		with less than		
	VL	village		1,500 population		
	TP	township		and/or experienced		
				amalgamations/nam	ne cl	nange after 1992

^{*} Sources: Ministry of Municipal Affairs and Housing and Ontario Municipal Directory 1998

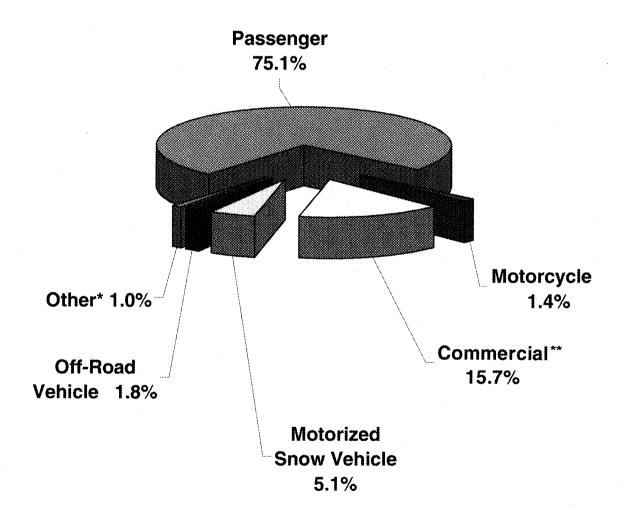
Population data in this table refers to persons residing in a municipality on a permanent basis.

Municipalities that experienced amalgamation, annexation or name change after 1992 are included in "other areas". Table 4.1 is not comparable to previous years.

^{**} The number is adjusted to include vehicles that are not associated with a county or region in Ontario and by commercial vehicles that are simulationally registered in Ontario and other jurisdictions.

## 5 The Vehicle

# Vehicle Population by Vehicle Class in Ontario - 1998



^{*}Other includes bus, school bus, road building machinery, permanent apparatus and farm trucks.

^{**} Commercial excludes Single Application Vehicle Registration (SAVR - 28,779 vehicles).

# 5a. Vehicles in Collisions

Table 5.1	Vehicles Involved in Colli	sions 1998				
Type of Vehicle*	Number of Vehicles Involved in Collisions					
		Personal	Property	••••••		
	Fatal	Injury	Damage			
Passenger Car	750	75,304	202,793	278,847		
Passenger Van	118	10,511	29,544	40,173		
Motorcycle & Moped	38	1,253	498	1,789		
Pick-up Truck	160	8,362	26,740	35,262		
Delivery Van	21	2,101	6,879	9,001		
Tow Truck	5	137	490	632		
Truck	122	2,689	11,469	14,280		
Bus	14	568	1,513	2,095		
School Vehicle	2	198	734	934		
Off-Road Vehicle	1	41	69	111		
Snowmobile	1	31	51	83		
Snow Plow	1	17	103	121		
Emergency Vehicle	6	457	1,141	1,604		
Farm Vehicle	3	70	126	199		
Construction Equipment	4	47	202	253		
Motor Home	0	20	124	144		
Railway Train	11	19	40	70		
Street Car	1	107	372	480		
Bicycle	37	3,219	465	3,721		
Other	0	0	0	C		
Other Non-Motor Vehicle	· 1	33	120	154		
Unknown	7	1,076	10,510	11,593		
Total	1,303	106,260	293,983	401,546		

^{*}Categories in this table are not comparable to previous years

Table 5.2	Condition of Vehicle by	
	Class of Collision 1998	

Condition of Vehicle	Class of Collision				
		Personal	Property		
	Fatal	Injury	Damage		
No Apparent Defect	1,220	100,772	256,843	358,835	
Service Brakes Defective	4	132	256	392	
Steering Defective	2	12	22	36	
Tire Puncture or Blow Out	0	38	112	150	
Tire Tread Insufficient	2	36	58	96	
Headlamps Defective	. 2	9	16	27	
Other Lamps or Reflectors Defective	1	16	50	67	
Engine Controls Defective	1	7	33	41	
Wheels or Suspension Defective	0	13	67	80	
Vision Obscured	1	12	. 35	48	
Trailer Hitch Defective	0	5	9	14	
Other Defects	17	684	5,416	6,117	
Unknown	53	4,524	31,066	35,643	
Total	1,303	106,260	293,983	401,546	

Table 5.3	Model Year of Vehicle by Class of
	Collision 1998

Model Year of Vehicle	Clas	Total		
		Personal	Property	
***************************************	Fatal	Injury	Damage	
1999	8	424	1,679	2,111
1998	88	6,714	21,254	28,056
1997	97	7,699	22,558	30,354
1996	75	5,701	17,005	22,781
1995	81	7,255	20,871	28,207
1994	63	6,394	18,443	24,900
1993	- 78	6,660	18,711	25,449
1992	88	7,292	19,596	26,976
1991	74	6,881	18,594	25,549
1990	91	7,696	20,412	28,199
1989 and earlier	493	37,554	95,319	133,366
Unknown	67	5,990	19,541	25,598
Total	1,303	106,260	293,983	401,546

Table 5.4	Insurance Status of Vehicle by Class of Collision 1998								
	Insurance		lass of Collision		Total				
***************************************			Personal	Property					
		Fatal	Injury	Damage	***************************************				
***************************************	Insured	1,182	98,449	265,302	364,933				
	Not Insured	49	2,045	1,982	4,076				
·	Unknown	72	5,766	26,699	32,537				
***************************************	Total	1,303	106,260	293,983	401,546				

# 5b. Putting the Vehicle in Context

Table 5.5	Vehicle Population by	
	Type of Vehicle 1998	
	Vehicle Class	
	Passenger	5,369,972
	Motorcycle	98,156
	Moped	3,013
	Commercial*	1,120,377
	Bus	18,912
	School Bus	8,562
	Motorized Snow Vehicle	363,737
	Off-Road Vehicle	125,498
	Road Building Machinery	657
	Permanent Apparatus	3,297
	Farm Trucks	35,547
	Total	7,147,728

^{*} Excludes Single Application Vehicle Registrations (SAVR - 28,779 vehicles)

Table 5.6	Selected T	ypes of Ve	ehicles by	Model Yea	r 1998				*****************		****	
Vehicle Class	Mo	del Years								······		·····
	99	98	97	96	95	94	93	92	91	90	89+	Total
Passenger	113,667	448,849	395,599	300,283	366,158	342,348	359,136	385,315	365,271	378,110	1,915,236	5,369,972
Motorcycle	657	4,741	4,062	3,429	2,622	2,521	2,742	2,248	2,060	2,251	70,823	98,156
Moped	4	10	8	9	3	13	8	5	8	17	2,928	3,013
Commercial*	23,429	96,235	78,230	55,705	72,284	66,916	54,130	55,288	55,767	74,578	527,316	1,159,878
Bus	327	2,021	1,644	2,002	1,942	1,348	1,595	1,994	2,124	2,454	10,023	27,474
Motorized Snow Vehicle	8,438	16,907	16,707	15,034	14,306	14,389	11,915	9,398	12,946	14,044	229,653	363,737
Off-Road Vehicle	2,559	6,124	4,627	5,394	5,284	4,337	5,214	4,922	4,920	5,733	76,384	125,498
Total	149,081	574,887	500,877	381,856	462,599	431,872	434,740	459,170	443,096	477,187	2,832,363	7,147,728

^{*} Excludes Single Application Vehicle Registrations (SAVR - 28,779 vehicles).

Vehicle Damage Level 1998						
Clas	Class of Collision					
	Personal	Property				
Fatal	Injury	Damage				
57	10,241	17,728	28,026			
145	31,272	119,449	150,866			
115	27,642	92,368	120,125			
205	21,826	27,131	49,162			
738	10,585	5,193	16,516			
43	4,694	32,114	36,851			
1,303	106,260	293,983	401,546			
	Fatal 57 145 115 205 738 43	Class of Collision   Personal	Class of Collision           Personal Property           Fatal         Injury         Damage           57         10,241         17,728           145         31,272         119,449           115         27,642         92,368           205         21,826         27,131           738         10,585         5,193           43         4,694         32,114			

## 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 of 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 feasible.

Vehicles

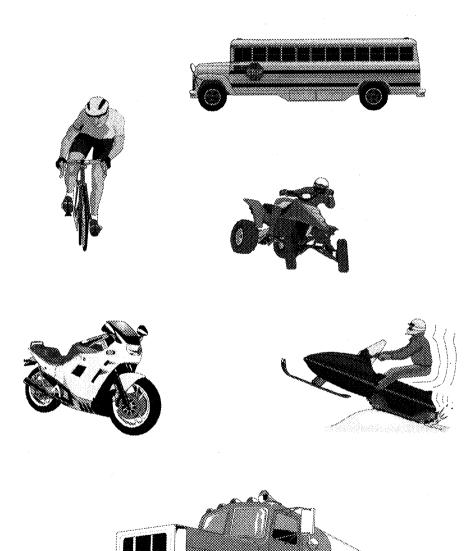
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of

Special

Interest

# 6 Vehicles of Special Interest



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# 6a. Motorcycles

Table 6.1	Motorcyclists*
	Killed and Injured
	1994-1998

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1994	50	1,526	4	324
1995	37	1,309	4	289
1996	27	1,006	2	244
1997	36	993	2	255
1998	32	1,068	3	263

^{*} Excludes moped drivers and passengers.

Table 6.2	Selected Factors	
	Relevant to Fatal Motorcycle	
	Collisions 1998	
Factors (not mutually	y exclusive)	%
Unlicensed Motorcyc	le Drivers	5
Under 25 years Old		19
Alcohol Used		
Ability Impaired Alco	shol > .08	19
Had Been Drinking		5
Unknown		14
Helmet Not Worn (Fa	talities)	14
Motorcycle Driver Err	or	
Speed Too Fast/Los	it Control	54
Other Error		14
Single Vehicle Collisi	ons	46
Day/Night		51/49
Weekend		31

Vehicles of Special

Interest

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# 6b. School Vehicles

Table 6.3	Pupils Transported D	Pupils Transported Daily, Total Collisions and Injury Rate per 100,000 Pupils - School Years 1993/94-1997/98							
	School Years 1993/94								
	School Year	Pupils	Total	Injury Rate p	er 100,000 Pupils				
		Transported	Number of						
		Daily	Collisions	Fatal	Non-Fatal				
	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				
	1997/98	877.000*	835	Not Available	Not Available				

^{*} Estimated number

Table 6.4	School Vehicle Type by Nature of Collision 1	1997/98

School Vehicle	Nature of Collision				Total	Five Year Total
Туре		Pupil	Non-Pupil	Property	Number of	(1993/94
	Fatal	Injury	lnjury	Injury Damage C	Collisions	1997/98)
School Bus	4	44	83	583	714	4,590
School Van	0	8	13	47	- 68	508
Other School Vehicl	les 1	1	9	42	53	185
Total	5	53	105	672	835	5,283

Table 6.5	Pupil Injury t	y Collision I	Event and \	ehicle Type	1997/98	(1	Number of Pe	ersons)	ns)			
School Vehicle	Collisio	n Event					Total		Five \	rear Total		
Туре	Crossin	g	Within		Other			,		(1993/94		
·	Road		School	Vehicle						1997/98)		
•••••••••••	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured		
School Bus	0	2	0	96	0	3	0	101	6	698		
School Van	0	0	0	6	0	0	0	6	0	47		
Other School Vehicles	0	0	0	1	0	. 0	0	1	0	11		
Total	0	2	0	103	0	3	0	108	6	756		

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## 6c. Trucks

Table 6.6 Number of Trucks Involved in Collisions 1994-1998

Year	Cla	Class of Collision					
		Personal	Property				
	Fatal	Injury	Damage				
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			
1998	278	11,292	33,967	45,537			
Total	1,631	61,713	196,474	259,818			

Table 6.7	Driver Licence Class Required	
	by Class of Truck Collision	
	- Number of Trucks** 1998	

Driver Licence	Clas	on	Total	
Required		Personal	Property	
	Fatal	Injury	Damage	
G	169	9,482	27,531	37,182
D	20	548	1,973	2,541
A*	89	1,262	4,463	5,814
Total	278	11,292	33,967	45,537

^{*} Tractor/trailer combination only.

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

Table 6.8	Driver Licence Class Required -
	Trucks, Registered Trucks and
	Collision Rate 1998

Driver Licence	Trucks in	Registered	Truck
Required	Collisions	Trucks	Involvement*
G	37,182	1,010,124	3.7
D	2,541	49,315	5.2
A**	5,814	129,218	*** 4.5
Total	45,537	1,188,657	3.8

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

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

Table 6.9	Selected Factors Relevant to Fatal
	Truck Collisions 1998

Factors in	Driver Licence Required					
Fatal Collisions:	Class G	Class D	Class A			
Drivers		· 				
Alcohol Involved	16.0%	0.0%	1.1%			
Driving Properly	43.2%	75.0%	69.7%			
Collisions	***************************************		***************************************			
Single Vehicle	34.3%	20.0%	15.7%			
Urban Area	42.0%	55.0%	16.9%			
Daylight	57.4%	80.0%	55.1%			
Vehicles						
Vehicle Defect Present*	3.6%	10.0%	0.0%			

^{*} Excludes unknown category

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

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

^{**} Includes vehicles registered under the SAVR - 28779 vehicles

^{**} Tractor/trailer combination only.

^{***} Includes vehicles registered under the SAVR system (28779 vehicles).

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# 6d. Off-Road Vehicles

For the purposes of this publication, off-road vehicles include dune buggles, 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 1994-1998	

Location			Killed					Injured		
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
On-Highway	3	0	0	1	1	22	23	20	19	24
Off-Highway	3	6	5	3	2	63	74	46	41	49
Total	6	6	5	4	3	85	97	66	60	73

Table 6.11	Collision Location
	by Off-Road Vehicle Passengers
	Killed and Injured 1994-1998

Location	Killed				Injured					
	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
On-Highway	0	0	0	0	0	6	5	6	15	10
Off-Highway	0	0	0	1	0	23	23	9	19	23
Total	0	0	0	1	0	29	28	15	34	33

	Vehicles 1994-1998	
Year	Vehicles Registered	
1994	101,954	
1995	106,677	
1996	111,344	
1997	117,438	
1998	125,498	

Registered Off-Road

**Table 6.12** 

Table 6.13	Selected Factors Relevant	to
	All Off-Road Vehicle	
	Collisions 1998	
Factors		%
Drivers Under 25	Years of Age	61
Alcohol Used		19
Speeding		14
Helmet Not Worl		50
Daytime		73
Two-Wheeled		14
Three-Wheeled		12
Four-Wheeled		74

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## 6e. Motorized Snow Vehicles

Table 6.14	Collision Location by Motorized Snow Vehicle* Drivers Killed and Injured -	
	Riding Seasons 1993/94-1997/98	

Location			Killed					Injured		
	93/94	94/95	95/96	96/97	97/98	93/94	94/95	95/96	96/97	97/98
On-Highway	2	6	3	2	2	62	36	73	72	22
Off-Highway	9	22	25	19	31	237	243	304	259	199
Total	11	28	28	21	33	299	279	377	331	221
% On-Highway	18	21	11	10	6	21	13	19	22	10

Table 6.15 Collision Location by Motorized Snow Vehicle* Passengers Killed and Injured Riding Seasons 1993/94-1997/98

Location	***************************************		Killed			Injured					
	93/94	94/95	95/96	96/97	97/98	93/94	94/95	95/96	96/97	97/98	
On-Highway	1	0	0	3	0	25	17	33	20	14	
Off-Highway	3	2	2	2	2	63	62	103	61	69	
Total	4	2	2	5	2	88	79	136	81	83	

Table 6.16	Registered Motorized			
	Snow Vehicles 1994-1998			
Year	Registered Motorized			
	Snow Vehicles			
1994	391,847			
1995	339,803			
1996	361,596			
1997	362,561			
1998	363,737			

Table 6.17	All Motorized Snow Vehicle		
	Collisions 1997/98		
Factors	%		
Unlicensed Operators	10		
Rider Error; Speed too F	ast 33		
Alcohol Used	24		
Surface Condition; Icy or	Packed Snow 48		

^{*} 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.

Vehicles of Special

Interest

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# 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.

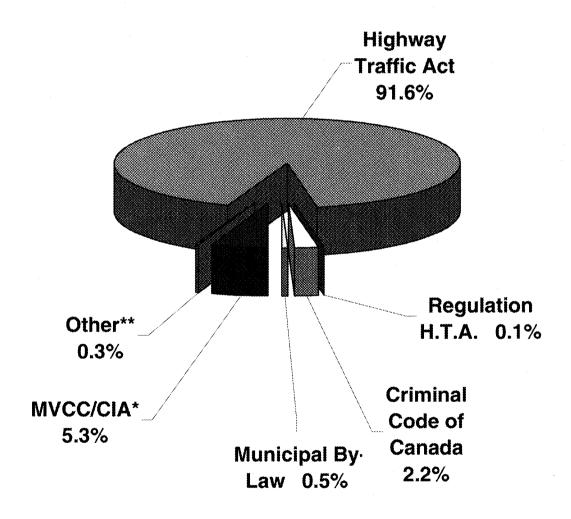
Table 6.18	Bicyclists			
***************************************	Killed and Inj	ured		
	1994-1998			
	***************************************	Drivers	Pa	ssengers
Year	Killed	Injured	Killed	Injured
1994	27	3,283	0	107
1995	19	2,983	0	105
1996	20	2,863	0	109
1997	22	2,997	1	101
1998	36	2,994	0	136

Table 6.20	Selected Factors	
	Relevant to	
	All Bicycle Collisions 1998	
Factors		%
Driving Proper	rly (Bicyclist)	37
Driving Proper	rly (Motor Vehicle Driver)	49
Intersection R	elated	65
Going Ahead	(Bicyclist)	81
Alcohol Relate	ed (Bicyclist)	3
No Apparent \	/ehicle Defect (Bicycle)	87
Clear Visibility	1	93
Weekend	***************************************	19

Table 6.19	Age of Bicyclists Invo	olved in Collision	s by						
	Light Condition 1998								
Light	Age Groups		· 						
Condition	0 - 5	6 - 15	16 - 30	31 - 60	61+	UK	Total		
Daylight	272	914	888	739	137	77	3,027		
Dawn	2	4	11	8	0	0	25		
Dusk	16	54	48	22	0	4	144		
Dark	43	82	219	151	16	13	524		
Total	333	1,054	1,166	920	153	94	3,720		

# 7 Conviction, Offence and Suspension Data

# Per Cent of Motor Vehicle Convictions in Ontario - 1998



^{*} Motor Vehicle Collision Claim / Compulsory Insurance Act

^{**} Other includes Motorized Snow Vehicles Act and Off-Road Vehicles Act

Conviction,

Offence and Suspension Data

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## 7a. Conviction Data

Table 7.1	Summary of Motor Vehicle	
	Related Convictions 1998	
Convictions*		Number
Highway Traffic Act		927,460
Regulations under	the H.T.A	924
Criminal Code of C	anada**	22,730
Municipal By-Law		5,167
Motor Vehicle Collis	sion Claim/Compulsory Insurance Act**	53,826
Motorized Snow Ve	hicles Act	1,550
Off-Road Vehicles	Act	926
Other		153
Total		1,012,736

^{*} Includes manually recorded convictions.

Table 7.2

**Motor Vehicle Convictions** 

Related to the					
Highway Traffic Act 1998					
Convictions	Number				
Equipment	17,338				
Administrative*	111,440				
Seat Belt (Driver & Passenger)**	52,238				
Other Non-Pointable Convictions ***	11,042				
Speeding	573,199				
Other Pointable Convictions (2 - 4 pts)	121,556				
Other Pointable Convictions (5 - 7 pts)	7,933				
Driving While Suspended	12,315				
Total	907,061				
/					

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

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

Table 7.3	Motor Vehicle Convictions
	Related to the
	Criminal Code 1998*

Convictions	Number
Alcohol Related**	18,681
Criminal Negligence	. 24
Fail to Remain at Collision	550
Driving While Disqualified	2,353
Dangerous Driving	1,121
Motor Manslaughter	1
Total	22,730

^{*} Does not include 350 convictions for young offenders.

^{**} This figure does not include 350 convictions for young offenders under the Criminal Code.

^{***} Now includes some out-of-province convictions.

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

Conviction,
Offence and
Suspension
Data

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## 7b. Offence Data

Table 7.4	Number of Convicted Driv	vers* with Criminal (	Code of Canada Offer	nses, During the Spe	ecified Years
Conviction Type	1993	1994	1995	1996	1997
		η.			***************************************
Criminal Negligence	47	40	39	26	14
Fail to Remain	817	789	721	649	524
Dangerous Driving	1,138	1,204	1,182	1,069	925
Impaired Driving	13,907	13,415	12,608	12,087	9,805
Blood/Alcohol over 80 mg%	9,159	9,026	8,975	8,789	7,486
Fail to Provide Breath Sample	1,524	1,551	1,545	1,494	1,236
Driving While Disqualified	2,846	2,675	2,440	2,602	2,221
Total	29,438	28,700	27,510	26,716	22,211

^{*} The same driver can be represented in this table more than once.

As of March 31, 1999, there were 16,459 Criminal Code offences recorded for 1998. The 1998 breakdown will be updated in the 1999 annual report to accommodate the lag time in the recording of offences (offences are only recorded upon conviction).

Table 7.5	Adminstrative Driver License Suspension								
Monthly Suspensions Issued 1998⁴									
Suspensions	1996	1997	1998						
January	•	1,310	1,337						
February	*	1,595	1,471						
March	## # # # # # # # # # # # # # # # # # #	1,898	1,608						
April		1,810	1,681						
May		2,068	1,801						
June	-	1,978	1,665						
July	*	1,887	1,665						
August	<u> </u>	1,450	1,750						
September	*	1,679	1,609						
October	-	1,747	1,663						
November		1,769	1,617						
December	2,013	1,820	1,810						
Total	2,013	21,011	19,677						

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.

November 29, 1996.

See Appendix for more explanation of 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.

^{*} Adminstrative Driver License Suspension (ADLS) began on

Data

## 7c. Suspension Data

Table 7.6	Demerit Point Suspensions by Driver Age 1998

Driver Age	Demerit I	Demerit Point Suspensions						
		Novice First Accumulation	Novice Second Accumulation	Regular First Accumulation	Regular Second Accumulation			
	Probationary							
16	0	1	0	0	0			
17	0	18	0	0	0			
18	0	221	3	1	0			
19	0	477	23	12	0			
20-24	116	1,058	88	327	24			
25-34	91	348	29	468	50			
35-44	30	124	12	197	18			
45-54	3	31	4	71	10			
55-64	0	8	0	15	0			
65-74	_ 0	4	0	7	0			
75 +	. 0	0	0	1	. 0			
Total	240	2,290	159	1,099	102			

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.

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## 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.

### 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.

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## 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. As of January 1,1998, the minimum reportable level for property damage only collision is \$1,000.

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# 8b. Acknowledgements

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

## Office of the Chief Coroner

The Ministry of the Solicitor General

## **Revenue Control Unit**

Motor Fuels and Tobacco Tax Branch Ministry of Finance

## **Knowledgement Management Unit**

Information Planning and Evaluation Branch Ministry of Health and Long Term Care

## Information Planning & Court Statistics

Program Development Branch Ministry of the Attorney General

Ministry of Education

Ministry of Municipal Affairs and Housing