

### YEARLY REPORT 2010 MOTOR VEHICLE CRASHES IN NEW ZEALAND 2009 STATISTICAL STATEMENT CALENDAR YEAR 2009

Prepared by Research and Statistics, Ministry of Transport









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ROAD CRASHES + FATAL: 337 + INJURY: 10,788

CASUALTIES + DEATHS: 384 + INJURIES: 14,541

CASUALTY RATES
+ DEATHS PER 10,000 VEHICLES: 1.2
+ INJURIES PER 10,000 VEHICLES: 45
+ DEATHS PER 100,000 POPULATION: 8.9
+ INJURIES PER 100,000 POPULATION: 337

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### **REPORTED INJURY CRASHES 2009**



Photo courtesy of NZTA

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### INTRODUCTION AND NOTES

#### INTRODUCTION

This statistical statement contains tabulations of information coded from Traffic Crash Reports. To put these data into context, the following is a brief description of the process which has resulted in this publication.

When a road traffic crash involves a motor vehicle and results in someone being injured, the law requires that crash to be reported. However, comprehensive hospital-based surveys indicate that only about two thirds of such injury crashes are reported to the New Zealand Transport Agency (NZTA). There may also be a reporting bias by type of road user and by day of week and by hour of day and by region.

When an injury crash is reported it is attended usually by a police officer. The reporting officer's primary duties are to prevent further injury and to help those injured. The next duty is a legal one, to ascertain whether anyone involved in the crash has committed an offence.

After dealing with other duties, this officer completes a Traffic Crash Report (TCR). The TCR is examined and coded by traffic engineers and by NZTA administrative staff. This coded information is then entered into the Crash Analysis System (CAS). After editing and checking, the statistical statement is published.

#### NOTES

- Under section 22(3) of the Land Transport Act 1998 a driver involved in an accident resulting in death or injury to any person .... must report the accident in person ... as soon as reasonably practicable, and in any case not later than 24 hours after the time of the accident.
- 2. During the years 1975 to 1979 a system of crash reporting was used where a preliminary report, containing partial details of each crash, was sent to the Ministry of Transport within 24 hours of the crash or of it being reported. After investigations were completed a final report was supplied. By the time of printing, preliminary reports only had been received for a number of crashes. Details of those crashes were incomplete and appeared as 'unknown' in the tables. From 1980 the system returned to one report only and as a consequence the number of 'unknowns' has reduced.

The following notes give brief explanations of terms used in the tables.

- 3. Motor vehicle crash: Any crash that occurs on a public road that is attributable directly or indirectly to a motor vehicle or its load. Crashes which do not occur on public roads are excluded, for example tractor crashes on farms. The data in this statistical statement includes only crashes that involve a motor vehicle. A crash between a cyclist and a pedestrian, for example, would not be included.
- 4. Fatal injuries: Up to and including 1974, comprised injuries that resulted in death within 28 days of the crash. From, and including, 1975 they comprise injuries that result in death within 30 days of the crash. This is consistent with the international definition.

Exclusions: There are a number of cases where road deaths or motor vehicle deaths are not included in the official road toll. They include:

- > deaths that do not occur on a public road or a road to which the public has access (eg race track or farm paddock)
- deaths that did not result from injuries sustained in the crash (eg when the coroner determines that a driver died from a heart attack)
- > suicide or murder
- deaths on the road where a motor vehicle was not involved (eg cyclist only crash)

These definitions are in line with the most common international definitions. Although these deaths are excluded from the official road toll, a record is kept of the crash details.

- 5. Serious injuries: Fractures, concussion, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment, and any other injury involving removal to and detention in hospital.
- 6. Minor injuries: Injuries of a minor nature such as sprains and bruises.
- 7. Crash, casualty, vehicles involved: These terms often cause some confusion. The following example may help to clarify their use. If two motor vehicles collide, one motor vehicle crash has taken place. If four people in one of the vehicles were injured and two in the other, then this one crash resulted in six casualties. The number of vehicles involved was two.

- 8. Non-injury crashes: Statistics concerning crashes involving property damage only are not included in this report. The one exception is the total number of such crashes which is recorded in Section 1, Table 2a.
- 9. Movement classification of crashes: This is based on the manner in which the vehicles were moving immediately prior to the crash. Bicycles are treated as vehicles for this purpose. These movements are divided firstly into broad classes. These classes are used in the tables in this publication. They are then further divided into a series of sub-classes. A diagrammatic representation of the classes and sub-classes is given in Figure 14.
- 10. Factors contributing to crashes: Table 26 lists the factors identified as contributing to crashes (ie causes of crashes). On each crash report there may be several factors coded against each vehicle involved in the crash for driver or vehicle faults. In addition, there may be a number of factors coded on each report for faults of other road users, weather or other conditions. A crash report which has more than one cause factor coded will appear more than once in this table.

Alcohol factors: The method of coding alcohol factors has been changed in order to get a more accurate recording of this factor in crashes. Because of this, the number of alcohol factors shown from 1975 onwards will not be comparable with those of previous years.

11. Open road and urban areas: In all tables where the terms 'urban' and 'open road' are used: 'Urban' refers to all speed limit areas of 70 km/h and under and limited speed zones.

'Open road' refers to all speed limit areas of over 70 km/h.

- 12. Rounding: Where percentages are given, these are rounded. This may result in the individual percentages not adding exactly to 100.
- 13. Motorcycle/moped: In this document all mopeds and motorcycles have been included under the one heading of 'Motorcycles'. For the purposes of registration and licensing, a moped has a power output of 2 kw or under and a maximum design speed of 50 km/h or under.

- 14. Holiday periods:
- (a) The Christmas-New Year holiday period is that which begins in December of the year stated. The length of the official holiday period varies depending on where the statutory holidays fall in relation to the weekend. When Christmas Eve and New Year's Eve fall on a week day the holiday starts at 4.00pm on 24 December. If the holiday begins on a Monday or a Tuesday then it ends at 6.00am on 3 January (9.6 days). If the holiday begins from Wednesday to Friday then it ends at 6.00am on 5 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Saturday the holiday starts at 4.00pm on Friday 23 December and ends at 6.00am on Wednesday 4 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Sunday the holiday starts at 4.00pm on Friday 22 December and ends at 6.00am on Wednesday 3 January (11.6 days).
- (b) The Easter holiday covers the period from 4.00pm on the Thursday to 6.00am on the Tuesday.
- (c) Queen's Birthday and Labour Weekends cover the periods from 4.00pm on the Friday to 6.00am on the Tuesday.
- 15. Statistics recorded and stored from the Traffic Crash Report:
- (a) Location of crash

Local body name, crash road, nearest side road or landmark and the distance and direction of the crash from that side road or landmark, State highway reference.

(b) Type and time

Severity of crash (fatal or injury), date, time and day of week, type of collision, vehicle types involved.

- (c) Vehicle details (for each vehicle involved)
   Registration number, type (car, truck etc) make and model, year, engine capacity (cm3), warrant/certificate of fitness, parked or reversing, damage (minor, extensive etc), number of passengers and type of tow.
- (d) Driver details (for each driver involved whether injured or not)

Whether driver owned vehicle, surname, date of birth, sex, occupation, licence number, licence status (current, disqualified etc), driver injury (killed, serious, minor, none), alcohol suspected, factors (causes) assigned to driver and/or vehicle. 16. Change in vehicle licensing system: In 1986 the system for licensing vehicles in New Zealand changed. For this reason there are no currently collected statistics that are directly comparable to those collected prior to this date. From 1986 to 1997 the number of vehicles used in Table 1 and Table 2 was derived from a model based on historical data and the number of new vehicle registrations each year. From 1998, the first full year with Continuous Vehicle Licensing, vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds, but exclude those with an exempt or restoration licence. See page 163 for a breakdown of the fleet at June 30 for the current year.

## SECTION 1: HISTORICAL



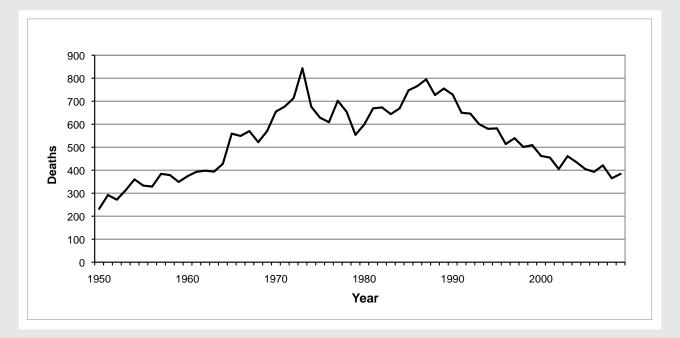
#### TABLE 1: CASUALTY RATES HISTORICAL YEAR ENDING 31 DECEMBER

	_		_	INJURIES		_	FATALITIES	
Year	Population	Vehicles* (000)	Number of	Per 100,000	Per 10,000	Number of	Per 100,000	Per 10,000
	(000)		Injuries	Population	Vehicles	Fatalities	Population	Vehicles
1951	1970.5	447.1	6938	352	155.2	292	14.8	6.5
1952	2024.6	494.2	7448	368	150.7	272	13.4	5.5
1953	2074.7	513.7	7686	371	149.6	313	15.1	6.1
1954	2118.4	553.5	7875	372	142.3	360	17.0	6.5
1955	2164.8	601.1	8976	415	149.3	333	15.4	5.5
1956	2209.2	638.3	9758	442	152.9	329	14.9	5.2
1957	2262.8	672.6	11053	489	164.3	384	17.0	5.7
1958	2360.0	702.9	11408	483	162.3	379	16.1	5.4
1959	2359.7	728.2	11703	496	160.7	349	14.8	4.8
1960	2403.6	762.7	12443	518	163.1	374	15.6	4.9
1961	2461.3	806.3	12796	520	158.7	393	16.0	4.9
1962	2515.8	844.1	13776	548	163.2	398	15.8	4.7
1963	2566.8	899.4	14447	563	160.6	394	15.3	4.4
1964	2617.0	963.9	16266	622	168.8	428	16.4	4.4
1965	2663.8	1013.8	17093	642	168.6	559	21.0	5.5
1966	2711.3	1060.2	18194	671	171.6	549	20.2	5.2
1967	2745.0	1087.6	17409	634	160.1	570	20.8	5.2
1968	2773.0	1114.7	17698	638	158.8	522	18.8	4.7
1969	2804.0	1148.7	18726	668	163.0	570	20.3	5.0
1970	2852.1	1208.7	20791	729	172.0	655	23.0	5.4
1971	2898.5	1272.4	21607	746	169.8	677	23.4	5.3
1972	2959.7	1349.1	22315	754	165.4	713	24.1	5.3
1973	3024.9	1438.8	23385	773	162.5	843	27.9	5.9
1974	3091.9	1515.3	20829	674	137.5	676	21.9	4.5
1975	3143.7	1574.5	19839	631	126.0	628	20.0	4.0
1976	3163.4	1631.3	17895	566	109.7	609	19.3	3.7
1970	3166.4	1642.8	17525	554	105.7	702	22.2	4.3
1978	3165.2	1675.1	15178	480	90.6	654	20.7	3.9
1978	3163.9	1732.9	13903	439	80.2	554	17.5	3.2
1980	3176.4	1789.4	15905	500	88.7	599	18.9	3.3
1980	3194.5	1848.6	15479	485	83.7	669	20.9	3.6
1981	3194.5	1882.5	16194	502	85.7	673	20.9	3.6
1982	3264.8	1917.4	16491	505	86.0	644	19.7	3.4
1985	3293.0	1968.9	17524	532	89.0	669	20.3	3.4
1985	3303.1	1908.9	18912	573	94.7	747	20.5	3.7
1985	3313.5	2010.1	18912	570	93.9	747	22.0	3.8
1980	3342.1	2010.1	18728	560	92.2	700	23.8	3.9
1987	3345.2	2030.8	17346	519	84.8	793	23.8	3.6
1989	3369.8	2043.4	17546	492	78.7	755	22.4	3.6
1989	3410.4	2108.4	17719	520	80.6	733	22.4	3.3
1990	3449.7	2197.7	16767	486	75.5	650	18.8	2.9
1991	3445.4	2220.1	16707	463	73.5	646	18.5	2.9
1992	3524.8	2243.8	15108	403	67.3	600	17.0	2.5
		2245.8						2.7
1994 1995	3577.2 3643.2	2289.3	16600 16870	464 463	72.5	580 582	16.2 16.0	2.5
1996 1997	3717.4 3761.1	2379.8 2392.7	14796 13375	398	62.2 55.9	514 539	13.8 14.3	2.2
1997	3761.1	2392.7	13375	356 327	50.9	539		2.3
							13.2	
1999	3810.7	2512.3	11999	315	47.8	509	13.4	2.0
2000	3830.8	2601.7	10962	286	42.1	462	12.1	1.8
2001	3850.1	2633.2	12368	321	47.0	455	11.8	1.7
2002	3939.1	2709.5	13918	353	51.4	405	10.3	1.5
2003	4009.2	2801.0	14372	359	51.3	461	11.5	1.6
2004	4060.9	2920.7	13890	342	47.6	435	10.7	1.5
2005	4098.3	3030.4	14451	353	47.7	405	9.9	1.3
2006	4139.5	3124.3	15174	367	48.6	393	9.5	1.3
2007	4228.3	3189.1	16013	379	50.2	421	10.0	1.3
2008	4268.6	3247.8	15174	355	46.7	365	8.6	1.1
2009	4315.8	3220.3	14541	337	45.2	384	8.9	1.2

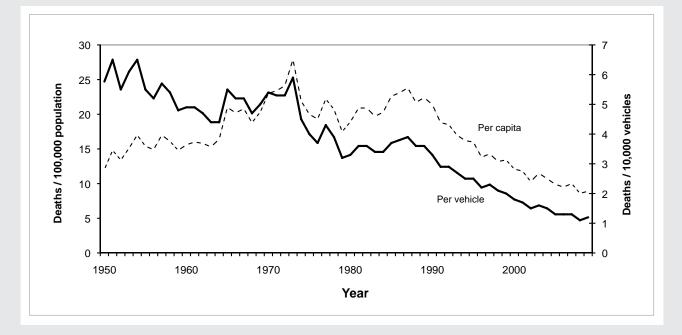
NOTES: Population: From 1997 the population is the estimated resident population at 30 June - SNZ INFOSHARE DPE group.

\* Vehicles: See Note 16 for details. From 1998 (the first full year with Continuous Vehicle Licensing) vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds but exclude those with an exempt or restoration licence. From 1986 to 1997 vehicle numbers are estimates. Prior to 1986 vehicle numbers were derived from annual licence transactions.

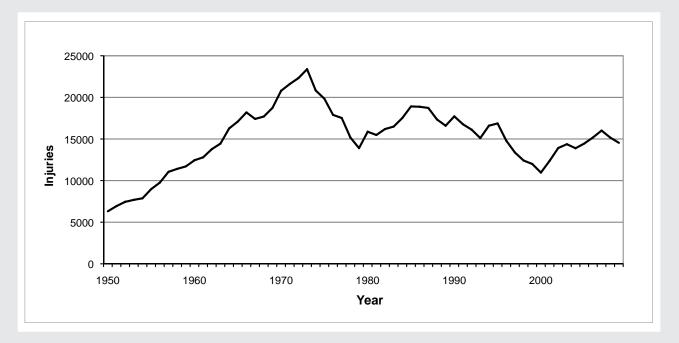
#### **FIGURE 1: ROAD DEATHS**



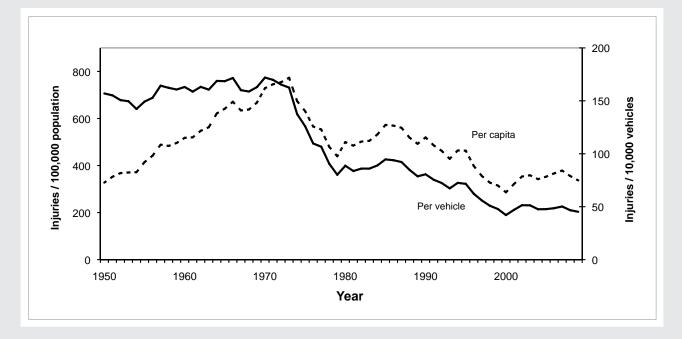
#### FIGURE 2: DEATHS PER VEHICLE AND PER CAPITA



#### FIGURE 3: REPORTED INJURIES



#### FIGURE 4: INJURIES PER VEHICLE AND PER CAPITA



#### FATAL INJURY Year Population Vehicles\* (000) Injury crashes Per 100,000 Per 10,000 Fatal crashes Per 100,000 Per 10,000 (000) Population Vehicles Population Vehicles 1951 1970.5 447.1 4952 251 110.8 272 13.8 6.1 1952 2024.6 494.2 5336 108.0 253 12.5 5.1 264 1953 2074.7 513.7 5377 259 292 104.7 14.1 5.7 1954 2118.4 553.5 5561 263 100.5 334 15.8 6.0 5.1 1955 2164.8 601.1 6372 294 106.0 304 14.0 1956 2209.2 638.3 6736 305 105.5 13.9 4.8 306 1957 672.6 7593 336 112.9 355 15.7 5.3 2262.8 1958 702.9 7848 333 111.7 346 14.7 4.9 2360.0 1959 2359.7 728.2 7952 337 109.2 313 13.3 4.3 1960 2403.6 762.7 8503 354 111.5 341 14.2 4.5 353 352 1961 2461.3 806.3 8679 107.6 14.3 4.4 1962 2515.8 844.1 9270 369 109.8 374 14.9 4.4 899.4 9514 371 13.9 1963 2566.8 105.8 357 4.0 1964 2617.0 963.9 10960 419 113.7 376 14.4 3.9 494 1965 2663.8 1013.8 11377 427 112.2 18.5 4.9 1966 2711.3 1060.2 11986 442 113.1 498 18.4 4.7 1967 2745.0 1087.6 11446 417 105.2 501 18.3 4.6 1968 2773.0 1114.7 11600 418 104.1 465 16.8 4.2 504 1969 1148.7 12050 430 104.9 18.0 4.4 2804.0 1970 2852.1 1208.7 12722 446 105.3 578 20.3 4.8 1971 1272.4 105.3 20.7 4.7 2898.5 13404 462 600 1972 2959.7 1349.1 14032 474 104.0 622 21.0 4.6 1973 1438.8 14830 490 103.1 741 5.2 3024.9 24.5 1974 3091.9 1515.3 13497 437 89.1 612 19.8 4.0 1975 3143.7 1574.5 13156 419 574 18.3 3.6 83.6 1976 3163.4 1631.3 11783 373 72.2 538 17.0 3.3 1977 1642.8 11443 625 3166.4 361 69.7 19.7 3.8 1978 3165.2 1675 1 9795 310 58 5 589 18.6 35 1979 3163.9 1732.9 9212 291 53.2 502 15.9 2.9 1980 3176.4 1789.4 10204 321 57.0 535 16.8 3.0 1981 3194.5 1848.6 10079 316 54.5 586 18.3 3.2 1982 3226.8 1882.5 10656 330 56.6 603 18.7 3.2 3264.8 1917.4 335 57.1 17.4 3.0 1983 10951 568 1984 3293.0 1968.9 11949 363 60.7 612 18.6 3.1 1985 3303.1 1996.1 12894 390 64.6 660 20.0 3.3 1986 3313.5 2010.1 12806 387 63.7 656 19.8 3.3 3342.1 12674 379 62.4 3.4 1987 2030.6 687 20.6 1988 3345.2 2045.4 11936 357 58.4 624 18.7 3.1 1989 3369.8 2108.4 11395 338 54.0 646 19.2 3.1 1990 3410.4 2197.7 12179 357 55.4 637 18.7 29 1991 3449.7 2220.1 11609 337 52.3 554 16.1 2.5 1997 3485 4 2227.1 11093 318 49.8 542 15.6 2.4 1993 3524.8 2243.8 10477 297 46.7 517 14.7 2.3 1994 3577.2 2289.3 11380 318 49.7 496 13.9 2.2 1995 3643.2 2354.6 11718 322 49.8 502 13.8 2.1 1996 3717.4 2379.8 10107 272 42.5 457 12.3 1.9 1997 3761.1 2392.7 9013 240 37.7 468 12.4 2.0 1998 3790.9 2440.4 8334 220 34.2 435 11.5 1.8 1999 3810.7 2512.3 8010 210 31.9 434 11.4 1.7 2000 3830.8 2601.7 7447 194 28.6 383 10.0 1.5 2001 3850.1 2633.2 8470 220 32.2 395 10.3 1.5 2002 3939 1 2709.5 9798 249 36.2 365 93 1.3 2003 4009.2 2801.0 10210 255 36.5 405 10.1 1.4 2004 4060.9 2920 7 9997 246 34 2 375 97 1.3 255 2005 4098.3 3030.4 10467 34.5 341 8.3 1.1 2006 4139.5 3124.3 10943 264 35.0 350 85 1.1 2007 4228.3 3189.1 11667 276 36.6 375 8.9 1.2 2008 4268.6 3247.8 11316 265 34.8 330 7.7 1.0 2009 4315.8 3220.3 10788 250 33.5 337 7.8 1.0

#### TABLE 2: CRASH RATES HISTORICAL YEAR ENDING 31 DECEMBER

NOTES: Population: From 1997 the population is the estimated resident population at 30 June - SNZ INFOSHARE DPE group.

\* Vehicles: See Note 16 for details. From 1998 (the first full year with Continuous Vehicle Licensing) vehicle numbers include registered cars, vans, trucks, buses, motor caravans, motorcycles and mopeds but exclude those with an exempt or restoration licence. From 1986 to 1997 vehicle numbers are estimates. Prior to 1986 vehicle numbers were derived from annual licence transactions.

#### TABLE 2A: CRASH SEVERITY YEAR ENDING 31 DECEMBER

		NUMBER OF	CRASHES		NUM	BER OF CASUAL	TIES
Year	Fatal	Serious	Minor	Non-injury	Fatal	Serious	Minor
1985	660	4311	8583	-	747	5406	13506
1986	656	4206	8600	-	766	5297	13577
1987	687	4036	8640	-	796	5177	13551
1988	624	3498	8443	-	727	4371	12983
1989	649	3067	8336	18384	758	3948	12672
1990	638	3451	8741	20230	730	4415	13326
1991	555	3190	8506	20248	651	4056	12839
1992	542	2717	8394	19563	646	3425	12728
1993	517	2533	7986	18198	600	3221	11945
1994	496	2583	8797	18437	580	3268	13332
1995	502	2473	9245	22306	582	3153	13717
1996	457	2321	7786	23000	514	2939	11857
1997	468	2030	6983	23973	539	2611	10764
1998	435	1899	6435	22904	501	2400	10012
1999	434	1904	6106	24284	509	2428	9571
2000	383	1769	5678	23961	462	2243	8719
2001	395	1918	6552	27114	455	2435	9933
2002	365	2111	7687	27697	405	2600	11318
2003	405	2041	8169	27058	461	2578	11794
2004	375	2022	7970	26393	435	2491	11399
2005	341	2071	8396	27217	405	2531	11920
2006	350	2137	8806	28171	393	2629	12545
2007	375	2116	9551	29317	421	2654	13359
2008	330	2098	9218	27527	365	2531	12643
2009	337	1961	8827	26901	384	2425	12116

NOTE: Non-injury crash data began nationally in 1989.

#### TABLE 2B: CRASHES AND CASUALTIES ON OPEN ROADS AND URBAN ROADS YEAR ENDING 31 DECEMBER

		OPEN F	ROADS					
Year	Fatal crashes	Injury	Deaths	Injuries	Fatal crashes	Injury	Deaths	Injuries
1985	355	crashes 3292	423	5978	305	crashes 9602	324	12934
1986	378	3488	464	6310	278	9321	302	12564
1987	417	3638	499	6536	270	9038	297	12192
1988	383	3375	465	6021	241	8566	262	11333
1989	420	3401	505	5983	229	8002	253	10637
1990	396	3699	470	6502	242	8493	260	11239
1991	362	3898	449	6655	193	7798	202	10240
1992	342	3741	429	6377	200	7370	217	9776
1993	344	3554	402	6093	173	6965	198	9073
1994	353	3733	426	6387	143	7647	154	10213
1995	343	4085	407	6730	159	7633	175	10140
1996	308	3652	357	6138	149	6455	157	8658
1997	333	3201	393	5513	135	5812	146	7862
1998	291	3166	350	5393	144	5168	151	7019
1999	320	3139	389	5394	114	4871	120	6605
2000	286	2960	360	4960	97	4487	102	6002
2001	285	3390	342	5593	110	5080	113	6775
2002	265	3773	298	6037	100	6025	107	7881
2003	288	4071	338	6425	117	6139	123	7947
2004	272	4011	322	6198	103	5981	113	7692
2005	248	4238	306	6485	93	6229	99	7966
2006	246	4345	285	6631	104	6598	108	8543
2007	271	4681	315	7032	104	7059	106	9110
2008	244	4419	275	6466	86	6991	90	8850
2009	245	4126	282	6181	92	6662	102	8360

**NOTES:** For urban/open road classification see Note 11.

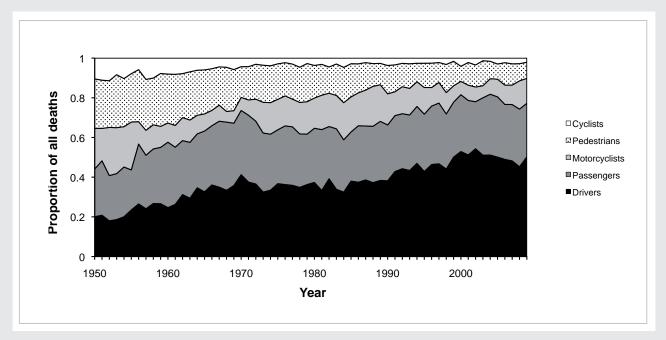
Historical data in these tables may not agree exactly with other tables as the data files have been updated prior to the data extraction for these new tables.

#### **TABLE 3: TYPE OF ROAD USER KILLED AND INJURED** YEAR ENDING 31 DECEMBER

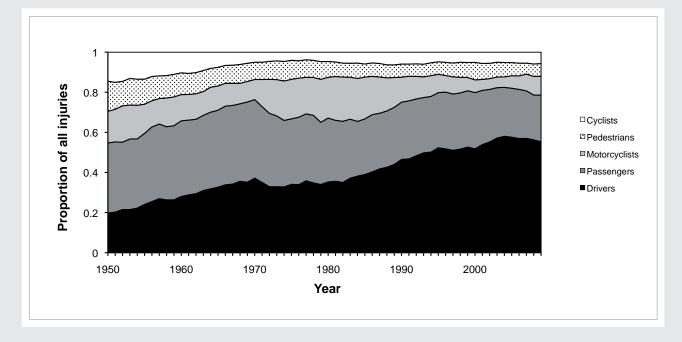
Year	Drivers of motor vehicles			ngers in vehicles	an	orcyclist d pillion sengers	Pedal	cyclists	Ped	estrians	Otl	her road users	Unkn	own (1)	Total ca	sualties
1951	1387	(60)	2399	(79)	1117	(47)	1033	(32)	918	(70)	88	(4)	-	(-)	6942	(292)
1952	1590	(49)	2482	(62)	1338	(66)	1077	(31)	902	(64)	54	(-)	-	(-)	7443	(272)
1953	1643	(58)	2686	(72)	1293	(72)	1002	(26)	1012	(83)	52	(2)	-	(-)	7688	(313)
1954	1739	(72)	2700	(90)	1312	(73)	1055	(37)	1019	(87)	51	(1)	-	(-)	7876	(360)
1955	2144	(78)	3161	(67)	1295	(80)	1202	(26)	1114	(81)	61	(1)	-	(-)	8977	(333)
1956	2473	(87)	3605	(99)	1269	(37)	1176	(19)	1173	(86)	63	(1)	-	(-)	9759	(329)
1957	2964	(92)	4098	(103)	1397	(48)	1304	(41)	1243	(98)	49	(2)	-	(-)	11055	(384)
1958	2992	(101)	4148	(104)	1629	(46)	1329	(38)	1272	(89)	39	(1)	-	(-)	11409	(379)
1959	3076	(93)	4307	(99)	1673	(37)	1291	(27)	1313	(93)	43	(-)	-	(-)	11703	(349)
1960	3478	(92)	4685	(123)	1625	(36)	1281	(30)	1347	(92)	28	(1)	-	(-)	12444	(374)
1961	3679	(103)	4757	(113)	1629	(43)	1354	(32)	1341	(101)	37	(1)	-	(-)	12797	(393)
1962	4038	(124)	5087	(108)	1749	(46)	1401	(31)	1447	(88)	55	(1)	-	(-)	13777	(398)
1963	4477	(115)	5409	(110)	1711	(44)	1320	(27)	1517	(95)	46	(3)	-	(-)	14480	(394)
1964	5166	(148)	6204	(116)	2016	(40)	1315	(26)	1524	(97)	44	(1)	-	(-)	16269	(428)
1965	5570	(181)	6540	(170)	2061	(48)	1289	(33)	1587	(123)	50	(4)	-	(-)	17097	(559)
1966	6144	(196)	7120	(162)	2072	(42)	1205	(29)	1609	(114)	50	(6)	-	(-)	18200	(549)
1967	5944	(198)	6812	(188)	1918	(46)	1132	(25)	1566	(109)	41	(4)	-	(-)	17413	(570)
1968	6282	(174)	6828	(179)	1807	(28)	1083	(24)	1658	(116)	41	(1)	-	(-)	17699	(522)
1969	6566	(204)	7474	(179)	1909	(36)	1039	(33)	1696	(118)	42	(-)	-	(-)	18726	(570)
1970	7701	(269)	8122	(211)	2077	(43)	1041	(28)	1786	(101)	67	(3)	-	(-)	20794	(655)
1971	7558	(253)	8148	(227)	2911	(52)	1083	(29)	1861	(113)	49	(3)	-	(-)	21610	(677)
1972	7324	(260)	8147	(225)	3766	(79)	1029	(22)	1994	(125)	57	(2)	-	(-)	22317	(713)
1973	7682	(273)	8236	(250)	4224 4092	(130)	1018 969	(30)	2180	(157)	48 32	(3)	-	(-)	23388	(843)
1974	6819	(225)	6896	(190)		(107)	745	(26)	2024 1747	(125)	38	(3)	- 1420	(-)	20832	(676)
1975 1976	6266 5796	(230)	6000 5746	(170)	3625 3330	(96)	745	(18)	1/4/	(112)	29		782	(-)	19841 17895	(628)
1976	5937	(221)	5526	(207)	3016	(92)	631	(14)	1476	(102)	29	(-)	946	(-)	17525	(702)
1978	4990	(228)	4831	(176)	2713	(104)	588	(30)	1224	(116)	7	(-)	825	(-)	15178	(654)
1979	4465	(220)	4071	(140)	2810	(90)	623	(15)	1157	(106)	14	(3)	766	(-)	13906	(554)
1980	5592	(223)	5054	(163)	3222	(91)	741	(22)	1249	(98)	12	(1)	2	(1)	15872	(599)
1981	5509	(223)	4692	(205)	3377	(116)	756	(21)	1123	(104)	20	(-)	2	(-)	15479	(669)
1982	5668	(264)	4934	(177)	3568	(113)	886	(30)	1128	(89)	10	(-)	-	(-)	16194	(673)
1983	6121	(218)	4851	(196)	3451	(108)	912	(19)	1147	(102)	9	(1)	-	(-)	16491	(644)
1984	6687	(217)	4778	(176)	3746	(125)	957	(31)	1343	(119)	12	(1)	1	(-)	17524	(669)
1985	7358	(284)	5240	(185)	3940	(132)	1120	(21)	1229	(125)	10	(-)	15	(-)	18912	(747)
1986	7601	(287)	5382	(218)	3593	(127)	1012	(22)	1268	(112)	17	(-)	1	(-)	18874	(766)
1987	7814	(307)	5196	(216)	3389	(144)	1058	(18)	1261	(110)	10	(-)	-	(-)	18728	(795)
1988	7381	(270)	4862	(206)	2862	(146)	1097	(20)	1122	(83)	15	(2)	7	(-)	17346	(727)
1989	7295	(289)	4722	(224)	2467	(139)	1054	(20)	1044	(81)	12	(1)	-	(-)	16594	(754)
1990	8236	(278)	5054	(205)	2203	(114)	1053	(27)	1161	(104)	12	(1)	-	(-)	17719	(729)
1991	7838	(278)	4858	(183)	2061	(78)	1000	(22)	1015	(88)	5	(1)	-	(-)	16777	(650)
1992	7788	(286)	4564	(179)	1816	(88)	941	(17)	1007	(76)	5	(-)	-	(-)	16121	(646)
1993	7515	(259)	4159	(167)	1561	(80)	910	(17)	949	(74)	14	(3)	-	(-)	15108	(600)
1994	8324	(272)	4606	(166)	1721	(72)	882	(15)	1063	(54)	4	(1)	-	(-)	16600	(580)
1995	8818	(249)	4637	(168)	1539	(78)	813	(15)	1053	(71)	10	(1)	-	(-)	16870	(582)
1996	7653	(238)	4184	(151)	1223	(48)	754	(13)	969	(63)	13	(1)	-	(-)	14796	(514)
1997	6825	(252)	3747	(165)	1142	(56)	724	(12)	925	(54)	12	(-)	-	(-)	13375	(539)
1998 1999	6403 6311	(221)	3471 3367	(139) (141)	969 791	(54)	626 619	(16)	930 895	(71)	13 16	(-)	-	(-)	12412 11999	(501)
2000	5667	(233)	3068	(141)	697	(42)	559	(8)	953	(35)	18	(1)	-	(-)	10962	(509) (462)
2000	6655	(233)	3336	(132)	669	(35)	696	(19)	986	(52)	26	(-)	-	(-)	12368	(455)
2001	7662	(220)	3641	(125)	744	(30)	771	(10)	1065	(45)	35	(-)	-	(-)	13918	(405)
2002	8204	(220)	3601	(133)	761	(28)	722	(14)	1005	(58)	26	(1)	-	(-)	14372	(461)
2005	8043	(222)	3384	(133)	701	(34)	716	(7)	999	(38)	20	(1)	-	(-)	13890	(435)
2005	8308	(203)	3521	(123)	903	(36)	751	(12)	943	(31)	25	(-)	-	(-)	14451	(405)
2005	8612	(191)	3713	(108)	1017	(38)	833	(9)	960	(44)	39	(3)	-	(-)	15174	(393)
2007	9131	(202)	3758	(119)	1336	(41)	880	(12)	868	(45)	40	(2)	-	(-)	16013	(421)
2008	8590	(162)	3412	(104)	1421	(51)	902	(10)	945	(31)	46	(7)	-	(-)	15316	(365)
2009	8017	(192)	3370	(103)	1369	(48)	825	(8)	914	(31)	46	(2)	-	(-)	14541	(384)

**NOTE:** The figures in brackets are the numbers killed and are not included in the adjacent totals. (1) See Note 2.





#### FIGURE 6: PROPORTION OF INJURIES BY ROAD USER TYPE



#### TABLE 4: CRASHES IN HOLIDAY PERIODS HISTORICAL

		Christmas-New Year				Easter		0	en's Birth	dav	Labour Weekend			
Year	Crashes	Casualties Period			Crashes Casualties			Crashes Casualties			Crashes Casualties			
ICAI	Clashes	Casu	arties	(days)	Crashes	Casu	aities	Crashes	Casu	aities	Clasiles	Casua	arres	
1956	211	342	(12)	9.6	96	145	(6)	121	202	(1)	90	153	(3)	
1957	244	400	(13)	9.6	158	254	(7)	109	169	(4)	109	170	(3)	
1958	232	358	(15)	11.6	170	275	(13)	121	185	(9)	104	174	(5)	
1959	321	506	(8)	11.6	154	251	(4)	143	214	(2)	122	177	(5)	
1960	252	414	(18)	11.6	155	256	(12)	140	225	(5)	123	210	(5)	
1961	228	346	(13)	11.6	143	235	(8)	107	185	(8)	96	182	(3)	
1962	255	421	(10)	9.6	159	298	(10)	136	221	(6)	130	210	(3)	
1963	276	457	(11)	9.6	179	308	(10)	176	298	(6)	152	251	(8)	
1964	302	500	(13)	11.6	192	340	(11)	178	279	(6)	169	291	(4)	
1965	343	557	(19)	11.6	218	372	(16)	166	256	(7)	153	250	(6)	
1966	448	749	(9)	11.6	236	382	(7)	174	281	(12)	146	269	(10)	
1967	253	399	(20)	11.6	203	306	(13)	171	281	(7)	139	232	(9)	
1968	288	429	(20)	9.6	189	317	(8)	191	317	(7)	169	292	(13)	
1969	403	713	(18)	11.6	176	328	(12)	204	357	(11)	175	298	(9)	
1970	453	824	(26)	11.6	196	367	(8)	144	251	(9)	157	290	(10)	
1971	468	819	(34)	11.6	215	425	(21)	174	284	(6)	170	340	(8)	
1972	477	826	(37)	11.6	234	421	(15)	154	243	(15)	202	363	(10)	
1973	366	585	(16)	9.6	229	415	(16)	210	352	(24)	208	399	(11)	
1974	363	574	(29)	9.6	245	434	(17)	163	257	(15)	194	352	(6)	
1975	401	628	(24)	11.6	202	327	(15)	185	273	(9)	186	290	(12)	
1976	360	584	(19)	11.6	216	346	(11)	165	238	(17)	151	263	(3)	
1977	399	609	(34)	11.6	182	293	(9)	161	240	(7)	148	252	(2)	
1978	244	346	(30)	11.6	158	259	(7)	132	208	(22)	120	205	(16)	
1979	257	416	(13)	9.6	144	219	(10)	105	154	(7)	115	202	(8)	
1980	273	481	(32)	11.6	138	213	(15)	122	197	(7)	139	232	(9)	
1981	356	602	(35)	11.6	136	248	(5)	114	158	(15)	147	266	(10)	
1982	289	473	(18)	11.6	150	240	(13)	144	229	(9)	136	208	(7)	
1983	341	523	(17)	11.6	164	285	(11)	142	211	(5)	144	248	(13)	
1984	282	439	(13)	9.6	160	258	(15)	134	223	(11)	140	218	(9)	
1985	338	532	(25)	9.6	177	291	(9)	156	231	(12)	133	225	(10)	
1986	369	554	(31)	11.6	168	254	(15)	149	239	(13)	146	232	(6)	
1987	344	544	(22)	11.6	163	254	(19)	161	259	(8)	157	243	(12)	
1988	378	594	(16)	11.6	186	283	(12)	132	202	(8)	142	213	(10)	
1989	377	596	(19)	11.6	153	214	(16)	140	214	(13)	120	181	(5)	
1990	313	487	(18)	9.6	155	237	(17)	150	220	(9)	141	225	(9)	
1991	332	537	(17)	9.6	162	238	(12)	119	177	(6)	107	180	(11)	
1992	340	528	(29)	11.6	129	185	(12)	107	172	(9)	133	178	(9)	
1993	244	372	(17)	11.6	103	165	(11)	118	179	(3)	93	149	(8)	
1994	339	542	(19)	11.6	141	228	(10)	134	214	(7)	134	191	(7)	
1995	380	598	(26)	11.6	137	192	(9)	120	189	(2)	143	220	(7)	
1996	272	432	(14)	9.6	141	229	(7)	120	186	(10)	100	153	(5)	
1997	248	387	(26)	11.6	132	218	(6)	108	156	(7)	80	119	(5)	
1998	247	391	(24)	11.6	109	176	(3)	90	134	(4)	82	124	(8)	
1999	249	398	(17)	11.6	99	145	(7)	76	109	(8)	87	139	(6)	
2000	251	409	(20)	11.6	96	134	(6)	74	96	(7)	79	141	(7)	
2001	250	417	(21)	9.6	101	161	(4)	83	125	(5)	101	142	(6)	
2002	222	323	(17)	9.6	126	214	(3)	94	141	(3)	98	135	(3)	
2003	272	408	(13)	11.6	126	190	(3)	84	131	(4)	80	117	(3)	
2004	318	513	(11)	11.6	120	170	(4)	112	146	(4)	87	136	(5)	
2005	313	488	(22)	11.6	142	209	(9)	99	136	(3)	85	112	(3)	
2006	294	444	(22)	11.6	119	170	(5)	106	154	(3)	128	199	(3)	
2000	266	413	(18)	9.6	144	206	(5)	129	188	(5)	120	145	(4)	
2008	334	458	(10)	11.6	142	196	(0)	119	167	(3)	100	159	(4)	
2009	-		()		132	193	(7)	110	159	(10)	95	132	(8)	

**NOTES:** The figures in brackets are the numbers killed and are not included in the adjacent injury figures. For the Christmas–New Year holiday period the year refers to the year in which the holiday period began. The number of days covered by the Christmas holiday period can vary. For the other three holiday periods the number of days is the same for all years. Also see Note 14.



## SECTION 2: CASUALTIES AND CRASHES



Age group years			Ma	les	Unkr	ıown	Total casualties		
Under 5	74	(1)	101	(8)	-	(-)	175	(9)	
5 to 9	128	(3)	167	(3)	-	(-)	295	(6)	
10 to 14	203	(4)	310	(3)	1	(-)	514	(7)	
15 to 19	1114	(10)	1463	(40)	2	(-)	2579	(50)	
20 to 24	920	(13)	1248	(37)	5	(-)	2173	(50)	
25 to 29	514	(11)	714	(16)	4	(-)	1232	(27)	
30 to 34	408	(5)	561	(32)	-	(-)	969	(37)	
35 to 39	450	(7)	592	(18)	1	(-)	1043	(25)	
40 to 44	428	(6)	568	(16)	1	(-)	997	(22)	
45 to 49	414	(7)	533	(20)	-	(-)	947	(27)	
50 to 54	356	(8)	477	(17)	1	(-)	834	(25)	
55 to 59	289	(7)	327	(6)	-	(-)	616	(13)	
60 to 64	235	(13)	261	(9)	-	(-)	496	(22)	
65 to 69	161	(6)	165	(8)	1	(-)	327	(14)	
70 to 74	120	(1)	117	(5)	-	(-)	237	(6)	
75 to 79	109	(6)	131	(7)	-	(-)	240	(13)	
80 and over	180	(9)	169	(14)	-	(-)	349	(23)	
Unknown age	240	(3)	208	(5)	70	(-)	518	(8)	
TOTALS	6343	(120)	8112	(264)	86	(-)	14541	(384)	

#### TABLE 5: AGE AND SEX OF ROAD USERS KILLED AND INJURED YEAR ENDING 31 DECEMBER 2009

NOTE: The figures in brackets are the numbers killed and are not included in the adjacent totals.

#### TABLE 6: AGE AND TYPES OF ROAD USERS KILLED AND INJURED YEAR ENDING 31 DECEMBER 2009

Age group years			Passengers		Motorcycle drivers			Motorcycle pillions		Pedal cyclists		trians	Other road users		Total casualties	
Under 5	-	(-)	137	(6)	1	(-)	1	(-)	5	(-)	30	(2)	1	(1)	175	(9)
5 to 9	-	(-)	169	(5)	2	(-)	4	(-)	31	(1)	86	(-)	3	(-)	295	(6)
10 to 14	9	(-)	248	(6)	10	(-)	6	(-)	111	(-)	126	(1)	4	(-)	514	(7)
15 to 19	1300	(16)	860	(27)	198	(2)	10	(1)	74	(1)	129	(3)	8	(-)	2579	(50)
20 to 24	1257	(28)	554	(16)	187	(3)	12	(-)	74	(-)	88	(3)	1	(-)	2173	(50)
25 to 29	771	(10)	232	(8)	117	(7)	7	(-)	62	(1)	41	(1)	2	(-)	1232	(27)
30 to 34	633	(22)	134	(3)	106	(10)	4	(-)	54	(1)	36	(1)	2	(-)	969	(37)
35 to 39	698	(13)	111	(3)	116	(6)	7	(-)	71	(1)	39	(2)	1	(-)	1043	(25)
40 to 44	664	(11)	99	(2)	134	(5)	10	(1)	61	(-)	28	(3)	1	(-)	997	(22)
45 to 49	575	(13)	112	(4)	147	(7)	11	(-)	71	(1)	29	(2)	2	(-)	947	(27)
50 to 54	530	(20)	92	(2)	111	(2)	6	(-)	65	(-)	30	(1)	-	(-)	834	(25)
55 to 59	391	(5)	100	(3)	53	(2)	4	(-)	42	(-)	25	(3)	1	(-)	616	(13)
60 to 64	330	(10)	62	(7)	43	(1)	1	(-)	31	(1)	25	(3)	4	(-)	496	(22)
65 to 69	203	(10)	61	(3)	16	(-)	2	(-)	9	(1)	34	(-)	2	(-)	327	(14)
70 to 74	163	(6)	38	(-)	9	(-)	-	(-)	6	(-)	18	(-)	3	(-)	237	(6)
75 to 79	167	(11)	30	(2)	10	(-)	-	(-)	9	(-)	23	(-)	1	(-)	240	(13)
80 and over	230	(12)	57	(4)	3	(-)	-	(-)	2	(-)	50	(6)	7	(1)	349	(23)
Unknown age	96	(5)	274	(2)	20	(1)	1	(-)	47	(-)	77	(-)	3	(-)	518	(8)
TOTALS	8017	(192)	3370	(103)	1283	(46)	86	(2)	825	(8)	914	(31)	46	(2)	14541	(384)

**NOTE:** The figures in brackets are the numbers killed and are not included in the adjacent totals. (1) Includes unknown.

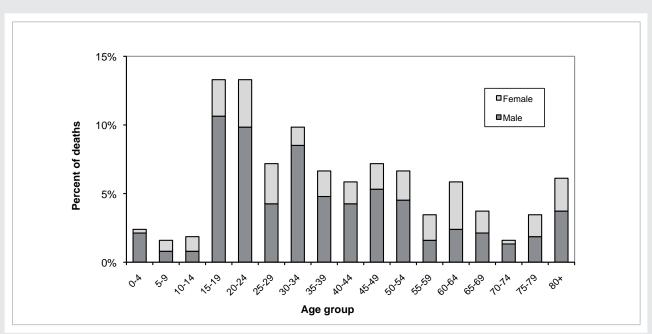
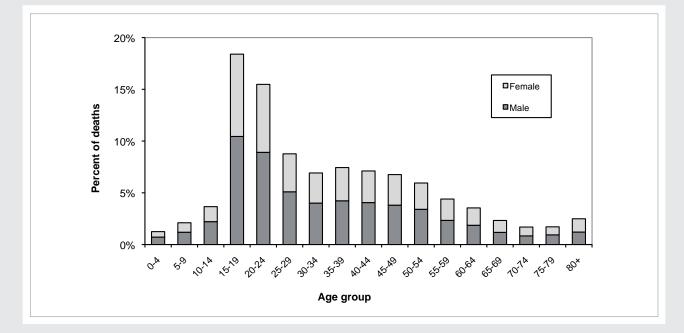
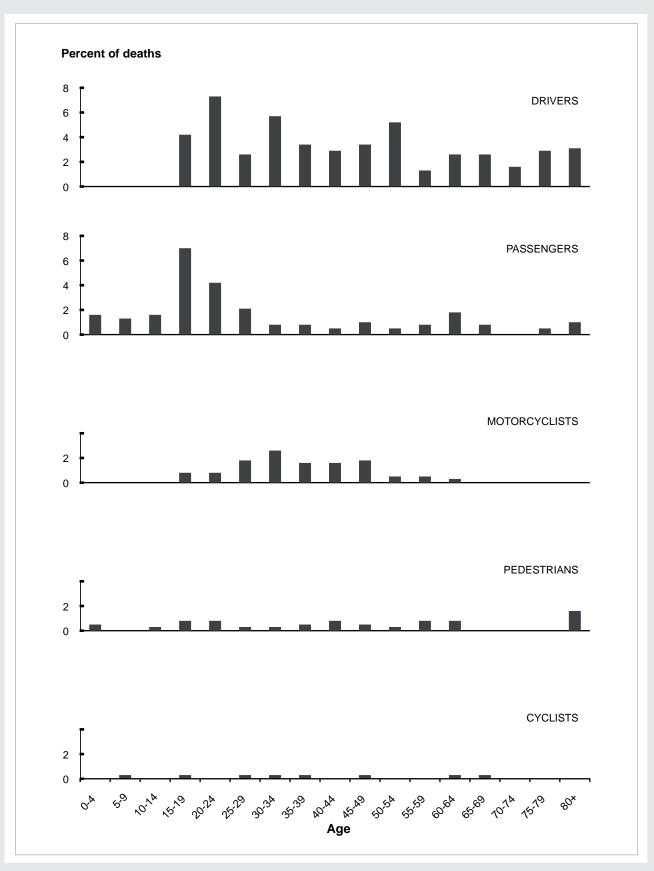


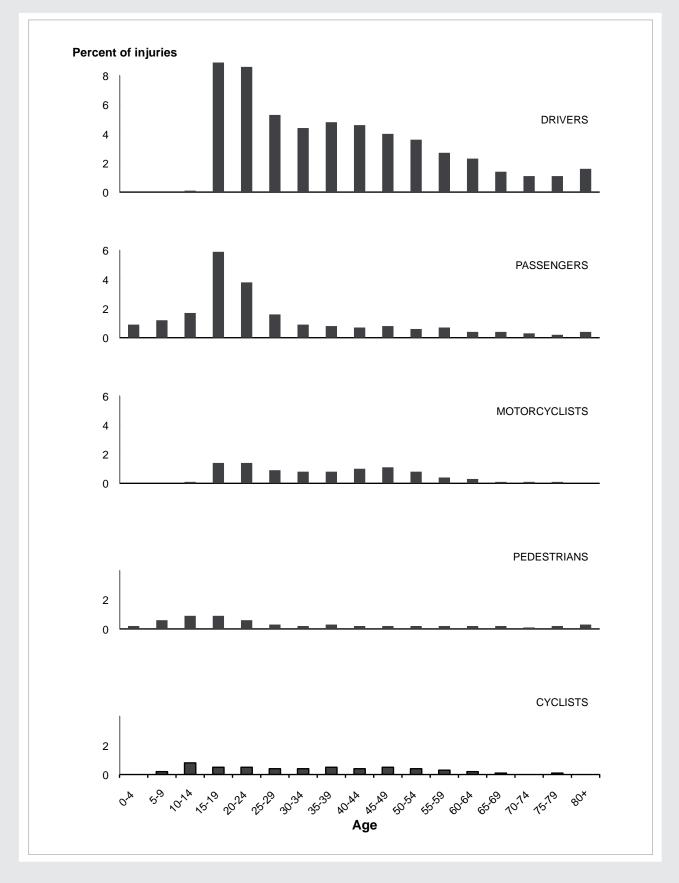
FIGURE 7: PERCENTAGE OF ROAD DEATHS BY AGE AND SEX

#### FIGURE 8: PERCENTAGE OF ROAD INJURIES BY AGE AND SEX





#### FIGURE 9: PERCENTAGE OF ROAD DEATHS BY AGE AND ROAD USER TYPE

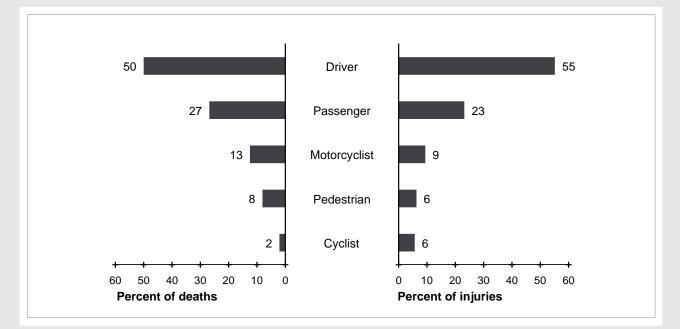


#### FIGURE 10: PERCENTAGE OF ROAD INJURIES BY AGE AND ROAD USER TYPE

Type of road user	Killed	Serious injury	Minor injury	Totals
DRIVERS OF:	I			
Car	142	758	5543	6443
Taxi	1	1	25	27
SUV	25	115	660	800
Van	17	97	543	657
Truck	7	30	209	246
Bus	-	3	20	23
Motorcycle	46	435	848	1329
Other	-	5	8	13
Unknown	-	-	-	-
SUBTOTAL	238	1444	7856	9538
PASSENGERS FROM:				
Car	78	412	2144	2634
Taxi	-	-	5	5
SUV	12	67	316	395
Van	12	68	268	348
Truck	-	13	27	40
Bus	1	12	37	50
Motorcycle	2	25	61	88
Other	-	1	-	1
Unknown	-	-	-	-
SUBTOTAL	105	598	2858	3561
OTHER ROAD USERS:				
Pedal cyclists	8	143	682	833
Pedestrian	31	233	681	945
Other and Unknown	2	7	39	48
SUBTOTAL	41	383	1402	1826
TOTAL ALL CASUALTIES	384	2425	12116	14925

#### TABLE 7: TYPE OF ROAD USER KILLED AND INJURED YEAR ENDING 31 DECEMBER 2009

#### FIGURE 11: TYPE OF ROAD USER KILLED AND INJURED



#### TABLE 8: TYPE OF ROAD USERS KILLED AND INJURED IN EACH SPEED LIMIT AREA DURING DAYLIGHT AND DARKNESS YEAR ENDED 31 DECEMBER 2009

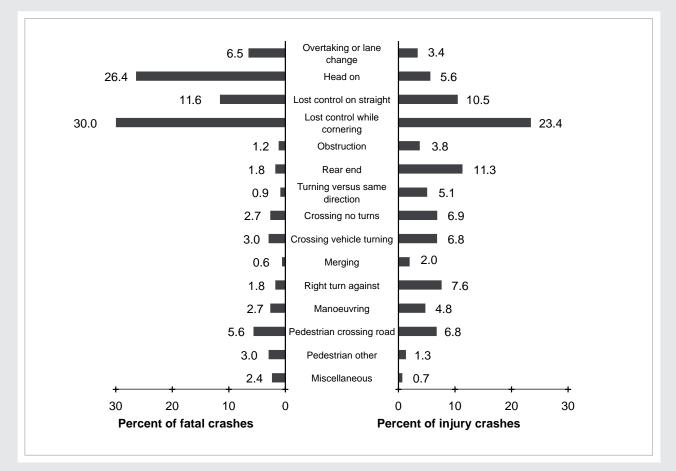
ROAD USER	50	) KM/H	OR LES	S		60-70	KM/H			80-100	KM/H		UNKNOWN SPEED LIMIT / LIGHT		TOTALS			
	Da	Day		Dark		Day		Dark		Day		Dark			Day	′	Dark	
DRIVERS OF:																		
Car	2136	(8)	1063	(9)	271	(6)	116	(5)	1798	(68)	914	(45)	3	(1)	4205	(82)	2093	(59)
Taxi	7	(-)	11	(1)	-	(-)	1	(-)	5	(-)	2	(-)	-	(-)	12	(-)	14	(1)
SUV	172	(1)	74	(1)	21	(1)	16	(-)	325	(12)	166	(10)	1	(-)	518	(14)	256	(11)
Van	151	(2)	74	(-)	30	(1)	10	(-)	245	(7)	130	(7)	-	(-)	426	(10)	214	(7)
Truck	38	(-)	9	(-)	11	(-)	2	(-)	121	(5)	58	(2)	-	(-)	170	(5)	69	(2)
Bus	5	(-)	4	(-)	1	(-)	1	(-)	11	(-)	1	(-)	-	(-)	17	(-)	6	(-)
Motorcycle	574	(6)	200	(2)	57	(1)	16	(4)	369	(25)	66	(8)	1	(-)	1000	(32)	282	(14)
Other	2	(-)	1	(-)	1	(-)	-	(-)	8	(-)	1	(-)	-	(-)	11	(-)	2	(-)
Unknown	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
SUBTOTAL	3085	(17)	1436	(13)	392	(9)	162	(9)	2882	(117)	1338	(72)		(1)	6359	(143)	2936	(94)
PASSENGERS I	FROM:																	
Car	630	(6)	480	(11)	95	(3)	79	(5)	808	(27)	460	(26)	4	(-)	1533	(36)	1019	(42)
Taxi	2	(-)	3	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	2	(-)	3	(-)
SUV	58	(-)	37	(4)	12	(-)	9	(-)	167	(6)	100	(2)	-	(-)	237	(6)	146	(6)
Van	59	(-)	38	(1)	13	(-)	6	(-)	150	(8)	70	(3)	-	(-)	222	(8)	114	(4)
Truck	12	(-)	1	(-)	2	(-)	-	(-)	19	(-)	6	(-)	-	(-)	33	(-)	7	(-)
Bus	14	(-)	3	(-)	-	(-)	-	(-)	31	(1)	1	(-)	-	(-)	45	(1)	4	(-)
Motorcycle	21	(-)	12	(-)	6	(-)	1	(-)	42	(1)	4	(1)	-	(-)	69	(1)	17	(1)
Other	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	-	(-)	-	(-)	1	(-)	-	(-)
Unknown	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
SUBTOTAL	796	(6)	574	(16)	128	(3)	95	(5)	1218	(43)	641	(32)			2142	(52)	1310	(53)
OTHER ROAD	USERS:																	
Pedal cyclists	614	(-)	108	(-)	35	(1)	9	(-)	43	(5)	13	(2)	3	(-)	692	(6)	130	(2)
Pedestrian	619	(10)	224	(11)	20	(-)	10	(-)	24	(3)	17	(7)	-	(-)	663	(13)	251	(18)
Other and unknown	42	(2)	4	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	42	(2)	4	(-)
SUBTOTAL	1275	(12)	336	(11)	55	(1)	19	(-)	67	(8)	30	(9)	3	(-)	1397	(21)	385	(20)
TOTAL	5156	(35)	2346	(40)	575	(13)	276	(14)	4167	(168)	2009	(113)	12	(1)	9898	(216)	4631	(167)

NOTE: The figures in brackets are numbers killed and are not included in the adjacent totals.

#### TABLE 9: MOVEMENT CLASSIFICATION OF CRASHES AND NUMBER OF CASUALTIES YEAR ENDING 31 DECEMBER 2009

	Number of crash	ies	Number of casualties							
Movement classification	Injury	Fatal	Killed	Serious	Minor	Total				
Overtaking or lane change	367	22	30	108	428	566				
Head on (not overtaking)	609	89	110	333	879	1322				
LOSS CONTROL OR OFF ROAD:										
• On straight	1132	39	46	286	1214	1546				
While cornering	2527	101	105	672	2714	3491				
Collision with obstruction	407	4	4	55	419	478				
Rear end	1222	6	10	77	1560	1647				
INTERSECTIONS OR DRIVEWAYS:										
Turning versus same direction	548	3	3	100	674	777				
Crossing no turns	740	9	9	149	865	1023				
Crossing vehicle turning	737	10	10	122	859	991				
<ul> <li>Vehicles merging</li> </ul>	214	2	2	23	228	253				
<ul> <li>Right turn against</li> </ul>	824	6	6	153	948	1107				
Vehicle manoeuvring	514	9	10	90	554	654				
Pedestrian crossing road	730	19	19	189	600	808				
Pedestrian other	143	10	11	36	118	165				
Miscellaneous	74	8	9	32	56	97				
TOTALS	10788	337	384	2425	12116	14925				

#### FIGURE 12: MOVEMENT CLASSIFICATION OF CRASHES



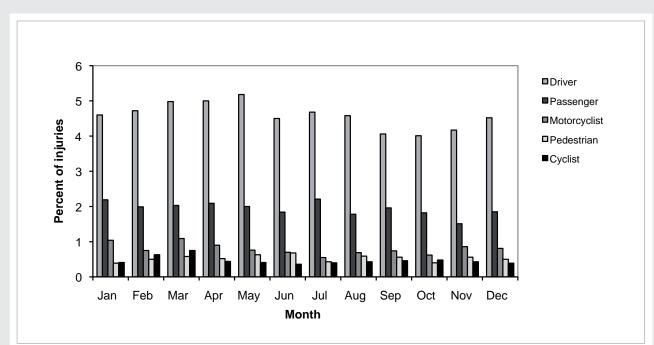
	CASUALTIES														CRASHES			
Month	Driver		Passenger		Motorcyclist (1)		Pedestrian		Pedal cyclist		Other (2)		Totals		Number		Daily average	
January	671	(15)	317	(10)	149	(6)	57	(1)	61	(-)	8	(1)	1263	(33)	890	(30)	29	
February	687	(18)	292	(5)	104	(8)	70	(5)	94	(-)	3	(-)	1250	(36)	928	(30)	33	
March	727	(16)	291	(12)	159	(3)	84	(3)	110	(2)	3	(-)	1374	(36)	1043	(31)	34	
April	724	(22)	297	(15)	129	(5)	74	(3)	66	(-)	5	(-)	1295	(45)	929	(39)	31	
May	755	(18)	287	(11)	110	(3)	90	(4)	60	(1)	3	(-)	1305	(37)	968	(31)	32	
June	658	(13)	267	(8)	102	(2)	101	(1)	53	(1)	6	(-)	1187	(25)	882	(22)	28	
July	683	(16)	323	(7)	81	(1)	59	(5)	58	(1)	1	(1)	1205	(31)	886	(28)	29	
August	667	(17)	260	(5)	101	(2)	87	(1)	63	(1)	5	(-)	1183	(26)	903	(23)	29	
September	589	(17)	283	(9)	102	(8)	81	(2)	67	(1)	3	(-)	1125	(37)	818	(31)	27	
October	590	(9)	266	(6)	89	(3)	57	(3)	71	(1)	2	(-)	1075	(22)	796	(20)	26	
November	608	(14)	222	(4)	127	(2)	82	(1)	64	(-)	3	(-)	1106	(21)	859	(20)	29	
December	658	(17)	265	(11)	116	(5)	72	(2)	58	(-)	4	(-)	1173	(35)	886	(32)	29	
TOTALS	8017	(192)	3370	(103)	1369	(48)	914	(31)	825	(8)	46	(2)	14541	(384)	10788	(337)	30	

#### TABLE 10: CASUALTIES AND CRASHES EACH MONTH YEAR ENDED 31 DECEMBER 2009

NOTES: The figures in brackets are numbers killed or the number of fatal crashes and are not included in the adjacent totals.

(1) Includes pillion passengers.

(2) Includes unknown road user types.



#### FIGURE 13: PERCENTAGE OF ROAD INJURIES BY MONTH AND TYPE OF ROAD USER

	TYPE	A	B	C	D	E	F	G	0
A	OVERTAKING AND LANE CHANGE	PULLING OUT OR CHANGING LANE TO RIGHT	HEAD ON	CUTTING IN OR CHANGING LANE TO LEFT	LOST CONTROL (OVERTAKING VEHICLE)	SIDE ROAD	LOST CONTROL (OVERTAKEN VEHICLE)	WEAVING IN HEAVY TRAFFIC	OTHER
В	HEAD ON	ON STRAIGHT	CUTTING CORNER	SWINGING WIDE	BOTH OR UNKNOWN	LOST CONTROL ON STRAIGHT	LOST CONTROL ON CURVE		OTHER
С	LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)	OUT OF CONTROL ON ROADWAY	OFF ROADWAY TO LEFT	OFF ROADWAY TO RIGHT					OTHER
D	CORNERING	LOST CONTROL TURNING RIGHT	LOST CONTROL TURNING LEFT	MISSED INTERSECTION OR END OF ROAD					OTHER
E	COLLISION WITH OBSTRUCTION			NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)		OPENING DOOR			OTHER
F	REAR END	SLOWER VEHICLE	CROSS TRAFFIC						OTHER
G	TURNING VERSUS SAME DIRECTION	REAR OF LEFT TURNING VEHICLE	LEFT TURN SIDE SIDE SWIPE	STOPPED OR TURNING FROM LEFT SIDE	NEAR CENTRE LINE	OVERTAKING	TWO TURNING		OTHER
Η	CROSSING (NO TURNS)	RIGHT ANGLE (70° TO 110°)							OTHER
J	CROSSING (VEHICLE TURNING)	RIGHT TURN RIGHT SIDE	OBSOLETE	TWO TURNING					OTHER
K	MERGING	LEFT TURN IN	RIGHT TURN IN	TWO TURNING					OTHER
L	RIGHT TURN AGAINST	STOPPED WAITING TO TURN	MAKING TURN						OTHER
Μ	MANOEUVRING	PARKING OR LEAVING	"U" TURN	"U" TURN			ENTERING OR LEAVING	REVERSING ALONG ROAD	OTHER
N	PEDESTRIANS CROSSING ROAD		RIGHT SIDE	LEFT TURN LEFT SIDE	RIGHT TURN RIGHT SIDE	LEFT TURN RIGHT SIDE	RIGHT TURN LEFT SIDE	MANOEUVRING VEHICLE	OTHER
Ρ	PEDESTRIANS OTHER	WALKING WITH TRAFFIC	WALKING FACING TRAFFIC	WALKING ON FOOTPATH	CHILD PLAYING (INCLUDING TRICYCLE)		ENTERING OR LEAVING VEHICLE		OTHER
Q	MISCELLANEOUS	FELL WHILE BOARDING OR ALIGHTING	₩ Ho/ FELL FROM MOVING VEHICLE	,			FELL INSIDE VEHICLE		OTHER

FIGURE 14: CRASH MOVEMENT CLASSIFICATION DIAGRAM

**NOTE:** \* = Movement applies for left and right hand bends, curves or turns.

## **TABLE 11: CRASHES CLASSIFIED BY TYPE OF MOVEMENT**YEAR ENDED 31 DECEMBER 2009

	ТҮРЕ	A	В	С	D	E	F	G	0	TOTAL
Α	Overtaking or lane change	88	35	102	105	2	17	3	37	389
В	Head on — not overtaking	126	80	132	23	74	247		16	698
с	Lost control — straight road	164	627	373					7	1171
D	Cornering	1471	1057	94					6	2628
E	Collision with obstruction	236	7	97	7	56			8	411
F	Rear end collision	164	90	64	731	136	32		11	1228
G	Turning versus same direction	46	83	51	253	89	16		13	551
н	Crossing no turns	736							13	749
J	Crossing vehicle turning	704		23					20	747
к	Vehicles merging	124	77	10					5	216
L	Right turn against	1	827						2	830
м	Vehicle manoeuvring	50	34	209	51	1	17	15	146	523
N	Pedestrian crossing road	359	202	20	41	13	71	36	7	749
Р	Pedestrian other	18	7	44	5	6	4		69	153
Q	Miscellaneous	8	24	12	7		1	22	8	82
								TOTAL C	RASHES	11125

**NOTE:** See Figure 14 for a diagrammatic representation of this table.

#### TABLE 12: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING CARS, SUVS, VANS AND TAXIS YEAR ENDED 31 DECEMBER 2009

	ТҮРЕ	A	В	с	D	E	F	G	0	TOTAL
•		58	32	81	84	1	11	3	21	291
A	Overtaking or lane change	61	32	53	38	2	4	3	17	210
В		118	67	105	16	71	218		8	603
В	Head on — not overtaking	104	62	106	16	65	209		11	573
с	Lost control — straight road	88	572	349					6	1015
	Lost control — straight road	41	74	44					1	160
D	Cornering	1214	876	80					3	2173
	Cornering	99	76	12					3	190
Е	Collision with obstruction	206	7	77	5	6			6	307
E		201	6	7	0	50			3	267
F	Rear end collision	137	83	55	659	120	25		9	1088
		102	77	58	709	127	29		8	1110
G	Turning versus same direction	38	21	33	228	56	11		7	394
U		42	66	42	242	78	4		9	483
н	Crossing no turns	653							10	663
n		602							4	606
J	Crossing vehicle turning	482		18					5	505
,		656		14					17	687
к	Vehicles merging	48	59	8					2	117
ĸ	venicies merging	114	60	6					4	184
L	Right turn against	1	561						1	563
		1	766						1	768
м	Vehicle manoeuvring	33	21	138	19	0	11	14	113	349
		48	32	196	43	1	14	10	63	407
N	Pedestrian crossing road	33	188	18	36	11	68	36	7	694
		0	0	0	0	0	0	0	0	0
Р	Pedestrian other	11	7	4	5	5	4		62	134
		0	0	0	0	0	1		2	3
Q	Miscellaneous	4	13	9	6		1	14	6	53
		1	1	0	1		1	11	3	18
								TOTAL C	RASHES	8949
										5666

NOTE: See Figure 14 for a diagrammatic representation of this table.

Top figure in each cell is the 'key' vehicle (dark arrow). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.

#### TABLE 13: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING BUSES AND TRUCKS YEAR ENDED 31 DECEMBER 2009

	ТҮРЕ	А	В	с	D	E	F	G	0	TOTAL
		10	0	16	2	1	1		7	37
A	Overtaking or lane change	8	2	9	6	0	0		6	31
В	Head on — not overtaking	4	4	4	3	3	9		2	29
В	Head on — not overtaking	19	9	20	2	9	35		2	96
с	Lost control — straight road	1	20	9						30
		4	5	8						17
D	Cornering	61	51	3					1	116
		8	6	0					0	14
Е	Collision with obstruction	4	0	5	2	0			1	12
		29	1	0	7	3			0	40
F	Rear end collision	9	2	4	41	12	2		2	72
		16	3	1	16	6	1		0	43
G	Turning versus same direction	3	3	5	12	4	5		0	32
		1	11	3	8	4	2		1	30
н	Crossing no turns	21							1	22
		24							0	24
J	Crossing vehicle turning	26		2						28
		22		0						22
к	Vehicles merging	9	4							13
		3	2							5
L	Right turn against		13							13
			26							26
м	Vehicle manoeuvring	2	0	10	1	1	0	0	4	18
		1	2	7	5	0	1	2	1	19
N	Pedestrian crossing road	22	8	2	5	1	3			41
		0	0	0	0	0	0			0
Р	Pedestrian other	7		2		1			7	17
		0		0		0			0	0
Q	Miscellaneous	4	5	2				8	1	20
		0	0	0				0	1	1
								TOTAL C	RASHES	500
										368

**NOTE:** See Figure 14 for a diagrammatic representation of this table. Top figure in each cell is the 'key' vehicle (dark arrow). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.

#### TABLE 14: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING MOTORCYCLES YEAR ENDED 31 DECEMBER 2009

	ТҮРЕ	A	В	с	D	E	F	G	0	TOTAL
•		8	2	4	16		2		6	38
A	Overtaking or lane change	14	0	19	1		1		2	37
		1	6	16	4		18		2	47
В	Head on — not overtaking	2	5	3	4		3		2	19
		72	33	14					1	120
С	Lost control — straight road	2	0	1					0	3
	Comorina	196	130	1					1	337
D	Cornering	5	3	0					0	8
E	Collision with obstruction	10		15		7			1	33
E	Collision with obstruction	1		1		0			0	2
F	Rear end collision	18	4	5	30	3	3		0	63
	Rear end consion	12	9	4	6	2	2		1	36
G	Turning versus same direction	3	19	10	12	25	0		1	70
	Turning versus same direction	3	5	2	2	5	6		1	24
н	Crossing no turns	30								30
		41								41
,	Crossing vehicle turning	103		2						105
,		11		3						14
к	Vehicles merging	13	8	2					1	24
	venicies merging	2	7	2					0	11
L	Right turn against		141							141
			21							21
м	Vehicle manoeuvring	9	9	50	4		3	1	16	92
		1	0	4	1		0	1	5	12
N	Pedestrian crossing road	7	6			1				14
		0	0			0				0
Р	Pedestrian other			2						2
				0						0
Q	Miscellaneous		6	1	1			0	0	8
			0	0	0			3	2	5
								TOTAL C	RASHES	1124
										233

**NOTE:** See Figure 14 for a diagrammatic representation of this table. Top figure in each cell is the 'key' vehicle (dark arrow). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.

#### TABLE 15: MOVEMENT CLASSIFICATION OF CRASHES INVOLVING PEDAL CYCLES YEAR ENDED 31 DECEMBER 2009

_										
	ТҮРЕ	A	В	С	D	E	F	G	0	TOTAL
A	Overtaking or lane change	12	1	1	3		3		3	23
		5	1	18	1		8		11	44
В	Head on — not overtaking	3	3	7	0		2		4	19
		1	4	0	1		0		0	6
с	Lost control — straight road	3	2	1						6
		1	2	0						3
D	Cornering	0	0	1					1	2
		2	1	0					0	3
Е	Collision with obstruction	16				43				59
		0				2				2
F	Rear end collision	0	1		1	1	2		0	5
		34	1		0	0	0		2	37
G	Turning versus same direction	2	40	3	1	4	0		5	55
		0	1	4	1	2	4		2	14
н	Crossing no turns	32							2	34
		69							9	78
J	Crossing vehicle turning	93		1					15	109
		15		6					3	24
к	Vehicles merging	54	6	0					2	62
ĸ		5	8	2					1	16
L	Right turn against		112						1	113
	night turn against		14						1	15
		6	4	11	27		3		13	64
M	Vehicle manoeuvring	0	0	2	1		1		18	22
N	Pedestrian crossing road									
IN	redestrian crossing road									
Р	Dedectrian ather				0					0
	Pedestrian other				1					1
									1	1
Q	Miscellaneous								1	1
								TOTAL C	RASHES	552
										266

**NOTE:** See Figure 14 for a diagrammatic representation of this table. Top figure in each cell is the 'key' vehicle (dark arrow). Lower figure in each cell is the second vehicle. Third, fourth etc vehicles are not shown.



### TABLE 16: MOVEMENT CLASSIFICATION OF INJURY CRASHES ON OPEN AND URBAN ROADS

YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
Movement classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	150	1.4	44	217	2	73	-	367
Head on (not overtaking)	264	2.4	82	345	3.2	77	-	609
LOSS CONTROL OR OFF ROAD:	-							
• On straight	478	4.4	225	652	6	261	2	1132
While cornering	863	8	485	1663	15.4	647	1	2527
Collision with obstruction	290	2.7	103	116	1.1	77	1	407
Rear end	749	6.9	128	473	4.4	104	-	1222
INTERSECTIONS OR DRIVEWAYS	:		1					
<ul> <li>Turning versus same direction</li> </ul>	382	3.5	64	166	1.5	23	-	548
Crossing no turns	654	6.1	162	85	0.8	7	1	740
<ul> <li>Crossing vehicle turning</li> </ul>	590	5.5	118	146	1.4	21	1	737
<ul> <li>Vehicles merging</li> </ul>	192	1.8	31	22	0.2	2	-	214
<ul> <li>Right turn against</li> </ul>	725	6.7	214	97	0.9	27	2	824
Vehicle manoeuvring	440	4.1	94	74	0.7	17	-	514
Pedestrian crossing road	715	6.6	186	15	0.1	6	-	730
Pedestrian other	126	1.2	31	17	0.2	9	-	143
Miscellaneous	38	0.4	10	36	0.3	8	-	74
TOTALS	6656	61.7	1977	4124	38.2	1359	8	10788

**NOTE:** Fatal crashes are not included in this table (see Table 17).

#### TABLE 17: MOVEMENT CLASSIFICATION OF FATAL CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
Movement classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	6	1.8	2	16	4.7	6	-	22
Head on (not overtaking)	7	2.1	4	82	24.3	27	-	89
LOSS CONTROL OR OFF ROAD:		1	1			1		
• On straight	18	5.3	11	21	6.2	8	-	39
While cornering	16	4.7	11	84	24.9	45	1	101
Collision with obstruction	2	0.6	2	2	0.6	-	-	4
Rear end	-	-	-	6	1.8	1	-	6
INTERSECTIONS OR DRIVEWAYS	:			1		1	1	1
<ul> <li>Turning versus same direction</li> </ul>	1	0.3	1	2	0.6	1	-	3
<ul> <li>Crossing no turns</li> </ul>	5	1.5	1	4	1.2	-	-	9
Crossing vehicle turning	3	0.9	1	7	2.1	1	-	10
<ul> <li>Vehicles merging</li> </ul>	1	0.3	-	1	0.3	-	-	2
<ul> <li>Right turn against</li> </ul>	3	0.9	-	3	0.9	-	-	6
Vehicle manoeuvring	5	1.5	2	4	1.2	2	-	9
Pedestrian crossing road	15	4.5	9	4	1.2	1	-	19
Pedestrian other	5	1.5	1	5	1.5	5	-	10
Miscellaneous	5	1.5	2	3	0.9	-	-	8
TOTALS	92	27.3	47	244	72.4	97	1	337

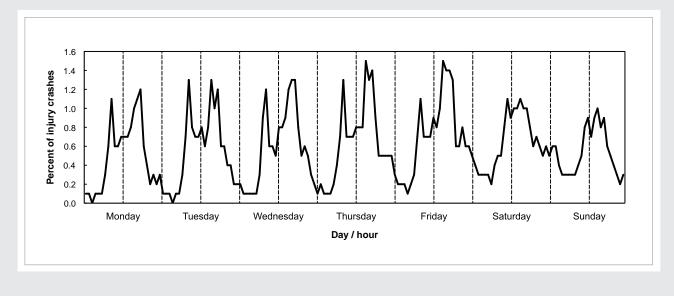
**NOTES:** For movement classification see Note 9. For area classification see Note 11.

Time of day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	16	10	22	12	29	55	55	199
1am to 1.59am	13	11	15	23	23	42	64	191
2am to 2.59am	5	8	16	13	24	37	64	167
3am to 3.59am	6	4	8	12	19	31	45	125
4am to 4.59am	7	6	11	16	11	35	35	121
5am to 5.59am	12	14	14	18	19	27	35	139
6am to 6.59am	37	37	32	45	32	21	36	240
7am to 7.59am	66	79	92	75	73	40	33	458
8am to 8.59am	117	138	132	138	122	59	36	742
9am to 9.59am	67	81	68	75	72	59	45	467
10am to 10.59am	67	70	62	76	72	84	57	488
11am to 11.59am	80	80	50	80	74	114	86	564
noon to 12.59am	75	85	86	87	94	101	93	621
1pm to 1.59pm	77	69	84	90	90	105	80	595
2pm to 2.59pm	84	87	98	85	104	103	96	657
3pm to 3.59pm	112	136	134	156	158	120	103	919
4pm to 4.59pm	115	110	138	144	146	106	90	849
5pm to 5.59pm	127	130	140	149	155	104	97	902
6pm to 6.59pm	63	69	91	97	142	83	64	609
7pm to 7.59pm	47	63	53	57	67	69	52	408
8pm to 8.59pm	25	46	62	55	68	70	44	370
9pm to 9.59pm	34	42	49	53	85	62	33	358
10pm to 10.59pm	24	26	35	52	67	54	18	276
11pm to 11.59pm	28	23	20	49	61	69	29	279
Unknown time	9	5	8	5	3	5	9	44
TOTALS	1313	1429	1520	1662	1810	1655	1399	10788

#### TABLE 18: INJURY CRASHES BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2009

NOTE: Fatal crashes are not included in this table (see Table 19).

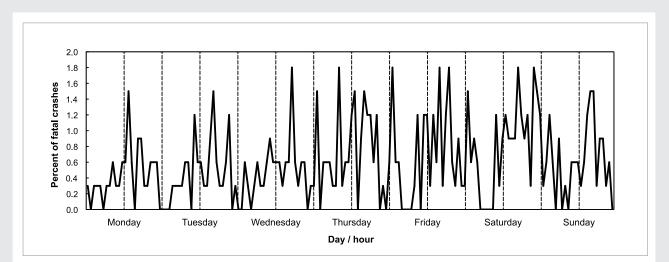
#### FIGURE 15: INJURY CRASHES BY TIME OF DAY AND DAY OF WEEK



Time of day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	1	-	-	1	2	1	4	9
1am to 1.59am	-	-	-	5	6	5	1	17
2am to 2.59am	1	-	2	-	2	2	2	9
3am to 3.59am	1	1	1	2	2	3	4	14
4am to 4.59am	1	1	-	2	-	2	2	8
5am to 5.59am	-	1	1	2	-	-	-	4
6am to 6.59am	1	1	2	1	-	-	3	8
7am to 7.59am	1	2	1	1	-	-	-	5
8am to 8.59am	2	2	1	6	1	-	1	13
9am to 9.59am	1	-	2	1	4	-	-	8
10am to 10.59am	1	4	3	2	-	4	2	16
11am to 11.59am	2	2	2	2	4	1	2	15
noon to 12.59am	2	2	2	4	4	3	2	19
1pm to 1.59pm	5	1	2	5	1	4	1	19
2pm to 2.59pm	2	1	1	-	4	3	2	13
3pm to 3.59pm	-	3	2	3	2	3	4	17
4pm to 4.59pm	3	5	2	5	6	3	5	29
5pm to 5.59pm	3	2	6	4	1	6	5	27
6pm to 6.59pm	1	1	2	4	4	4	1	17
7pm to 7.59pm	1	1	1	2	6	3	3	17
8pm to 8.59pm	2	2	2	4	2	4	3	19
9pm to 9.59pm	2	4	2	-	1	1	1	11
10pm to 10.59pm	2	-	-	1	3	6	2	14
11pm to 11.59pm	-	1	1	-	1	5	-	8
Unknown time	1	-	-	-	-	-	-	1
TOTALS	36	37	38	57	56	63	50	337

#### TABLE 19: FATAL CRASHES BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2009

#### FIGURE 16: FATAL CRASHES BY TIME OF DAY AND DAY OF WEEK



#### TABLE 20: LIGHT AND WEATHER CONDITIONS PREVAILING WHEN INJURY CRASHES OCCURRED YEAR ENDED 31 DECEMBER 2009

LIGHT CONDITIONS	FINE	HEAVY RAIN	LIGHT RAIN	MIST	SNOW	UNKNOWN	TOTAL
BRIGHT SUN	4131	6	19	6	3	18	4183
OVERCAST	2043	55	886	258	10	9	3261
TWILIGHT:							
<ul> <li>Street lights on</li> </ul>	135	1	25	6	-	1	168
<ul> <li>Street lights off</li> </ul>	178	-	15	2	-	4	199
<ul> <li>No street lights</li> </ul>	118	3	18	3	-	1	143
Not stated	-	-	-	-	-	-	-
TWILIGHT SUBTOTAL	431		58	11			510
DARK:							
<ul> <li>Street lights on</li> </ul>	1290	30	394	99	1	10	1824
<ul> <li>Street lights off</li> </ul>	24	-	5	-	-	-	29
<ul> <li>No street lights</li> </ul>	672	40	182	63	8	8	973
<ul> <li>Not stated</li> </ul>	-	-	-	-	-	-	-
DARK SUBTOTAL	1986	70	581	162		18	2826
UNKNOWN LIGHT	7	-	-	-	-	1	8
TOTAL	8598	135	1544	437	22	52	10788

**NOTE:** Fatal crashes are not included in this table (see Table 21).

# **TABLE 21: LIGHT AND WEATHER CONDITIONS PREVAILING WHEN FATAL CRASHES OCCURRED**YEAR ENDED 31 DECEMBER 2009

LIGHT CONDITIONS	FINE	HEAVY RAIN	LIGHT RAIN	MIST	SNOW	UNKNOWN	TOTAL
BRIGHT SUN	106	-	-	-	-	-	106
OVERCAST	45	1	29	10	1	-	86
TWILIGHT:							
<ul> <li>Street lights on</li> </ul>	2	-	1	-	-	-	3
<ul> <li>Street lights off</li> </ul>	4	-	1	-	-	-	5
<ul> <li>No street lights</li> </ul>	6	-	2	-	-	-	8
<ul> <li>Not stated</li> </ul>	-	-	-	-	-	-	-
TWILIGHT SUBTOTAL	12						16
DARK:							
<ul> <li>Street lights on</li> </ul>	40	-	8	2	-	-	50
Street lights off	1	-	-	-	-	-	1
<ul> <li>No street lights</li> </ul>	57	6	13	-	-	1	77
<ul> <li>Not stated</li> </ul>	-	-	-	-	-	-	-
DARK SUBTOTAL	98		21				128
UNKNOWN LIGHT	-	-	-	1	-	-	1
TOTAL	261	7	54	13	1	1	337

#### TABLE 22: OBJECTS COLLIDED WITH IN INJURY CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	;		OPEN ROADS		UNKNOWN AREA	
Objects struck	Number of objects	As a % of all objects	Number during darkness	Number of objects	As a % of all objects	Number during darkness	Number of objects	Total number of objects
Driven or accompanied animals	-	-	-	1	0	-	-	1
Bridge or approach rails	15	0.3	8	64	1.1	26	-	79
Upright cliff or bank	121	2.1	58	563	10	201	-	684
Debris on the road	7	0.1	4	19	0.3	7	-	26
Over the bank or cliff	48	0.8	27	235	4.2	96	-	283
Fence, letterbox, hoarding	342	6	184	632	11.2	260	-	974
Guard rail	48	0.8	28	222	3.9	99	-	270
House or building	108	1.9	51	10	0.2	7	-	118
Traffic island or median	76	1.3	45	20	0.4	9	-	96
Phone boxes, bus shelters etc	34	0.6	21	7	0.1	2	-	41
Kerb	149	2.6	76	22	0.4	9	-	171
Slip, washout or flood	-	-	-	5	0.1	2	-	5
Parked vehicle	552	9.8	229	32	0.6	11	-	584
Train	1	0	-	8	0.1	2	-	9
Pole or post	348	6.2	189	231	4.1	102	-	579
Broken down or accident vehicles	108	1.9	24	23	0.4	15	1	132
Road works signs or drums	1	0	1	6	0.1	5	-	7
Traffic sign or signals	86	1.5	43	112	2	33	-	198
Tree	280	4.9	174	279	4.9	124	-	559
Stray or wild animals	5	0.1	4	59	1	50	1	65
Ditch	50	0.9	20	518	9.2	208	1	569
Into water, river or sea	19	0.3	8	48	0.8	20	-	67
Other	72	1.3	39	68	1.2	22	-	140
TOTALS	2470	43.7	1233	3184	56.3	1310	3	5657

NOTE: For area classification see Note 11.

Fatal crashes are not included in this table (see Table 23).

#### TABLE 23: OBJECTS COLLIDED WITH IN FATAL CRASHES ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	;		OPEN ROADS		UNKNOWN AREA		
Objects struck	Number of objects	As a % of all objects	Number during darkness	Number of objects	As a % of all objects	Number during darkness	Number of objects	Total number of objects	
Driven or accompanied animals	-	-	-	-	-	-	-	-	
Bridge or approach rails	3	1	2	10	3.3	6	-	13	
Upright cliff or bank	4	1.3	2	24	7.9	12	-	28	
Debris on the road	-	-	-	-	-	-	-	-	
Over the bank or cliff	11	3.6	7	27	8.9	11	-	38	
Fence, letterbox, hoarding	9	3	4	41	13.4	19	-	50	
Guard rail	4	1.3	2	15	4.9	10	-	19	
House or building	2	0.7	1	1	0.3	1	-	3	
Traffic island or median	4	1.3	4	1	0.3	-	-	5	
Phone boxes, bus shelters etc	-	-	-	1	0.3	1	-	1	
Kerb	4	1.3	2	-	-	-	-	4	
Slip, washout or flood	-	-	-	-	-	-	-	-	
Parked vehicle	3	1	1	2	0.7	-	-	5	
Train	2	0.7	-	1	0.3	-	-	3	
Pole or post	9	3	6	19	6.2	13	-	28	
Broken down or accident vehicles	-	-	-	1	0.3	1	-	1	
Road works signs or drums	-	-	-	-	-	-	-	-	
Traffic sign or signals	2	0.7	1	2	0.7	-	-	4	
Tree	13	4.3	7	28	9.2	18	1	42	
Stray or wild animals	-	-	-	-	-	-	-	-	
Ditch	2	0.7	2	34	11.1	13	-	36	
Into water, river or sea	5	1.6	4	14	4.6	6	-	19	
Other	3	1	3	3	1	2	-	6	
TOTALS	80	26.2	48	224	73.4	113	1	305	

**NOTE:** For area classification see Note 11.

### TABLE 24: INJURY CRASHES BY ROAD FEATURE ON OPEN AND URBAN ROADS

YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
ROAD FEATURE	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
INTERSECTIONS								
Controlled by:								
Traffic signals	832	7.7	292	34	0.3	14	-	866
Stop sign	473	4.4	105	183	1.7	34	-	656
Roundabout	297	2.8	74	31	0.3	9	1	329
Other give way sign	1190	11	303	243	2.3	58	3	1436
Points man or school patrol	2	0	-	-	-	-	-	2
Uncontrolled	720	6.7	248	199	1.8	64	2	921
SUBTOTAL	3514	32.6	1022	690	6.4	179	6	4210
NON-INTERSECTIONS								
Bridge	38	0.4	12	147	1.4	46	-	185
Railway crossing	4	0	-	15	0.1	3	-	19
Motorway on-off ramp	6	0.1	1	18	0.2	7	-	24
Raised islands	262	2.4	92	119	1.1	36	-	381
Straight road	2077	19.3	517	1288	11.9	448	1	3366
Easy curve	390	3.6	163	754	7	290	-	1144
Moderate curve	302	2.8	140	888	8.2	287	1	1191
Severe curve	63	0.6	30	205	1.9	63	-	268
Not stated	-	-	-	-	-	-	-	-
SUBTOTAL	3142	29.1	955	3434	31.8	1180	2	6578
TOTAL	6656	61.7	1977	4124	38.2	1359	8	10788

**NOTES:** For urban/open road classification see Note 11.

Fatal crashes are not included in this table (see Table 25).

### TABLE 25: FATAL CRASHES BY ROAD FEATURE ON OPEN AND URBAN ROADS

YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
ROAD FEATURE	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
INTERSECTIONS								
Controlled by:								
Traffic signals	6	1.8	4	-	-	-	-	
Stop sign	3	0.9	2	7	2.1	1	-	1(
Roundabout	3	0.9	2	1	0.3	-	-	4
Other give way sign	11	3.3	2	18	5.3	3	-	29
Points man or school patrol	-	-	-	-	-	-	-	
Uncontrolled	5	1.5	3	4	1.2	4	-	
SUBTOTAL	28	8.3	13	30	8.9	8	-	58
NON-INTERSECTIONS								
Bridge	4	1.2	3	15	4.5	9	-	1
Railway crossing	2	0.6	-	1	0.3	-	-	
Motorway on-off ramp	-	-	-	1	0.3	1	-	
Raised islands	6	1.8	5	4	1.2	3	-	1
Straight road	36	10.7	18	72	21.4	24	-	10
Easy curve	7	2.1	2	52	15.4	24	-	5
Moderate curve	7	2.1	5	63	18.7	26	-	7
Severe curve	2	0.6	1	6	1.8	2	1	
Not stated	-	-	-	-	-	-	-	
SUBTOTAL	64	19	34	214	63.5	89	1	27
TOTAL	92	27.3	47	244	72.4	97	1	33

**NOTE:** For urban/open road classification see Note 11.

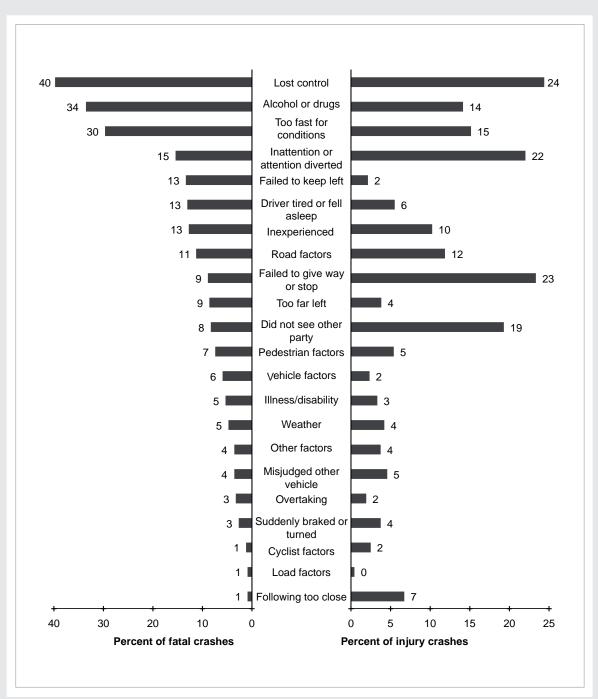


FIGURE 17: FACTORS PROBABLY CONTRIBUTING TO CRASHES

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	ïLE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	DRS							
Alcohol or drugs								
Alcohol suspected	257	(9)	22	(-)	-	(-)	279	(9)
Any test negative	285	(15)	22	(5)	-	(-)	307	(20)
All tests positive or refused	1074	(78)	53	(6)	-	(-)	1127	(84)
Result of test unknown	92	(13)	17	(-)	-	(-)	109	(13)
Visibly intoxicated non-driver (cyclist/passenger)	7	(1)	-	(-)	16	(-)	23	(1)
Not suspected and test negative	-	(99)	-	(24)	-	(-)	-	(123)
Drugs suspected	49	(14)	2	(2)	-	(-)	51	(16)
Drugs proven	8	(2)	-	(1)	-	(-)	8	(3)
Other	-	(-)	-	(-)	-	(-)	-	(-)
Totals	1772	(231)	116	(38)	16	(-)	1904	(269)
Too fast for conditions								
Cornering	1053	(64)	93	(11)	3	(-)	1149	(75)
On straight	288	(9)	24	(3)	6	(-)	318	(12)
To give way at intersection	33	(1)	7	(-)	5	(-)	45	(1)
Approaching railway crossing	1	(-)	-	(-)	-	(-)	1	(-)
Passing stationary school bus	-	(-)	-	(-)	-	(-)	-	(-)
At temporary speed limit	33	(1)	1	(-)	-	(-)	34	(1)
At crash or emergency	2	(-)	-	(-)	-	(-)	2	(-)
Other	109	(10)	8	(1)	8	(-)	125	(11)
Totals	1519	(85)	133	(15)	22		1674	(100)
Failed to keep left								
Swung wide on bend	73	(16)	10	(5)	3	(-)	86	(21)
Swung wide at an intersection	13	(-)	3	(-)	2	(-)	18	(-)
Cutting corner:								
<ul> <li>on bend</li> </ul>	47	(4)	9	(-)	2	(-)	58	(4)
<ul> <li>at an intersection</li> </ul>	20	(-)	-	(-)	2	(-)	22	(-)
On straight	46	(18)	-	(-)	-	(1)	46	(19)
Vehicle crossed raised median	-	(1)	-	(-)	-	(-)	-	(1)
Driving or riding abreast (cyclists more than 2 abreast)	1	(-)	-	(-)	-	(-)	1	(-)
Wandering or wobbling	2	(1)	1	(1)	1	(-)	4	(2)
Too far left/right	385	(29)	36	(-)	7	(-)	428	(29)
Other	19	(2)	2	(1)	-	(-)	21	(3)
Totals	606	(71)	61	(7)	17	(1)	684	(79)

#### (Continued)



YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	CLE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	RS							
Lost control								
When turning	1102	(53)	155	(11)	1	(-)	1258	(64)
Under heavy braking	137	(2)	40	(5)	2	(-)	179	(7)
Under heavy acceleration	89	(2)	12	(1)	-	(-)	101	(3)
While returning to seal from unsealed shoulder	148	(19)	10	(-)	-	(-)	158	(19)
Due to road conditions	303	(8)	91	(5)	1	(-)	395	(13)
Due to vehicle fault	39	(1)	22	(1)	-	(-)	61	(2)
Avoiding another vehicle, pedestrian, party or obstacle on roadway	83	(6)	19	(-)	4	(-)	106	(6)
On unsealed road	75	(-)	-	(-)	-	(-)	75	(-)
End of seal	9	(-)	-	(-)	-	(-)	9	(-)
Other	350	(25)	47	(1)	7	(-)	404	(26)
Totals	2335	(116)	396	(24)	15		2746	(140)
Failed to signal in time								
When moving to left, pulling over to left	4	(-)	-	(-)	-	(-)	4	(-)
When turning left	3	(-)	-	(-)	-	(-)	3	(-)
When pulling out or moving to the right	4	(-)	-	(-)	-	(-)	4	(-)
When turning right	20	(-)	2	(-)	2	(-)	24	(-)
Incorrect signal	27	(-)	2	(-)	-	(-)	29	(-)
Other	5	(-)	-	(-)	-	(-)	5	(-)
Totals	63	(-)	4	(-)	2	(-)	69	(-)
Overtaking								
A line of traffic or queue	12	(1)	8	(-)	1	(-)	21	(1)
Deliberately in the face of oncoming traffic	4	(-)	-	(-)	-	(-)	4	(-)
Failed to notice oncoming traffic	16	(2)	2	(1)	-	(-)	18	(3)
Misjudged speed or distance of oncoming traffic	4	(-)	1	(-)	-	(-)	5	(-)
At no passing line	8	(1)	2	(-)	-	(-)	10	(1)
With insufficient visibility	14	(5)	3	(-)	-	(-)	17	(5)
At an intersection without due care	16	(-)	6	(-)	2	(-)	24	(-)
On left without due care	14	(1)	25	(-)	16	(1)	55	(2)
Cut in after overtaking	21	(1)	3	(-)	1	(-)	25	(1)
Vehicle signalling right turn	31	(-)	10	(-)	2	(-)	43	(-)
Carelessly at a pedestrian crossing	1	(-)	-	(-)	-	(-)	1	(-)
Other	18	(1)	5	(-)	-	(-)	23	(1)
Totals	159	(12)	65	(1)	22	(1)	246	(14)

#### (Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHICL	E	MOTORCYCLE		PEDAL CYCLE		TOTALS	
DRIVER/RIDER CONTROL FACTO	RS							
Wrong lane or turned from wro	ng position							
Turned right from incorrect lane	12	(-)	4	(-)	1	(-)	17	(-
Turned left from incorrect lane	8	(-)	1	(-)	-	(-)	9	(-
Travelled straight ahead from turning lane or flush median	7	(-)	-	(-)	3	(-)	10	(-)
Turned right from left side of road	23	(-)	2	(-)	2	(-)	27	(-
Turned left from near centre line	7	(-)	2	(-)	-	(-)	9	(-
Turned into incorrect lane	3	(1)		(-)		(-)	3	(1
Weaving or cut in on multi-lane	5	(-)	3	(-)		(-)	8	(-
roads Moved left to avoid slow vehicle	-	(-)	ر -	(-)	-		0	
						(-)	-	(-
Long vehicle tracked outside lane	-	(-)	-	(-)	-	(-)	-	(-
Other	5	(-)	-	(-)	3	(-)	8	(-
Totals	70	(1)	12	(-)	9	(-)	91	(1
In line of traffic								
Following too closely	778	(2)	47	(1)	1	(-)	826	(3
Travelling unreasonably slowly	1	(-)	-	(-)	-	(-)	1	(-
Motorist crowded cyclist	11	(-)	-	(-)	-	(-)	11	(-
Incorrect merging manoeuvre	7	(-)	-	(-)	-	(-)	7	(-
Other	-	(-)	-	(-)	-	(-)	-	(-
Totals	797	(2)	47	(1)			845	(3
Sudden action								
Braked	125	(1)	15	(1)	1	(-)	141	(2
Turned left	8	(1)	-	(-)	-	(-)	8	(1
Turned right	7	(-)	-	(-)	1	(-)	8	(-
Swerved to avoid:								
• pedestrian	10	(-)	2	(-)	-	(-)	12	(-
• animal	59	(-)	4	(-)	-	(-)	63	(-
crash or broken down vehicle	1	(-)	-	(-)	-	(-)	1	(-
• vehicle	137	(4)	29	(-)	3	(-)	169	(4
object or for unknown reason	11	(-)	-	(-)	1	(-)	12	(-
Avoiding approaching emergency	2	(-)		(-)	1	(-)	2	(-
vehicle	2	(-)	_	(-)	-	(-)	2	(-
Other	14	(2)	2	(-)	1	(-)	17	(2
Totals	374	(8)	52	(1)	7	(-)	433	(9
Forbidden movements								
Wrong way in one way street, motorway or roundabout	5	(1)	-	(-)	1	(-)	6	(1
When turning or U turning contrary to a sign	3	(-)	-	(-)	-	(-)	3	(-
Contrary to 'in' or 'out' only driveway signs	1	(-)	-	(-)	1	(-)	2	(-
Driving or riding on footpath	3	(-)	3	(-)	77	(-)	83	(-
On incorrect side of island or	31	(1)	2	(-)	11	(-)	44	(1
median Contrary to 'No Entry' sign	2	(-)		(-)	-	(-)	2	(+
In car park	-	(-)		(-)	-	(-)		(•
Motor vehicle in cycle lane	1	(-)	3	(1)	-	(-)	4	(1
Bus/Transit lane	-	(-)	1	(-)	-	(-)	4	()
Cyclist riding on pedestrian	- 1	(-)	1	(-)	- 8	(-)	9	
crossing/pedestrian signals	1	(-)	-	(-)	8	(-)	9	(-
Other	11	(1)	4	(-)	2	(-)	17	(1
Totals	58	(3)	13	(1)	100	(-)	171	(4
TOTAL DRIVER/RIDER CONTROL FACTORS	7753	(529)	899	(88)	211	(2)	8863	(619

(Continued)



YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHICLE		MOTORCYCLE	1	PEDAL CYCLE		TOTALS	
VEHICLE CONFLICT FACTORS								
Failed to give way								
At a stop sign	273	(2)	1	(-)	2	(-)	276	(2)
At a give way sign	766	(10)	20	(-)	13	(-)	799	(10)
When turning, to non-turning traffic	736	(5)	8	(-)	3	(-)	747	(5)
When deemed turning by markings, not geometry	4	(-)	-	(-)	-	(-)	4	(-)
When turning left, to opposing right turning traffic	1	(-)	-	(-)	-	(-)	1	(-)
To pedestrian on a crossing	77	(1)	-	(-)	-	(-)	77	(1)
When turning at signals to pedestrians	40	(-)	-	(-)	-	(-)	40	(-)
When entering roadway from driveway	187	(4)	5	(-)	12	(1)	204	(5)
To traffic approaching or crossing from right	34	(-)	-	(-)	4	(-)	38	(-)
At one lane bridge/road	6	(-)	2	(-)	-	(-)	8	(-)
To pedestrian on footpath or verge	12	(1)	-	(-)	-	(-)	12	(1)
Entering roadway not from driveway or intersection	6	(-)	1	(-)	23	(-)	30	(-)
To emergency vehicle	3	(-)	-	(-)	1	(-)	4	(-)
Driver waved through	51	(-)	-	(-)	-	(-)	51	(-)
Other	7	(-)	1	(-)	6	(-)	14	(-)
Totals	2203	(23)	38	(-)	64	(1)	2305	(24)
Did not stop								
At stop sign	113	(3)	2	(-)	4	(-)	119	(3)
At steady red light	193	(2)	5	(-)	14	(-)	212	(2)
At steady red arrow	29	(-)	-	(-)	-	(-)	29	(-)
At steady amber light	22	(-)	3	(-)	-	(-)	25	(-)
At steady amber arrow	2	(-)	-	(-)	-	(-)	2	(-)
At flashing red lights (railway crossing, fire station etc)	2	(2)	1	(-)	-	(-)	3	(2)
For police or flag person	4	(-)	-	(-)	-	(-)	4	(-)
For school patrol/kea crossing	-	(-)	-	(-)	-	(-)	-	(-)
Other	6	(-)	1	(-)	-	(-)	7	(-)
Totals	371	(7)	12		18		401	(7)
Inattentive: failed to notice								
Car slowing, stopping or stopped in front	718	(4)	37	(-)	4	(-)	759	(4)
Bend in road	31	(3)	4	(-)	-	(-)	35	(3)
Indication of vehicle in front	74	(-)	3	(1)	2	(-)	79	(1)
Traffic lights	110	(1)	3	(-)	3	(-)	116	(1)
Intersection or its stop/give way control	69	(1)	1	(-)	1	(-)	71	(1)
Other regulatory sign/markings	7	(-)	-	(-)	-	(-)	7	(-)
Warning sign	15	(-)	1	(-)	-	(-)	16	(-)
Direction, information signs/ markings	1	(-)	-	(-)	-	(-)	1	(-)
Roadworks signs	9	(-)	1	(-)	-	(-)	10	(-)
Lane use arrows/markings	1	(-)	1	(-)	-	(-)	2	(-)
Obstructions on roadway	37	(-)	4	(-)	1	(-)	42	(-)
Other	284	(15)	20	(3)	14	(-)	318	(18)
Totals	1356	(24)	75	(4)	25		1456	(28)

(Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHICLE		MOTORCYCLE		PEDAL CYCLE	1	TOTALS	
VEHICLE CONFLICT FACTORS								
Attention diverted by:								
Passengers	169	(1)	1	(-)	-	(-)	170	(1)
Scenery or persons outside vehicle	127	(1)	6	(-)	1	(-)	134	(1)
Other traffic	233	(1)	10	(-)	2	(-)	245	(1)
Animal or insect in vehicle	27	(1)	-	(-)	-	(-)	27	(1)
Trying to find intersection/house no.	45	(1)	-	(-)	-	(-)	45	(1)
Advertising or signs	-	(-)	1	(-)	-	(-)	1	(-)
Emotionally upset	96	(1)	1	(-)	-	(-)	97	(1)
Cigarette, radio, glove box etc.	266	(3)	6	(-)	1	(-)	273	(3)
Cell phone	76	(5)	-	(-)	-	(-)	76	(5)
Navigation devices	1	(-)	-	(-)	-	(-)	1	(-)
CB Radio/non-cell comms devices	-	(1)		(-)	-	(-)	_	(1)
Driver dazzled	177	(6)	9	(-)	1	(-)	187	(6)
Other	138	(12)	9	(-)	4	(-)	151	(12)
Totals	1355	(33)	43	(-)	9	(-)	1407	(33)
Did not see or look for another								
Behind when:								
reversing	133	(2)	1	(-)	2	(-)	136	(2)
changing lanes, position, or direction (includes U-turns)	374	(5)	10	(-)	18	(1)	402	(6)
pulling out from parked     position	42	(-)	-	(-)	-	(-)	42	(-)
opening door or leaving     vehicle	48	(-)	-	(-)	-	(-)	48	(-)
When required to give way to:								
• traffic from another direction	1012	(14)	15	(-)	17	(1)	1044	(15
• pedestrians	55	(1)	-	(-)	-	(-)	55	(1
When visibility was:								
obstructed by other vehicles	263	(1)	6	(-)	7	(-)	276	(1
Iimited by roadside features	77	(1)	8	(-)	3	(-)	88	(1)
When first in queue on receiving green light	1	(-)	-	(-)	1	(-)	2	(-)
Other	111	(3)	6	(2)	17	(-)	134	(5)
Totals	2116	(27)	46	(2)	65	(2)	2227	(31)
Misjudged speed, distance, size	of							
Other vehicle coming from								
behind or alongside	46	(4)	4	(-)	5	(1)	55	(5
another direction with right of     way	103	(1)	1	(-)	2	(-)	106	(1
Pedestrian movement or intention	8	(-)	1	(-)	-	(-)	9	(-
Towed vehicle, or while towing	5	(-)	-	(-)	-	(-)	5	(-)
Fixed object or obstacle	13	(-)	2	(-)	-	(-)	15	(-
Own vehicle	71	(3)	11	(-)	6	(-)	88	(3
Misjudged intentions of another party	203	(2)	24	(-)	5	(1)	232	(3
Other	7	(2)	1	(-)	-	(-)	8	(2
Totals	456	(12)	44	(-)	18	(2)	518	(14)
TOTAL VEHICLE CONFLICT	7857	(126)	258	(6)	199	(5)	8314	(137)

#### (Continued)

# **TABLE 26: FACTORS PROBABLY CONTRIBUTING TO CRASHES**YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	LE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
GENERAL DRIVER FACTORS								
Inexperience								
Driving in fast or heavy traffic	6	(1)	-	(-)	-	(-)	6	(1)
New driver	506	(1)	79	(3)	1	(-)	586	(1)
Driving strange vehicle	58	(20)	30	(1)	-	(-)	88	(23)
Overseas/migrant driver fails to	126	(6)	7	(-)	3	(-)	136	(4)
adjust to local conditions			/		ر 			
Driver under instruction	2	(1)	-	(-)	-	(-)	2	(1)
At towing trailer/other vehicle	5	(-)	-	(-)	-	(-)	5	(-)
Driver over-reacted	178	(2)	10	(-)	1	(-)	189	(2)
Unsupervised cyclist	1	(-)	-	(-)	3	(-)	4	(-)
Other	128	(3)	20	(4)	3	(-)	151	(7)
Totals	1010	(36)	146	(8)	11	(-)	1167	(44)
Fatigue (drowsy, tired or fell asl	eep)							
Long trip	13	(-)	-	(-)	-	(-)	13	(-)
Lack of sleep	147	(4)	1	(-)	-	(-)	148	(4)
Exhaust fumes	-	(-)	-	(-)	-	(-)	-	(-)
Worked long hours before driving	31	(1)	1	(-)	-	(-)	32	(1)
Exceeded driving hours	1	(-)	_	(-)	-	(-)	1	(-)
Other	402	(38)	3	(1)	-	(-)	405	(39)
Totals	594	(43)	5	(1)	-	(-)	599	(44)
Incorrect use of vehicle controls		(,		(.,				(,
Started in gear	1	(-)	1	(-)	-	(-)	2	(-)
Stalled engine	-	(-)	-	(-)		(-)		(-)
Wrong pedal	84	(1)	1	(-)		(-)	85	(1)
Footrest, stand	-	(-)	1	(-)		(-)	1	(-)
Ignition turned off (steering	-	(-)	-	(-)	-	(-)	-	(-)
locked)								
Lights not switched on	2	(-)	4	(-)	5	(-)	11	(-)
Foot slipped	42	(-)	-	(-)	1	(-)	43	(-)
Parking brake not fully applied	6	(-)	-	(-)	-	(-)	6	(-)
Trailer coupling or safety chain not secured	-	(-)	-	(-)	-	(-)	-	(-)
Other	35	(1)	7	(-)	-	(-)	42	(1)
Totals	170	(2)	14				190	(2)
Showing off								
Racing	33	(4)	-	(1)	-	(-)	33	(5)
Playing chicken	-	(-)	-	(-)	1	(-)	1	(-)
Wheelspins/wheelies/doughnuts	40	(-)	5	(-)	-	(-)	45	(-)
etc								
Intimidating driving	26	(-)	1	(-)	-	(-)	27	(-)
Other	42	(-)	6	(1)	-	(-)	48	(1)
Totals	141	(4)	12	(2)			154	(6)

#### (Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHI	CLE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
Parked or stopped								
Inadequately lit at night (not lit by street lights or park lights off)	3	(-)	-	(-)	-	(-)	3	(-)
At a point of limited visibility	2	(-)	-	(-)	-	(-)	2	(-)
Not as close as practicable to the side of the road	3	(1)	-	(-)	-	(-)	3	(1)
On incorrect side of the road	3	(-)	-	(-)	-	(-)	3	(-)
Double parked	2	(-)	-	(-)	-	(-)	2	(-)
In a 'No Stopping' area	2	(-)	-	(-)	-	(-)	2	(-)
Not clear of rail crossing	-	(-)	-	(-)	-	(-)	-	(-)
In cycle or transit lane	-	(-)	-	(-)	-	(-)	-	(-)
Other	4	(-)	-	(-)	-	(-)	4	(-)
Totals	19	(1)	-	(-)	-	(-)	19	(1)
TOTAL GENERAL DRIVER FACTORS	1934	(86)	177	(11)	18	(-)	2129	(97)

(Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	CLE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
GENERAL PERSON FACTORS								
Illness and disability								
Illness with no warning	173	(7)	5	(1)	2	(-)	180	(8)
Physically disabled	-	(-)	-	(-)	1	(-)	1	(-)
Defective vision	14	(-)	-	(-)	-	(-)	14	(-)
Medical illness (not sudden) flu, diabetes	46	(-)	2	(-)	-	(-)	48	(-)
Mental illness (depression, psychosis)	14	(5)	2	(1)	1	(-)	17	(6)
Suicidal (but not successful)	8	(-)	-	(-)	-	(-)	8	(-)
Impaired ability due to old age	79	(2)	2	(-)	1	(-)	82	(2)
Other	19	(3)	-	(-)	1	(-)	20	(3)
Totals	353	(17)	11	(2)	б	(-)	370	(19)
Intentional or criminal								
Deliberate homicide (only if successful)	-	(-)	-	(-)	-	(-)	-	(-)
Intentional collision	51	(1)	-	(-)	-	(-)	51	(1)
Committed suicide (only if succeeded)	-	(1)	-	(-)	-	(-)	-	(1)
Evading enforcement	63	(2)	16	(1)	2	(-)	81	(3)
Object deliberately thrown at or dropped on vehicle/shot at	1	(-)	-	(-)	-	(-)	1	(-)
Object thrown from vehicle	1	(-)	-	(-)	-	(-)	1	(-)
Stolen vehicle	33	(3)	4	(2)	1	(-)	38	(5)
Other	6	(1)	-	(-)	-	(-)	6	(1)
Totals	155	(8)	20	(3)			178	(11)
Driver/passenger boarding/lea	ving/in vehicle							
Boarding moving vehicle	3	(-)	-	(-)	-	(-)	3	(-)
Intentionally leaving moving vehicle	-	(2)	-	(-)	-	(-)	-	(2)
Riding in insecure position	19	(1)	3	(-)	-	(-)	22	(1)
Interfered with driver	14	(-)	1	(-)	-	(-)	15	(-)
Opened door inadvertently	5	(-)	-	(-)	-	(-)	5	(-)
Overloaded vehicle (with passengers)	2	(-)	-	(-)	-	(-)	2	(-)
Child playing in parked vehicle	3	(-)	1	(-)	-	(-)	4	(-)
Other	5	(-)	1	(-)	-	(-)	6	(-)
Totals	51	(3)	6	(-)		(-)	57	(3)
Miscellaneous person								
Casualty drowned	-	(2)	-	(-)	-	(-)	-	(2)
Casualty thrown from vehicle	12	(31)	10	(2)	1	(-)	23	(33)
Equestrian not keeping to verge	-	(-)	-	(-)	-	(-)	-	(-)
Cyclist or motorcyclist wearing dark clothing	-	(-)	3	(-)	10	(-)	13	(-)
Other	-	(-)	1	(-)	-	(-)	1	(-)
Totals	12	(33)	14	(2)	11	(-)	37	(35)
TOTAL GENERAL PERSON FACTORS	571	(61)	51	(7)	20	(-)	642	(68)

(Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	LE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
VEHICLE FACTORS								
Lights and reflectors								
Dazzling headlights	-	(1)	-	(-)	-	(-)	-	(1)
Inadequate or no headlights	9	(1)	9	(2)	15	(-)	33	(3)
Headlights failed suddenly	-	(-)	-	(-)	-	(-)	-	(-)
Brake lights or indicators defective or not fitted	3	(1)	-	(1)	-	(-)	3	(2)
Inadequate or no tail-lights	1	(-)	-	(-)	1	(-)	2	(-)
Inadequate or no reflectors	-	(-)	-	(-)	1	(-)	1	(-)
Lights or reflectors covered by dirt	-	(-)	-	(-)	-	(-)	-	(-)
Other	2	(1)	-	(-)	-	(-)	2	(1)
Totals	15	(4)		(3)	17		41	(7)
Brakes								
Parking brake:								
• failed	-	(1)	-	(-)	-	(-)	-	(1)
• defective	1	(-)	1	(-)	-	(-)	2	(-)
Service brake:								
• failed	12	(-)	3	(-)	3	(-)	18	(-)
defective	5	(-)	1	(-)	2	(-)	8	(-)
Jack-knifed	4	(1)	-	(-)	-	(-)	4	(1)
Other	-	(-)	1	(-)	3	(-)	4	(-)
Totals	22	(2)	6	(-)	8	(-)	36	(2)
Steering								
Defective	5	(-)	-	(-)	-	(-)	5	(-)
Failed suddenly	2	(-)	1	(-)	-	(-)	3	(-)
Other	2	(-)	-	(-)	-	(-)	2	(-)
Totals	9	(-)	1	(-)	-	(-)	10	(-)
Tyres								
Puncture or blow out	20	(1)	2	(1)	-	(-)	22	(2)
Tread worn	58	(5)	3	(1)	-	(-)	61	(6)
Incorrect type	5	(-)	3	(-)	-	(-)	8	(-)
Mixed treads/space savers	11	(-)	-	(-)	-	(-)	11	(-)
Other	7	(1)	5	(-)	-	(-)	12	(1)
Totals	101	(7)	13	(2)	-	(-)	114	(9)
Windscreen or mirror								
Windscreen shattered	1	(-)	-	(-)	-	(-)	1	(-)
Windscreen or rear window dirty	2	(-)	-	(-)	-	(-)	2	(-)
Rear vision mirror not adjusted correctly	-	(-)	-	(-)	-	(-)	-	(-)
No rear vision mirror	-	(-)	-	(-)	-	(-)	-	(-)
Windscreen, spectacles or rear window misted/frosted	37	(-)	-	(-)	-	(-)	37	(-)
Inadequate or no sun visors	-	(-)	-	(-)	-	(-)	-	(-)
Inadequate or no windscreen wipers	-	(-)	-	(-)	-	(-)	-	(-)
Cycle/motorcycle visor, goggles or screen defective, misted etc	-	(-)	-	(-)	-	(-)	-	(-)
Other	1	(-)	-	(-)	-	(-)	1	(-)

(Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	MOTOR VEHIC	CLE	MOTORCYCLE		PEDAL CYCLE		TOTALS	
VEHICLE FACTORS CONTINUED								
Mechanical								
Engine failure	1	(-)	1	(-)	-	(-)	2	(-)
Transmission failure	1	(-)	3	(-)	-	(-)	4	(-)
Accelerator or throttle jammed	2	(-)	6	(-)	-	(-)	8	(-)
Other	5	(-)	5	(-)	1	(-)	11	(-)
Totals	9	(-)	15	(-)	1	(-)	25	(-)
Body or chassis								
Body, chassis or frame failure	-	(-)	-	(1)	-	(-)	-	(1)
Suspension failure	1	(-)	-	(-)	-	(-)	1	(-)
Failure of door catch/door not shut	4	(-)	-	(-)	-	(-)	4	(-)
Inadequate mudguards	-	(-)	-	(-)	-	(-)	-	(-)
Inadequate tow coupling	2	(-)	-	(-)	-	(-)	2	(-)
Inadequate or no safety chain	2	(-)	-	(-)	-	(-)	2	(-)
Bonnet catch failed	-	(-)	-	(-)	-	(-)	-	(-)
Wheel off	5	(-)	-	(-)	-	(-)	5	(-)
Broken axle	-	(-)	-	(-)	-	(-)	-	(-)
Inconspicuous colour	9	(-)	1	(-)	-	(-)	10	(-)
Blind spot	47	(-)	2	(-)	-	(-)	49	(-)
Seatbelt/restraint failed	-	(-)	-	(-)	-	(-)	-	(-)
Airbag failed to inflate (fully)	-	(-)		(-)	-	(-)	-	(-)
Other	2	(1)	2	(-)	-	(-)	4	(1)
Totals	72	(1)	5	(1)	-	(-)	77	(2)
Load								
Interferes with driver	-	(-)	_	(-)	-	(-)	-	(-)
Not well secured or load moved	17	(1)	2	(-)	-	(-)	19	(1)
Overhanging	1	(-)		(-)	-	(-)	1	(-)
Load obscured vision	-	(-)		(-)	-	(-)	-	(-)
Excess dimensions not adequately indicated	-	(-)	-	(-)	-	(-)	-	(-)
Overdimension vehicle or load	5	(-)	-	(-)	-	(-)	5	(-)
Load too heavy	10	(1)	-	(-)	-	(-)	10	(1)
Towed vehicle or trailer too heavy or incompatible	7	(-)	-	(-)	-	(-)	7	(-)
Other	5	(1)	-	(-)	-	(-)	5	(1)
Totals	45	(3)	2	(-)	-	(-)	47	(3)
Miscellaneous vehicle								
Emergency vehicle attending emergency	8	(1)	-	(-)	-	(-)	8	(1)
Vehicle caught fire	31	(15)	3	(-)	-	(-)	34	(15)
Being towed	1	(-)	-	(-)	-	(-)	1	(-)
Airbag contributed to crash or injury	1	(-)	-	(-)	-	(-)	1	(-)
Seatbelt/restraint absent or unusable	-	(-)	-	(-)	-	(-)	-	(-)
Dangerous goods	-	(-)	-	(-)	-	(-)	-	(-)
Other	1	(-)	-	(-)	-	(-)	1	(-)
Totals TOTAL VEHICLE FACTORS	42 356	(16) (33)	3	(-) (6)	- 26	(-) (-)	45 436	(16) (39)
TOTAL VEHICLE FACTORS	000	(25)	J4	(6)	20	(-)	430	(39)

(Continued)

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#### TABLE 26: FACTORS PROBABLY CONTRIBUTING TO CRASHES

YEAR ENDING 31 DECEMBER 2009

PEDESTRIAN FACTORS		
Walking along road		
Not keeping to footpath	5	(1)
Not keeping to side of road	6	(4)
Not facing oncoming traffic	2	(1)
Not on outside of blind curve	1	(-
Wheeled pedestrian inconsiderate or dangerous on footpath	2	(-
Other	4	(1
Totals	20	(7)
Crossing road		
Walking heedless of traffic	197	(6)
Stepping out from behind parked vehicle	89	(2)
Running heedless of traffic	221	(9
Failed to use pedestrian crossing when one within 20 metres	16	(2
Waiting on roadway for moving traffic	12	(-
Confused by traffic or stepped back	5	(-
Stepping suddenly on to pedestrian crossing	8	(-
Not complying with traffic signals or school patrol	28	(-
Misjudged speed and/or distance of vehicle	16	(2
Other	13	(-
Totals	605	(21)
Miscellaneous		
Pushing, working or unloading vehicle	5	(-
Playing on, or unnecessarily on road	35	(1
Working on road	1	(-
Wearing dark clothing	25	(7
Vision obscured by umbrella or clothing	5	(-
Child escaped from supervision	25	(1
Unsupervised child	41	(1
Sitting/lying on road	2	(2
Pedestrian from school bus	6	(1
Pedestrian behind reversing/manoeuvring vehicle	25	(-
Overseas pedestrian	4	(-
Pedestrian attention diverted (music player, cigarette, cell phone etc)		(1
Other	8	(2
Totals	199	(16)

#### (Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	NUMBER	
ROAD FACTORS		
Slippery because of		
Rain	409	(5)
Frost or ice	131	(3)
Snow or hail	5	(1)
Loose material on seal	100	(-)
Mud	3	(-)
Oil/diesel/fuel	50	(1)
Painted markings	6	(-)
Recently graded	1	(-)
Surface bleeding/defective	15	(2)
Other	130	(-)
Totals	850	(12)
Surface		
Potholed	9	(-)
Uneven	15	(1)
Deep loose metal	30	(1)
High crown	1	(-)
Curve not well banked	4	(1)
Edge badly defined or gave way	4	(2)
Under construction or maintenance	117	(3)
Unusually narrow	27	(2)
Broken glass	-	(-)
Broken glass Other	- 20	(-)
	- 20 227	
Other		(1)
Other Totals		(1) (11)
Other Totals Obstructed	227	(1) (11) (-)
Other Totals Obstructed Fallen tree or branch	227	(1) (11) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence	227 2 2 7	(1) (11) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford	227 2 2 7	(1) (11) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works:	227 2 7 8	(1) (11) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted	227 2 7 8 2 1	(1) (11) (-) (-) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted	227 2 7 8 1 1 1	(1) (11) (-) (-) (-) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle	227 2 2 7 8 8 1 1 1 1 2	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle	227 2 7 8 8 1 1 1 2 2 2	(1)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other	227 2 7 8 8 1 1 1 1 2 2 2 2 10	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals	227 2 7 8 8 1 1 1 1 2 2 2 2 10	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-)
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibility limited by	227 2 7 8 1 1 1 1 2 2 2 10 33	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibilty limited by Curve	227 2 7 8 8 1 1 1 2 2 2 2 10 33 3 47	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibility limited by Curve Crest	227 2 7 8 8 1 1 1 1 2 2 2 10 33 3 47 38	(1) (11) ((1) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibility limited by Curve Crest Building	227 2 7 8 8 1 1 1 1 2 2 2 10 33 33 47 38 2	(1) (11) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibility limited by Curve Crest Building Trees	227 2 2 7 8 8 1 1 1 1 2 2 2 2 10 33 33 47 38 - 19	(1) (11) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other Totals Obstructed Fallen tree or branch Slip or subsidence Flood waters, large puddles, ford Road works: • not adequately lighted • not adequately signposted Roadside object fell on vehicle Object flicked up by vehicle Other Totals Visibility limited by Curve Curve Crest Building Trees Hedge or fence	227 2 2 7 8 8 1 1 1 1 1 2 2 2 2 10 33 33 33 47 38 38 - - 19 26	(1) (11) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other         Totals         Obstructed         Fallen tree or branch         Slip or subsidence         Flood waters, large puddles, ford         Road works:         • not adequately lighted         • not adequately signposted         Roadside object fell on vehicle         Object flicked up by vehicle         Other         Totals         Visibility limited by         Curve         Crest         Building         Trees         Hedge or fence         Scrub or long grass	227 2 2 7 8 8 1 1 1 1 2 2 2 2 10 33 3 7 10 33 3 7 10 33 7 10 33 7 10 33 7 10 33 7 10 33 7 10 33 7 10 10 33 7 10 10 10 10 10 10 10 10 10 10 10 10 10	(1) (11) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-) (-
Other         Totals         Obstructed         Fallen tree or branch         Slip or subsidence         Flood waters, large puddles, ford         Road works:         • not adequately lighted         • not adequately signposted         Roadside object fell on vehicle         Object flicked up by vehicle         Other         Totals         Visibility limited by         Curve         Crest         Building         Trees         Hedge or fence         Scrub or long grass         Bank	227 2 2 7 8 8 1 1 1 1 2 2 2 10 33 3 3 7 10 33 3 7 10 33 3 10 33 10 33 10 10 33 10 10 33 10 10 33 10 10 10 10 10 10 10 10 10 10 10 10 10	(1) (11) (-) (-) (-) (-) (-) (-) (-) (-) (-)
Other         Totals         Obstructed         Fallen tree or branch         Slip or subsidence         Flood waters, large puddles, ford         Road works:         • not adequately lighted         • not adequately signposted         Roadside object fell on vehicle         Object flicked up by vehicle         Other         Totals         Visibility limited by         Curve         Crest         Building         Trees         Hedge or fence         Scrub or long grass         Bank         Temporary obstruction or dust/smoke	227 2 2 7 8 1 1 1 1 2 2 10 33 47 38 - 47 38 - 19 26 12 12 1 5	(1) (11) (11) () () () () () () () () () () () () ()

(Continued)

YEAR ENDING 31 DECEMBER 2009

FACTORS	NUMBER	
ROAD FACTORS CONTINUED		
Signs and signals		
Damaged, removed or malfunctioned	6	(-)
Badly located	9	(-)
Ineffective or inadequate	10	(-)
Necessary	13	(-)
Signals turned off	3	(-)
Other	1	(-)
Totals	42	(-)
Markings		
Faded	4	(-)
Difficult to see in weather conditions	1	(-)
Necessary	11	(-)
Not visible due to geometry or vehicles	-	(-)
Old markings not adequately removed	-	(-)
Other	1	(-)
Totals	17	(-)
Street lighting		
Failed	-	(-)
Inadequate	23	(-)
Glare on wet road	2	(-)
Pedestrian crossing not adequately lighted	-	(-)
Other	2	(-)
Totals	27	(-)
Raised islands and roundabouts		
Difficult to see	-	(-)
Ineffective, badly located/designed	-	(-)
Cyclist squeeze point	-	(-)
Other	1	(-)
Totals	1	(-)
TOTAL ROAD FACTORS	1437	(38)

#### (Continued)



YEAR ENDING 31 DECEMBER 2009

FACTORS	NUMBER	
MISCELLANEOUS FACTORS		
Weather		
Heavy rain	212	(9)
Dazzling sun	176	(4)
Strong wind	39	(2)
Fog or mist	32	(-)
Snow, sleet or hail	7	(1)
Other	-	(-)
Totals	466	(16)
Animals		
Household pet rushed out or playing	11	(-)
Farm animal straying	50	(-)
Farm animal attended but:		
<ul> <li>inadequate warning or unexpected</li> </ul>	1	(-)
• out of control	3	(-)
Wild	4	(-)
Other	1	(-)
Totals	70	(-)
Entering or leaving land use		
Roadside stall	7	(-)
Service station	59	(-)
Specialised liquor outlet	6	(-)
Takeaway foods	26	(-)
Shopping complex	71	(-)
Car parking building/area	31	(-)
Other commercial	175	(2)
Industrial site	2	(-)
Private house/farm	439	(12)
Other non-commercial	89	(1)
Mobile shop or vendor	-	(-)
Other	18	(-)
Totals	923	(15)
Unknown factor	-	(-)
TOTAL MISCELLANEOUS FACTORS	1459	(31)
TOTAL ALL FACTORS	24104	(1073)

(Continued)

		Crashes with a	lcohol/drugs		Casua	lties from crashe	s with alcohol/dru	ohol/drugs		
	Fata	Injur	'y	Deat	hs	Injuries				
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
1985	238	36.1	2493	19.3	274	36.7	4418	23.4		
1986	266	40.5	2575	20.1	328	42.8	4520	23.9		
1987	271	39.4	2595	20.5	329	41.3	4498	24.0		
1988	266	42.6	2500	20.9	318	43.7	4246	24.5		
1989	264	40.6	2364	20.8	321	42.1	3969	24.0		
1990	268	42.1	2716	22.3	318	43.6	4531	25.6		
1991	225	40.6	2424	20.9	269	41.4	3935	23.5		
1992	221	40.8	2282	20.6	273	42.3	3672	22.8		
1993	185	35.8	1906	18.2	227	37.8	3042	20.1		
1994	190	38.3	2044	18.0	225	38.8	3300	19.9		
1995	162	32.3	2118	18.1	200	34.4	3421	20.3		
1996	129	28.2	1652	16.3	148	28.8	2664	18.0		
1997	127	27.1	1389	15.5	147	27.3	2317	17.4		
1998	118	27.1	1347	16.2	142	28.3	2233	18.0		
1999	100	23.0	1146	14.3	122	24.0	1904	15.9		
2000	101	26.4	1063	14.3	115	24.9	1727	15.8		
2001	104	26.3	1111	13.1	118	25.9	1870	15.1		
2002	95	26.1	1296	13.2	109	27.0	1995	14.3		
2003	124	30.6	1229	12.0	141	30.6	1953	13.6		
2004	116	30.9	1235	12.4	135	31.0	1899	13.7		
2005	101	29.6	1335	12.8	116	28.6	1992	13.8		
2006	99	28.3	1563	14.1	109	27.7	2370	15.4		
2007	117	31.1	1584	13.6	128	30.3	2336	14.6		
2008	103	31.1	1597	14.1	119	32.5	2308	15.2		
2009	113	33.5	1527	14.2	138	35.9	2319	15.9		

#### TABLE 26A: CRASHES AND CASUALTIES WHERE DRIVER ALCOHOL/DRUGS WAS A CONTRIBUTING FACTOR

# TABLE 26B: CRASHES AND CASUALTIES WHERE TRAVELLING TOO FAST FOR CONDITIONS WAS A CONTRIBUTING FACTOR

		Crashes wi	ith speed	Casualties from crashes with speed					
	Fata	<b>.</b> l	Inju	ry	Deat	:hs	Injuries		
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
1985	193	29.2	1848	14.3	218	29.2	3210	17.0	
1986	192	29.3	2024	15.8	224	29.2	3544	18.8	
1987	251	36.5	2253	17.8	292	36.7	3904	20.8	
1988	231	37.0	2204	18.5	267	36.7	3650	21.0	
1989	257	39.5	2146	18.9	311	40.8	3624	21.9	
1990	224	35.2	2041	16.8	265	36.4	3422	19.3	
1991	190	34.3	2108	18.2	225	34.6	3383	20.2	
1992	195	36.0	1918	17.3	241	37.3	3164	19.6	
1993	192	37.1	1712	16.3	228	38.0	2801	18.5	
1994	191	38.5	1816	16.0	228	39.3	2982	18.0	
1995	182	36.3	1827	15.6	221	38.0	2988	17.7	
1996	153	33.5	1684	16.7	177	34.4	2806	19.0	
1997	137	29.3	1461	16.3	162	30.1	2508	18.8	
1998	140	32.1	1415	17.0	162	32.3	2427	19.6	
1999	124	28.6	1180	14.7	153	30.1	2095	17.5	
2000	87	22.7	1122	15.1	102	22.1	1923	17.5	
2001	123	31.1	1298	15.3	141	31.0	2197	17.8	
2002	108	29.7	1431	14.6	126	31.2	2339	16.8	
2003	140	34.6	1644	16.1	167	36.2	2601	18.1	
2004	138	36.7	1632	16.3	172	39.4	2624	18.9	
2005	112	32.8	1700	16.2	130	32.1	2670	18.5	
2006	107	30.7	1734	15.8	126	32.2	2746	18.1	
2007	117	31.1	1905	16.3	133	31.5	2949	18.4	
2008	111	33.5	1726	15.3	127	34.7	2629	17.3	
2009	100	29.7	1635	15.2	113	29.4	2461	16.9	

NOTES: The Police Traffic Crash Report form was modified in 2001. The 'too fast for conditions' data since this change are not strictly comparable to earlier data.

Most crashes have a number of contributing causal factors and many have both alcohol and 'too fast for conditions'. For this reason these tables cannot be added together to give the total number of crashes with alcohol/drugs and/or 'too fast for conditions' listed as contributing factors.

### SECTION 3: TRUCK CASUALTIES AND CRASHES

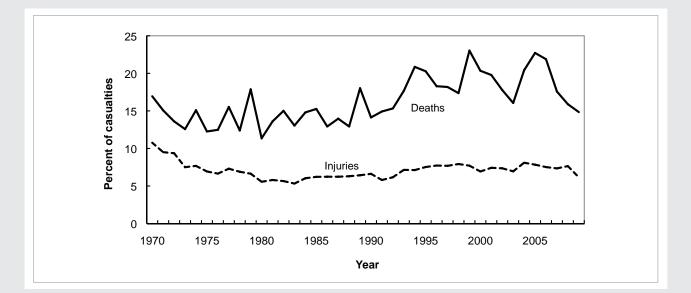


Photo courtesy of NZTA

		CRASHES				CASUALTIES			
	li	nvolving trucks		Truck occ	upants	Non truck occupants			
Year	Injury	Fatal	Total crashes	Injured	Killed	Injured	Killed	Total casualties	
1980	575	63	638	190	15	693	53	951	
1981	569	76	645	186	16	712	75	989	
1982	602	87	689	246	12	670	89	1017	
1983	606	67	673	203	4	675	80	962	
1984	701	85	786	237	13	820	86	1156	
1985	785	99	884	271	15	905	99	1290	
1986	833	83	916	274	15	903	84	1276	
1987	823	90	913	309	16	859	95	1279	
1988	767	76	843	307	11	786	83	1187	
1989	692	106	798	272	14	795	122	1203	
1990	801	85	886	280	7	893	96	1276	
1991	661	81	742	291	15	681	82	1069	
1992	672	77	749	258	6	736	93	1093	
1993	758	87	845	297	12	783	94	1186	
1994	782	96	878	331	24	851	97	1303	
1995	859	105	964	380	13	890	105	1388	
1996	792	77	869	359	26	784	68	1237	
1997	698	85	783	308	12	720	86	1126	
1998	649	75	724	282	11	702	76	1071	
1999	625	97	722	288	17	637	100	1042	
2000	545	75	620	241	16	519	78	854	
2001	620	76	696	284	13	634	77	1008	
2002	746	69	815	337	13	687	59	1096	
2003	765	62	827	349	16	650	58	1073	
2004	829	80	909	401	19	724	70	1214	
2005	837	72	909	367	21	766	71	1225	
2006	806	76	882	375	15	766	71	1227	
2007	871	68	939	396	10	780	64	1250	
2008	889	53	942	373	7	788	51	1219	
2009	666	51	717	279	7	615	50	951	

#### TABLE 27: TRUCK CRASHES AND CASUALTIES HISTORICAL YEAR ENDING 31 DECEMBER

#### FIGURE 18: CASUALTIES FROM TRUCK CRASHES AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES



### TABLE 28: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING TRUCKS ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	12	1.8	2	43	6.5	14	-	55
Head on (not overtaking)	16	2.4	1	63	9.5	13	-	79
LOSS CONTROL OR OFF ROAD:								
• On straight	15	2.3	5	27	4.1	11	-	42
While cornering	20	3	9	94	14.1	34	-	114
Collision with obstruction	28	4.2	9	19	2.9	9	-	47
Rear end	45	6.8	4	49	7.4	7	-	94
INTERSECTIONS OR DRIVEWAYS	:			1	1		1	
<ul> <li>Turning versus same direction</li> </ul>	27	4.1	1	24	3.6	2	-	51
Crossing no turns	26	3.9	4	9	1.4	1	-	35
Crossing vehicle turning	29	4.4	4	11	1.7	2	1	41
<ul> <li>Vehicles merging</li> </ul>	9	1.4	1	4	0.6	-	-	13
• Right turn against	20	3	4	6	0.9	2	-	26
Vehicle manoeuvring	24	3.6	5	9	1.4	1	-	33
Pedestrian crossing road	10	1.5	3	2	0.3	1	-	12
Pedestrian other	3	0.5	-	6	0.9	3	-	9
Miscellaneous	7	1.1	2	8	1.2	1	-	15
TOTALS	291	43.7	54	374	56.2	101	1	666

**NOTE:** This table does not include fatal crashes (see Table 29).

## TABLE 29: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING TRUCKS ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	1	2	-	2	3.9	1	-	3
Head on (not overtaking)	1	2	-	22	43.1	8	-	23
LOSS CONTROL OR OFF ROAD:			,	,	1			
• On straight	1	2	-	-	-	-	-	1
While cornering	-	-	-	5	9.8	1	-	5
Collision with obstruction	1	2	1	-	-	-	-	1
Rear end	-	-	-	2	3.9	-	-	2
INTERSECTIONS OR DRIVEWAYS				,				
Turning versus same     direction	-	-	-	-	-	-	-	-
Crossing no turns	1	2	-	-	-	-	-	1
Crossing vehicle turning	1	2	-	2	3.9	-	-	3
<ul> <li>Vehicles merging</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Right turn against</li> </ul>	2	3.9	-	2	3.9	-	-	4
Vehicle manoeuvring	1	2	-	1	2	1	-	2
Pedestrian crossing road	2	3.9	1	-	-	-	-	2
Pedestrian other	1	2	-	2	3.9	2	-	3
Miscellaneous	-	-	-	1	2	-	-	1
TOTALS	12	23.5	2	39	76.5	13	-	51

**NOTES:** A truck driver can be involved in an accident and escape injury or death. For movement classification see Note 9. For area classification see Note 11.



# **TABLE 30: CRASHES INVOLVING TRUCKS BY TIME OF DAY AND DAY OF WEEK**YEAR ENDED 31 DECEMBER 2009

Time of day	Monda	Ý	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	ay	Sunday		TOTALS	;
Midnight to 12.59am	_	(1)	1	(-)	1	(-)	1	(-)	_	(-)	2	(-)	1	(-)	6	(1)
1am to 1.59am	1	(-)	1	(-)	1	(-)	-	(1)	2	(-)	-	(-)	2	(-)	7	(1)
2am to 2.59am	-	(-)	3	(-)	2	(-)	1	(-)	1	(-)	3	(-)	2	(-)	12	(-)
3am to 3.59am	-	(-)	-	(-)	2	(-)	1	(-)	1	(-)	-	(-)	3	(-)	7	(-)
4am to 4.59am	3	(-)	-	(1)	3	(-)	4	(1)	2	(-)	3	(-)	-	(-)	15	(2)
5am to 5.59am	3	(-)	1	(-)	-	(1)	5	(1)	4	(-)	1	(-)	-	(-)	14	(2)
6am to 6.59am	6	(-)	3	(1)	2	(1)	8	(-)	5	(-)	1	(-)	2	(1)	27	(3)
7am to 7.59am	8	(1)	12	(-)	13	(1)	7	(-)	8	(-)	2	(-)	2	(-)	52	(2)
8am to 8.59am	10	(-)	11	(2)	5	(-)	2	(2)	7	(-)	3	(-)	2	(-)	40	(4)
9am to 9.59am	10	(-)	9	(-)	7	(-)	8	(-)	10	(2)	1	(-)	3	(-)	48	(2)
10am to 10.59am	10	(-)	8	(1)	10	(-)	8	(-)	7	(-)	6	(-)	1	(1)	50	(2)
11am to 11.59am	11	(1)	6	(-)	10	(-)	11	(1)	10	(1)	4	(-)	5	(-)	57	(3)
noon to 12.59am	4	(1)	7	(-)	7	(-)	8	(-)	7	(1)	2	(1)	3	(-)	38	(3)
1pm to 1.59pm	4	(1)	9	(1)	6	(1)	10	(1)	3	(-)	7	(1)	1	(-)	40	(5)
2pm to 2.59pm	4	(1)	7	(1)	11	(-)	9	(-)	9	(1)	2	(-)	4	(-)	46	(3)
3pm to 3.59pm	5	(-)	13	(1)	7	(1)	5	(1)	11	(-)	3	(-)	1	(-)	45	(3)
4pm to 4.59pm	11	(1)	5	(-)	10	(1)	7	(2)	17	(1)	1	(-)	3	(-)	54	(5)
5pm to 5.59pm	6	(-)	5	(-)	9	(1)	5	(2)	7	(-)	1	(-)	4	(-)	37	(3)
6pm to 6.59pm	3	(-)	-	(-)	4	(-)	3	(1)	10	(1)	1	(-)	-	(-)	21	(2)
7pm to 7.59pm	1	(-)	1	(-)	2	(-)	-	(-)	3	(1)	1	(-)	1	(-)	9	(1)
8pm to 8.59pm	1	(-)	1	(-)	1	(-)	4	(1)	1	(-)	1	(1)	2	(-)	11	(2)
9pm to 9.59pm	1	(-)	1	(-)	3	(-)	3	(-)	2	(-)	-	(-)	-	(-)	10	(-)
10pm to 10.59pm	-	(-)	-	(-)	1	(-)	2	(-)	4	(-)	1	(1)	-	(-)	8	(1)
11pm to 11.59pm	2	(-)	2	(1)	-	(-)	2	(-)	3	(-)	-	(-)	-	(-)	9	(1)
Unknown time	-	(-)	-	(-)	2	(-)	1	(-)	-	(-)	-	(-)	-	(-)	3	(-)
TOTALS	104	(7)	106	(9)	119	(7)	115	(14)	134	(8)	46	(4)	42	(2)	666	(51)

NOTE: The figures in brackets are fatal accidents and are not included in the adjacent totals.

### SECTION 4: MOTORCYCLE CASUALTIES AND CRASHES



#### TABLE 31: MOTORCYCLE RIDER AND PILLION CASUALTIES HISTORICAL YEAR ENDING 31 DECEMBER

	Motorcy			le pillions	Total ca			
Year	Injured	Killed	Injured	Killed	Injured	Killed		
1951	885	42	232	5	1117	47		
1952	1081	58	257	8	1338	66		
1953	1039	58	254	14	1293	72		
1954	1056	67	256	6	1312	73		
1955	1067	73	228	7	1295	80		
1956	1048	35	221	2	1269	37		
1957	1169	42	228	6	1397	48		
1958	1391	42	238	4	1629	46		
1959	1404	34	269	3	1673	37		
1960	1388	31	239	5	1627	36		
1961	1420	38	209	5	1629	43		
1962	1473	45	276	1	1749	46		
1963	1473	38	238	6	1711	44		
1964	1748	37	258	3	2016	40		
1964	1748	41	208	7	2018	40		
	1779	41	363	2	2081	40		
1966								
1967	1638	41	280	5	1918	46		
1968	1537	24	270	4	1807	28		
1969	1587	29	322	7	1909	36		
1970	1711	40	366	3	2077	43		
1971	2381	44	530	8	2911	52		
1972	3056	67	710	12	3766	79		
1973	3420	106	804	24	4224	130		
1974	3406	88	686	19	4092	107		
1975	3077	79	548	17	3625	96		
1976	2828	80	512	12	3340	92		
1977	2581	79	435	19	3016	98		
1978	2281	91	432	13	2713	104		
1979	2406	82	404	8	2810	90		
1980	2769	79	382	12	3151	91		
1981	2944	104	432	12	3376	116		
1982	3069	99	479	14	3548	113		
1983	2932	97	477	10	3409	107		
1984	3360	107	497	18	3857	125		
1985	3390	118	515	14	3905	132		
		107	430	20				
1986	3253			14	3683	127		
1987	3066	131	455		3521	145		
1988	2498	125	365	21	2863	146		
1989	2153	122	303	19	2456	141		
1990	1936	95	267	19	2203	114		
1991	1844	64	217	14	2061	78		
1992	1606	75	210	13	1816	88		
1993	1402	74	159	6	1561	80		
1994	1542	61	179	11	1721	72		
1995	1379	66	160		1539	78		
1996	1112	42	111	6	1223	48		
1997	1039	52	103	4	1142	56		
1998	862	47	107	7	969	54		
1999	714	39	77	3	791	42		
2000	646	29	51	2	697	31		
2001	610	34	59		669	35		
2002	696	28	48	2	744	30		
2002	707	20	54	1	761	28		
2003	669	32	52		781	34		
2004	834	32	69	3	903	36		
2006	947	35	70	3	1017	38		
2007	1243	37	93	4	1336	41		
2008	1314	48	82	3	1396	51		
2009	1283	46	86	2	1369	48		

NOTE: See Note 13.

#### Per 10,000 on road motorcycles Motorcycles Motorcycles\* New registrations Crashes Crashes Injuries Fatalities Year 19.0 24.0 26.1 25.5 29.6 12.9 15 9 13.7 10.9 9.9 10.3 10.7 10.0 8.6 10.4 10.2 6.3 8.1 9.1 9.2 12.2 17.0 12.3 10.0 9.3 10.0 10.7 7.2 8.7 8.5 8.2 9.9 10.8 10.9 12.9 14.1 15.2 13.8 10.7 14.0 13.9 13.1 15.9 10.4 11.2 8.9 7.1 6.1 5.2 5.0 5.8 5.6 5.1 4.8 5.3

#### TABLE 32: MOTORCYCLIST CRASH AND CASUALTY RATES HISTORICAL YEAR ENDING 31 DECEMBER

\*NOTE (Table 32): Motorcycles: See Note 16 for details.

From 1998 (the first full year with Continuous Vehicle Licensing) motorcycle numbers include registered motorcycles and mopeds but exclude those with an exempt or restoration licence. From 1986 to 1997 motorcycle numbers are estimates. Prior to 1986 motorcycle numbers were derived from annual licence transactions.



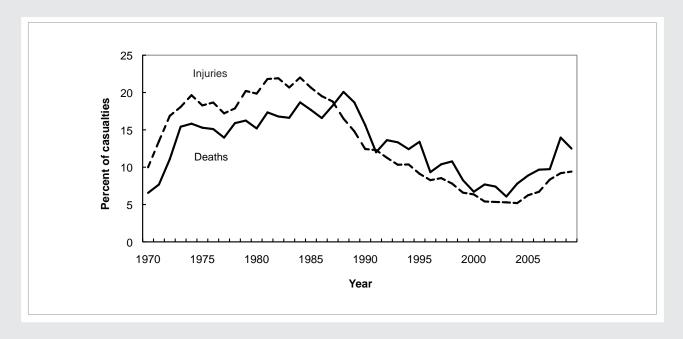
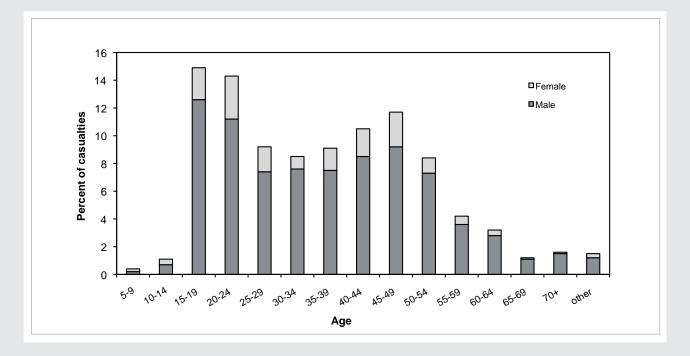


FIGURE 19: MOTORCYCLISTS AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES





# TABLE 33: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING MOTORCYCLISTS ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS		UNKNOWN AREA	
Movement classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	32	2.5	7	38	2.9	8	-	70
Head on (not overtaking)	19	1.5	1	33	2.6	2	-	52
LOSS CONTROL OR OFF ROAD:				1	1	1	1	
• On straight	77	6	19	42	3.2	6	1	120
While cornering	118	9.1	40	201	15.5	28	-	319
Collision with obstruction	22	1.7	7	13	1	5	-	35
Rear end	63	4.9	12	33	2.6	6	-	96
INTERSECTIONS OR DRIVEWAYS				1	1	1	1	
Turning versus same     direction	70	5.4	10	21	1.6	1	-	91
Crossing no turns	68	5.3	10	2	0.2	-	1	71
Crossing vehicle turning	101	7.8	25	18	1.4	2	-	119
<ul> <li>Vehicles merging</li> </ul>	30	2.3	5	3	0.2	1	-	33
• Right turn against	152	11.7	52	7	0.5	3	-	159
Vehicle manoeuvring	87	6.7	23	14	1.1	-	-	101
Pedestrian crossing road	13	1	6	-	-	-	-	13
Pedestrian other	1	0.1	-	1	0.1	-	-	2
Miscellaneous	6	0.5	1	7	0.5	2	-	13
TOTALS	859	66.4	218	433	33.5	64	2	1294

**NOTE:** This table does not include fatal crashes (see Table 34).

# TABLE 34: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING MOTORCYCLISTS ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	1	2	-	2	4.1	1	-	3
Head on (not overtaking)	1	2	1	10	20.4	2	-	11
LOSS CONTROL OR OFF ROAD:				,	,			
• On straight	2	4.1	1	-	-	-	-	2
While cornering	3	6.1	1	16	32.7	5	-	19
Collision with obstruction	-	-	-	-	-	-	-	-
Rear end	-	-	-	1	2	-	-	1
INTERSECTIONS OR DRIVEWAYS	:				1	1	1	1
<ul> <li>Turning versus same direction</li> </ul>	1	2	1	1	2	-	-	2
<ul> <li>Crossing no turns</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Crossing vehicle turning</li> </ul>	1	2	1	1	2	-	-	2
<ul> <li>Vehicles merging</li> </ul>	1	2	-	1	2	-	-	2
<ul> <li>Right turn against</li> </ul>	1	2	-	2	4.1	-	-	3
Vehicle manoeuvring	2	4.1	1	1	2	-	-	3
Pedestrian crossing road	1	2	1	-	-	-	-	1
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
TOTALS	14	28.6	7	35	71.4	8	-	49

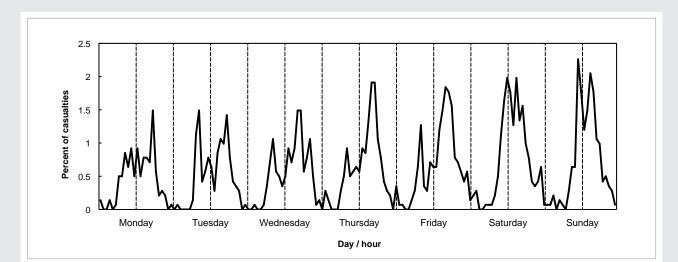
**NOTES:** A motorcyclist can be involved in a crash and escape injury or death. For movement classification see Note 9. For area classification see Note 11.

### TABLE 35: CRASHES INVOLVING MOTORCYCLISTS BY TIME OF DAY AND DAY OF WEEK

YEAR ENDED 31 DECEMBER 2009

Time of day	Monday	/	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	ay	Sunday		TOTALS	
Midnight to 12.59am	1	(-)	-	(-)	-	(-)	-	(-)	5	(-)	1	(1)	1	(-)	8	(1)
1am to 1.59am	-	(-)	1	(-)	-	(-)	1	(2)	1	(-)	3	(-)	1	(-)	7	(2)
2am to 2.59am	-	(-)	-	(-)	1	(-)	2	(-)	1	(-)	3	(-)	1	(-)	8	(-)
3am to 3.59am	2	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(2)	3	(2)
4am to 4.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
5am to 5.59am	1	(-)	-	(-)	1	(-)	-	(-)	2	(-)	1	(-)	2	(-)	7	(-)
6am to 6.59am	6	(1)	2	(-)	5	(1)	4	(-)	4	(-)	1	(-)	-	(1)	22	(3)
7am to 7.59am	8	(-)	16	(1)	10	(-)	7	(-)	8	(-)	1	(-)	-	(-)	50	(1)
8am to 8.59am	12	(-)	21	(-)	16	(-)	13	(-)	18	(-)	3	(-)	3	(-)	86	(-)
9am to 9.59am	9	(-)	6	(-)	8	(-)	6	(1)	5	(-)	7	(-)	8	(-)	49	(1)
10am to 10.59am	12	(-)	8	(-)	6	(1)	8	(-)	4	(-)	14	(1)	7	(1)	59	(3)
11am to 11.59am	7	(-)	9	(-)	5	(-)	9	(-)	8	(1)	21	(-)	23	(1)	82	(2)
noon to 12.59am	13	(-)	10	(-)	6	(1)	7	(1)	8	(1)	24	(1)	22	(-)	90	(4)
1pm to 1.59pm	5	(2)	4	(-)	12	(-)	9	(1)	10	(-)	22	(1)	16	(-)	78	(4)
2pm to 2.59pm	10	(-)	10	(1)	10	(-)	12	(-)	14	(1)	16	(1)	20	(-)	92	(3)
3pm to 3.59pm	12	(-)	15	(1)	13	(-)	18	(-)	18	(-)	24	(3)	23	(2)	123	(6)
4pm to 4.59pm	10	(-)	13	(-)	21	(-)	26	(-)	24	(-)	17	(-)	21	(-)	132	(-)
5pm to 5.59pm	21	(-)	18	(1)	18	(3)	26	(-)	24	(-)	18	(1)	14	(1)	139	(6)
6pm to 6.59pm	8	(-)	10	(-)	7	(-)	16	(1)	21	(-)	13	(2)	13	(-)	88	(3)
7pm to 7.59pm	3	(-)	6	(-)	11	(-)	10	(-)	10	(1)	10	(-)	6	(-)	56	(1)
8pm to 8.59pm	2	(1)	5	(-)	12	(1)	5	(-)	8	(-)	6	(-)	5	(1)	43	(3)
9pm to 9.59pm	3	(-)	4	(-)	6	(1)	3	(-)	7	(-)	5	(-)	3	(1)	31	(2)
10pm to 10.59pm	-	(-)	-	(-)	1	(-)	3	(-)	5	(-)	5	(-)	3	(-)	17	(-)
11pm to 11.59pm	1	(-)	1	(-)	2	(-)	1	(-)	7	(1)	7	(1)	1	(-)	20	(2)
Unknown time	1	(-)	-	(-)	1	(-)	-	(-)	-	(-)	-	(-)	2	(-)	4	(-)
TOTALS	147	(4)	159	(4)	172	(8)	186	(6)	212	(5)	222	(12)	196	(10)	1294	(49)

NOTE: The figures in brackets are fatal crashes and are not included in the adjacent totals.



### FIGURE 21: MOTORCYCLE CASUALTIES BY TIME OF DAY AND DAY OF WEEK

# SECTION 5: PEDAL CYCLIST CASUALTIES AND CRASHES

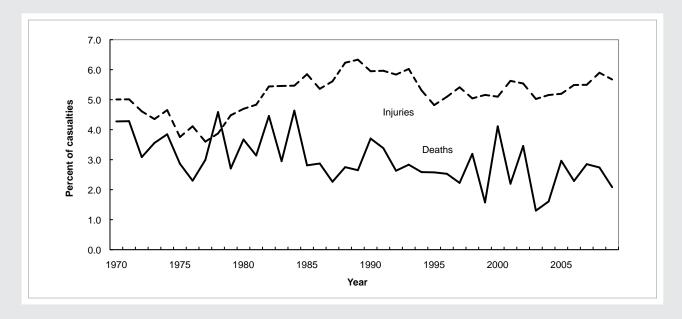


#### **TABLE 36: PEDAL CYCLIST CASUALTIES AND POPULATION STATISTICS HISTORICAL** YEAR ENDING 31 DECEMBER

				Per 100 000	) population
Year	Population	Injured	Killed	Injured	Killed
1975	3143700	745	18	24	0.6
1976	3163400	736	14	23	0.4
1977	3166400	631	21	20	0.7
1978	3165200	588	30	19	0.9
1979	3163900	623	15	20	0.5
1980	3164100	745	22	24	0.7
1981	3195800	748	21	23	0.7
1982	3229800	881	30	27	0.9
1983	3269500	900	19	28	0.6
1984	3299500	958	31	29	0.9
1985	3311200	1106	21	33	0.6
1986	3316700	1012	22	31	0.7
1987	3349100	1051	18	31	0.5
1988	3356200	1081	20	32	0.6
1989	3384510	1051	20	31	0.6
1990	3429100	1054	27	31	0.8
1991	3449700	1000	22	29	0.6
1992	3485400	941	17	27	0.5
1993	3524800	910	17	26	0.5
1994	3577200	882	15	25	0.4
1995	3643200	813	15	22	0.4
1996	3717400	754	13	20	0.3
1997	3761100	724	12	19	0.3
1998	3790900	626	16	17	0.4
1999	3810700	619	8	16	0.2
2000	3830800	559	19	15	0.5
2001	3850100	696	10	18	0.3
2002	3939100	771	14	20	0.4
2003	4009200	722	6	18	0.1
2004	4060900	716	7	18	0.2
2005	4098300	751	12	18	0.3
2006	4139500	833	9	20	0.2
2007	4228300	880	12	21	0.3
2008	4268600	895	10	21	0.2
2009	4315800	825	8	19	0.2

NOTE: Population from 1997 on is from Statistics INFOSHARE DPE group.

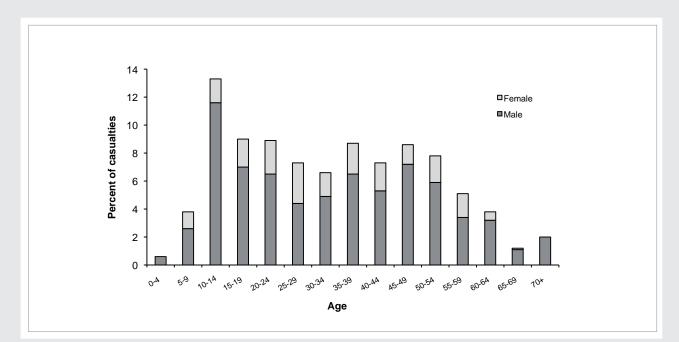




				Per 100 000 population				
Age group	Population	Injured	Killed	Injured	Killed			
Under 5	305510	5	0	2	0			
5 to 9	288150	31	1	11	0.3			
10 to 14	297550	111	0	37	0			
15 to 19	323190	74	1	23	0.3			
20 to 24	304290	74	0	24	0			
25 to 29	280630	62	1	22	0.4			
30 to 34	268740	54	1	20	0.4			
35 to 39	307740	71	1	23	0.3			
40 to 44	312060	61	0	20	0			
45 to 49	322740	71	1	22	0.3			
50 to 54	283970	65	0	23	0			
55 to 59	247330	42	0	17	0			
60 to 64	221270	31	1	14	0.5			
65 to 69	171670	9	1	5	0.6			
70 to 74	130230	6	0	5	0			
75 to 79	104790	9	0	9	0			
80 and over	145930	2	0	1	0			
Unknown age	0	47	0	-	-			
TOTAL	4315790	825	8	19	0.2			

# **TABLE 37: PEDAL CYCLIST CASUALTIES AND POPULATION STATISTICS BY AGE GROUP**YEAR ENDING 31 DECEMBER 2009

NOTE: Population is the resident population as at 30 June. Statistics NZ INFOSHARE DAE group.



#### FIGURE 23: PERCENTAGE OF PEDAL CYCLIST CASUALTIES BY AGE AND GENDER



# TABLE 38: MOVEMENT CLASSIFICATION OF INJURY CRASHES INVOLVING PEDAL CYCLISTS ON OPEN AND URBAN ROADS YEAR ENDED 31 DECEMBER 2009

		URBAN ROADS	5		OPEN ROADS	UNKNOWN AREA		
Movement classification	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	As a % of all injury crashes	Number during darkness	Number of injury crashes	Total number of injury crashes
Overtaking or lane change	50	6.2	5	14	1.7	4	-	64
Head on (not overtaking)	20	2.5	4	4	0.5	1	-	24
LOSS CONTROL OR OFF ROAD:			1	1			1	
• On straight	6	0.7	1	1	0.1	1	2	9
While cornering	5	0.6	1	-	-	-	-	5
Collision with obstruction	56	6.9	4	5	0.6	1	-	61
Rear end	31	3.8	11	9	1.1	2	-	40
INTERSECTIONS OR DRIVEWAYS	:							
<ul> <li>Turning versus same direction</li> </ul>	62	7.6	6	7	0.9	-	-	69
<ul> <li>Crossing no turns</li> </ul>	109	13.4	26	3	0.4	-	-	112
<ul> <li>Crossing vehicle turning</li> </ul>	127	15.7	23	6	0.7	1	-	133
<ul> <li>Vehicles merging</li> </ul>	76	9.4	8	1	0.1	1	-	77
<ul> <li>Right turn against</li> </ul>	124	15.3	18	3	0.4	1	1	128
Vehicle manoeuvring	84	10.4	10	2	0.2	1	-	86
Pedestrian crossing road	-	-	-	-	-	-	-	-
Pedestrian other	1	0.1	-	-	-	-	-	1
Miscellaneous	2	0.2	-	-	-	-	-	2
TOTALS	753	92.8	117	55	6.8	13	3	811

NOTE: This table does not include fatal crashes (see Table 39).

## TABLE 39: MOVEMENT CLASSIFICATION OF FATAL CRASHES INVOLVING PEDAL CYCLISTS ON OPEN AND URBAN ROADS YEAR ENDING 31 DECEMBER 2009

	URBAN ROADS				OPEN ROADS		UNKNOWN AREA	
Movement classification	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	As a % of all fatal crashes	Number during darkness	Number of fatal crashes	Total number of fatal crashes
Overtaking or lane change	1	12.5	-	2	25	-	-	3
Head on (not overtaking)	-	-	-	1	13	1	-	1
LOSS CONTROL OR OFF ROAD:	1		1	1	1	1	1	1
• On straight	-	-	-	-	-	-	-	-
While cornering	-	-	-	-	-	-	-	-
Collision with obstruction	-	-	-	-	-	-	-	-
Rear end	-	-	-	3	38	1	-	3
INTERSECTIONS OR DRIVEWAYS:				1	1	1		
<ul> <li>Turning versus same direction</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Crossing no turns</li> </ul>	-	-	-	-	-	-	-	-
Crossing vehicle turning	-	-	-	-	-	-	-	-
<ul> <li>Vehicles merging</li> </ul>	-	-	-	1	13	-	-	1
• Right turn against	-	-	-	-	-	-	-	-
Vehicle manoeuvring	-	-	-	-	-	-	-	-
Pedestrian crossing road	-	-	-	-	-	-	-	-
Pedestrian other	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
TOTALS	1	12.5	-	7	88	2	-	8

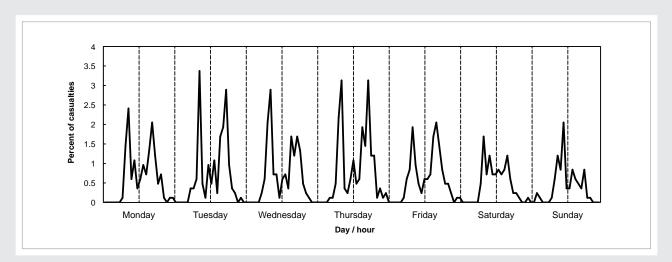
**NOTE:** A pedal cyclist can be involved in a crash and escape injury or death. For movement classification see Note 9. For area classification see Note 11.

#### TABLE 40: CRASHES INVOLVING PEDAL CYCLISTS BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2009

Time of day	Monda	у	Tuesda	у	Wedne	sday	Thursd	ay	Friday		Saturda	ıy	Sunday		TOTALS	
Midnight to 12.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	-	(-)	1	(-)
1am to 1.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)
2am to 2.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	2	(-)	2	(-)
3am to 3.59am	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)
4am to 4.59am	-	(-)	-	(-)	-	(-)	1	(-)	-	(-)	-	(-)	-	(-)	1	(-)
5am to 5.59am	-	(-)	3	(-)	2	(-)	1	(-)	1	(-)	-	(-)	-	(-)	7	(-)
6am to 6.59am	1	(-)	3	(-)	5	(-)	4	(-)	5	(-)	-	(-)	-	(-)	18	(-)
7am to 7.59am	12	(-)	5	(-)	17	(-)	17	(1)	7	(-)	4	(-)	1	(-)	63	(1)
8am to 8.59am	20	(-)	28	(-)	23	(1)	26	(-)	16	(-)	10	(-)	5	(-)	128	(1)
9am to 9.59am	5	(-)	4	(-)	6	(-)	3	(-)	7	(1)	6	(-)	8	(-)	39	(1)
10am to 10.59am	9	(-)	1	(-)	6	(-)	2	(-)	4	(-)	10	(-)	7	(-)	39	(-)
11am to 11.59am	3	(-)	8	(-)	1	(-)	5	(-)	2	(-)	6	(-)	14	(-)	39	(-)
noon to 12.59am	5	(-)	4	(-)	5	(-)	9	(-)	5	(-)	5	(-)	3	(-)	36	(-)
1pm to 1.59pm	8	(-)	9	(-)	6	(-)	4	(-)	5	(-)	7	(-)	3	(-)	42	(-)
2pm to 2.59pm	6	(-)	2	(-)	3	(-)	5	(-)	4	(1)	6	(-)	7	(-)	33	(1)
3pm to 3.59pm	11	(-)	13	(1)	13	(-)	16	(-)	14	(-)	7	(-)	5	(-)	79	(1)
4pm to 4.59pm	17	(-)	16	(-)	10	(-)	12	(-)	16	(1)	10	(-)	4	(-)	85	(1)
5pm to 5.59pm	10	(-)	23	(-)	14	(-)	25	(1)	12	(-)	5	(-)	3	(-)	92	(1)
6pm to 6.59pm	4	(-)	8	(-)	11	(-)	9	(-)	7	(-)	2	(-)	7	(-)	48	(-)
7pm to 7.59pm	6	(-)	3	(-)	4	(-)	9	(1)	4	(-)	2	(-)	1	(-)	29	(1)
8pm to 8.59pm	1	(-)	2	(-)	2	(-)	1	(-)	4	(-)	1	(-)	1	(-)	12	(-)
9pm to 9.59pm	-	(-)	-	(-)	1	(-)	3	(-)	2	(-)	-	(-)	-	(-)	6	(-)
10pm to 10.59pm	1	(-)	1	(-)	-	(-)	1	(-)	-	(-)	-	(-)	-	(-)	3	(-)
11pm to 11.59pm	1	(-)	-	(-)	-	(-)	2	(-)	1	(-)	1	(-)	-	(-)	5	(-)
Unknown time	-	(-)	1	(-)	1	(-)	-	(-)	-	(-)	1	(-)	-	(-)	3	(-)
TOTALS	120	(-)	134	(1)	130	(1)	155	(3)	116	(3)	84	(-)	72	(-)	811	(8)

NOTE: The figures in brackets are fatal crashes and are not included in the adjacent totals.





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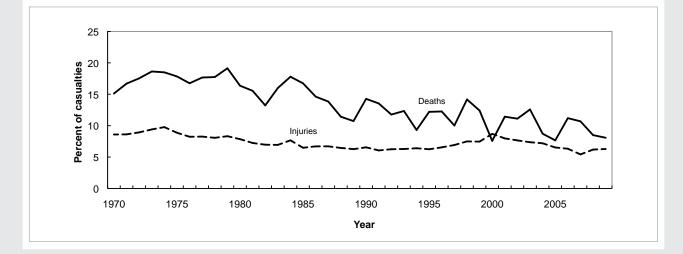
## SECTION 6: PEDESTRIAN CASUALTIES AND CRASHES



# **TABLE 41: PEDESTRIAN CASUALTIES AND POPULATION STATISTICS HISTORICAL**YEAR ENDING 31 DECEMBER

				Per 100 000	) population
Year	Population	Injured	Killed	Injured	Killed
1975	3143700	1760	112	56	3.6
1976	3163400	1473	102	47	3.2
1977	3166400	1447	124	46	3.9
1978	3165200	1224	116	39	3.7
1979	3163900	1157	106	37	3.4
1980	3164100	1246	98	39	3.1
1981	3195800	1121	104	35	3.3
1982	3229800	1128	89	35	2.8
1983	3269500	1144	103	35	3.2
1984	3299500	1343	119	41	3.6
1985	3311200	1225	125	37	3.8
1986	3316700	1265	112	38	3.4
1987	3349100	1256	110	38	3.3
1988	3356200	1119	83	33	2.5
1989	3384510	1039	81	31	2.4
1990	3429100	1161	104	34	3.0
1991	3449700	1015	88	29	2.6
1992	3485400	1007	76	29	2.2
1993	3524800	949	74	27	2.1
1994	3577200	1063	54	30	1.5
1995	3643200	1053	71	29	1.9
1996	3717400	969	63	26	1.7
1997	3761100	925	54	25	1.4
1998	3790900	930	71	25	1.9
1999	3810700	895	63	24	1.7
2000	3830800	953	35	25	0.9
2001	3850100	986	52	26	1.4
2002	3939100	1065	45	27	1.1
2003	4009200	1058	58	26	1.4
2004	4060900	999	38	25	0.9
2005	4098300	943	31	23	0.8
2006	4139500	960	44	23	1.1
2007	4228300	868	45	21	1.1
2008	4268600	939	31	22	0.7
2009	4315800	914	31	21	0.7

**NOTE:** Population from 1997 on is from Statistics NZ INFOSHARE DPE group.

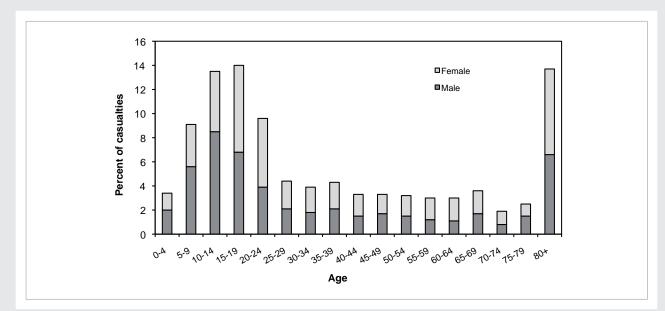


#### FIGURE 25: PEDESTRIANS AS A PERCENTAGE OF ALL ROAD CRASH CASUALTIES

#### TABLE 42: PEDESTRIAN CASUALTIES AND POPULATION STATISTICS BY AGE GROUP YEAR ENDING 31 DECEMBER 2009

				Per 100 000	) population
Age group	Population	Injured	Killed	Injured	Killed
Under 5	305510	30	2	10	0.7
5 to 9	288150	86	0	30	0
10 to 14	297550	126	1	42	0.3
15 to 19	323190	129	3	40	0.9
20 to 24	304290	88	3	29	1
25 to 29	280630	41	1	15	0.4
30 to 34	268740	36	1	13	0.4
35 to 39	307740	39	2	13	0.6
40 to 44	312060	28	3	9	1
45 to 49	322740	29	2	9	0.6
50 to 54	283970	30	1	11	0.4
55 to 59	247330	25	3	10	1.2
60 to 64	221270	25	3	11	1.4
65 to 69	171670	34	0	20	0
70 to 74	130230	18	0	14	0
75 to 79	104790	23	0	22	0
80 and over	145930	50	6	34	4.1
Unknown age	0	77	0	-	-
TOTAL	4315790	914	31	21	0.7

NOTE: Population is the resident population as at 30 June. Statistics NZ INFOSHARE DAE group.



List

#### FIGURE 26: PERCENTAGE OF PEDESTRIAN CASUALTIES BY AGE AND SEX

# **TABLE 43: INJURY CRASHES INVOLVING PEDESTRIANS BY ROAD FEATURE ON OPEN AND URBAN ROADS**YEAR ENDING 31 DECEMBER 2009

		URBAN	ROADS		OPEN I	ROADS	UNKNOWN AREA	
	At pedestrian	crossing	Not at pedest	rian crossing				
Road feature	Day	Dark	Day	Dark	Day	Dark	and light	Total
INTERSECTIONS								
Controlled by:								
<ul> <li>Traffic signals</li> </ul>	4	3	91	32	1	-	-	131
<ul> <li>Stop sign</li> </ul>	-	-	11	3	-	1	-	15
<ul> <li>Roundabout</li> </ul>	1	-	5	1	-	-	-	7
<ul> <li>Other give way sign</li> </ul>	8	2	42	15	-	-	-	67
<ul> <li>Pointsman or school patrol</li> </ul>	-	-	1	-	-	-	-	1
Uncontrolled	5	2	52	40	1	-	-	100
SUBTOTAL	18	7	202	91	2	1	-	321
NON-INTERSECTIONS								
• Bridge	1	-	4	-	1	-	-	6
<ul> <li>Railway crossing</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Motorway on-off ramp</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Raised islands</li> </ul>	-	-	27	16	4	-	-	47
<ul> <li>Straight road</li> </ul>	40	6	297	87	10	14	-	454
• Easy curve	-	2	24	10	4	1	-	41
<ul> <li>Moderate curve</li> </ul>	1	-	7	3	3	-	-	14
Severe curve	-	-	1	-	-	-	-	1
<ul> <li>Not stated</li> </ul>	-	-	-	-	-	-	-	-
SUBTOTAL	42	8	360	116	22	15	-	563
TOTAL	60	15	562	207	24	16	-	884

**NOTE:** For urban/open road classification see Note 11.

Fatal crashes are not included in this table (see Table 44).

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# **TABLE 44: FATAL CRASHES INVOLVING PEDESTRIANS BY ROAD FEATURE ON OPEN AND URBAN ROADS**YEAR ENDING 31 DECEMBER 2009

		URBAN	ROADS		OPEN	ROADS	UNKNOWN AREA	
	At pedestrian	crossing	Not at pedest	rian crossing				
Road feature	Day	Dark	Day	Dark	Day	Dark	and light	Total
INTERSECTIONS								
Controlled by:								
<ul> <li>Traffic signals</li> </ul>	-	1	-	1	-	-	-	2
<ul> <li>Stop sign</li> </ul>	-	-	1	-	1	-	-	2
<ul> <li>Roundabout</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Other give way sign</li> </ul>	-	-	2	-	-	-	-	2
<ul> <li>Pointsman or school patrol</li> </ul>	-	-	-	-	-	-	-	-
Uncontrolled	-	-	-	-	-	1	-	1
SUBTOTAL								
NON-INTERSECTIONS								
• Bridge	-	-	-	-	-	-	-	-
<ul> <li>Railway crossing</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Motorway on-off ramp</li> </ul>	-	-	-	-	-	-	-	-
<ul> <li>Raised islands</li> </ul>	-	-	1	-	-	-	-	1
<ul> <li>Straight road</li> </ul>	1	-	4	8	2	5	-	20
• Easy curve	-	-	1	1	-	1	-	3
<ul> <li>Moderate curve</li> </ul>	-	-	-	-	-	-	-	-
Severe curve	-	-	-	-	-	-	-	-
<ul> <li>Not stated</li> </ul>	-	-	-	-	-	-	-	-
SUBTOTAL	1	-	6	9	2	6	-	24
TOTAL	1	1	9	10	3	7	-	31

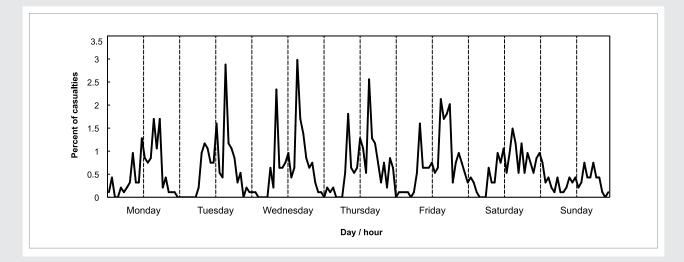
**NOTE:** For urban/open road classification see Note 11.

Time of day	Monda	y	Tuesda	y	Wedne	sday	Thursd	ay	Friday		Saturda	ıy	Sunday		TOTALS	
Midnight to 12.59am	-	(1)	-	(-)	1	(-)	-	(-)	-	(-)	3	(-)	8	(1)	12	(2)
1am to 1.59am	2	(-)	-	(-)	1	(-)	-	(2)	1	(-)	4	(-)	7	(-)	15	(2)
2am to 2.59am	-	(-)	-	(-)	-	(-)	1	(-)	1	(-)	2	(-)	3	(-)	7	(-)
3am to 3.59am	-	(-)	-	(-)	-	(-)	2	(-)	1	(-)	1	(-)	3	(-)	7	(-)
4am to 4.59am	2	(-)	-	(-)	-	(-)	-	(-)	1	(-)	-	(-)	1	(1)	4	(1)
5am to 5.59am	1	(-)	-	(-)	-	(-)	-	(-)	-	(-)	-	(-)	1	(-)	2	(-)
6am to 6.59am	2	(-)	2	(-)	5	(1)	-	(-)	1	(-)	-	(-)	3	(1)	13	(2)
7am to 7.59am	3	(-)	9	(-)	2	(-)	5	(-)	5	(-)	5	(-)	1	(-)	30	(-)
8am to 8.59am	8	(1)	11	(-)	22	(-)	14	(2)	14	(1)	3	(-)	1	(-)	73	(4)
9am to 9.59am	4	(-)	10	(-)	4	(1)	6	(-)	6	(-)	3	(-)	2	(-)	35	(1)
10am to 10.59am	3	(-)	7	(-)	6	(-)	5	(-)	6	(-)	9	(-)	4	(-)	40	(-)
11am to 11.59am	12	(-)	6	(1)	7	(-)	6	(-)	5	(1)	6	(1)	3	(-)	45	(3)
noon to 12.59am	7	(-)	13	(-)	9	(-)	11	(1)	7	(-)	10	(-)	4	(-)	61	(1)
1pm to 1.59pm	7	(-)	5	(-)	4	(-)	10	(-)	5	(-)	5	(-)	2	(-)	38	(-)
2pm to 2.59pm	7	(-)	4	(-)	6	(-)	5	(-)	6	(-)	8	(-)	3	(-)	39	(-)
3pm to 3.59pm	15	(-)	26	(-)	27	(-)	22	(1)	19	(1)	14	(-)	6	(-)	129	(2)
4pm to 4.59pm	9	(-)	11	(-)	16	(-)	11	(-)	15	(1)	11	(-)	3	(-)	76	(1)
5pm to 5.59pm	16	(-)	10	(-)	11	(1)	10	(1)	16	(-)	5	(-)	3	(1)	71	(3)
6pm to 6.59pm	1	(1)	8	(-)	8	(-)	7	(-)	19	(-)	11	(-)	7	(-)	61	(1)
7pm to 7.59pm	3	(1)	3	(-)	6	(-)	3	(-)	2	(1)	5	(-)	4	(-)	26	(2)
8pm to 8.59pm	1	(-)	4	(1)	6	(1)	7	(-)	7	(-)	6	(-)	4	(-)	35	(2)
9pm to 9.59pm	1	(-)	-	(-)	2	(1)	2	(-)	8	(-)	7	(-)	1	(-)	21	(1)
10pm to 10.59pm	-	(1)	2	(-)	1	(-)	7	(-)	5	(1)	5	(-)	-	(-)	20	(2)
11pm to 11.59pm	-	(-)	1	(-)	1	(-)	6	(-)	3	(-)	6	(1)	1	(-)	18	(1)
Unknown time	2	(-)	1	(-)	-	(-)	1	(-)	1	(-)	1	(-)	-	(-)	6	(-)
TOTALS	106	(5)	133	(2)	145	(5)	141	(7)	154	(6)	130	(2)	75	(4)	884	(31)

# **TABLE 45: CRASHES INVOLVING PEDESTRIANS BY TIME OF DAY AND DAY OF WEEK**YEAR ENDED 31 DECEMBER 2009

NOTE: The figures in brackets are fatal crashes and are not included in the adjacent totals.

#### FIGURE 27: PERCENTAGE OF PEDESTRIAN CASUALTIES BY TIME OF DAY AND DAY OF WEEK



# SECTION 7: LOCAL BODY CASUALTIES AND CRASHES



### TABLE 46: CRASHES AND CASUALTIES BY POPULATION CENTRE\* YEAR ENDING 31 DECEMBER 2009

Local body name	Population (000)	Injury crashes	Fatal crashes	Total injuries	Total deaths	Crashes per 10,000 population	Casualties per 10,000 Population
CITIES							
North Shore	225.8	416	6	518	6	19	23
Waitakere	204.5	432	15	573	15	22	29
Auckland	444.1	1123	9	1400	10	26	32
Manukau	368.6	688	13	897	15	19	25
Hamilton	140.7	316	2	400	2	23	29
Tauranga	112.6	182	1	217	1	16	19
Napier	57.2	177	4	226	5	32	40
Palmerston North	80.3	152	7	191	7	20	25
Porirua	51.5	102	4	135	5	21	27
Upper Hutt	40.6	66	1	77	1	17	19
Hutt	102.1	210	1	240	1	21	24
Wellington	195.5	421	3	505	3	22	26
Nelson	45.0	100	3	120	3	23	27
Christchurch	372.6	899	11	1125	13	24	31
Dunedin	123.7	468	2	655	2	38	53
DISTRICTS	· · · ·						
Far North	58.0	173	13	264	15	32	48
Whangarei	79.0	189	14	261	16	26	35
Kaipara	18.8	84	4	122	4	47	67
Rodney	98.1	267	15	356	16	29	38
Papakura	48.9	107	1	141	1	22	29
Franklin	64.2	196	8	283	12	32	46
Thames Coromandel	26.8	69	3	101	3	27	39
Hauraki	17.8	66	4	115	4	39	67
Waikato	47.6	190	13	289	13	43	63
Matamata-Piako	31.6	89	5	120	5	30	40
Waipa	45.1	120	6	171	7	28	40
Otorohanga	9.3	20	2	32	2	24	37
South Waikato	22.8	67	7	104	8	33	49
Waitomo	9.6	53	2	87	5	57	96
Taupo	33.6	148	11	228	18	47	73
Western Bay of Plenty	44.8	126	7	194	9	30	45
Rotorua	68.2	143	5	199	5	22	30
Whakatane	34.3	79	7	115	8	25	36
Kawerau	7.0	7	-	8	-	10	11
Opotiki	9.0	34	6	54	6	44	67
Gisborne	46.2	104	3	141	5	23	32
Wairoa	8.4	41	5	70	5	55	89
Hastings	74.3	244	7	336	8	34	46
Central Hawke's Bay	13.4	35	1	45	1	27	35
New Plymouth	72.3	187	6	250	6	27	35
Stratford	9.1	28	4	37	4	35	45
South Taranaki	26.8	60	7	89	8	25	36
Ruapehu	13.6	42	4	87	4	34	67
	43.4	85	4	110	4	21	26
Whanganui	45.4	50	3	75	3	36	52
Rangitikei	29.5		3		3		
Manawatu	29.5	70	/	96	9	26	36

**NOTE:** \* Motorways are included in the adjacent population centre.

Populations are resident populations from SNZ INFOSHARE DPE group.

#### CONTINUED

#### TABLE 46: CRASHES AND CASUALTIES BY POPULATION CENTRE\* YEAR ENDING 31 DECEMBER 2009

Local body name	Population (000)	Injury crashes	Fatal crashes	Total injuries	Total deaths	Crashes per 10,000 population	Casualties per 10,000 Population
DISTRICTS							
Tararua	17.7	64	2	91	2	37	53
Horowhenua	30.6	87	5	114	8	30	40
Kapiti Coast	48.9	68	2	100	4	14	21
Masterton	23.3	73	2	98	2	32	43
Carterton	7.4	17	1	29	1	24	40
South Wairarapa	9.3	32	3	52	3	38	60
Tasman	46.8	106	4	153	4	24	34
Marlborough	45.0	112	7	143	7	26	33
Kaikoura	3.8	24	1	39	1	66	106
Buller	10.0	37	2	55	2	39	57
Grey	13.8	50	3	64	3	39	49
Westland	8.8	51	1	79	1	59	91
Hurunui	11.0	54	4	83	4	53	79
Waimakariri	46.9	78	3	117	3	17	26
Selwyn	38.6	104	5	145	5	28	39
Ashburton	29.1	61	3	87	4	22	31
Timaru	44.1	109	1	149	1	25	34
Mackenzie	4.0	30	-	47	-	76	119
Waimate	7.5	18	1	22	1	25	31
Chatham Islands	0.6	4	-	6	-	63	94
Waitaki	20.7	83	3	118	3	42	59
Central Otago	18.0	59	1	90	1	33	51
Queenstown-Lakes	27.1	106	2	150	2	40	56
Clutha	17.4	82	2	123	3	48	72
Southland	29.3	145	4	239	5	51	83
Gore	12.3	35	2	52	2	30	44
Invercargill	51.9	174	7	237	9	35	47

**NOTE:** \* Motorways are included in the adjacent population centre. Populations are resident populations from SNZ INFOSHARE DPE group.

# TABLE 47: PEDESTRIAN, MOTORCYCLE AND PEDAL CYCLE CRASHES BY POPULATION CENTRE \* YEAR ENDING 31 DECEMBER 2009

			Number o	of crashes		
Local body name	Pedestrians	5	Motoro		Pedal c	vclists
CITIES					i cuul c	,
North Shore	44	(3)	52	(-)	32	(-)
Waitakere	35	(3)	38	(3)	18	(-)
Auckland	135	(4)	162	(2)	100	(-)
Manukau	74	(1)	50	(1)	34	(-)
Hamilton	34	(-)	32	(1)	36	(-)
Tauranga	12	(-)	28	(-)	28	(1)
Napier	13	(1)	25	(-)	22	(-)
Palmerston North	13	(-)	23	(3)	16	(-)
Porirua	10	(1)	7	(-)	10	(-)
Upper Hutt	5	(1)	12	(-)	9	(-)
Hutt	22	(-)	30	(1)	23	(-)
Wellington	64	(1)	78	(-)	62	(-)
Nelson	11	(-)	15	(-)	28	(-)
Christchurch	105	(1)	128	(2)	126	(1)
Dunedin	48	(1)	48	(-)	26	(1)
DISTRICTS					1	
Far North	10	(1)	13	(2)	2	(-)
Whangarei	16	(2)	21	(-)	6	(-)
Kaipara	3	(-)	5	(-)	1	(-)
Rodney	8	(-)	41	(4)	8	(1)
Papakura	7	(-)	8	(-)	7	(-)
Franklin	7	(-)	24	(-)	9	(-)
Thames Coromandel	3	(-)	6	(1)	3	(-)
Hauraki	1	(-)	7	(-)	1	(-)
Waikato	4	(-)	20	(3)	5	(-)
Matamata-Piako	5	(1)	15	(-)	-	(-)
Waipa	7	(1)	12	(-)	4	(-)
Otorohanga	1	(-)	1	(1)	1	(-)
South Waikato	6	(-)	8	(1)	3	(-)
Waitomo	2	(-)	3	(-)	-	(-)
Таиро	3	(-)	15	(3)	9	(1)
Western Bay of Plenty	3	(-)	9	(1)	4	(1)
Rotorua	17	(-)	10	(-)	17	(-)
Whakatane	5	(-)	11	(-)	2	(-)
Kawerau	-	(-)	1	(-)	-	(-)
Opotiki	1	(2)	2	(-)	-	(-)
Gisborne	5	(-)	13	(1)	11	(-)
Wairoa	2	(-)	3	(-)	-	(-)
Hastings	16	(-)	35	(2)	32	(-)
Central Hawke's Bay	1	(-)	2	(-)	-	(-)
New Plymouth	17	(-)	29	(2)	13	(-)
Stratford	3	(1)	4	(-)	2	(-)
South Taranaki	2	(-)	5	(2)	2	(-)
Ruapehu	3	(-)	3	(-)	1	(-)
Whanganui	10	(-)	13	(1)	9	(-)
Rangitikei	2	(1)	2	(-)	1	(-)

**NOTE: \*** Motorways are included in the adjacent population centre.

The figures in brackets are fatal accidents and are not included in the adjacent totals.

A pedal cyclist or a motorcyclist can be involved in a crash and escape injury or death.

#### CONTINUED

#### TABLE 47: PEDESTRIAN, MOTORCYCLE AND PEDAL CYCLE CRASHES BY POPULATION CENTRE \* YEAR ENDING 31 DECEMBER 2009

	Number of crashes									
Local body name	Pedest	trians	Motoro	cyclists	Pedal c	yclists				
DISTRICTS										
Manawatu	6	(2)	8	(-)	2	(-)				
Tararua	1	(-)	10	(-)	2	(-)				
Horowhenua	10	(1)	5	(-)	4	(-)				
Kapiti Coast	2	(-)	13	(-)	8	(1)				
Masterton	5	(-)	10	(-)	10	(-)				
Carterton	-	(1)	2	(-)	-	(-)				
South Wairarapa	-	(-)	6	(1)	-	(-)				
Tasman	4	(-)	17	(-)	3	(-)				
Marlborough	7	(-)	17	(2)	10	(-)				
Kaikoura	2	(-)	2	(1)	-	(-)				
Buller	-	(-)	4	(1)	1	(-)				
Grey	2	(-)	8	(2)	3	(-)				
Westland	-	(1)	15	(-)	1	(-)				
Hurunui	1	(-)	8	(2)	1	(-)				
Waimakariri	4	(-)	2	(-)	2	(-)				
Selwyn	-	(-)	9	(-)	3	(1)				
Ashburton	3	(-)	7	(-)	3	(-)				
Timaru	8	(-)	12	(-)	4	(-)				
Mackenzie	1	(-)	1	(-)	-	(-)				
Waimate	1	(-)	4	(-)	1	(-)				
Chatham Islands	-	(-)	1	(-)	-	(-)				
Waitaki	7	(-)	5	(-)	5	(-)				
Central Otago	3	(-)	б	(-)	4	(-)				
Queenstown-Lakes	3	(-)	13	(1)	4	(-)				
Clutha	2	(-)	б	(-)	-	(-)				
Southland	2	(-)	14	(-)	-	(-)				
Gore	2	(-)	2	(1)	2	(-)				
Invercargill	13	(-)	18	(1)	15	(-)				

**NOTE:** \* Motorways are included in the adjacent population centre.

The figures in brackets are fatal accidents and are not included in the adjacent totals. A pedal cyclist or a motorcyclist can be involved in a crash and escape injury or death.

### TABLE 48: LOCAL BODY CRASHES AND CASUALTIES YEAR ENDING 31 DECEMBER

City		Number of crashes Year crash happened					2009 casualties				
Local body names	2005	2006	2007	2008	2009	Fatal injuries	Serious injuries	Minor injuries	Total casualties		
North Shore	464	472	447	411	422	6	63	455	524		
Waitakere	381	397	402	443	447	15	51	522	588		
Auckland	1201	1162	1132	1154	1132	10	152	1248	1410		
Manukau	543	706	702	666	701	15	129	768	912		
Hamilton	275	292	368	363	318	2	59	341	402		
Tauranga	173	167	179	169	183	1	36	181	218		
Napier	134	136	164	152	181	5	31	195	231		
Palmerston North	183	186	180	166	159	7	39	152	198		
Porirua	105	99	105	87	106	5	25	110	140		
Upper Hutt	72	71	90	84	67	1	10	67	78		
Hutt	143	182	275	265	211	1	27	213	241		
Wellington	376	412	515	554	424	3	54	451	508		
Nelson	105	111	105	110	103	3	26	94	123		
Christchurch	807	939	1067	1029	910	13	185	940	1138		
Dunedin	535	475	500	484	470	2	120	535	657		
Total	5497	5807	6231	6137	5834	89	1007	6272	7368		

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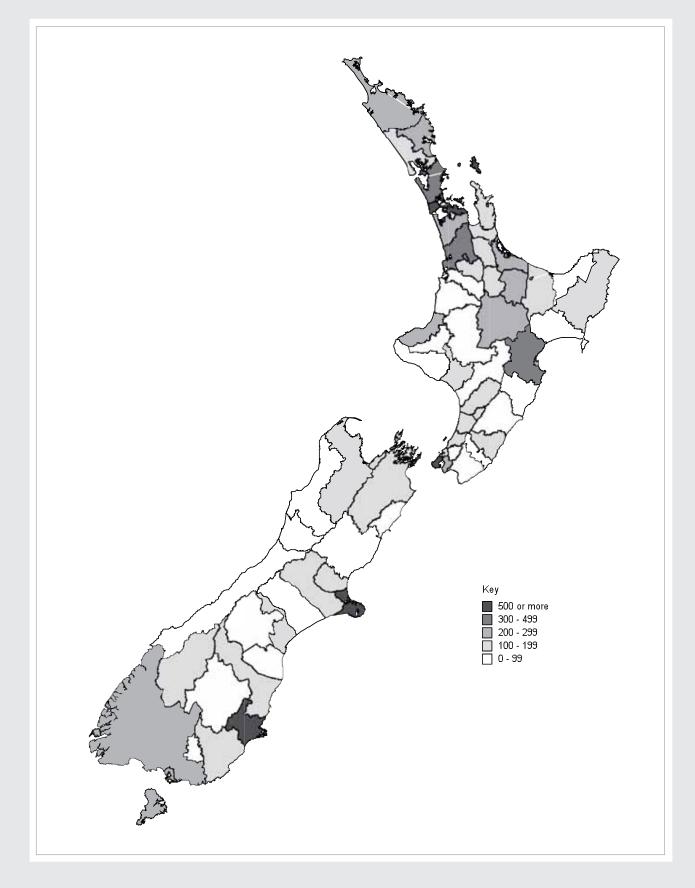
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#### TABLE 48: LOCAL BODY CRASHES AND CASUALTIES YEAR ENDING 31 DECEMBER

District			ber of crash rash happen				2009 casualties			
Local body names	2005	2006	2007	2008	2009	Fatal injuries	Serious injuries	Minor injuries	Total casualties	
Far North	179	226	245	182	186	15	44	220	279	
Whangarei	226	203	195	229	203	16	39	222	277	
Kaipara	87	95	103	78	88	4	19	103	126	
Rodney	232	263	288	302	282	16	58	298	372	
Papakura	118	121	141	127	108	1	22	119	142	
Franklin	184	212	189	204	204	12	39	244	295	
Thames Coromandel	88	81	88	81	72	3	12	89	104	
Hauraki	80	69	83	75	70	4	25	90	119	
Waikato	192	195	216	188	203	13	53	236	302	
Matamata-Piako	92	91	94	140	94	5	26	94	125	
Waipa	125	132	121	124	126	7	38	133	178	
Otorohanga	37	54	40	46	22	2	5	27	34	
South Waikato	74	63	70	72	74	8	27	77	112	
Waitomo	71	60	65	48	55	5	16	71	92	
Таиро	126	141	150	132	159	18	57	171	246	
Western Bay of Plenty	82	108	145	114	133	9	51	143	203	
Rotorua	167	178	184	181	148	5	39	160	204	
Whakatane	82	76	97	96	86	8	19	96	123	
Kawerau	3	6	5	4	7	-	1	7	8	
Opotiki	24	27	27	34	40	6	23	31	60	
Gisborne	124	114	109	153	107	5	29	112	146	
Wairoa	46	29	47	33	46	5	25	45	75	
Hastings	294	286	273	222	251	8	48	288	344	
Central Hawke's Bay	45	36	35	34	36	1	5	40	46	
New Plymouth	180	213	229	216	193	6	47	203	256	
Stratford	15	29	37	34	32	4	8	29	41	
South Taranaki	80	68	72	74	67	8	10	79	97	
Ruapehu	44	55	67	55	46	4	27	60	91	
Whanganui	101	71	93	99	89	4	14	96	114	
Rangitikei	58	57	59	59	53	3	14	61	78	
Manawatu	82	95	95	105	77	9	18	78	105	
Tararua	63	64	69	70	66	2	21	70	93	
Horowhenua	85	95	95	98	92	8	25	89	122	
Kapiti Coast	97	96	95	80	70	4	18	82	104	
Masterton	70	74	61	69	75	2	17	81	100	
Carterton	22	12	35	17	18	1	10	19	30	
South Wairarapa	26	28	37	31	35	3	11	41	55	
Tasman	107	108	138	139	110	4	30	123	157	
Marlborough	113	124	135	124	119	7	26	117	150	
Kaikoura	13	25	29	20	25	1	17	22	40	
Buller	32	39	55	37	39	2	12	43	57	
Grey	34	36	37	44	53	3	17	47	67	
Westland	40	45	31	42	52	1	13	66	80	
Hurunui	64	66	83	66	58	4	25	58	87	
Waimakariri	91	81	85	81	81	3	30	87	120	
Selwyn	81	81	99	107	109	5	29	116	150	
Ashburton	48	45	79	65	64	4	25	62	91	
Timaru	85	104	115	96	110	1	27	122	150	
Mackenzie	20	27	23	22	30	-	9	38	47	
Waimate	19	14	36	24	19	1	6	16	23	
Chatham Islands	4	6	5	4	4	-	3	3	6	
Waitaki	97	94	94	91	86	3	24	94	121	
Central Otago	85	74	74	69	60	1	16	74	91	
Queenstown-Lakes	125	105	126	93	108	2	30	120	152	
Clutha	112	119	105	80	84	3	24	99	126	
Southland	184	171	174	163	149	5	47	192	244	
Gore	44	41	29	44	37	2	16	36	54	
Invercargill	212	256	206	193	181	9	32	205	246	
Totals	5311	5484	5812	5510	5291	295	1418	5844	7557	



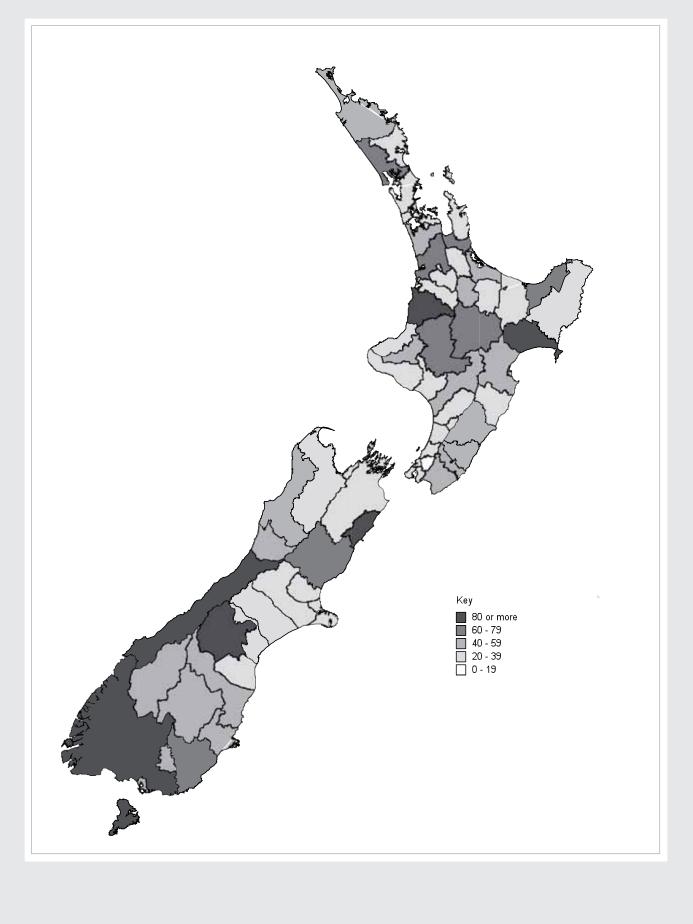
### FIGURE 28: 2009 TOTAL CASUALTIES





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### SECTION 8: DRIVERS INVOLVED IN REPORTED INJURY CRASHES



# **TABLE 49: DRIVERS INVOLVED IN FATAL CRASHES BY AGE AND VEHICLE TYPE**YEAR ENDING 31 DECEMBER 2009

	Ca	Car/van		uck	Moto	rcycle	Total		
Age group years	Number	Percent male	Number	Percent male	Number	Percent male	Number	Percent male	
0 to 14	-	-	-	-	-	-	-	-	
15 to 19	53	70	1	100	3	100	57	72	
20 to 24	57	67	4	100	3	100	64	70	
25 to 29	28	61	1	100	8	75	37	65	
30 to 34	37	76	6	100	10	100	53	83	
35 to 39	36	72	6	100	7	100	49	80	
40 to 44	29	76	7	100	7	100	43	84	
45 to 49	33	73	7	100	9	100	50	82	
50 to 54	30	73	7	100	5	100	43	81	
55 to 59	12	50	5	100	4	100	21	71	
60 to 64	21	67	2	100	1	100	26	73	
65 to 69	14	57	2	100	-	-	16	63	
70 and over	38	63	1	100	-	-	39	64	
Unknown	10	50	2	-	1	100	13	46	
TOTAL	398	68	51	96	58	97	511	74	

NOTE: Columns do not always add to the total as there are other vehicle types such as buses not included separately in the table.

#### TABLE 50: DRIVERS INVOLVED IN INJURY CRASHES BY AGE AND VEHICLE TYPE YEAR ENDING 31 DECEMBER 2009

	Car/van		Tru	ıck	Moto	rcycle	Total		
Age group years	Number	Percent male	Number	Percent male	Number	Percent male	Number	Percent male	
0 to 14	14	71	1	-	15	80	31	74	
15 to 19	2119	61	24	92	203	87	2350	63	
20 to 24	2255	61	41	95	188	79	2486	63	
25 to 29	1514	61	51	98	120	85	1693	64	
30 to 34	1229	58	59	98	108	91	1402	62	
35 to 39	1247	53	87	98	119	86	1464	58	
40 to 44	1206	56	94	99	137	86	1453	61	
45 to 49	1131	58	85	99	150	84	1394	64	
50 to 54	973	56	81	96	113	90	1192	62	
55 to 59	750	59	55	98	56	93	880	64	
60 to 64	610	57	43	100	44	91	723	63	
65 to 69	384	57	18	94	18	100	431	61	
70 and over	918	56	8	88	22	96	964	58	
Unknown	773	27	40	43	29	69	849	29	
TOTAL	15123	57	687	94	1322	86	17312	61	

NOTE: Columns do not always add to the total as there are other vehicle types such as buses not included separately in the table. Fatal crashes are not included in this table (see Table 49).

#### TABLE 51: CAR AND VAN DRIVERS INVOLVED IN FATAL CRASHES BY AGE GROUP YEAR ENDING 31 DECEMBER

Year	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 to 59 years	60 years and over	Unknown and other	Total
1980	95	132	80	81	88	58	20	554
1981	121	122	78	90	84	68	40	603
1982	112	156	70	105	104	59	21	627
1983	108	156	71	100	109	59	29	632
1984	116	139	84	110	116	56	18	639
1985	119	143	113	128	111	70	29	713
1986	126	154	100	139	127	60	35	741
1987	138	137	118	144	135	65	25	762
1988	110	133	105	119	131	68	19	685
1989	101	119	105	143	146	80	26	720
1990	99	145	105	128	122	59	36	694
1991	94	140	89	119	115	67	15	639
1992	76	119	85	122	120	74	28	624
1993	78	106	70	108	100	72	36	570
1994	64	110	81	117	110	54	21	557
1995	72	100	70	125	130	59	16	572
1996	80	82	70	94	114	60	21	521
1997	69	71	59	104	138	82	29	552
1998	70	84	61	115	115	74	28	547
1999	70	85	69	95	115	88	19	541
2000	56	64	42	94	128	87	21	492
2001	60	68	57	72	115	77	23	472
2002	44	55	54	79	108	69	18	427
2003	71	71	63	106	120	68	14	513
2004	76	62	38	78	114	70	14	452
2005	73	59	38	66	105	56	9	406
2006	59	57	31	74	110	76	7	413
2007	61	62	33	84	111	74	19	444
2008	55	58	34	47	89	59	14	356
2009	53	57	28	73	104	73	10	398

#### TABLE 52: CAR AND VAN DRIVERS INVOLVED IN INJURY CRASHES BY AGE GROUP YEAR ENDING 31 DECEMBER

Year	15 to 19 years	20 to 24 years	25 to 29 years	30 to 39 years	40 to 59 years	60 years and over	Unknown and other	Total
1980	2474	2306	1343	1953	2145	998	335	11554
1981	2266	2378	1401	1890	2075	1032	417	11459
1982	2376	2619	1443	1999	2237	1068	374	12116
1983	2431	2616	1533	2145	2307	1292	373	12697
1984	2578	2908	1708	2423	2583	1326	413	13939
1985	2750	3201	1966	2677	2906	1382	440	15322
1986	2926	3113	1986	2748	2881	1431	429	15514
1987	2840	2938	2145	2785	2824	1415	431	15378
1988	2284	2766	2126	2826	2963	1452	442	14859
1989	2202	2777	2037	2725	3032	1456	465	14694
1990	2445	2947	2262	3041	3194	1611	449	15949
1991	2306	2756	2109	3184	3244	1582	350	15531
1992	2127	2813	1968	2995	3174	1502	329	14908
1993	2034	2525	1880	2825	3060	1485	345	14154
1994	2302	2713	1995	3136	3259	1607	412	15424
1995	2380	2930	1988	3299	3480	1565	362	16004
1996	2008	2298	1691	2745	3113	1427	380	13662
1997	1878	1896	1541	2539	2787	1212	400	12253
1998	1729	1743	1423	2309	2645	1168	442	11459
1999	1624	1578	1336	2347	2714	1169	454	11222
2000	1417	1496	1166	2089	2507	1072	408	10155
2001	1669	1675	1237	2366	2987	1292	441	11667
2002	2133	1949	1432	2660	3481	1527	691	13873
2003	2146	2163	1348	2802	3743	1623	704	14529
2004	2168	2026	1382	2710	3639	1617	642	14184
2005	2285	2185	1431	2693	3952	1607	754	14907
2006	2397	2271	1501	2678	4041	1770	609	15267
2007	2542	2386	1610	2910	4328	1855	830	16461
2008	2313	2251	1524	2634	4166	1889	825	15602
2009	2119	2255	1514	2476	4060	1912	787	15123

NOTE: Fatal crashes are not included in this table (see Table 51).

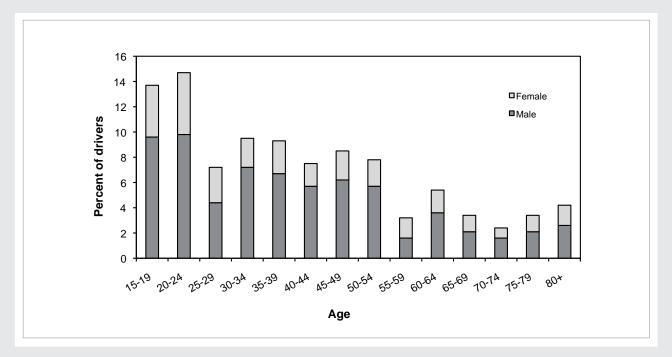
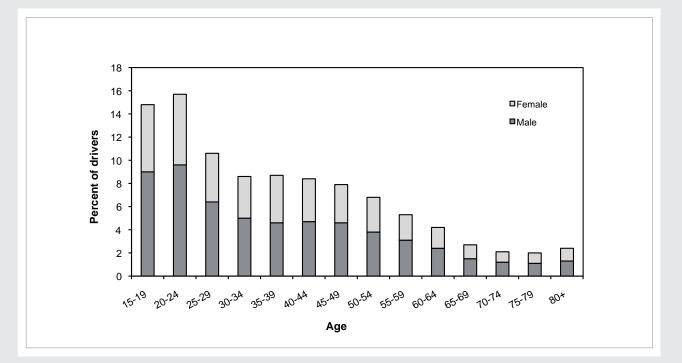


FIGURE 30: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS BY AGE AND SEX FOR FATAL CRASHES

FIGURE 31: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS BY AGE AND SEX FOR INJURY CRASHES



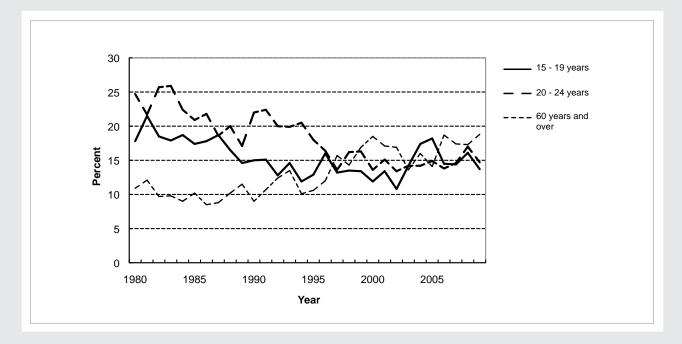
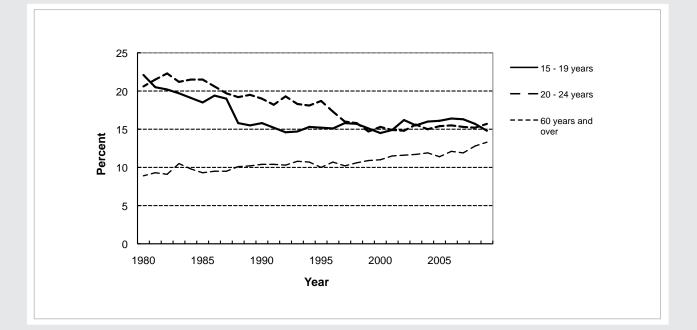


FIGURE 32: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS IN SELECTED AGE GROUPS — FATAL CRASHES

FIGURE 33: PERCENTAGE OF CRASH INVOLVED CAR DRIVERS IN SELECTED AGE GROUPS - INJURY CRASHES



# **TABLE 53: CAR AND VAN DRIVERS INVOLVED IN FATAL CRASHES BY AGE GROUP AND SEX**YEAR ENDING 31 DECEMBER

Year	15 to 19 years	Percent male	30 to 59 years	Percent male	60 years and over	Percent male	Total	Percent male
1980	307	83	169	80	58	74	554	81
1981	321	82	174	75	68	72	603	77
1982	338	84	209	83	59	75	627	82
1983	335	84	209	78	59	71	632	80
1984	339	81	226	74	56	82	639	78
1985	375	78	239	73	70	81	713	76
1986	380	80	266	78	60	78	741	78
1987	393	77	279	74	65	63	762	74
1988	348	81	250	75	68	66	685	77
1989	325	80	289	74	80	70	720	76
1990	349	77	250	76	59	73	694	76
1991	323	73	234	76	67	73	639	74
1992	280	78	242	74	74	66	624	74
1993	254	82	208	76	72	67	570	77
1994	255	77	227	72	54	74	557	75
1995	242	75	255	69	59	68	572	71
1996	232	77	208	71	60	73	521	74
1997	199	67	242	75	82	76	552	72
1998	215	76	230	67	74	69	547	71
1999	224	71	210	74	88	67	541	71
2000	162	72	222	72	87	66	492	70
2001	185	82	187	70	77	61	472	74
2002	153	71	187	65	69	71	427	67
2003	205	76	226	70	68	72	513	72
2004	176	73	192	68	70	71	452	70
2005	170	80	171	70	56	79	406	76
2006	147	65	184	69	76	71	413	67
2007	156	70	195	71	74	66	444	69
2008	147	75	136	65	59	70	356	69
2009	138	67	177	72	73	63	398	68

#### TABLE 54: CAR AND VAN DRIVERS INVOLVED IN INJURY CRASHES BY AGE GROUP AND SEX YEAR ENDING 31 DECEMBER

Year	15 to 19 years	Percent male	30 to 59 years	Percent male	60 years and over	Percent male	Total	Percent male
1980	6123	76	4098	69	998	69	11554	72
1981	6045	76	3965	70	1032	70	11459	72
1982	6438	74	4236	66	1068	69	12116	70
1983	6580	73	4452	68	1292	69	12697	69
1984	7194	72	5006	68	1326	68	13939	69
1985	7917	73	5583	66	1382	67	15322	69
1986	8025	73	5629	66	1431	69	15514	69
1987	7923	70	5609	64	1415	65	15378	66
1988	7176	69	5789	64	1452	64	14859	66
1989	7016	70	5757	63	1456	66	14694	66
1990	7654	69	6235	62	1611	65	15949	65
1991	7171	68	6428	62	1582	65	15531	65
1992	6908	67	6169	62	1502	65	14908	64
1993	6439	65	5885	61	1485	61	14154	62
1994	7010	65	6395	60	1607	65	15424	62
1995	7298	66	6779	61	1565	63	16004	63
1996	5997	65	5858	60	1427	63	13662	62
1997	5315	65	5326	60	1212	62	12253	61
1998	4895	65	4954	59	1168	61	11459	60
1999	4538	65	5061	58	1169	60	11222	60
2000	4079	65	4596	59	1072	62	10155	61
2001	4581	65	5353	57	1292	58	11667	59
2002	5514	64	6141	58	1527	60	13873	59
2003	5657	64	6545	57	1623	59	14529	59
2004	5576	64	6349	58	1617	60	14184	59
2005	5901	64	6645	57	1607	61	14907	59
2006	6169	63	6719	59	1770	58	15267	59
2007	6538	62	7238	57	1855	61	16461	58
2008	6088	63	6800	56	1889	58	15602	58
2009	5888	61	6536	56	1912	57	15123	57

NOTE: Fatal crashes are not included in this table (see Table 53).

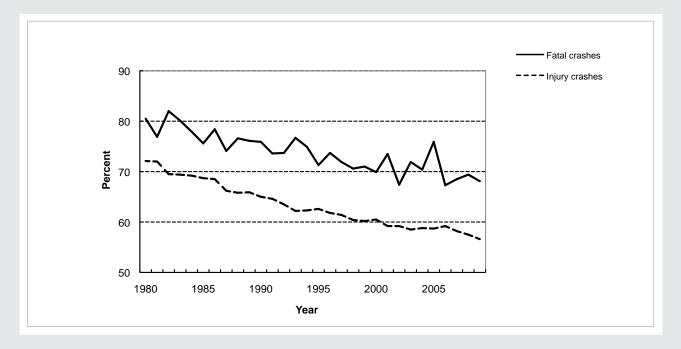
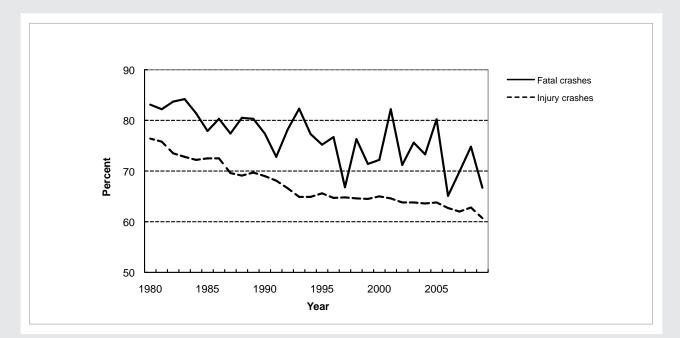


FIGURE 34: MALE DRIVERS AS A PERCENTAGE OF ALL CRASH INVOLVED CAR DRIVERS — ALL AGES

FIGURE 35: MALE DRIVERS AS A PERCENTAGE OF ALL CRASH INVOLVED CAR DRIVERS — YOUNG DRIVERS 15–29 YEARS



# TABLE 55: PERCENTAGE OF CRASH INVOLVED DRIVERS WITH ALCOHOL/DRUGS RECORDED AS A FACTORCONTRIBUTING TO THE CRASH YEAR ENDING 31 DECEMBER 2009

		Fatal crashes				Injury crashes				
Age group years	Car/van	Truck	Motorcycle	Total		Car/van	Truck	Motorcycle	Total	
15 to 19	40	-	-	39		15	8	6	14	
20 to 24	40	-	-	36		16	5	10	15	
25 to 29	29	-	-	27		11	4	7	11	
30 to 39	34	-	-	28		11	5	10	11	
40 to 59	24	4	4	17		6	3	6	б	
60 and over	3	-	-	3		2	1	1	2	
Total	27	2	14	23		10	3	7	9	

**NOTE**: Where the number of drivers is less than 20 the percentage is not calculated.

# TABLE 56: PERCENTAGE OF CRASH INVOLVED DRIVERS WITH TOO FAST FOR CONDITIONS RECORDED AS A FACTOR CONTRIBUTING TO THE CRASH YEAR ENDING 31 DECEMBER 2009

		Fatal crashes				Injury crashes				
Age group years	Car/van	Truck	Motorcycle	Total		Car/van	Truck	Motorcycle	Total	
15 to 19	38	-	-	37		22	17	8	21	
20 to 24	35	-	-	34		16	5	13	15	
25 to 29	25	-	-	30		10	12	10	10	
30 to 39	16	-	-	17		8	8	11	8	
40 to 59	14	0	16	12		4	6	11	5	
60 and over	7	-	-	7		2	6	5	2	
Total	20	4	26	19		10	7	10	10	

NOTE: Where the number of drivers is less than 20 the percentage is not calculated.

#### TABLE 57: PERCENTAGE OF CRASH INVOLVED DRIVERS WITH FAILED TO GIVE WAY OR STOP RECORDED AS A FACTOR CONTRIBUTING TO THE CRASH YEAR ENDING 31 DECEMBER 2009

Fatal crashes				Injury crashes				
Age group years	Car/van	Truck	Motorcycle	Total	Car/van	Truck	Motorcycle	Total
15 to 19	0	-	-	0	15	17	6	15
20 to 24	7	-	-	6	15	10	3	14
25 to 29	7	-	-	5	16	12	3	15
30 to 39	6	-	-	4	14	5	0	12
40 to 59	2	12	0	3	15	7	4	13
60 and over	21	-	-	19	26	13	7	24
Total	7	6	0	6	16	8	3	15

NOTE: Where the number of drivers is less than 20 the percentage is not calculated.

# SECTION 9: ETHNICITY



Photo courtesy of NZTA

# **TABLE 58: DRIVERS INVOLVED IN CRASHES BY ETHNIC GROUP AND CRASH SEVERITY**YEAR ENDING 31 DECEMBER 2009

		CRASH SEVERITY							
	Fatal		Serious	s injury	Minor	injury	Total		
Ethnic group	Number % of known		Number % of known		Number % of known		Number	% of known	
Asian	19	4	166	6	1206	9	1391	9	
European	300	66	1918	72	9034	70	11252	71	
Maori	108	24	421	16	1601	12	2130	13	
Pacific	17	4	104	4	749	6	870	5	
Other	8	2	39	1	258	2	305	2	
SUBTOTAL (known ethnicity)	452	100	2648	100	12848	100	15948	100	
Unknown	59	-	271	-	1545	-	1875	-	
TOTAL	511	-	2919	-	14393	-	17823	-	

**NOTE:** The Traffic Crash Report form was modified during 2001 to allow the police to record ethnicity data for those involved in road crashes. The new form was introduced progressively during the year so the first full year of ethnicity data is 2002. The percentages in the table show each ethnic group as a percentage of drivers of known ethnicity.

# **TABLE 59: CASUALTIES FROM CRASHES BY ETHNIC GROUP AND CRASH SEVERITY**YEAR ENDING 31 DECEMBER 2009

		INJURY SEVERITY							
	Fa	Fatal		Serious injury		injury	Total		
Ethnic group	Number % of known		Number	% of known	Number	% of known	Number	% of known	
Asian	18	5	108	5	970	9	1096	8	
European	216	62	1535	70	7512	68	9263	68	
Maori	87	25	435	20	1678	15	2200	16	
Pacific	19	5	79	4	601	5	699	5	
Other	9	3	36	2	232	2	277	2	
SUBTOTAL (known ethnicity)	349	100	2193	100	10993	100	13535	100	
Unknown	35	-	232	-	1123	-	1390	-	
TOTAL	384	-	2425	-	12116	-	14925	-	

**NOTE:** The Traffic Crash Report form was modified during 2001 to allow the police to record ethnicity data for those involved in road crashes. The new form was introduced progressively during the year so the first full year of ethnicity data is 2002.

The percentages in the table show each ethnic group as a percentage of casualties of known ethnicity.

# NATIONAL HEALTH STATISTICS FOR ROAD USERS



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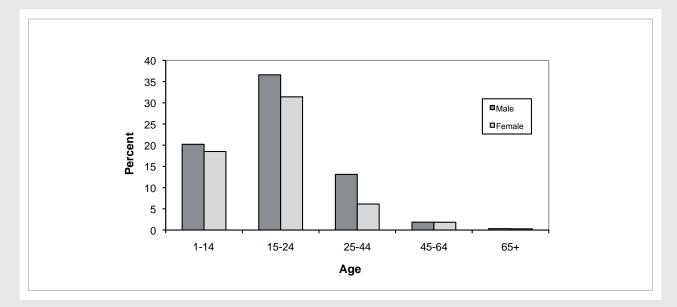
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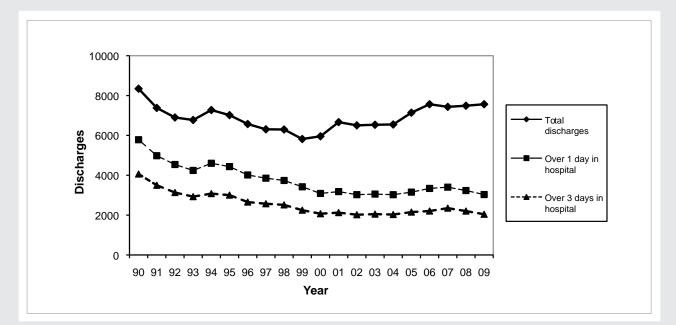
### NOTES

- The material presented in this section is derived from data provided by the New Zealand Health Information Service, Ministry of Health.
- 2. The data includes those who, as a result of a motor vehicle crash, were injured seriously enough to be admitted to hospital. (Figures 8 and 9 show data for cyclists who were injured in non-motor vehicle crashes. These casualties are not included in the Ministry of Transport's data base which records primarily motor vehicle crashes.) The data base includes only those discharged during the 2009 calendar year.
- 3. Casualties who are readmitted for further treatment are included only once in the casualty count, but their total stay in hospital is recorded.



# FIGURE 1: DEATHS FROM MOTOR VEHICLE CRASHES AS A PERCENTAGE OF ALL DEATHS FOR SELECTED AGE GROUP (2007)

## FIGURE 2: HOSPITAL DISCHARGES FROM MOTOR VEHICLE CRASHES (BY LENGTH OF STAY IN HOSPITAL)



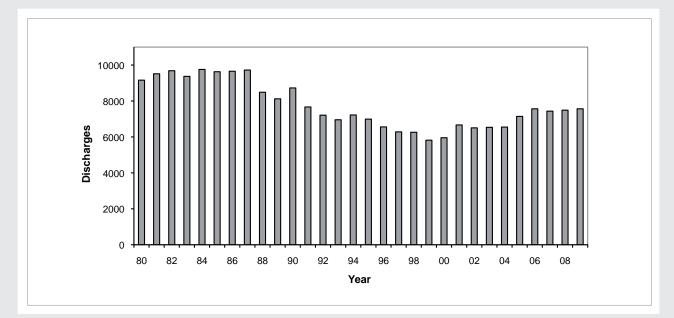
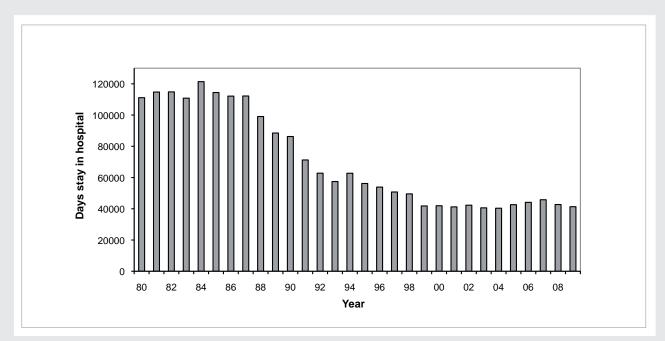




FIGURE 4: TOTAL DAYS STAY IN HOSPITAL RESULTING FROM MOTOR VEHICLE CRASHES

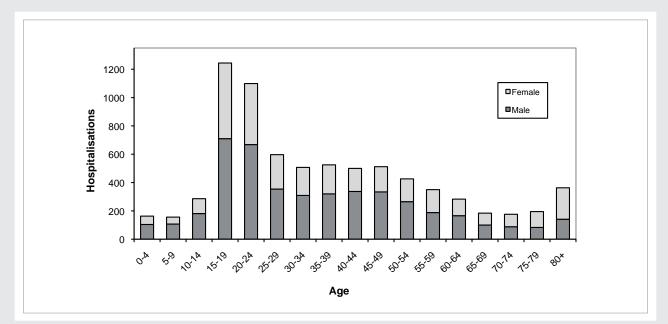


Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	99	2	2	5	32	23	163
5 to 9	-	61	14	2	11	52	16	156
10 to 14	6	112	42	5	34	66	21	286
15 to 19	402	449	142	2	26	97	126	1244
20 to 24	440	269	191	10	30	64	95	1099
25 to 29	242	116	115	7	21	40	56	597
30 to 34	201	83	124	12	16	31	40	507
35 to 39	238	77	111	5	21	33	40	525
40 to 44	219	50	125	6	25	28	47	500
45 to 49	184	58	135	12	35	35	53	512
50 to 54	170	51	101	6	27	26	45	426
55 to 59	137	63	56	5	19	26	44	350
60 to 64	122	43	38	2	15	25	38	283
65 to 69	83	30	16	2	4	20	29	184
70 to 74	78	31	10	-	2	20	35	176
75 to 79	83	39	6	1	6	27	33	195
80 and over	141	61	5	-	1	55	100	363
TOTALS	2746	1692	1233	79	298	677	841	7566

### TABLE 1: AGE AND TYPES OF ROAD USERS HOSPITALISED YEAR ENDING 31 DECEMBER 2009

NOTE: (1) Includes unknown.

SOURCE: NZHIS Ministry of Health.



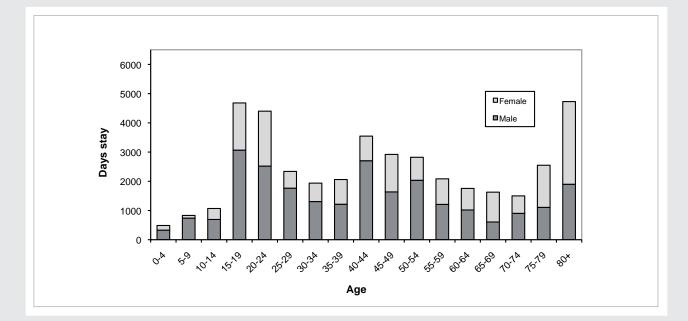
#### FIGURE 5: NUMBER OF HOSPITALISATIONS FROM ROAD CRASHES BY AGE AND SEX

Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	278	4	1	3	106	95	487
5 to 9	-	195	29	3	458	116	30	831
10 to 14	17	346	77	68	181	271	109	1069
15 to 19	1558	1454	734	1	42	464	428	4681
20 to 24	2215	916	706	43	57	157	306	4400
25 to 29	993	458	394	23	45	240	185	2338
30 to 34	586	212	668	73	21	177	200	1937
35 to 39	742	322	537	44	76	199	140	2060
40 to 44	1579	197	1081	31	168	190	300	3546
45 to 49	910	448	929	328	82	136	87	2920
50 to 54	1055	287	856	14	142	193	275	2822
55 to 59	959	279	351	5	63	153	274	2084
60 to 64	590	236	356	4	69	220	281	1756
65 to 69	366	336	132	14	16	595	169	1628
70 to 74	681	173	77	-	16	250	303	1500
75 to 79	802	438	224	1	184	443	457	2549
80 and over	1615	744	10	-	26	1196	1137	4728
TOTALS	14668	7319	7165	653	1649	5106	4776	41336

### TABLE 2: NUMBER OF DAYS STAY BY AGE AND TYPE OF ROAD USER HOSPITALISED YEAR ENDING 31 DECEMBER 2009

NOTE: (1) Includes unknown.

SOURCE: NZHIS Ministry of Health.



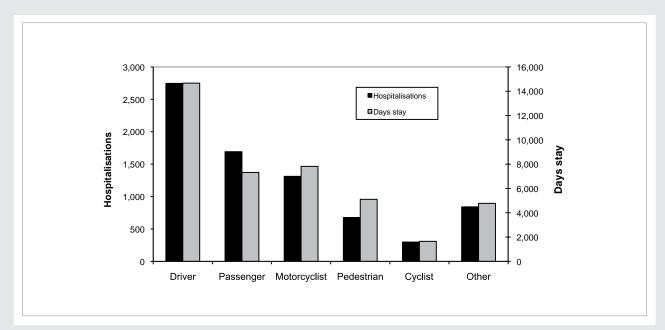
## FIGURE 6: TOTAL DAYS STAY IN HOSPITAL FROM ROAD CRASHES BY AGE AND SEX

Age group years	Drivers	Passengers	Motorcycle drivers	Motorcycle pillions	Pedal cyclists	Pedestrians	Other road users (1)	TOTAL casualties
Under 5	-	3	-	-	-	3	4	3
5 to 9	-	3	-	-	-	2	-	5
10 to 14	-	3	2	-	5	4	5	4
15 to 19	4	3	5	-	2	5	3	4
20 to 24	5	3	4	-	2	2	3	4
25 to 29	4	4	3	-	2	6	3	4
30 to 34	3	3	5	-	-	6	5	4
35 to 39	3	4	5	-	4	6	4	4
40 to 44	7	4	9	-	7	7	6	7
45 to 49	5	8	7	-	2	4	2	6
50 to 54	6	6	8	-	5	7	6	7
55 to 59	7	4	6	-	-	6	6	6
60 to 64	5	5	9	-	-	9	7	6
65 to 69	4	11	-	-	-	-	6	9
70 to 74	9	6	-	-	-	-	9	9
75 to 79	10	11	-	-	-	16	14	13
80 and over	11	12	-	-	-	22	11	13
TOTALS	5	4	6	8	6	8	6	5

# **TABLE 3: AVERAGE NUMBER OF DAYS STAY BY AGE AND TYPE OF ROAD USER HOSPITALISED**YEAR ENDING 31 DECEMBER 2009

NOTE: (1) Includes unknown.

Average days stay are not calculated when there are fewer than 20 individuals. **SOURCE:** NZHIS Ministry of Health.



### FIGURE 7: HOSPITALISATIONS AND DAYS STAY BY ROAD USER TYPE

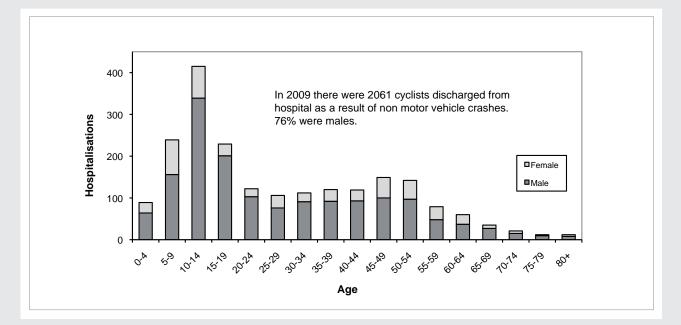
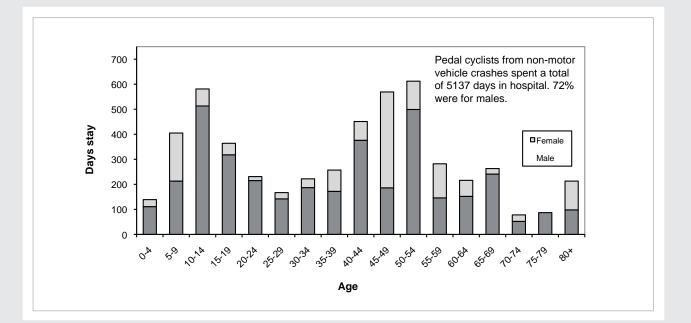




FIGURE 9: DAYS STAY IN HOSPITAL FOR PEDAL CYCLISTS INJURED IN NON-MOTOR VEHICLE CRASHES





# BREATH AND BLOOD ALCOHOL STATISTICS



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Figure 5	Number of offenders by alcohol level and sex	123

### NOTES

### 1. Data

The data in this section includes alcohol offences recorded by police. There can be several alcohol offence codes related to a single incident. For the following tables and graphs, 'offenders' are counted only once for each incident. Any offence records for the same individual that occur within the same hour are treated as a single incident. Not all the offences reported here will result in a successful prosecution.

#### 2. Limits and testing procedure

As from December 1988 the legal breath alcohol level was lowered from 500 micrograms of alcohol per litre of breath to 400 micrograms of alcohol per litre of breath.

From 1 April 1993, for those aged under 20 years, the legal breath alcohol limit was lowered to 150 micrograms of alcohol per litre of breath and the legal blood alcohol level was reduced to 30mg of alcohol per 100ml of blood.

### The procedure is:

- i. A breath screening test is requested.
- If the screening test is positive or not taken for any reason, the driver is asked to accompany the officer to a place where an evidential breath or blood test may be taken.
- iii. If the evidential breath test:
  - (a) is not taken for any reason, then a blood sample is requested by the officer.
  - (b) gives a reading of not over 400 micrograms of alcohol per litre of breath (150 for those under 20 years), then the test is considered negative and no blood sample is requested.
  - (c) gives a reading of over 400 (150 for those under 20 years), then the driver, after being advised of his rights, decides whether to accept the reading and subsequent court action or to request a blood sample.

Refusing a blood sample when requested by an officer, or a result over the legal limit, normally results in court charges.

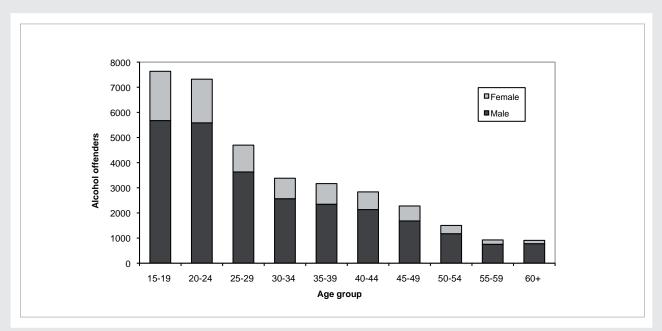


FIGURE 1: NUMBER OF ALCOHOL OFFENDERS BY AGE GROUP AND SEX

### TABLE 1: NUMBER OF ALCOHOL OFFENDERS BY AGE AND SEX YEAR ENDING 31 DECEMBER

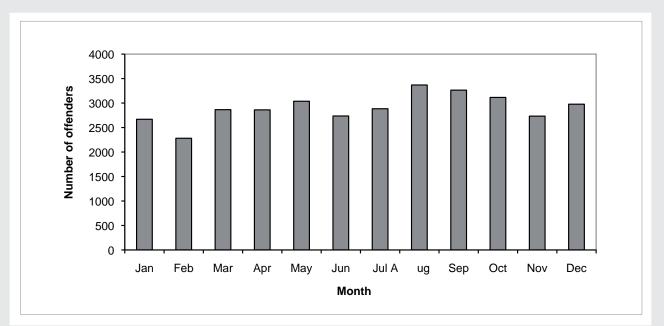
	20	006	2	007	2008		2009	
Age group	Male	Female	Male	Female	Male	Female	Male	Female
15 to 19	5018	1538	5518	1710	5859	1844	5674	1961
20 to 24	4097	1037	4640	1256	5323	1526	5584	1737
25 to 29	2678	691	3115	839	3595	1016	3631	1066
30 to 34	2205	723	2437	717	2529	741	2566	815
35 to 39	2048	654	2276	739	2421	827	2346	821
40 to 44	1873	567	2006	709	2184	772	2134	703
45 to 49	1330	446	1611	546	1771	588	1682	595
50 to 54	903	219	1023	268	1208	323	1174	329
55 to 59	566	131	635	145	675	174	753	173
60 and over	528	93	660	82	741	112	777	132
Unknown age	33	16	24	12	33	10	16	10
Total	21279	6115	23945	7023	26339	7933	26337	8342

NOTE: In 2009 there were 112 cases where sex was not recorded.

Month	Fatal crash	Injury crash	Non-injury crash	Did not crash	Total
January	1	50	136	2482	2669
February	1	53	140	2087	2281
March	1	67	167	2630	2865
April	0	61	146	2654	2861
May	1	54	196	2786	3037
June	2	49	160	2525	2736
July	0	52	196	2636	2884
August	1	67	180	3121	3369
September	0	46	183	3035	3264
October	1	51	168	2895	3115
November	0	50	166	2517	2733
December	0	54	159	2764	2977
Total	8	654	1997	32132	34791

## TABLE 2: ALCOHOL OFFENDERS BY MONTH AND CRASH INVOLVEMENT YEAR ENDING 31 DECEMBER 2009

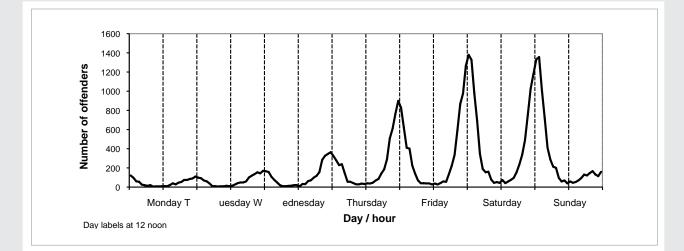
FIGURE 2: NUMBER OF ALCOHOL OFFENDERS BY MONTH OF THE YEAR



Time of day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTALS
Midnight to 12.59am	121	98	165	324	827	1379	1332	4246
1am to 1.59am	97	92	157	278	619	1327	1356	3926
2am to 2.59am	60	69	107	229	410	979	1011	2865
3am to 3.59am	55	60	75	238	401	693	718	2240
4am to 4.59am	25	38	48	145	223	346	410	1235
5am to 5.59am	19	10	20	56	139	188	287	719
6am to 6.59am	13	9	9	55	70	155	213	524
7am to 7.59am	20	6	9	42	40	160	200	477
8am to 8.59am	5	8	12	29	40	79	96	269
9am to 9.59am	7	8	14	28	38	44	58	197
10am to 10.59am	7	13	20	36	38	52	69	235
11am to 11.59am	8	10	20	32	27	44	39	180
noon to 12.59am	10	13	8	39	37	73	59	239
1pm to 1.59pm	9	26	32	37	27	41	45	217
2pm to 2.59pm	22	41	31	46	42	58	53	293
3pm to 3.59pm	39	48	62	69	59	75	70	422
4pm to 4.59pm	28	48	71	85	55	96	95	478
5pm to 5.59pm	46	59	98	141	136	154	130	764
6pm to 6.59pm	53	100	117	185	223	236	121	1035
7pm to 7.59pm	74	119	155	289	335	337	146	1455
8pm to 8.59pm	74	135	283	508	591	490	166	2247
9pm to 9.59pm	84	154	326	610	866	754	131	2925
10pm to 10.59pm	90	143	345	765	976	1026	114	3459
11pm to 11.59pm	110	169	363	899	1265	1179	159	4144
TOTALS	1076	1476	2547	5165	7484	9965	7078	34791

# TABLE 3: ALCOHOL OFFENDERS BY TIME OF DAY AND DAY OF WEEK YEAR ENDED 31 DECEMBER 2009

### FIGURE 3: ALCOHOL OFFENDERS BY TIME OF DAY AND DAY OF WEEK



# **TABLE 4: ALCOHOL OFFENDERS BY ROAD TYPE AND WEEKEND/NON-WEEKEND**YEAR ENDING 31 DECEMBER 2009

		Weekday	Weekend	Total
Open road				
	State highway	815	1192	2007
	Non-State highway	471	702	1173
	Open road subtotal	1286	1894	3180
Urban				
	State highway	690	1284	1974
	Non-State highway	7814	13391	21205
	Urban subtotal	8504	14675	23179
Speed limit unspecified		3325	5107	8432
Total		13115	21676	34791

## TABLE 5: ALCOHOL LEVEL BY DRIVER AGE YEAR ENDING 31 DECEMBER 2009

			Alcohol level (1)											
Age group	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	24	8	1214	2512	773	1093	1118	752	90	7	2	7	44	7644
20 to 24	36	0	0	2	1031	1847	2181	1757	313	26	2	0	135	7330
25 to 29	25	0	0	1	596	1106	1402	1161	247	33	8	0	139	4718
30 to 34	27	0	0	3	386	718	931	910	225	42	7	6	141	3396
35 to 39	30	0	0	3	358	626	826	830	279	51	10	4	158	3175
40 to 44	26	0	0	0	336	557	722	771	227	53	13	2	133	2840
45 to 49	24	0	0	1	227	483	602	577	193	52	14	0	107	2280
50 to 54	12	0	0	0	174	312	405	378	125	32	7	2	67	1514
55 to 59	6	0	0	0	93	218	270	247	65	16	3	1	27	946
60 and over	3	0	0	0	138	238	221	198	68	18	4	1	31	920
Unknown age	0	0	3	3	2	3	10	3	2	0	0	0	2	28
Total	213	8	1217	2525	4114	7201	8688	7584	1834	330	70	23	984	34791

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood. Breath test results have been converted to a blood equivalent eg breath reading of 400 micrograms per litre is equivalent to a blood reading of 80 milligrams per 100 millilitres.

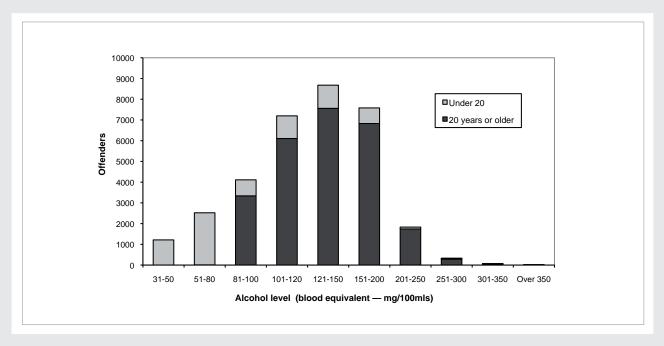
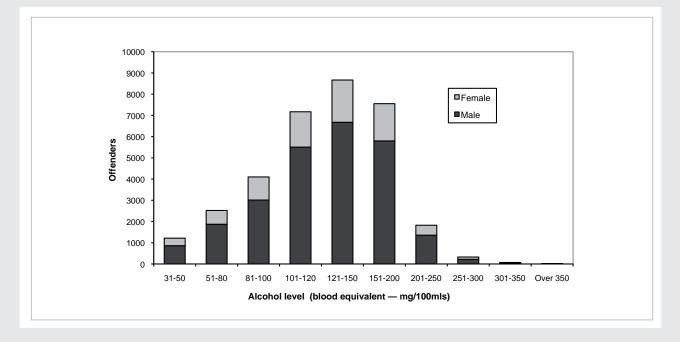


FIGURE 4: NUMBER OF OFFENDERS BY ALCOHOL LEVEL AND AGE

### FIGURE 5: NUMBER OF OFFENDERS BY ALCOHOL LEVEL AND SEX



				Evidenti	al breath test l	evels (1)			
Age group	No value (2)	0 to 150	151 to 300	301 to 400	401 to 500	501 to 600	601 to 1000	Over 1000	Total
15 to 19	712	6	1169	1242	491	758	1237	59	5674
20 to 24	1174	0	0	1	602	1122	2500	185	5584
25 to 29	769	0	0	1	364	725	1610	162	3631
30 to 34	594	0	0	2	224	451	1160	135	2566
35 to 39	603	0	0	1	206	385	1003	148	2346
40 to 44	527	0	0	0	194	361	913	139	2134
45 to 49	423	0	0	0	140	279	706	134	1682
50 to 54	298	0	0	0	104	193	492	87	1174
55 to 59	181	0	0	0	58	149	321	44	753
60 and over	230	0	0	0	100	157	255	35	777
Unknown age	4	0	2	1	0	1	7	1	16
Total	5515	6	1171	1248	2483	4581	10204	1129	26337

### TABLE 6: AGE OF MALE OFFENDERS BY BREATH TEST RESULT YEAR ENDING 31 DECEMBER 2009

NOTE: (1) In micrograms of alcohol per litre of breath. (2) Most will have blood test results (see Table 8).

## TABLE 7: AGE OF FEMALE OFFENDERS BY BREATH TEST RESULT YEAR ENDING 31 DECEMBER 2009

				Evidenti	al breath test l	levels (1)			
Age group	No value (2)	0 to 150	151 to 300	301 to 400	401 to 500	501 to 600	601 to 1000	Over 1000	Total
15 to 19	218	2	466	426	181	239	412	17	1961
20 to 24	269	0	0	0	223	409	775	61	1737
25 to 29	166	0	0	0	124	226	501	49	1066
30 to 34	154	0	0	0	80	145	376	60	815
35 to 39	164	0	0	1	78	130	351	97	821
40 to 44	132	0	0	0	81	101	328	61	703
45 to 49	137	0	0	0	53	104	246	55	595
50 to 54	80	0	0	0	34	61	124	30	329
55 to 59	53	0	0	0	13	24	72	11	173
60 and over	55	0	0	0	15	18	34	10	132
Unknown age	2	0	1	0	1	1	5	0	10
Total	1430	2	467	427	883	1458	3224	451	8342

NOTE: (1) In micrograms of alcohol per litre of breath. (2) Most will have blood test results (see Table 9).

						Blood ald	ohol test	levels (1)						
Age group	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	4960	0	167	145	72	73	90	95	11	4	2	2	53	5674
20 to 24	4414	0	0	1	155	258	275	256	75	7	1	0	142	5584
25 to 29	2867	0	0	0	81	124	191	170	49	13	3	0	133	3631
30 to 34	1980	0	0	1	61	100	118	120	44	16	3	1	122	2566
35 to 39	1756	0	0	1	53	81	103	134	49	13	4	1	151	2346
40 to 44	1614	0	0	0	42	80	109	95	48	16	4	1	125	2134
45 to 49	1271	0	0	0	16	80	86	96	28	13	5	0	87	1682
50 to 54	880	0	0	0	21	45	57	83	21	13	2	0	52	1174
55 to 59	572	0	0	0	13	34	42	47	13	6	1	1	24	753
60 and over	541	0	0	0	16	49	47	56	23	7	4	0	34	777
Unknown age	12	0	0	1	0	1	1	0	0	0	0	0	1	16
Total	20867	0	167	149	530	925	1119	1152	361	108	29	6	924	26337

## TABLE 8: AGE OF MALE OFFENDERS BY BLOOD ALCOHOL LEVEL YEAR ENDING 31 DECEMBER 2009

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood. (2) Most will have breath test results (see Table 6).

# TABLE 9: AGE OF FEMALE OFFENDERS BY BLOOD ALCOHOL LEVEL YEAR ENDING 31 DECEMBER 2009

						Blood ald	ohol test	levels (1)						
Age group	No value (2)	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Refused	Total
15 to 19	1748	0	63	45	29	20	16	19	6	1	0	3	11	1961
20 to 24	1469	0	0	0	51	55	60	66	7	5	0	0	24	1737
25 to 29	895	0	0	0	22	27	35	46	6	1	3	0	31	1066
30 to 34	657	0	0	0	20	18	23	37	13	2	2	1	42	815
35 to 39	650	0	0	0	21	28	26	34	24	4	2	2	30	821
40 to 44	568	0	0	0	19	15	24	22	12	10	4	0	29	703
45 to 49	460	0	0	1	17	18	24	21	15	8	1	0	30	595
50 to 54	249	0	0	0	13	9	7	16	8	3	1	0	23	329
55 to 59	117	0	0	0	6	6	7	18	5	0	2	0	12	173
60 and over	77	0	0	0	6	11	10	11	7	3	0	1	6	132
Unknown age	8	0	0	1	1	0	0	0	0	0	0	0	0	10
Total	6898	0	63	47	205	207	232	290	103	37	15	7	238	8342

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.(2) Most will have breath test results (see Table 7).

# BLOOD ALCOHOL LEVELS FOR FATALLY INJURED DRIVERS



Photo courtesy of NZ Police

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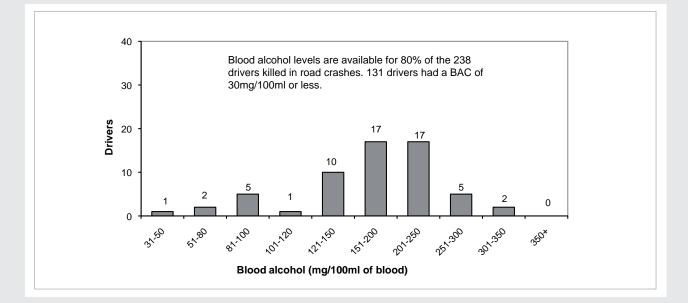
### NOTES

- 1. The data in this section are derived by matching the Ministry of Transport's Traffic Crash Reports with blood alcohol measurements taken as part of post mortem examinations for dead drivers.
- In cases where the driver dies at some time after the crash, the blood alcohol level measured in a post mortem examination may be different to that present at the time of the crash.

### SUMMARY

- 1. Of the 238 drivers/riders who were killed in road crashes in 2009, 191 (80 percent) were given a blood test to detect the presence of alcohol.
- 2. Fifty-seven drivers had a blood alcohol level above the legal limit. That is, 30 percent of those tested and at least 24 percent of the total number killed were above the legal limit.
- 3. A number of those not tested may also have had a blood alcohol level above the legal limit, so the percentage of killed drivers who were above the legal limit is likely to be higher than 24 percent. An estimate of the number of untested drivers who may have been above the legal limit can be made by assuming that the alcohol involvement rate for untested drivers with 'alcohol suspected' is the same as that for the tested drivers with 'alcohol suspected', and similarly for drivers with 'alcohol not suspected'. For 2009 this estimate gives a further nine drivers likely to be above the legal limit. Hence, based on the above assumptions, and the available data, a likely estimate is that about 28 percent of all the drivers killed were above the legal blood alcohol limit.

### FIGURE 1: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS YEAR ENDED 31 DECEMBER 2009

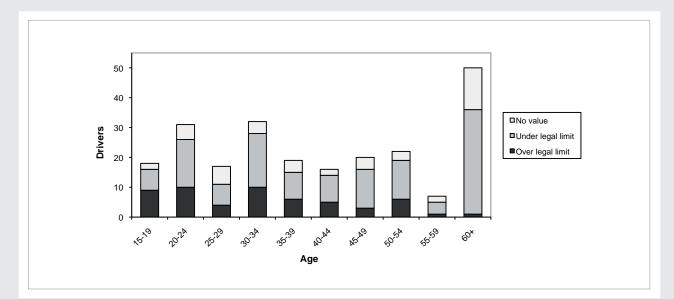


## TABLE 1: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY AGE GROUP

YEAR ENDED 31 DECEMBER 2009

						Blood	alcohol le	vels (1)					
Age group	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
15 to 19	2	7	-	-	1	-	3	3	1	1	-	-	18
20 to 24	5	16	-	-	2	-	1	3	4	-	-	-	31
25 to 29	6	7	-	-	1	-	-	2	1	-	-	-	17
30 to 34	4	17	1	-	-	-	2	2	3	3	-	-	32
35 to 39	4	9	-	-	-	-	2	1	2	-	1	-	19
40 to 44	2	8	-	1	-	-	-	2	1	1	1	-	16
45 to 49	4	13	-	-	1	-	-	1	1	-	-	-	20
50 to 54	3	12	-	1	-	-	1	2	3	-	-	-	22
55 to 59	2	4	-	-	-	-	1	-	-	-	-	-	7
60 and over	14	35	-	-	-	-	-	1	-	-	-	-	50
Unknown age	1	3	-	-	-	1	-	-	1	-	-	-	6
Total	47	131	1	2	5	1	10	17	17	5	2	-	238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.



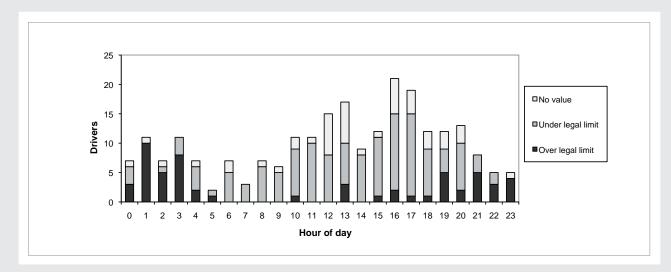
### FIGURE 2: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY AGE GROUP

### TABLE 2: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TIME OF DAY

YEAR ENDED 31 DECEMBER 2009

		Blood alcohol levels (1)											
Time of day	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Midnight to 12.59am	1	3	-	-	1	-	-	-	-	1	1	-	7
1am to 1.59am	1	-	-	-	1	-	2	4	2	1	-	-	11
2am to 2.59am	1	1	-	-	1	-	1	2	1	-	-	-	7
3am to 3.59am	-	3	-	-	-	1	2	1	3	-	1	-	11
4am to 4.59am	1	4	-	-	-	-	1	-	1	-	-	-	7
5am to 5.59am	-	1	-	-	-	-	-	-	1	-	-	-	2
6am to 6.59am	2	5	-	-	-	-	-	-	-	-	-	-	7
7am to 7.59am	-	3	-	-	-	-	-	-	-	-	-	-	3
8am to 8.59am	1	6	-	-	-	-	-	-	-	-	-	-	7
9am to 9.59am	1	5	-	-	-	-	-	-	-	-	-	-	6
10am to 10.59am	2	8	-	-	-	-	-	1	-	-	-	-	11
11am to 11.59am	1	10	-	-	-	-	-	-	-	-	-	-	11
noon to 12.59am	7	8	-	-	-	-	-	-	-	-	-	-	15
1pm to 1.59pm	7	7	-	-	-	-	1	1	1	-	-	-	17
2pm to 2.59pm	1	8	-	-	-	-	-	-	-	-	-	-	9
3pm to 3.59pm	1	10	-	-	-	-	1	-	-	-	-	-	12
4pm to 4.59pm	6	12	-	1	-	-	-	-	2	-	-	-	21
5pm to 5.59pm	4	13	1	-	-	-	-	1	-	-	-	-	19
6pm to 6.59pm	3	7	-	1	-	-	-	-	-	1	-	-	12
7pm to 7.59pm	3	4	-	-	-	-	1	1	2	1	-	-	12
8pm to 8.59pm	3	8	-	-	-	-	-	1	1	-	-	-	13
9pm to 9.59pm	-	3	-	-	1	-	-	1	2	1	-	-	8
10pm to 10.59pm	-	2	-	-	-	-	1	1	1	-	-	-	5
11pm to 11.59pm	1	-	-	-	1	-	-	3	-	-	-	-	5
	47	131	1	2	5	1	10	17	17	5	2	-	238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.



### FIGURE 3: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY HOUR OF DAY

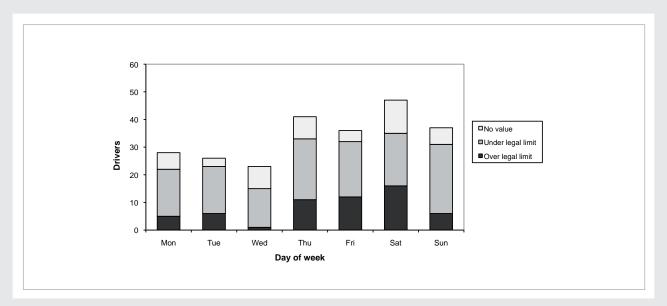
## TABLE 3: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY DAY OF WEEK

YEAR ENDED 31 DECEMBER 2009

			Blood alcohol test levels (1)           21         51         81         101         151         201         251         201										
Day of week	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Monday	6	17	-	-	-	-	2	2	1	-	-	-	28
Tuesday	3	17	-	-	1	-	-	1	3	1	-	-	26
Wednesday	8	14	-	-	-	-	-	1	-	-	-	-	23
Thursday	8	22	-	-	1	-	1	3	5	-	1	-	41
Friday	4	19	-	1	3	-	2	3	-	3	1	-	36
Saturday	12	18	-	1	-	1	4	5	6	-	-	-	47
Sunday	6	24	1	-	-	-	1	2	2	1	-	-	37
Total	47	131	1	2	5	1	10	17	17	5	2	-	238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.

# FIGURE 4: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY DAY OF WEEK

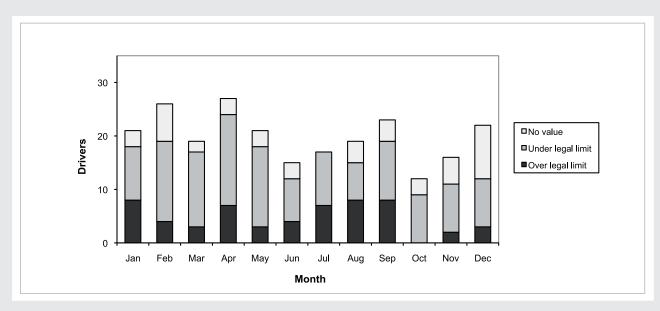


### TABLE 4: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY MONTH

YEAR ENDING 31 DECEMBER 2009

						Blood	alcohol lev	vels (1)					
Month	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
January	3	10	-	-	1	1	-	1	4	1	-	-	21
February	7	15	-	-	-	-	1	2	-	1	-	-	26
March	2	14	-	-	-	-	1	-	1	-	1	-	19
April	3	17	-	-	2	-	2	-	2	1	-	-	27
May	3	15	-	-	-	-	1	1	-	-	1	-	21
June	3	7	-	1	-	-	-	1	2	1	-	-	15
July	-	10	-	-	1	-	2	2	2	-	-	-	17
August	4	6	-	1	-	-	1	3	3	1	-	-	19
September	4	11	-	-	1	-	2	4	1	-	-	-	23
October	3	8	1	-	-	-	-	-	-	-	-	-	12
November	5	9	-	-	-	-	-	1	1	-	-	-	16
December	10	9	-	-	-	-	-	2	1	-	-	-	22
Total	47	131	1	2	5	1	10	17	17	5	2	-	238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.



### FIGURE 5: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY MONTH

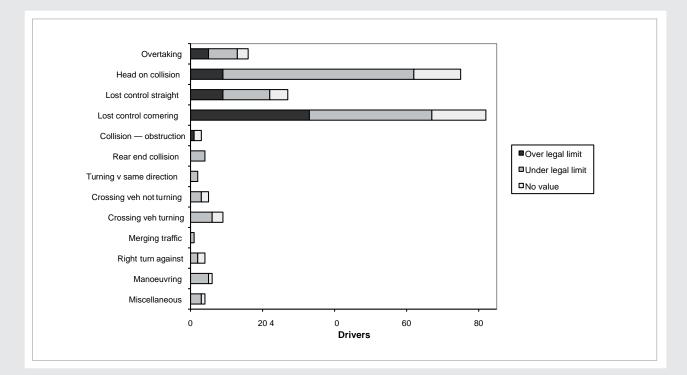
### TABLE 5: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF CRASH

YEAR ENDING 31 DECEMBER 2009

						Blood	alcohol lev	vels (1)					
Crash type	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Overtaking	3	8	-	-	-	-	1	3	1	-	-	-	16
Head-on collision	13	53	-	-	-	-	2	2	5	-	-	-	75
Lost control straight	5	13	-	-	2	-	2	2	2	1	-	-	27
Lost control cornering	15	31	1	2	3	1	5	10	9	3	2	-	82
Collision— obstruction	2	-	-	-	-	-	-	-	-	1	-	-	3
Rear end collision	-	4	-	-	-	-	-	-	-	-	-	-	4
Turning vehicle same direction	-	2	-	-	-	-	-	-	-	-	-	-	2
Crossing vehicle not turning	2	3	-	-	-	-	-	-	-	-	-	-	5
Crossing vehicle turning	3	6	-	-	-	-	-	-	-	-	-	-	9
Merging traffic	-	1	-	-	-	-	-	-	-	-	-	-	1
Right turn against	2	2	-	-	-	-	-	-	-	-	-	-	4
Manoeuvring	1	5	-	-	-	-	-	-	-	-	-	-	6
Miscellaneous	1	3	-	-	-	-	-	-	-	-	-	-	4
Total	47	131	1	2	5	1	10	17	17	5	2		238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood.

## FIGURE 6: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY CRASH TYPE

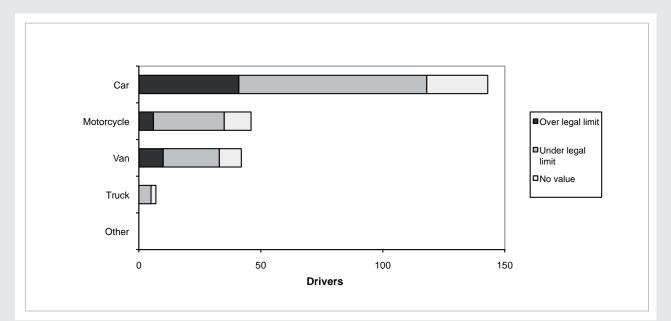


# **TABLE 6: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY TYPE OF VEHICLE**YEAR ENDING 31 DECEMBER 2009

			Blood alcohol levels (1)										
Vehicle type	No value	0 to 30	31 to 50	51 to 80	81 to 100	101 to 120	121 to 150	151 to 200	201 to 250	251 to 300	301 to 350	Over 350	Total
Car	25	76	-	1	3	1	7	12	13	3	2	-	143
Motorcycle	11	28	1	-	1	-	2	2	1	-	-	-	46
Van (2)	9	22	-	1	1	-	1	3	3	2	-	-	42
Truck	2	5	-	-	-	-	-	-	-	-	-	-	7
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
	47	131	1	2	5	1	10	17	17	5	2	-	238

NOTE: (1) In milligrams of alcohol per 100 millilitres of blood. (2) SUVs are included as vans.

## FIGURE 7: BLOOD ALCOHOL LEVELS OF FATALLY INJURED DRIVERS BY VEHICLE TYPE



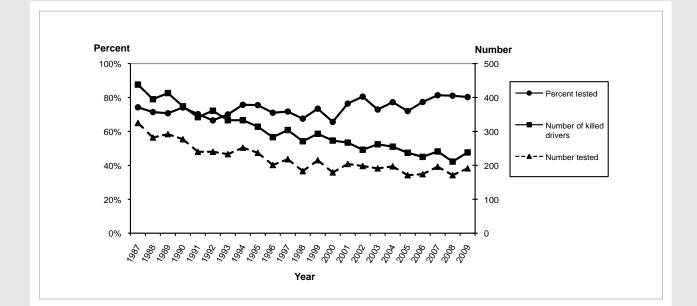
							Adjusted for	non-testing#
Year	Number of killed drivers	Number tested	Percent tested	Number over legal limit	Percent of drivers over legal limit	Percentage of those tested over the limit	Best estimate of number over the limit	Best estimate of percent over the limit
	(A)	(B)		(C)	(C/A)	(C/B)		
1987	438	325	74%	151	35%	47%	185	42%
1988	395	282	71%	122	31%	43%	156	40%
1989	413	292	71%	135	31%	44%	162	39%
1990	374	277	74%	137	37%	50%	172	46%
1991	342	240	70%	108	32%	45%	138	40%
1992	361	240	67%	98	27%	41%	129	36%
1993	333	233	70%	88	26%	38%	106	32%
1994	333	252	76%	105	32%	42%	127	38%
1995	314	237	76%	78	25%	33%	93	30%
1996	283	201	71%	66	23%	33%	84	30%
1997	304	218	72%	46	15%	21%	63	21%
1998	271	183	68%	56	21%	31%	74	27%
1999	293	215	73%	50	17%	23%	61	21%
2000	273	179	66%	55	20%	31%	58	21%
2001	267	204	76%	44	17%	22%	55	21%
2002	246	198	81%	52	21%	26%	60	24%
2003	262	191	73%	59	23%	31%	70	27%
2004	255	197	77%	57	22%	29%	69	27%
2005	237	171	72%	45	19%	26%	58	25%
2006	225	174	77%	46	20%	26%	54	24%
2007	241	196	81%	56	23%	29%	65	27%
2008	211	171	81%	53	25%	31%	59	28%
2009	238	191	80%	57	24%	30%	66	28%

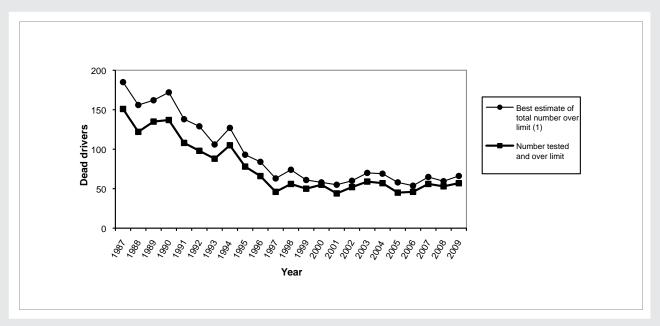
### TABLE 7: BLOOD ALCOHOL FOR FATALLY INJURED DRIVERS — HISTORICAL

NOTE: # This gives the best estimate of the number and percentage of all killed drivers likely to have a blood alcohol level over the legal limit after adjusting for the 20 percent or so of drivers that are not tested.

See Note 3 in the summary for more detail.

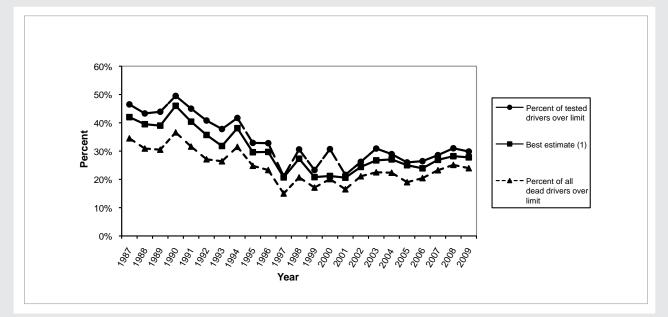
### FIGURE 8: NUMBER OF DRIVERS, NUMBER TESTED FOR ALCOHOL AND PERCENT TESTED FOR ALCOHOL





### FIGURE 9: NUMBER OF DEAD DRIVERS WHO HAD A BLOOD ALCOHOL LEVEL ABOVE THE LEGAL LIMIT

FIGURE 10: PERCENT OF DEAD DRIVERS WHO HAD A BLOOD ALCOHOL LEVEL ABOVE THE LEGAL LIMIT



**NOTE:** (1). After adjusting for those drivers who were not tested but may have been over the limit. See Note 3 in the summary for more detail.

# INTERNATIONAL COMPARISONS FOR ROAD DEATHS



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#### NOTES

- The data in this section are derived from data submitted to the International Road Traffic and Accident Database (IRTAD). Only countries that contribute to the database are included in this section.
- More about IRTAD (from http://internationaltransportforum.org/irtad/ about.html)

### Background

In 1988, the OECD Road Transport Research Programme established the International Road Traffic and Accident Database (IRTAD) as a mechanism for providing an aggregated database, in which international accident and victim as well as exposure data are collected on a continuous basis.

### What is IRTAD?

IRTAD includes both a database and a working group.

The IRTAD database includes accident and traffic data and other safety indicators for 30 countries.

The International Traffic Safety Data and Analysis Group (known as the IRTAD Group) is an on-going working group of the Joint Transport Research Centre of the OECD and the International Transport Forum. It is composed of road safety experts and statisticians from renowned safety research institutes, national road and transport administrations, international organisations, universities, automobilists associations, motorcar industry etc. Its main objectives are to contribute to international co-operation on road accident data and its analysis.

# TABLE 1: INTERNATIONAL COMPARISON OF DEATH RATES

Country	Year	Population (thousand)	Vehicles (thousand)	Vehicles per capita	Road deaths	Deaths per 100,000 population	Deaths per 10,000 vehicles
AUSTRALIA	2008	21374	14780	0.69	1442	6.8	1.0
AUSTRIA	2008	8332	5571	0.67	679	8.2	1.2
BELGIUM	2008	10667	6362*	0.60*	944	8.9	1.5*
CANADA	2007	32976	20593	0.62	2761	8.4	1.3
CZECH REPUBLIC	2008	10381	5503	0.53	1076	10.4	2.0
DENMARK	2008	5512	2888	0.52	406	7.4	1.4
FINLAND	2008	5300	3178	0.60	344	6.5	1.1
FRANCE	2008	61876	36847	0.60	4275	6.9	1.2
GERMANY	2008	82218	49330	0.60	4477	5.5	0.9
GREECE	2008	11214	7729	0.69	1553	13.9	2.0
HUNGARY	2008	10045	3625	0.36	996	9.9	2.7
ICELAND	2008	315	255	0.81	12	3.8	0.5
IRELAND	2008	4401	2498	0.57	279	6.3	1.1
ISRAEL	2008	7244*	2251*	0.31*	412	5.3*	1.8*
ITALY	2008	59619	46313*	0.78*	4731	7.9	1.0*
JAPAN	2008	127692	83031	0.65	6023	4.7	0.7
LUXEMBOURG	2008	484	432	0.89	35	7.2	0.8
NETHERLANDS	2008	16404	9058	0.55	677	4.1	0.7
NEW ZEALAND	2008	4269	3248	0.76	366	8.6	1.1
NORWAY	2008	4737	3182	0.67	255	5.4	0.8
POLAND	2008	38116	21337	0.56	5437	14.3	2.5
PORTUGAL	2008	10135	5716	0.56	885	8.7	1.5
SLOVAKIA	2007	5394	-	-	627	11.6	-
SLOVENIA	2008	2057	1269	0.62	214	10.4	1.7
SOUTH KOREA	2008	48456*	20020	0.41*	5870	12.7*	2.9
SPAIN	2008	45283	30969	0.68	3100	6.9	1.0
SWEDEN	2008	9183	5386	0.59	397	4.3	0.7
SWITZERLAND	2008	7593	5245	0.69	357	4.7	0.7
UNITED KINGDOM	2008	61383	35140	0.57	2645	4.3	0.8
USA	2008	304060	255748*	0.84*	37261	12.3	1.5*

**NOTE:** Data are for countries that contribute data to the International Road Traffic and Accident Database. Values marked with an \* use at least some data from an earlier year.

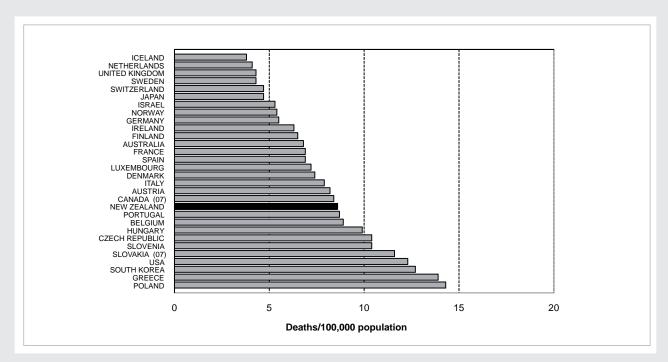
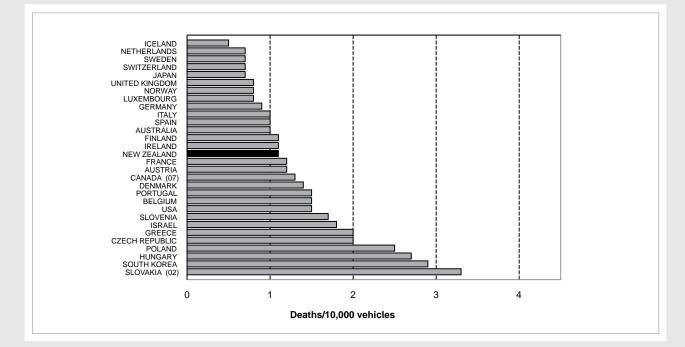


FIGURE 1A: INTERNATIONAL COMPARISON OF DEATHS PER 100,000 POPULATION (2008)

### FIGURE 1B: INTERNATIONAL COMPARISON OF DEATHS PER 10,000 VEHICLES (2008)



### TABLE 2: TYPE OF ROAD USER KILLED

		Percentage of deaths												
Country	Year	Vehicle occupants #	Motorcyclists (including mopeds)	Pedestrians	Cyclists	Unknown	Total number killed							
AUSTRALIA	2008	67.8	17	13.2	1.9	0.1	1442							
AUSTRIA	2008	58.8	17.1	15.0	9.1	0.0	679							
BELGIUM	2008	65.4	14.8	10.5	9.1	0.2	944							
CANADA	2007	75.2	8.1	13.6	2.4	0.7	2761							
CZECH REPUBLIC	2008	57.8	11.4	22.1	8.6	0.0	1076							
DENMARK	2008	55.2	17.2	14.3	13.3	0.0	406							
FINLAND	2008	66.0	13.4	15.4	5.2	0.0	344							
FRANCE	2008	58.3	25.4	12.8	3.5	0.0	4275							
GERMANY	2008	58.1	17.1	14.6	10.2	0.0	4477							
GREECE	2008	54.6	28.0	16.0	1.4	0.0	1553							
HUNGARY	2008	52.1	11.7	25.2	10.9	0.0	996							
ICELAND	2008	91.7	8.3	0.0	0.0	0.0	12							
IRELAND	2008	67.4	10.4	17.6	4.7	0.0	279							
ISRAEL														
ITALY														
JAPAN	2008	31.8	19.3	32.8	16.1	0.0	6023							
LUXEMBOURG														
NETHERLANDS	2008	52.3	16.2	8.3	21.4	1.8	677							
NEW ZEALAND	2008	75.1	13.7	8.5	2.7	0.0	366							
NORWAY	2008	68.6	14.5	12.9	3.9	0.0	255							
POLAND	2008	51.0	6.4	34.6	8.0	0.0	5437							
PORTUGAL														
SLOVAKIA														
SLOVENIA	2008	52.3	21.5	18.2	7.5	0.5	214							
SOUTH KOREA	2008	37.4	21.0	36.4	5.3	0.0	5870							
SPAIN	2008	60.2	21.9	16.2	1.7	0.0	3100							
SWEDEN	2008	65.5	15.6	11.3	7.6	0.0	397							
SWITZERLAND	2008	50.1	25.8	16.5	7.6	0.0	357							
UNITED KINGDOM	2008	54.0	19.2	22.3	4.4	0.0	2645							
USA	2008	71.9	14.2	11.7	1.9	0.2	37261							

NOTE: Data are for countries that contribute data to the International Road Traffic and Accident Database.

# Includes 'other' road users ie those that do not fit in any other category.

			1	Ag	e group in ye	ars	1	1	
Country	Year	0 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	Over 64	All ages
AUSTRALIA	2008	1.4	12.2	9.0	7.2	6.3	4.6	8.3	6.8
AUSTRIA	2008	0.9	15.7	7.2	6.3	8.9	6.7	12.0	8.2
BELGIUM	2007	1.7	18.9	15.7	11.0	8.6	8.4	9.2	10.1
CANADA	2007	1.9	15.1	9.7	7.6	7.8	7.7	10.1	8.4
CZECH REPUBLIC	2008	1.3	15.4	13.3	10.2	10.6	8.2	12.3	10.4
DENMARK	2008	1.9	12.6	8.4	8.1	5.2	6.2	11.1	7.4
FINLAND	2008	0.9	11.6	7.0	5.3	6.2	4.9	10.6	6.5
FRANCE	2008	1.1	14.6	9.1	7.0	6.0	4.9	7.9	6.9
GERMANY	2008	0.9	11.2	6.3	4.1	5.1	4.7	6.5	5.5
GREECE	2007	2.6	25.0	21.0	13.6	11.7	9.8	15.9	14.4
HUNGARY									
ICELAND									
IRELAND	2007	1.8	14.2	7.9	7.1	5.4	8.1	12.3	7.8
ISRAEL									
ITALY									
JAPAN	2008	0.8	4.9	2.7	2.6	3.3	4.4	10.5	4.7
LUXEMBOURG									
NETHERLANDS	2008	0.8	7.0	5.1	3.4	3.7	3.0	7.2	4.1
NEW ZEALAND	2008	2.6	18.9	11.2	6.1	6.2	7.7	9.3	8.6
NORWAY	2008	1.0	12.0	5.2	5.3	5.0	4.2	6.9	5.4
POLAND	2007	2.6	19.2	15.8	14.6	16.0	14.8	18.4	14.7
PORTUGAL									
SLOVAKIA									
SLOVENIA	2008	1.4	19.2	11.4	12.7	9.6	9.2	10.2	10.4
SOUTH KOREA	2007	2.3	9.2	9.0	10.1	14.8	20.4	37.1	12.7
SPAIN	2008	1.3	11.1	8.4	6.9	6.6	6.0	7.3	6.9
SWEDEN	2008	0.4	6.4	4.7	4.6	4.9	3.4	6.3	4.3
SWITZERLAND	2008	0.9	6.4	5.9	3.2	4.9	3.9	8.0	4.7
UNITED KINGDOM	2008	1.0	8.5	5.4	4.4	3.7	2.8	5.0	4.3
USA	2008	2.2	20.5	15.6	12.7	13.0	12.0	14.2	12.3

### TABLE 3: DEATHS PER 100,000 POPULATION BY AGE GROUP

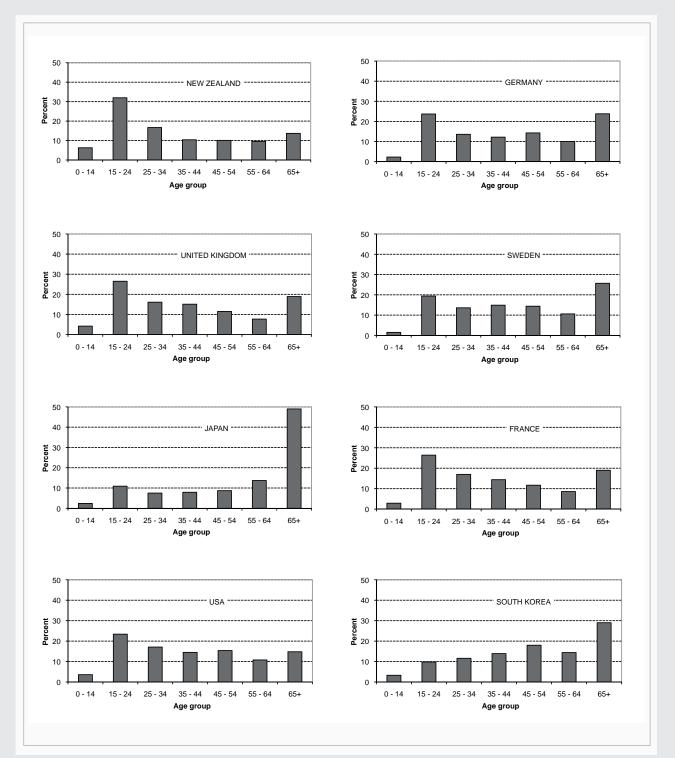
NOTE: Data are for countries that contribute data to the International Road Traffic and Accident Database.



### TABLE 4: PERCENTAGE OF DEATHS BY AGE GROUP

				Ag	e group in ye	ars			
Country	Year	0 to 14	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	Over 64	Unknown age
AUSTRALIA	2008	3.9	25.2	18.4	15.5	12.9	7.8	16.2	0.0
AUSTRIA	2008	1.8	23.6	11.5	12.8	15.9	9.1	25.3	0.0
BELGIUM	2007	2.8	22.7	20.1	16.3	12.2	9.7	15.7	0.6
CANADA	2007	3.9	24.4	15.8	13.7	14.6	10.7	16.2	0.7
CZECH REPUBLIC	2008	1.8	19.2	21.5	13.8	13.8	11.1	17.3	1.7
DENMARK	2008	4.7	20.4	14.0	16.3	9.6	11.1	23.9	0.0
FINLAND	2008	2.3	22.1	13.4	10.8	13.7	10.8	27.0	0.0
FRANCE	2008	2.9	26.4	17.0	14.4	11.7	8.6	19.0	0.0
GERMANY	2008	2.3	23.7	13.6	12.2	14.3	10.0	23.8	0.1
GREECE	2007	2.6	20.0	22.1	14.3	11.1	7.8	20.5	1.6
HUNGARY	2008	2.5	13.6	18.5	13.8	18.0	14.5	18.0	1.3
ICELAND	2008	0.0	25.0	8.3	8.3	0.0	25.0	33.3	0.0
IRELAND	2007	4.7	26.6	17.8	13.3	8.6	10.1	17.2	1.8
ISRAEL	2008	8.3	19.9	16.3	10.7	11.7	8.3	18.4	6.6
ITALY									
JAPAN	2008	2.4	10.9	7.5	7.9	8.7	13.7	49.0	0.0
LUXEMBOURG									
NETHERLANDS	2008	3.4	20.5	15.2	12.9	13.0	9.3	25.7	0.0
NEW ZEALAND	2008	6.3	32.0	16.7	10.4	10.1	9.6	13.7	1.4
NORWAY	2008	3.5	28.2	12.5	14.9	12.5	9.4	18.8	0.0
POLAND	2008	2.5	20.8	16.8	11.7	17.0	12.3	17.7	1.2
PORTUGAL									
SLOVAKIA									
SLOVENIA	2008	1.9	22.4	16.8	18.2	14.0	10.7	15.9	0.0
SOUTH KOREA	2007	3.3	9.8	11.6	13.9	18.0	14.4	29.0	0.0
SPAIN	2008	2.7	18.1	20.8	16.5	13.0	9.4	17.8	1.7
SWEDEN	2008	1.5	19.4	13.6	14.9	14.4	10.6	25.7	0.0
SWITZERLAND	2008	2.8	16.2	16.5	11.2	15.1	10.1	28.0	0.0
UNITED KINGDOM	2008	4.2	26.5	16.1	15.1	11.5	7.7	18.9	0.0
USA	2008	3.6	23.4	17.1	14.5	15.4	10.8	14.8	0.2

NOTE: Data are for countries that contribute data to the International Road Traffic and Accident Database.



### FIGURE 2: AGE DISTRIBUTION OF ROAD DEATHS FOR SELECTED COUNTRIES

### TABLE 5: DEATHS PER 100,000 POPULATION BY YEAR

						Year					
Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
AUSTRALIA	9.4	9.3	9.5	9.0	8.7	8.2	7.9	8.0	7.7	7.6	6.8
AUSTRIA	12.1	13.5	12.2	11.9	11.8	11.5	10.7	9.3	8.8	8.3	8.2
BELGIUM	14.7	13.7	14.4	14.5	13.1	11.7	11.2	10.4	10.2	10.1	8.9
CANADA	9.6	9.8	9.4	8.9	9.3	8.8	8.6	9.0	9.1	8.4	
CZECH REPUBLIC	13.2	14.1	14.5	13.0	14.0	14.2	13.5	12.6	10.4	11.9	10.4
DENMARK	9.4	9.7	9.3	8.1	8.6	8.0	6.8	6.1	5.6	7.4	7.4
FINLAND	7.8	8.4	7.7	8.4	8.0	7.3	7.2	7.2	6.4	7.2	6.5
FRANCE	15.2	14.4	13.6	13.8	12.9	10.2	9.3	8.8	7.7	7.5	6.9
GERMANY	9.5	9.5	9.1	8.5	8.3	8.0	7.1	6.5	6.2	6.0	5.5
GREECE	20.8	20.1	18.7	17.2	14.9	14.6	15.1	15.0	14.9	14.4	13.9
HUNGARY	13.5	12.9	12.0	12.2	14.0	13.1	12.8	12.7	12.9	12.2	9.9
ICELAND	9.9	7.6	11.5	8.5	10.1	8.0	7.9	6.5	10.3	4.9	3.8
IRELAND	12.4	11.0	11.0	10.7	9.6	8.4	8.8	9.7	8.6	7.8	6.3
ISRAEL	8.9	7.5	7.1	8.2	7.8	6.6	6.8	6.3	5.7	5.3	
ITALY	11.9	11.8	12.4	12.5	12.3	11.5	10.6	10.0	9.7	8.7	7.9
JAPAN	8.5	8.2	8.2	7.9	7.5	7.0	6.7	6.2	5.7	5.2	4.7
LUXEMBOURG	13.4	13.5	17.5	15.7	14.0	11.8	11.0	10.2	7.7	9.0	7.2
NETHERLANDS	6.8	6.9	6.8	6.2	6.1	6.4	5.0	4.6	4.5	4.3	4.1
NEW ZEALAND	13.2	13.4	12.1	11.8	10.3	11.5	10.7	9.9	9.5	10.0	8.6
NORWAY	8.0	6.8	7.6	6.1	6.9	6.2	5.6	4.8	5.2	5.0	5.4
POLAND	18.3	17.4	16.3	14.3	15.3	14.8	15.0	14.3	13.8	14.7	14.3
PORTUGAL	22.4	21.0	18.1	16.2	16.1	14.8	12.3	11.8	9.6	9.6	8.7
SLOVAKIA	15.2	12.0	11.6	11.4	11.3	12.0	11.2	10.4	10.7	11.6	
SLOVENIA	15.6	16.9	15.8	13.9	13.5	12.1	13.7	12.9	13.1	14.5	10.4
SOUTH KOREA	22.5	23.1	21.8	17.1	15.2	15.1	13.7	13.2	13.1	12.7	
SPAIN	15.1	14.5	14.5	13.8	12.9	12.8	11.0	10.2	9.3	8.6	6.9
SWEDEN	6.0	6.6	6.7	6.2	6.0	5.9	5.4	4.9	4.9	5.2	4.3
SWITZERLAND	8.4	8.2	8.3	7.6	7.1	7.5	6.9	5.5	5.0	5.1	4.7
TURKEY											
UNITED KINGDOM	6.1	6.1	6.1	6.1	6.0	6.1	5.6	5.5	5.4	5.0	4.3
USA	15.4	15.3	15.3	14.8	14.9	14.8	14.6	14.7	14.3	13.7	12.3

NOTE: Data are for countries that contribute data to the International Road Traffic and Accident Database.

### TABLE 6: DEATHS PER 10,000 VEHICLES BY YEAR

						Year					
Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
AUSTRALIA	1.5	1.4	1.5	1.4	1.3	1.2	1.2	1.2	1.1	1.1	1.0
AUSTRIA	2.0	2.2	1.9	1.8	1.8	1.8	1.7	1.5	1.4	1.3	1.2
BELGIUM	2.8	2.5	2.6	2.5	2.3	2.0	1.9	1.8	1.7	1.7	
CANADA	1.6	1.7	1.6	1.5	1.6	1.5	1.4	1.5	1.5	1.3	
CZECH REPUBLIC	3.1	3.3	3.4	3.1	3.3	3.2	3.0	2.7	2.1	2.3	2.0
DENMARK	2.1	2.2	2.1	1.8	1.9	1.7	1.5	1.3	1.2	1.5	1.4
FINLAND	1.7	1.8	1.6	1.7	1.6	1.4	1.4	1.3	1.1	1.2	1.1
FRANCE	2.7	2.5	2.4	2.3	2.1	1.7	1.5	1.4	1.3	1.2	1.2
GERMANY	1.6	1.5	1.5	1.3	1.3	1.2	1.1	1.0	0.9	0.9	0.9
GREECE	5.0	4.5	4.0	3.5	2.9	2.7	2.6	2.5	2.4	2.2	2.0
HUNGARY	4.9	4.9	4.4	4.4	4.8	4.2	3.9	3.8	3.8	3.5	2.7
ICELAND	1.8	1.3	1.8	1.3	1.5	1.1	1.1	0.9	1.3	0.6	0.5
IRELAND	3.0	2.6	2.5	2.3	2.0	1.7	1.8	1.9	1.6	1.4	1.1
ISRAEL	3.2	2.7	2.5	2.8	2.6	2.2	2.3	2.1	1.9	1.7	
ITALY	1.8	1.7	1.8	1.7	1.7	1.5	1.4			1.1	
JAPAN	1.4	1.3	1.3	1.3	1.2	1.1	1.0	1.0	0.9	0.8	0.7
LUXEMBOURG	1.9	1.9	2.4	2.1	1.8	1.5	1.4	1.3	1.0	1.1	0.8
NETHERLANDS	1.5	1.5	1.4	1.3	1.2	1.2	0.9	0.9	0.8	0.8	0.7
NEW ZEALAND	2.1	2.0	1.8	1.7	1.5	1.6	1.5	1.3	1.3	1.3	1.1
NORWAY	1.4	1.2	1.3	1.0	1.1	1.0	0.9	0.8	0.8	0.7	0.8
POLAND	5.6	5.1	4.5	3.8	3.8	3.5	3.4	3.2	2.9	2.9	2.5
PORTUGAL	5.1	4.4	3.9	3.4	3.3	3.0	2.4	2.3	1.7	1.7	1.5
SLOVAKIA	5.2	4.2	4.1	3.9	3.3						
SLOVENIA	3.3	3.4	3.1	2.7	2.6	2.3	2.5	2.2	2.3	2.4	1.7
SOUTH KOREA	7.1	7.2	6.9	5.1	4.4	4.1	3.6	3.4	3.3	3.2	2.9
SPAIN	2.8	2.6	2.5	2.3	2.1	2.1	1.8	1.6	1.4	1.3	1.0
SWEDEN	1.2	1.3	1.2	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.7
SWITZERLAND	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.8	0.7	0.7	0.7
TURKEY											
UNITED KINGDOM	1.3	1.2	1.2	1.2	1.1	1.1	1.0	1.0	1.0	0.9	0.8
USA	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.6	

NOTE: Data are for countries that contribute data to the International Road Traffic and Accident Database.

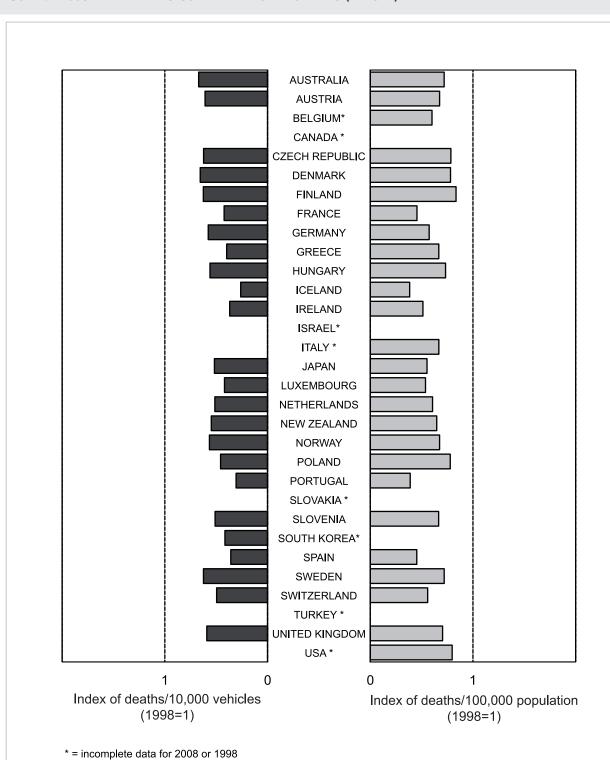


FIGURE 3: 2008 DEATH RATES COMPARED TO 1998 RATES (1998=1)

### TABLE 7: PERCENTAGE OF DEATHS BY ROAD CATEGORY

		URBAN ROADS		OUTSIDE UR	BAN AREAS				
Country	Year	All urban	Motorways	A-level roads	Other	Total	Total number killed		
AUSTRALIA									
AUSTRIA	2008	27.8	11.0	33.6	27.5	72.2	679		
BELGIUM	2007	25.4	14.2	13.5	41.3	74.6	1067		
CANADA	2007	29.6	13.6			70.4	2761		
CZECH REPUBLIC	2008	41.3	2.8	25.7	30.3	58.7	1076		
DENMARK	2008	31.8	8.4	15.3	44.6	68.2	406		
FINLAND	2008	31.4	2.6	32.8	33.1	68.6	344		
FRANCE	2008	28.9	5.9			71.1	4275		
GERMANY	2008	28.2	11.1	22.6	38.2	71.8	4477		
GREECE	2008	47.9	7.7			52.1	1553		
HUNGARY	2008	42.1	5.4	31.1	21.4	57.9	996		
ICELAND	2008	41.7				58.3	12		
IRELAND	2008	27.6	0.7			72.4	279		
ISRAEL	2008	39.6				60.4	412		
ITALY	2008	43.9	9.6	17.4	29.2	56.1	4731		
JAPAN	2008	54.4	2.4			45.6	6023		
LUXEMBOURG									
NETHERLANDS	2008	35.9	11.1			64.1	677		
NEW ZEALAND	2008	25.1	1.6	41.0	32.2	74.9	366		
NORWAY									
POLAND	2008	46.0	0.6			54	5437		
PORTUGAL	2008	47.1	10.8	5.4	36.6	52.9	885		
SLOVAKIA									
SLOVENIA	2008	34.1	4.7	23.8	37.4	65.9	214		
SOUTH KOREA	2008	49.8	7.5			50.2	5870		
SPAIN	2008	20.5	3.5			79.5	3100		
SWEDEN	2008	24.9	4.5			75.1	397		
SWITZERLAND	2008	37.8	7.6	35.0	19.6	62.2	357		
UNITED KINGDOM	2007	31.5	6.0			68.5	3059		
USA	2008	36.8	12.5	21.1	28.2	63.2	37261		

**NOTES:** Data are for countries that contribute data to the International Road Traffic and Accident Database. For New Zealand, A-level roads are State highways excluding motorways.

# ROAD USER BEHAVIOUR SURVEYS



Photo courtesy of NZTA

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### TABLE 1: SAFETY BELT WEARING RATES FOR FRONT SEAT ADULTS

In the survey carried out in March and April 2009, about 90,000 adult front seat drivers and passengers were surveyed at 274 sites around the country. Note that this survey was expanded from 114 sites in 2002 to 274 in 2003, so from 2003 results are not strictly comparable with those from earlier surveys.

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	90	93	93	98	100	90	87
Auckland	95	96	97	97	96	96	96
Waikato	93	94	96	94	95	97	95
Bay of Plenty	93	95	93	95	94	93	96
Gisborne	96	92	92	96	88	85	86
Hawke's Bay	90	91	91	97	94	89	97
Taranaki	93	92	96	95	95	96	96
Manawatu-Whanganui	88	92	92	96	96	96	95
Wellington	91	94	96	96	95	95	95
Nelson-Marlborough	96	96	97	97	97	97	98
West Coast	90	93	94	95	95	96	96
Canterbury	92	94	95	94	97	96	96
Otago	92	94	94	95	95	97	97
Southland	93	96	97	95	95	96	96
New Zealand	92	94	95	95	95	95	95

### TABLE 2: SAFETY BELT WEARING RATES FOR REAR SEAT ADULTS

In the survey carried out in November/December 2009 more than 12,000 adults seated in the rear seats of cars were observed at 139 sites around the country. Each site was surveyed between 2pm and 4pm on Sunday afternoons during the school term. Only adults seated in the rear window positions were included in the survey.

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	87	89	94	99	71	73	94
Auckland	82	90	82	93	92	88	76
Waikato	82	85	83	83	88	83	91
Bay of Plenty	70	78	85	90	76	86	87
Gisborne	69	59	97	86	92	*see note	79
Hawke's Bay	76	87	96	90	84	87	94
Taranaki	83	81	92	91	93	94	94
Manawatu-Whanganui	85	85	87	94	92	92	87
Wellington	82	87	84	89	87	89	84
Nelson-Marlborough	90	93	89	88	87	83	85
West Coast	78	85	89	95	91	92	93
Canterbury	82	88	85	87	91	91	87
Otago	79	78	88	92	84	79	90
Southland	88	74	70	64	71	78	77
New Zealand	81	86	86	89	87	87	87

\* NOTE: Sample too small in this area to provide regional estimates.

### TABLE 3: CHILD RESTRAINTS IN CARS

In the survey carried out in September 2009, children aged under 5 years in more than 5,300 cars were observed at 112 sites around the country. The table shows the percentage restrained in appropriate child restraints. In the 2009 survey 52 percent were restrained in child seats, 18 percent in booster seats, 20 percent in infant seats and less than half a percent in child harnesses. A further five percent were restrained by adult safety belts. The remaining four percent were not restrained at all.

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	84	95	98	100	95	88	89
Auckland	82	81	86	92	90	90	89
Waikato	90	87	89	87	89	93	89
Bay of Plenty	78	81	91	89	86	87	84
Gisborne	76	88	92	83	100	94	90
Hawke's Bay	83	92	98	89	92	92	94
Taranaki	91	94	87	95	96	96	88
Manawatu-Whanganui	89	94	91	94	97	95	99
Wellington	90	89	91	92	90	81	97
Nelson-Marlborough	92	93	91	93	91	96	96
West Coast	92	92	92	93	96	99	99
Canterbury	93	93	83	85	90	91	94
Otago	90	95	91	91	98	96	93
Southland	88	83	94	92	90	95	92
New Zealand	86	87	89	91	91	90	91

### TABLE 4: CYCLE HELMET WEARING RATES

In the survey carried out in March and April 2009, more than 5,000 cyclists of primary and intermediate school age, secondary school age and adults were surveyed at 58 sites around the country. Each site was surveyed for two separate hours, typically between 8am and 9am, and between 3pm and 4pm, on normal school weekdays.

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	69	85	91	91	77	84	85
Auckland	76	85	76	89	89	85	88
Waikato	93	91	91	88	89	82	85
Bay of Plenty	87	84	87	93	93	92	90
Gisborne	96	92	93	93	79	96	96
Hawke's Bay	85	95	94	98	90	94	92
Taranaki	86	92	92	95	98	90	84
Manawatu-Whanganui	92	93	95	96	93	94	94
Wellington	91	94	93	95	88	95	86
Nelson-Marlborough	95	95	92	94	93	93	93
West Coast	87	95	82	88	94	94	96
Canterbury	89	94	90	98	96	97	96
Otago	91	98	94	91	93	93	95
Southland	92	95	94	95	95	92	91
New Zealand	89	92	91	94	92	92	92



### OPEN ROAD CAR SPEEDS

In the survey of open road speeds of cars carried out in July/August 2009, about 13,700 cars were surveyed at approximately 65 sites around the country.

The speed surveys are designed to monitor changes in free speeds of vehicles. That is, speeds attained when the vehicle is unimpeded by the presence of other vehicles (for example there is some distance between a vehicle travelling at a free speed and the vehicle in front of it) or by environmental features such as traffic lights, intersections, hills, corners or road works. By monitoring the speeds of unimpeded vehicles these surveys measure driver choice of speed.

The regional surveys are designed to track changes over time in driver speed choice within regions. They are not designed to provide valid comparisons between regions.

### TABLE 5: MEAN OPEN ROAD SPEEDS (KM/H)

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	95.7	96.5	95.9	96.0	95.0	96.3	95.8
Auckland	98.5	97.0	97.0	96.5	96.2	95.3	95.9
Waikato	97.0	97.0	96.2	96.6	95.2	94.6	94.6
Bay of Plenty	95.1	96.4	95.5	91.2	91.5	95.4	96.4
Gisborne	97.7	97.3	96.2	97.3	97.8	95.8	96.7
Hawke's Bay	100.0	99.0	98.0	96.1	96.3	99.8	99.3
Taranaki	97.7	98.1	96.2	94.2	94.4	94.3	93.0
Manawatu-Whanganui	100.8	101.1	101.2	97.3	97.7	97.0	97.4
Wellington	97.4	96.2	96.6	92.1	93.2	94.0	95.6
Nelson-Marlborough	-	-	-	-	-	-	*see note
West Coast	-	-	-	-	-	-	*see note
Canterbury	100.0	99.3	99.1	100.2	99.3	98.5	98.9
Otago	97.4	97.9	98.0	97.3	99.8	100.9	99.7
Southland	99.2	98.3	-	*see note	99.4	100.1	99.9
New Zealand	98.0	97.8	97.1	96.4	96.3	96.6	96.3

### TABLE 6: 85TH PERCENTILE OPEN ROAD SPEEDS (KM/H)

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	105	105	105	104	102	104	103
Auckland	112	110	110	109	109	108	110
Waikato	103	103	102	102	101	101	100
Bay of Plenty	105	107	105	101	101	106	107
Gisborne	108	108	106	107	107	105	106
Hawke's Bay	106	106	104	101	101	105	104
Taranaki	105	105	103	102	102	102	100
Manawatu-Whanganui	107	108	108	104	103	103	103
Wellington	106	104	105	101	102	102	104
Nelson-Marlborough	-	-	-	-	-	-	*see note
West Coast	-	-	-	-	-	-	*see note
Canterbury	106	105	104	105	104	103	103
Otago	105	105	104	104	105	105	104
Southland	107	104	-	*see note	105	106	105
New Zealand	105	105	104	103	103	103	103

85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.

\* NOTE: Too few sites in this area to provide regional estimates.

### URBAN CAR SPEEDS

In the survey of urban speeds of cars carried out in July/August 2009, about 16,100 cars were surveyed at approximately 65 sites around the country.

The speed surveys are designed to monitor changes in free speeds of vehicles. That is, speeds attained when the vehicle is unimpeded by the presence of other vehicles (for example there is some distance between a vehicle travelling at a free speed and the vehicle in front of it) or by environmental features such as traffic lights, intersections, hills, corners or road works. By monitoring the speeds of unimpeded vehicles these surveys measure driver choice of speed.

The regional surveys are designed to track changes over time in driver speed choice within regions. They are not designed to provide valid comparisons between regions.

### TABLE 7: MEAN URBAN SPEEDS (KM/H)

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	53.1	51.8	51.6	53.0	53.0	52.4	51.8
Auckland	55.9	54.5	54.5	55.4	55.3	55.1	54.8
Waikato	55.8	54.4	53.7	53.9	52.2	52.5	51.5
Bay of Plenty	49.5	49.6	49.6	47.4	48.2	49.5	49.2
Gisborne	56.6	56.0	55.6	55.7	55.2	55.8	55.0
Hawke's Bay	53.7	53.3	51.3	52.3	51.7	52.2	52.7
Taranaki	51.2	50.3	49.5	48.4	48.9	48.2	48.7
Manawatu-Whanganui	51.9	51.5	51.8	50.3	50.2	51.6	51.2
Wellington	51.5	50.8	49.9	49.1	49.4	49.7	49.3
Nelson-Marlborough	50.1	50.4	49.7	49.0	49.0	50.4	48.9
West Coast	-	-	-	-	-	-	*see note
Canterbury	53.2	52.1	52.3	52.5	52.5	52.1	52.5
Otago	52.7	52.3	-	53.1	52.4	51.4	51.4
Southland	54.2	54.4	-	*see note	55.1	54.4	54.3
New Zealand	53.7	52.9	52.4	52.6	52.5	52.6	52.3

### TABLE 8: 85TH PERCENTILE URBAN SPEEDS (KM/H)

REGION	2003	2004	2005	2006	2007	2008	2009
Northland	58.5	57.0	57.0	57.5	58.0	57.0	56.0
Auckland	61.0	59.5	59.0	60.0	60.0	60.0	59.0
Waikato	61.5	60.0	59.5	59.5	58.0	58.0	57.0
Bay of Plenty	55.5	55.0	54.5	53.0	53.5	54.0	54.0
Gisborne	63.5	62.5	62.5	61.5	61.5	62.5	62.0
Hawke's Bay	59.0	58.5	56.5	57.0	57.0	57.0	57.0
Taranaki	56.5	55.0	55.0	54.0	54.0	53.0	54.0
Manawatu-Whanganui	57.0	56.5	56.5	55.0	55.0	56.0	56.0
Wellington	56.0	55.0	54.0	53.0	53.0	53.5	53.0
Nelson-Marlborough	55.5	55.0	54.5	53.5	53.5	54.5	53.5
West Coast			-	-	-	-	*see note
Canterbury	59.0	58.0	58.0	58.0	59.0	58.0	58.0
Otago	58.0	57.0	-	57.0	57.0	56.5	56.5
Southland	59.0	60.0	-	*see note	60.5	59.5	58.5
New Zealand	59.5	58.0	58.0	58.0	58.0	58.0	57.0

85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.

\* NOTE: Too few sites in this area to provide regional estimates.



# DRIVER LICENCE AND VEHICLE FLEET STATISTICS



Photo courtesy of NZTA

Age group	Lear	Learner		icted	Fi	Total	
years	Males	Females	Males	Females	Males	Females	
15 years	9597	8377	1923	1178			21075
16 years	9796	9514	8926	6396	843	526	36001
17 years	8545	9215	9538	7855	5444	3755	44352
18 years	7769	9207	9477	8659	9333	6779	51224
19 years	6774	8481	8916	8758	11889	8580	53398
20 to 24	25449	33936	36234	41942	85222	60693	283476
25 to 29	17268	24577	25647	34311	115066	88683	305552
30 to 34	9717	14709	15802	24009	127448	112080	303765
35 to 39	5789	9816	8131	14171	143743	137166	318816
40 to 44	3595	7456	4101	8214	159329	150865	333560
45 to 49	2087	5058	2193	4627	156338	148910	319213
50 to 54	1454	3582	1425	2419	143706	134706	287292
55 to 59	957	1918	844	1311	118562	110437	234029
60 to 64	689	1077	520	694	109200	100419	212599
65 to 69	433	443	358	305	78042	71510	151091
70 to 74	333	231	271	125	61374	55860	118194
75 to 79	37	28	71	47	42122	38158	80463
80 and over	5	10	15	11	37439	33944	71424
Total	110294	147635	134392	165032	1405100	1263071	3225524

### NUMBER OF CAR LICENCES HELD BY AGE AND SEX OF LICENCE HOLDER AS AT 4 JULY 2009

### NUMBER OF MOTORCYCLE LICENCES HELD BY AGE AND SEX OF LICENCE HOLDER AS AT 4 JULY 2009

Age group	Lear	Learner		icted	Fu	Total	
years	Males	Females	Males	Females	Males	Females	
15 years	215	13	27				255
16 years	367	38	127	18	3		553
17 years	471	49	178	12	51	2	763
18 years	689	68	204	13	78	4	1056
19 years	782	79	216	19	96	11	1203
20 to 24	5693	698	1644	142	1142	94	9413
25 to 29	7594	1202	1745	240	2969	327	14077
30 to 34	10189	2047	1988	315	6900	859	22298
35 to 39	9988	2777	2245	576	18996	3780	38362
40 to 44	4566	1755	1185	415	37463	10158	55542
45 to 49	2499	970	657	258	51343	13894	69621
50 to 54	1434	630	380	156	53972	15333	71905
55 to 59	771	294	233	79	43536	11341	56254
60 to 64	440	154	109	34	43492	9137	53366
65 to 69	175	45	36	12	32515	6248	39031
70 to 74	81	14	20	8	25118	4046	29287
75 to 79	19	4	3	2	16831	2234	19093
80 and over	5	1	1		5364	531	5902
Total	45978	10838	10998	2299	339869	77999	487981

**NOTE:** The tables include all drivers eligible to be on the road as at the stated date. Disqualified and expired licences are excluded. **SOURCE:** National Register of Driver Licences (maintained by NZ Transport Agency).

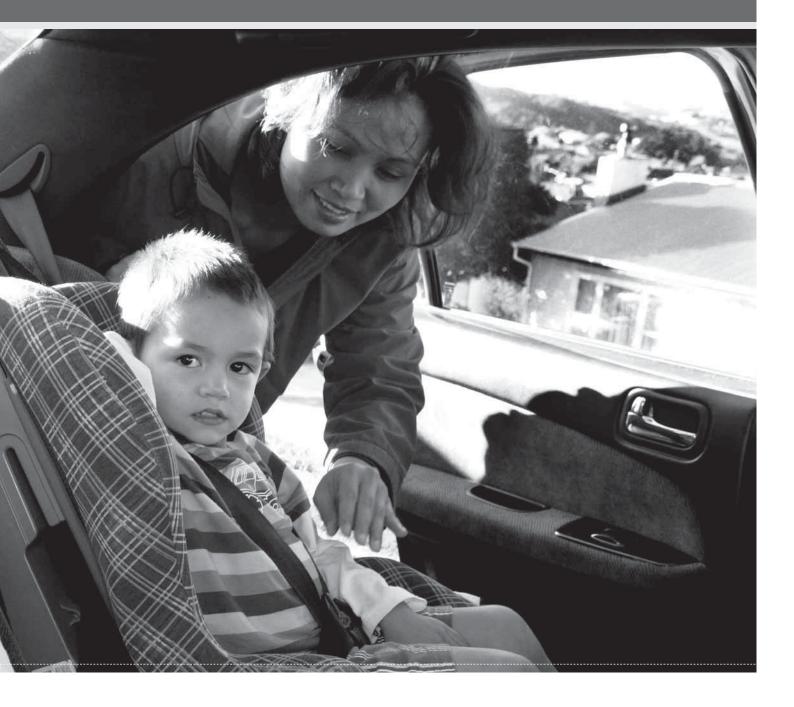
### VEHICLE FLEET AS AT 30 JUNE 2009

VEHICLE DESCRIPTION	TOTAL FLEET	EXCLUDING EXEMPT AND RESTORATION LICENCES
Moped	31830	27407
Trailer/caravan	589386	562982
Tractor	37276	35881
Agricultural machine	1638	1504
Trailer not designed for highway use	1203	1132
Mobile machine	15083	14358
Passenger car/van	2773293	2602924
Goods van/truck/utility	519842	473538
Bus	22105	20253
Motor caravan	28181	22118
Motorcycle	108846	74053
ATV	5036	4836
Special purpose vehicle	2723	2401
Total	4136442	3843387
Vehicles used for crash rate calculation (Table 1, Page 14)		3220293

SOURCE: Motor Vehicle Register, NZ Transport Agency.

**NOTES:** The total fleet is the number of vehicles recorded in the Motor Vehicle Register, excluding vehicles with cancelled/lapsed registration. The shaded cells in the table above indicate the vehicle categories included for the purpose of calculating crash rates (see Table 1, page 17). These include motorised vehicles designed primarily for on road use and exclude vehicles with an exempt or restoration licence.

# NEW ZEALAND INJURY PREVENTION STRATEGY SERIOUS INJURY OUTCOME INDICATORS



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### NOTES

### 1. The New Zealand Injury Prevention Strategy (NZIPS)

The New Zealand Injury Prevention Strategy is an expression of the government's commitment to working with organisations and groups in the wider community to improve the country's injury prevention performance. The Strategy's vision is "a safe New Zealand, becoming injury free". (For further details see www.nzips.govt.nz.)

'Motor vehicle traffic crashes' is one of the six priority areas identified in the strategy.

### 2. NZIPS serious injury indicators

Official serious injury outcome indicators have been developed for each of the six priority areas as the main means of measuring performance in reducing injury. Chart books with the full set of indicators can be found by visiting the Statistics NZ website:

www.statistics.govt.nz and searching for NZIPS serious injury indicators.

Several of the official NZIPS indicators for motor vehicle traffic crashes are presented in this section.

#### 3. What is a serious injury?

The definition of serious injury adopted for the official NZIPS indicators is: serious injuries are those that result in death or an admission to hospital that is associated with at least a 6 percent chance of death. The methods by which cases of fatal and serious non-fatal injury are identified are described briefly in *The New Zealand Injury Prevention Strategy Injury Indicators: Technical Report*. The technical report can be found on the Statistics NZ website.

### 4. The graphs

### Time period

Where possible, the period presented for serious non-fatal injuries is 1994 to 2008. For fatal injuries, the period presented is 1994 to 2006. Because many cases of injury-related death are required to be reviewed by a Coroner, there is a time delay in the recording of the cause of fatal injury. Hence, 2006 is the most recent year available for the mortality data.

#### Bar shading

The coding scheme used for the diagnosis of injury is the World Health Organization (WHO) International Classification of Diseases (ICD)4. During the period considered in these charts, the ICD was substantially revised, and a new version of the coding scheme was introduced (from ICD-9 to ICD-10, refer Technical Report). This change has resulted in some differences in the number of deaths and hospitalisations attributable to injury. Readers should exercise caution if commenting on trends that include indicator values based on both ICD-9 and ICD-10 coded data. For this reason, the bars on the graphs have been shaded differently to highlight the change. Intermediate shading has been used for the bars for 1999 for indicators based on hospitalisation data, because 1999 was a transitional year when both ICD-9 and ICD-10 coding systems were used.

### Baseline

The 'baseline' provides a point from which to compare the frequencies and rates of injuries. It is the average count or rate of injury for the three years leading up to the launch of NZIPS (2001-2003).

### Confidence intervals

Each bar on each chart has confidence intervals shown as vertical lines. These give an indication of the amount of random variation associated with a single year's indicator value. Where wide confidence intervals are displayed, little weight should be given to the variation from one year to the next — it could be due to chance alone. When considering trends, observing the degree of overlap of confidence intervals for individual bars (years) is helpful as an aid to interpretation of trends. If confidence intervals do not overlap the baseline, this is indicative of a change from baseline that is unlikely to be due to chance alone.

#### 5. Age standardised rates

Age standardised rates provide an estimate of an individual's average annual risk of being injured. Age standardisation is a process of adjusting the rates of injury to account for changes in the age structure of a population over time. It allows comparison of the rates of injury from one year to another, taking into account the ageing population.

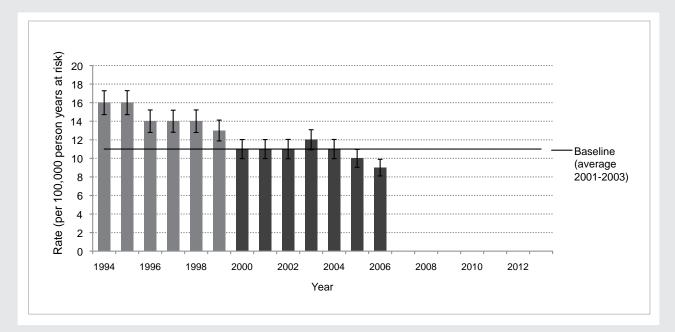
	NUM	BER OF SERIOUS INJU	IRIES	AGE STANDARDISED RATE (PER 100,000 PERSON YEARS AT RISK)			
Year	Fatal injury	Serious non-fatal injury	Fatal and serious injury	Fatal injury	Serious non-fatal injury	Fatal and serious injury	
	M11	M01	M21	M12	M02	M22	
1994	585	1351	1936	16	37	52	
1995	594	1491	2085	16	40	56	
1996	520	1479	1999	14	39	53	
1997	530	1445	1975	14	38	52	
1998	519	1465	1984	14	38	52	
1999	510	1480	1990	13	39	52	
2000	439	1559	1998	11	41	52	
2001	440	1551	1991	11	40	52	
2002	422	1449	1871	11	37	48	
2003	465	1615	2080	12	40	52	
2004	436	1515	1951	11	37	48	
2005	405	1749	2154	10	42	52	
2006	391	1804	2195	9	43	52	
2007		1839			43		
2008		1813			42		

### TABLE 1: NEW ZEALAND INJURY PREVENTION STRATEGY SERIOUS INJURY OUTCOME INDICATORS

Fatal injury Ministry of Health Mortality Collection

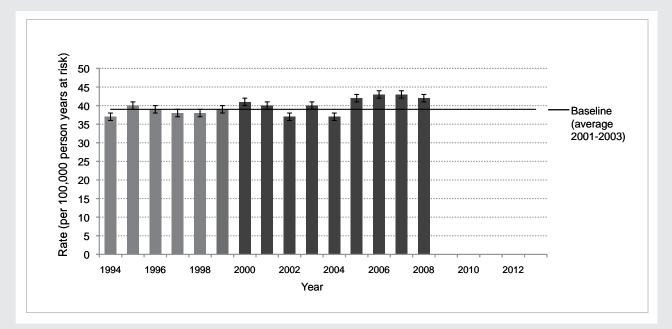
Population

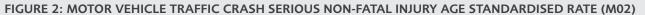
Non-fatal injury Ministry of Health National Minimum Data Set (1999 data are affected by the changeover from ICD-9 to ICD-10). Statistics New Zealand



### FIGURE 1: MOTOR VEHICLE TRAFFIC CRASH FATAL INJURY AGE STANDARDISED RATE (M12)

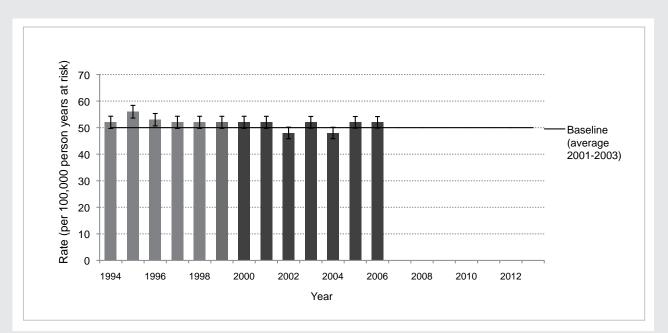
NOTE: 2006 data are provisional NUMERATOR SOURCE: Ministry of Health Mortality Collection DENOMINATOR SOURCE: Statistics New Zealand





NOTE: 1999 data are affected by the changeover from ICD-9 to ICD-10. 2008 data are provisional NUMERATOR SOURCE: Ministry of Health National Minimum Data Set DENOMINATOR SOURCE: Statistics New Zealand

FIGURE 3: MOTOR VEHICLE TRAFFIC CRASH SERIOUS (FATAL AND NON-FATAL) INJURY AGE STANDARDISED RATE (M22)



NOTE: 1999 data are affected by the changeover from ICD-9 to ICD-10. 2006 data are provisional NUMERATOR SOURCE: Ministry of Health Mortality Collection and National Minimum Data Set DENOMINATOR SOURCE: Statistics New Zealand

# LEGISLATION



### LEGISLATION

# The following is a brief listing of traffic legislation introduced since 1965.

Further information can be obtained from Transport and Land Transport Amendment Acts, the Driver Licensing Rule, the annual reports of the Ministry of Transport and the NZTA, Transport Law published by Butterworths and Brooker's Law of Transportation.

- **1965** 1. All new motor cars, station wagons and light trucks must be fitted with safety belts.
- **1967** 1. Introduction of the demerit points system.
  - 2. Driving at an 'unreasonably slow speed' became a traffic offence.
- **1969** 1. Introduction of breath and blood alcohol tests.
  - 2. Introduction of parking infringement system.
  - 3. Minimum tread depth for pneumatic tyres prescribed.
- **1971** 1. Speeding Infringement System introduced.
- **1972** 1. Compulsory testing for blood alcohol of accident victims at hospitals.
  - 2. Compulsory fitting and wearing of safety belts for certain drivers and front seat passengers 15 years and over in light vehicles registered since 1965.
- 1973 1. Safety helmets compulsory for motorcyclists and pillion riders at all speeds, previously (from 1956) they were only compulsory if travelling in excess of 30 mph (50 km/h).
  - Maximum open road speed limit reduced from 55 mph to 50 mph (80 km/h) as part of fuel conservation measures. Effective from 4 December 1973.
- 1975 1. Seat belt requirements (see 1972 above) extended to motor vehicles registered on or after 1 January 1955.
  - 2. Change over to metric speed limits and road signs.
- **1977** 1. New traffic regulations (Traffic Regulations 1976) came into effect bringing major changes to give way rules, intersections and pedestrian crossings.
- 1978 1. Introduction of evidential breath testing.Lowering of permissible blood alcohol level from 100 milligrams of alcohol per 100 millilitres of

blood to 80 milligrams per 100 millilitres. Tougher criteria for issue of limited licences to disqualified drivers.

- **1979** 1. Age for compulsory seat belt use lowered to eight years old.
- **1980** 1. Introduction of Traffic Infringement Systems to speed up processing of minor traffic offences plus notices of prosecution servable on roads.
- **1981** 1.Traffic Regulations 1976 heavily amended to provide legal framework for safe installation and inspection of alternative fuel systems.
- 1983 1. The Transport Amendment Act (No. 2) 1983. Introduced to provide an orderly phase-out of the 150 km rail protection by allowing shippers, upon payment of a long distance haulage fee, to use road transport in circumstances in which they were previously required to use rail. Effective from 1 November 1983.
  - 2. The Transport Amendment Act (No. 3) 1983. Allowing the Court to make an order requiring a person, convicted twice or more in a five year period of specific alcohol or drug related traffic offences, to attend an Assessment Centre and for disqualification from holding or obtaining a driver's licence until the Secretary for Transport makes an order removing that disqualification. Effective from 1 December 1983.
- **1984** 1. Regulations governing the approval and use of child restraints introduced.
- 1985 1. The open road speed limit was increased from 80 km/h to 100 km/h for all vehicles except heavy motor vehicles (speed limit now 90 km/h), articulated vehicles (90 km/h) and vehicles towing trailers (80 km/h). Effective from 1 July 1985.
- **1986** 1. Staggered relicensing of motor vehicles and provision for lifetime drivers' licences introduced.
  - 2. Strict liability for carriage of insecure loads came into effect (1 February).
- **1987** 1. Increased powers of arrest for traffic officers, new driving hours and logbook requirements for professional drivers, graduated licensing system and increased penalties for unlicensed driving introduced (1 August).

- 1988 1. Lowering the legal breath alcohol level from 500  $\mu$ g/l to 400  $\mu$ g/l and the removal of the officer's right to require a blood sample in certain circumstances. Increased maximum monetary penalty for serious traffic offences and an increase in the level of infringement fees payable for a number of offences. Introduction of community based sentences as a substitute for disqualification. Increased powers for enforcement officers dealing with offenders who fail to stop.
  - 2. Introduction of class C roads and the removal of the class II road classification. Revised maximum weights for heavy motor vehicles.
- **1989** 1. Introduction of the Transit New Zealand Act.
  - 2. Introduction of the Transport Services Licensing Act.
  - Introduction of a new schedule of infringement fees to cover a wide range of minor offences and road user charges infringements. Increased fees for speeding infringements.
  - 4. Traffic enforcement officers given power of entry on to private property for the purposes of undertaking drink driving procedures.
  - 5. Assumption of national traffic enforcement control by the Ministry of Transport.
  - 6. Introduction of new regulations governing the transport of hazardous substances.
- **1990** 1. Amendment made to the Transport Act to validate the breath test notice in its existing form.
  - 2. Introduction of the Transport (Vehicle Standards) Regulations 1990.
- **1991** 1. There was a change in the driver licence regulations to allow the introduction of the 'scratch' driver licence testing forms.
- **1992** 1. The merger of the TSS branch of the Land Transport Division with the NZ Police was implemented 1 July.
  - Amendments made to the Transport Act to allow for compulsory breath testing, reduced alcohol limits for under 20 year olds, extended owner liability regime and reduced driving hours regime — all to be brought in over 1993.

- Amendments made to the Transport Services
   Licensing Act to allow for area knowledge for taxi
   drivers, the licensing of rail services, 5 year ID
   cards and tighter controls over taxi organisations
   — all to be implemented during 1993.
- Amendments made to T(V & DR & L) Act to implement the new MVR system in 1994.
- 5. New Railway Safety and Corridor Management Act to come into force over 1993.
- 6. Amendments made to the Transport Accident Investigation Commission Act to include rail accidents.
- 7. Amendments made to the Local Government Act to simplify procedures for removing abandoned vehicles.
- 8. Amendments made to the Road User Charges Act to implement new RUC system over 1993.
- **1993** 1. Compulsory Breath Testing commenced April 1993.
  - 2. Speed cameras operational October 1993.
  - 3. Changes to demerit point system, including application from date of offence and graduated points for speeding offences.
  - 4. Introduction of VIN system for vehicle identification purposes.
  - 5. Land Transport Act 1993 created the Land Transport Safety Authority and authorised the making of Rules.
- **1994** 1. Compulsory cycle helmet wearing implemented on 1 January.
  - 2. Compulsory child restraints for 0-2 year olds from 1 April.
- **1995** 1. Compulsory child restraints for 3-5 year olds from 1 April.
  - 2. Traffic Regulations 1976 amended to provide for reintroduction of light rail/tram services (effective from 20 January 1995).
  - 3.Clarification of colours for use in personalised registration plates, new range of numbers for trailers, and new combined trade plate and licence introduced from 1 July 1995.

- 4. Land Transport Amendment Act 1995 introduced new National Land Transport Strategy and Regional Land Transport Strategy, with effect from 1 July 1996.
- Transit NZ Amendment Act 1995 provides for new road funding body, Transfund New Zealand, and revised Safety (Administration) and Roading Programmes regime, from 1 July 1996.
- 6. Clarification of vehicle inspection certificate regime's application to registration, licensing and change of ownership of motor vehicles.
- 7. Clarification of police enforcement powers in respect of heavy vehicles and road user charges.
- 8. Amendment to Transport (Vehicle and Driver Registration and Licensing) Act to provide for continuous licensing of motor vehicles (brought into force with effect from 1 Sept 1997).
- **1996** 1. Transfund was created as a new crown entity on 1 July 1996 with the principal objective of allocating resources to achieve a safe efficient roading system.
  - 2. The Glazing Rule was gazetted in 1996 to come into effect on 1 Jan 1997. The rule established minimum standards to ensure safe levels of visibility and structural strength for automotive glazing.
- **1997** 1. Six vehicle standards rules for impact protection were signed into law in August 1997 to come into effect on 1 January 1998.
- **1998** 1. The Land Transport Act 1998 was passed. The Act carried forward the administrative structures and law making processes of the 1993 Act. It incorporated and updated other transport legislation, and made substantive changes to parts of transport law such as driver licensing, including provision for photographic licences.
  - 2. Vehicle Compliance and Repair Rules were signed into law to come into effect in January 1999.
- **1999** 1. Conversion to photographic licences began in May.
  - 2. The following three provisions of the Land Transport Act came into force on 1 March.

- > Vehicle impoundment for driving while disqualified, suspended or revoked or for driving while forbidden.
- Roadside licence suspension for driving over 50 km/h above the posted speed limit, for driving with a blood alcohol level above 160 mg/100 ml or a breath alcohol level above 800 µg/l, or for refusing a blood test.
- > Mandatory licence carriage.
- 3. Dangerous goods rule came into effect on 3 May.
- 4. PSV rule came into effect on 1 September.

### 2000

- 2001 1. The following vehicle standards rules were signed during the year; Door Retention Systems (revised), Interior Impact (revised), Steering Systems (revised), Frontal Impact (revised), External Projections (revised), Head Restraints (revised), and Tyres and Wheels (new rule).
  - 2. The Land Transport (Road Safety Enforcement) Amendment Act 2001 removed legal impediments to the operation of breath testing devices and urban speed cameras. Under the Act, no matter what the result of a breath test, a driver has the right to request a blood sample. Previously this right was limited to drivers with a breath alcohol level of  $600 \,\mu g/l$  or below. The Police are still required to immediately suspend, for 28 days, the licences of drivers who give an evidential breath test reading that exceeds 800  $\mu$ g/l even if the driver requests a blood test. If the blood test result is available within the 28 day suspension period and is less than the blood alcohol qualifying level for mandatory licence suspension (ie 160 mg/100 ml), then the suspension ceases to have effect.
- 2002 1. The following vehicle standards rules were signed during the year; Vehicle Standards Compliance (revised), Seats and Seat Anchorages (new), Seatbelts and Seatbelt Anchorages (new), Light Vehicle Brakes (new), and Vehicle Dimension and Mass (new).
- 2003 1. The Land Transport (Unauthorised Street and Drag Racing) Amendment Act created offences

for street racing, wheel spinning and pouring slippery substances on the road to allow wheel spinning. Offenders can have their vehicles impounded for 28 days.

- Setting of Speed Limits Rule was signed on 25 February to come into force on a date to be determined by the Minister.
- 3. The Land Transport Management Act came into force November 2003, replacing provisions in the Transit NZ Act dealing with road construction and maintenance and safety funding.
- 2004 1. Heavy Vehicle Rule was signed to come into effect April 2005. This rule codified and updated existing legislation relating to heavy vehicle components and equipment.
  - 2. Vehicle Equipment Rule was signed to come into effect February 2005.
  - 3. Vehicle Lighting Rule was signed to come into effect February 2005.
  - 4. Road User Rule was signed to come into effect February 2005. This rule carried over and updated provisions of the Traffic Regulations 1976.
  - 5. Land Transport Management Amendment Act came into effect 1 December 2004, bringing together the bulk of the functions of Transfund and LTSA into one body, Land Transport NZ.

### 2005

2006 1. Several provisions of the Land Transport Amendment Bill 2005 came into effect January 2006. These provisions included enhanced targeting of serious and repeat drink drive offenders.

For example, mandatory 28 day licence suspension for:

- driving over 40 km/h above the posted speed limit
- driving with a blood alcohol level above 130 mg/100 ml
- > the second alcohol offence within 4 years
- > the third alcohol offence within 4 years, which also attracts a mandatory 28-day vehicle impoundment.
- 2. The Driver Licensing Amendment Rule took

effect June 2006 and included changes for older drivers, overseas drivers and commercial drivers.

3. Removal of periodic, age based practical driving test for older drivers.

### 2007

- 2008 1. The Land Transport Management Amendment Act 2008 came into effect on 1 August 2008, bringing together the functions of Transit NZ (including the management of the State highway system) and Land Transport NZ into one body, the New Zealand Transport Agency.
- 2009 1. The Land Transport (Road User) Amendment Rule 2009 came into effect on 1 November 2009. The most high-profile changes were:
  - a ban on the use of hand-held mobile phones, and all texting, while driving
  - riders of mopeds and motorcycles must switch their headlamps on during daylight hours, unless the vehicle was manufactured before 1 January 1980
  - > drivers are required to give way to pedestrians who are obviously waiting to cross at a pedestrian crossing.



ISSN: 1176-3949 www.transport.govt.nz

New Zealand Government