

# 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, then 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 NZ Transport Agency (formerly Land Transport New Zealand). 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 usually attended 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 administrative staff of the NZ Transport Agency and this coded information is entered into the Crash Analysis System (CAS). After editing and checking the statistical statement is published.

## Notes

1. 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 had only 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 eg tractor crashes on farms are not included. 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 bulletin. 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 4.00 pm on 24 December. If the holiday begins on a Monday or a Tuesday then it ends at 6.00 am on 3 January (9.6 days). If the holiday begins from Wednesday to Friday then it ends at 6.00 am on 5 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Saturday the holiday starts at 4.00 pm on Friday 23 December and ends at 6.00 am on Wednesday 4 January (11.6 days). When Christmas Eve and New Year's Eve fall on a Sunday the holiday starts at 4.00 pm on Friday 22 December and ends at 6.00 am on Wednesday 3 January (11.6 days).
- (b) The Easter holiday covers the period from 4.00 pm on the THURSDAY to 6.00 am on the TUESDAY.
- (c) Queen's Birthday and Labour Weekends cover the periods from 4.00 pm on the FRIDAY to 6.00 am 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 (cm<sup>3</sup>), 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.

### **(e) Non-driver casualties**

Age in years, sex, injury (killed, serious, minor), type (passenger, pedestrian, pedal cyclist etc).

### **(f) Other**

Objects struck, movement classification, non-driver/vehicle factors (causes), speed limit, advisory speed limit, road curvature, road surface (bitumen, metal etc), natural light, street lighting, lanes, road markings, road characteristics (bridge approach, railway crossing, flat road, hill road etc), type of junction, traffic control, weather conditions.

## **16. Change in vehicle licensing system**

In 1986 the system for licensing vehicles in NZ 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 excludes those with an exempt or restoration licence. See page 174 for a breakdown of the fleet at 30 June for the current year.