Guide for the interpretation of coded crash reports from the crash analysis system (CAS)







New Zealand Government

Copyright information

This publication is copyright © NZ Transport Agency. Material in it may be reproduced for personal or in-house use without formal permission or charge, provided suitable acknowledgement is made to this publication and the NZ Transport Agency as the source. Requests and enquiries about the reproduction of material in this publication for any other purpose should be made to:

Manager, Information NZ Transport Agency Private Bag 6995 Wellington 6141

The permission to reproduce material in this publication does not extend to any material for which the copyright is identified as being held by a third party. Authorisation to reproduce material belonging to a third party must be obtained from the copyright holder(s) concerned.

Disclaimer

The NZ Transport Agency has endeavoured to ensure material in this document is technically accurate and reflects legal requirements. However, the document does not override governing legislation. The NZ Transport Agency does not accept liability for any consequences arising from the use of this document. If the user of this document is unsure whether the material is correct, they should refer directly to the relevant legislation and contact the NZ Transport Agency.

More information

NZ Transport Agency Published February 2014

ISBN 978-0-478-41920-7 (online)

If you have further queries, call our contact centre on 0800 699 000 or write to us:

NZ Transport Agency Private Bag 6995 Wellington 6141

This document is available on the NZ Transport Agency's website at www.nzta.govt.nz.

Record of amendment

| Amendment number | Description of change | Effective date | Updated by |
|---------------------|-----------------------|----------------|------------|
| | | | |
| | | | |
| | | | |

Contents

| Introduction | 3 |
|--|----|
| Key to crash listing | 4 |
| CAS listing | 4 |
| Listing interpretation | 5 |
| Contact details | 11 |
| Appendix 1: Vehicle movement coding sheet | 12 |
| Appendix 2: Factors probably contributing to crashes | 13 |

Introduction

The national traffic crash database is owned and managed by the NZ Transport Agency.

The crash analysis system, (CAS), database provides safety information both for day to day operational needs, and for long term strategic planning. To assist our partners in this work Transport Agency staff from the CAS team can provide some advice and support. They can provide output from database queries in a range of reports and tables in both paper and electronic formats for further manipulation. Data exports are also available on request in a range of formats, eg for spreadsheets for mapping packages or for geographic information systems, (GIS).

For information or to discuss data exports contact: <u>CAS.Info@nzta.govt.nz</u>

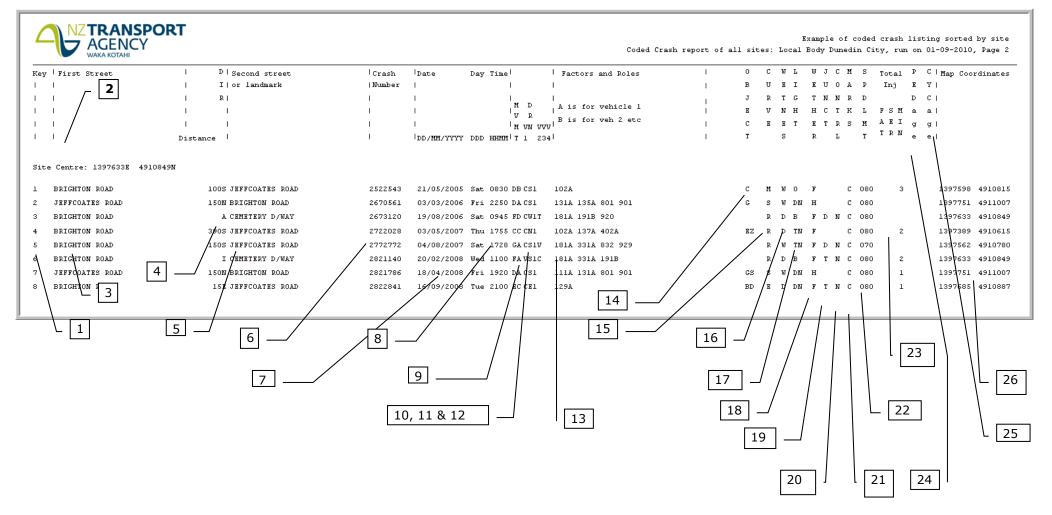
The coded crash listing is one of the basic tools for transport safety work. This document is to assist both the casual and the experienced user to confidently interpret coded crash listing reports from the CAS package.

Traffic crash data is entered directly into CAS as it arrives from the New Zealand Police so the database is a live database and is continually changing as data is entered and edited.

Key to crash listing

CAS listing

A standard coded listing example:



Listing interpretation

1. **Key** (optional)

The key provides a sequential number for each crash in the listing, or within each site if the data is grouped into sites. The key is not unique to the crash and may relate to a different crash if the listing is sorted another way.

2. Site centre (optional)

Where the crashes have been grouped into sites, this variable provides the location of the centroid of the site, (the centre of the site of user selected radius). This is in terms of the New Zealand Transverse Mercator, (NZTM) projection. The values are given as an easting and northing to the nearest metre.

3. First street

This is the name of the street, road or state highway on which the crash occurred. It is written in full, except for 'street' which is shortened to 'ST'. For long road names, (especially for hyphenated road names), there may be some further shortening by truncation, down to 25 characters, eg Masterton-Castlepoint Road will become:

MASTERTON-CASTLEPOINT ROA or

MASTERTON-CASTLEPOINT RD

If the first street is a state highway, it may be presented as a number made up of three sections. These three sections represent the 'route position', (RP), a linear method of describing a location on a route, eg 2/451/2.342. This can be broken down as:

- State Highway (SH) SH 2
- Reference Station (RS) 451
- Displacement (Displ) 2.342km from RS451, (in the increasing direction of the highway).

In sections of highway that run through a town or city the state highway may, (but not always), also have the urban street name included, eg 2/661/9.983 Karamu.

Some short highways that perform a particular network function, eg a spur highway to a tourist destination, or a link between two other highways. Such a highway may be named with an alphabetic character following the number, which may already be allocated to a longer highway, eg SH 20A, SH 8B.

Note:

Reports can be produced with 'simple route positions' which only list the state highway number, (eg SH 2). This is an option available when preparing the report. This is also the case if the route position is not known, i.e. if the crash has not been assigned map coordinates within the database, (called geocoding).

Where crashes are not on a road, abbreviations are often used to identify common locations eg FCT = service station forecourt, CPK = car park, BCH = beach. DWY or DWAY = driveway.

In general, off road crashes are identified by the prefix 'Z' eg Z FCT Shell, Z Waimakariri River south bank.

4. Distance and direction (DIR)

The distance given is in metres from the second street or landmark, (see 5 below), along the road to the crash site, eg 50 represents 50 metres, 1500 represents 1.5km.

Note:

The distance should be considered approximate as it may reflect where the crash vehicle(s) stopped moving rather than where the crash started, and in rural areas there can be large distances between the crash location and a second street or landmark, with consequent potential for inaccurate measurement. The CAS Processing Team staff put significant effort into resolving such issues. If you find a crash location, or other aspect of the crash data that you know to be incorrect, contact the Transport Agency help desk: <u>info@nzta.govt.nz</u> or 0800 805 263. The matter will be investigated and you will be advised of the outcome.

Direction from the second street or landmark is indicated by a one letter code as follows:

N = north

S = south

E = east

W = west.

If the crash is at an intersection eg Colombo St, Western Valley Road, or at a landmark, eg Oaro Saddle, Hope Riv Br, this is indicated as follows:

I = at intersection with

A = at landmark.

5. Second street or landmark

A crash is located from a second street or landmark. The second street must be a side street that intersects the first street, preferably the side street closest to the crash location. A landmark is used where there is no nearby second street, and is usually a prominent and reasonably permanent feature that is likely to be on a map, eg bridge (BR), summit (SUM), overbridge (OBR), railway level crossing (rail xing).

Note: When the side road is a state highway only the state highway number is given, eg SH 2. Alternatively, the underlying road name for the highway may be used.

6. Crash number

The crash number is a unique seven or nine digit reference number assigned to each crash by the Transport Agency. This number includes the crash year, (the year in which the crash occurred), and a five digit sequence.

The crash year precedes the crash number, (YYXXXX), eg for 1998 crashes the number is shown as 98XXXXX, and for 2010 as 2010XXXXX.

Note:

The following conventions have been adopted for 21st century crashes:

2000 identified by prefix 20

2001 identified by prefix 21

2002 identified by prefix 22, etc.

From 2010 the characters representing the year were increased to four digits:

2010 identified by 2010

2011 identified by 2011, etc

7. Date and day

Crash date format is DD/MM/YYYY (day/month/year). Day format is DDD (eg Mon = Monday)

8. **Time**

The 24 hour clock format is used to describe the time of day.

9. Movement code (MVMT)

The vehicle movement code is a two letter code that identifies the principal movements of the vehicle or vehicles involved in the crash. The available codes are detailed in the Vehicle Movement Coding Sheet,

(see Appendix 1). The first letter identifies the row and the second letter identifies the column, eg BC identifies row B, (a head-on crash), column C, (swinging wide), type of movement.

10. Key vehicle (V1)

The key vehicle, (V1), which is assigned the crash role number of 1, is the vehicle travelling in the direction indicated by the darker, (bold), arrow in the diagram on the Vehicle Movement Coding Sheet. The role number of a vehicle identifies the role that vehicle played in the crash event, or, in crashes involving more than two vehicles, the order in which the vehicle became involved.

Note:

The vehicle role **does not in any way** indicate driver fault.

The following codes are used to represent different vehicle types:

| C = car | T = truck |
|----------------------|----------------------|
| V = van, ute | M = motorcycle |
| X = taxi or taxi van | P = moped |
| B = bus | S = bicycle |
| L = school bus | O = other or unknown |
| | |

SUV or 4X4 vehicle

11. Movement direction key (DRN)

In order to identify the direction in which the key vehicle was travelling, and on which road it was travelling, a direction and number is given. The letter indicates the direction of travel and the number indicates the road on which the key vehicle was travelling.

For the following cases, the key vehicle was travelling:

| N1 = north on first street | N2 = north on second street |
|----------------------------|-----------------------------|
| S1 = south on first street | S2 = south on second street |
| E1 = east on first street | E2 = east on second street |
| W1 = west on first street | W2 = west on second street. |

12. V2, V3, V4 etc (Other vehicle(s) or road users)

The codes are same as those for V1 above plus the following additional code letters for non-motorised vehicles.

| E = | pedestrian |
|-----|------------|
|-----|------------|

- K = skateboard, in-line skater etc
- Q = equestrian
- H = wheeled pedestrian (wheelchairs etc)
- O = other or unknown.

13. **Factors and roles**

The factor codes are a set of three digit numerical codes that identify reasons why the crash occurred. They are grouped into related categories, (see Appendix 2). These factors are coded after consideration of the written explanation of what happened in the drivers', the witnesses', and any other involved parties' statements, and in the Police descriptions and comments.

A letter after the factor code indicates the vehicle or driver to which that factor applies. 'A' applies to V1; 'B' applies to V2, etc, eg 301B indicates that the driver of vehicle 2 failed to give way at a stop sign.

As well as describing driver and vehicle-related factors, there are also codes for other aspects of a crash such as the road conditions and the environmental conditions. These environmental factor codes are numbered from 800 onwards.

Note:

Driver and vehicle factor codes were not added to non-injury crashes in the areas north of a line approximately from East Cape, south of Taupo, to the mouth of the Mokau River prior to 2007.

Note:

All contributing factors may not be shown in the listing due to space limitations on the report.

14. Objects struck

During a crash the vehicle(s) involved may strike objects either in the roadway or on the roadside. Since the same vehicle might not have struck all the objects involved, each object is linked to the vehicle that hit it, but this is not shown on the listing.

The coded crash listings show only the first three objects struck. The same object type may appear twice but only if it has been struck by different vehicles.

Note:

If one vehicle strikes the same object type more than once (ie 2 parked cars) then only the first is coded.

The following is a guide to the different object type codes:

A = driven or accompanied animals, i.e. under control

- B = bridge abutment, handrail or approach, includes tunnels
- C = upright cliff or bank, retaining walls
- D = debris, boulder or object dropped from vehicle
- E = over edge of bank
- F = fence, letterbox, hoarding etc.
- G = guard or guide rail (including median barriers)
- H = house or building
- I = traffic island or median strip
- J = public furniture, eg phone boxes, bus shelters, signal controllers, etc
- K = kerb, when directly contributing to incident
- L = landslide, washout or floodwater
- M = parked motor vehicle
- N = train
- P = utility pole, includes lighting columns
- Q = broken down vehicle, workmen's vehicle, taxis picking up, etc
- R = roadwork signs or drums, holes and excavations, etc
- S = traffic signs or signal bollards
- T = trees, shrubbery of a substantial nature

V = ditch

W = wild animal, strays, or out of control animals

X = other

Y = objects thrown at or dropped onto vehicles

Z = into water, river or sea.

15. **Curve**

This is the degree of horizontal curvature of the road at the crash location, as described by the reporting police officer. The following codes are used:

R = Straight road

E = Easy curve

M = Moderate curve

S = Severe curve.

16. Wetness (WETNES)

Shows the wetness of the road surface at the time of the crash, if recorded, as follows:

W = Wet

D = Dry

I = Ice or snow.

17. Light

The light conditions at the time of the crash are described by a one or two letter code where the first letter refers to natural light, and the second to artificial light. The second letter is only used if the crash occurred in dark or twilight conditions.

Natural light conditions (first letter):

B = Bright sun

- O = Overcast
- T = Twilight

D = Dark.

If the natural light conditions are T or D, the artificial lighting (second letter) is:

O = street lights on

F = street lights off

N = No street lights present.

18. Weather (WETHER)

The weather conditions are described as follows:

F = Fine

M = Mist/fog

L = Light rain

H = Heavy rain

S = Snow.

There are also optional second letters available for particular weather conditions:

F = Frost

S = Strong wind.

eg FF = fine and frosty, HS = heavy rain and strong wind.

19. Junction (JUNCT)

A junction code may be used when the crash is within 30 metres of an intersection, but is required only if the crash is 10 metres or less from an intersection.

D = driveway (entrance to a public or private property that is not a road)

R = roundabout (any number of legs)

X = crossroads

T = T junction

Y = Y junction

M = multi-leg (more than 4 legs entering or leaving the intersection).

Note:

When one of the vehicles involved is attempting to enter or leave a driveway at an intersection location, the driveway code takes precedence.

20. Control (CONTRL)

If controls are present at the location of the crash and they are recorded they are listed as follows:

T = traffic signals

S = stop sign

G = give way sign

P = school patrol or warden

N = nil.

Note:

The control is related to the junction and need not apply to the vehicle(s) involved in the crash. Priority control, (S or G), may also be shown at junctions that are known to be signalised, eg free, or give way controlled, left turns.

21. Markings (MARKS)

The following codes are used to indicate what road markings were present at the crash location, if recorded by the attending officer. Only one marking is recorded. The list below is ordered in significance ranking, ie a pedestrian crossing is considered to be more important than a centre line, although both may be present at the crash location.

X = pedestrian crossing

R = raised island

P = painted island

L = no passing line

C = centre line

N = nil.

22. Speed limit (SPDLMT)

This shows the posted speed limit at the crash location, at the time of the crash, in kilometres per hour. The following codes may also be found:

U = unknown

LSZ = limited speed zone.

23. Total injuries (TOTAL INJ)

There are three columns in this section. They list the number of casualties, (people injured), resulting from the crash, separated into the following categories:

FAT = fatal injuries (where death is within 30 days and was as a result of the crash)

SER = serious injuries, includes broken bones, concussion etc

MIN = minor injuries, includes cuts, sprains, bruises etc.

Note:

This section is left blank for non-injury crashes.

24. Pedestrian age (PEDage)

Age of any pedestrian injured. If more than one pedestrian is injured, the age of the youngest pedestrian below 20 years old is shown; otherwise this shows the age of the oldest pedestrian.

25. Cyclist age (CYCage)

Age of any injured cyclist. If more than one cyclist is injured, the age of the youngest cyclist below 20 years old is shown; otherwise this shows the age of the oldest cyclist.

26. Map coordinates (optional)

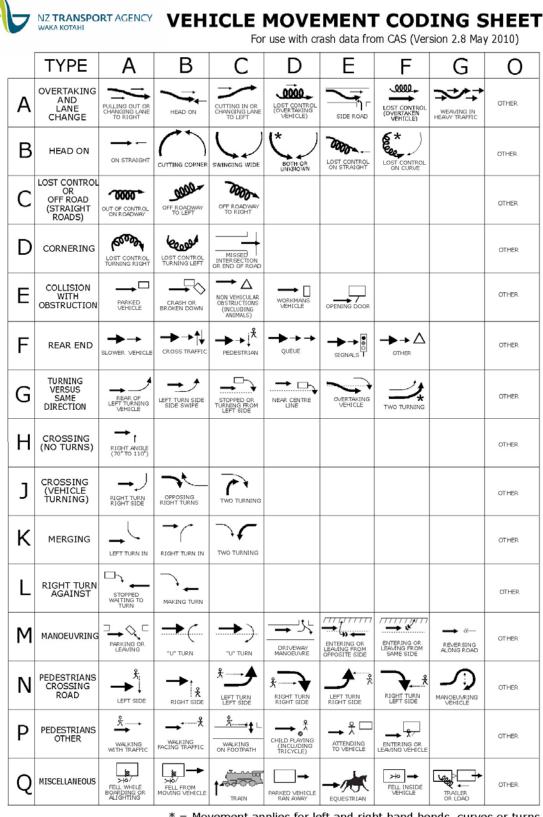
This shows the location of the crash in terms of the New Zealand Transverse Mercator, (NZTM) system. The values are given as an easting and northing to the nearest metre.

If the easting and northing are unknown it will be blank.

Contact details

If you have any questions or general inquiries in regard to this document please contact the CAS Analysis Team at **CAS.Info@nzta.govt.nz** or the Transport Agency help desk at **0800 805 263**, or <u>info@nzta.govt.nz</u>.

Appendix 1: Vehicle movement coding sheet



New Zealand Government

* = Movement applies for left and right hand bends, curves or turns

Appendix 2: Factors probably contributing to crashes

Driver control

100 Alcohol or drugs

- 101 Alcohol suspected
- 102 Alcohol test below limit
- 103 Alcohol test above limit or test refused 104 Alcohol test result unknown
- 105 Intoxicated non-driver (pedestrian / cyclist / passenger)
- 106 (MOT only) dead driver not suspect, tested neg
- 107 Drug test result unknown
- 108 Drugs suspected
- 109 Drugs proven

110 Too fast for conditions

- 111 Cornering
- 112 On straight
- 113 To give way at intersection
- 114 Approaching railway crossing
- 115 When passing stationary school bus
- 116 At temporary speed limit
- 117 At crash or emergency

120 Failed to keep left

- 121 Swung wide on bend
- 122 Swung wide at intersection
- 123 Cutting corner on bend
- 124 Cutting corner at intersection
- 125 On straight section
- 126 Vehicle crossed raised median
- 127 Driving or riding abreast (cyclists more than 2 abreast)
- 128 Wandering or wobbling
- 129 Too far left / right

130 Lost control

- 131 When turning
- 132 Under heavy braking
- 133 Under heavy acceleration
- 134 While returning to seal from unsealed shoulder
- 135 Due to road conditions (requires road series code)
- 136 Due to vehicle fault (requires vehicle series code)
- 137 Avoiding another vehicle, pedestrian, party or obstacle on roadway
- 138 On unsealed road
- 139 End of seal

140 Failed to signal in time

- 141 When moving to left, pulling over to left
- 142 When turning left
- 143 When pulling out or moving to the right
- 144 When turning right
- 145 Incorrect Signal

150 Overtaking

- 151 Overtaking line of traffic or queue
- 152 Deliberately in the face of oncoming traffic
- 153 Failed to notice oncoming traffic
- 154 Misjudged speed or distance of oncoming traffic
- 155 At no passing line
- 156 With insufficient visibility
- 157 At an intersection without due care
- 158 On left without due care
- 159 Cut in after overtaking
- 160 Vehicle signalling right turn
- 161 Without care at a pedestrian crossing

170 Wrong lane or turned from wrong position

- 171 Turned right from incorrect lane
- 172 Turned left from incorrect lane
- 173 Travelled straight ahead from turning lane or flush median

NZ Transport Agency Guide for the interpretation of coded crash reports from CAS January 2014

- 174 Turned right from left side of road
- 175 Turned left from near centre line
- 176 Turned into incorrect lane
- 177 Weaving or cut in on multi-lane roads
- 178 Moved left to avoid slow vehicle
- 179 Long vehicle tracked outside lane

180 In line of traffic

- 181 Following too closely
- 182 Travelling unreasonably slowly
- 183 Motorist crowded cyclist
- 184 Incorrect merging /diverging manoeuvre

190 Sudden action

- 191 Braked
- 192 Turned left
- 193 Turned right
- 194 Swerved to avoid pedestrian
- 195 Swerved to avoid animal
- 196 Swerved to avoid crash or broken down vehicle
- 197 Swerved to avoid vehicle
- 198 Swerved to avoid object or for unknown reason
- 199 Avoiding approaching emergency vehicle

200 Forbidden movements

201 Wrong way in one way street, motorway or roundabout
202 When turning or U turning contrary to a sign
203 Contrary to 'in' or 'out' only driveway sign
204 Driving or riding on footpath
205 On incorrect side of road, island or median
206 Contrary to 'no entry' sign
207 In Car Park
208 Motor vehicle in cycle lane
209 Bus / Transit lane
210 Cyclist riding on ped-xing / ped signals

Vehicle conflicts

300 Failed to give way

- 301 At Stop sign
- 302 At Give Way sign
- $303\,When\,turning\,to\,non-turning\,traffic$
- 304 When deemed turning by markings, not geometry 305 When turning left, to opposing right turning traffic (NOT
- for crashes occurring after 5am 25th March 2012)
- 306To pedestrian on a crossing
- 307 When turning at signals to pedestrians
- 308 When entering roadway from driveway
- 309To traffic approaching or crossing from the right
- 310 Failed to give way at one lane bridge / road
- 311 Failed to give way to pedestrian on footpath or verge
- 312 Entering roadway not from driveway or intersection

315 When turning right to opposing left turning traffic (for

crashes occurring after 5am 25th March 2012)

316 To traffic approaching or crossing from the left. (for

crashes occurring after 5am 25th March 2012

326 At flashing red lights (Rail Xing, Fire Stn etc)

page 13

- 313 To emergency vehicle
- 314 Driver waved through

320 Did not stop

321 At stop sign

322 At steady red light 323 At steady red arrow

324 At steady amber light

325 At steady amber arrow

327 For police or flag-person

328 For school patrol / kea crossing

330 Inattentive: failed to notice

- 331 Vehicle slowing, stopping or stationary in front
 332 Bend in road
 333 Indication of vehicle in front
 334 Traffic lights
 335 Intersection or its Stop / Give Way control
 336 Other regulatory sign / markings
 337 Warning sign
- 338 Direction, information signs / markings
- 339 Road-works signs
- 340Lane use arrows / markings?
- 341 Obstructions on Roadway

350 Attention diverted by:

- 351 Passengers
- 352 Scenery or persons outside vehicle
- 353 Other traffic
- 354 Animal or insect in vehicle
- 355 Trying to find intersection, house number, destination
- 356 Advertising or signs
- 357 Emotionally upset / road rage
- 358 Cigarette, radio, heater, AC, glove box, obj under drivers feet/pedals etc
- 359 Cell phone
- 360
- 361 Navigation device
- 362 CB radio/ non cell comms device
- 363 Driver dazzled

370 Did not see or look for another party until too late

- 371 Behind when reversing / manoeuvring 372 Behind when changing lanes position or direction (includes
- U-turns)
- 373 Behind when pulling out from parked position
- 374 Behind when opening door or leaving vehicle
- 375 When required to give way to traffic from another direction
- 376 When required to give way to pedestrians.
- 377 When visibility obstructed by other vehicles
- 378 When visibility limited by roadside features
- 379 When first in queue on receiving green light

380 Misjudged speed, distance, size or position of:

- 381 Other vehicle coming from behind or alongside
- 382 Other vehicle coming from another direction with right of way
- 383 Pedestrian movement or intention
- 384 Towed vehicle, or while towing a vehicle
- 385 Size or position of fixed object or obstacle
- 386 Of own vehicle

387 Misjudged intentions of another party

General driver

400 Inexperience

- 401 In driving in fast, complex or heavy traffic
- 402New driver showed inexperience
- 403Driving unfamiliar vehicle
- 404 Overseas / migrant driver fails to adjust to NZ road rules and road conditions

NZ Transport Agency Guide for the interpretation of coded crash reports from CAS January 2014

- 405Driver under instruction
- 406 At towing trailer / other vehicle
- 407Driver over-reacted
- 408 Unsupervised cyclist

410 Fatigue (drowsy, tired, fell asleep)

- 411 Long trip
- 412 Lack of sleep
- 413 Exhaust fumes
- 414 Worked long hours before driving
- 415 Exceeded driving hours

420Incorrect use of vehicle controls

- 421 Started in gear
- 422 Stalled engine
- 423 Wrong pedal
- 424Footrest, stand
- 425 Ignition turned off (steering locked)
- 426Lights not switched on 427Foot slipped or caught under pedal
- 427 Foot slipped or caught under peda 428 Parking brake not fully applied
- 428 Parking brake not runy applied 429 Trailer coupling or safety chain not secured

430 Showing off

- 431 Racing
- 432 Playing chicken
- 433 Wheel spins / wheelies / doughnuts / drifting 434 Intimidating driving

440 Parked or stopped

- 441 Inadequately lit at night: (not lit by street lights or park lights off)
- 442At point of limited visibility
- 443Not as close as practicable to side of road
- 444On incorrect side of road
- 445Double parked
- 446In 'No Stopping' area
- 447Not clear of rail crossing 448In cycle or Transit lane

General person

500Illness and disability

- 501 Illness with no warning eg heart attack, unexpected
- epilepsy) 502Physically disabled
- 503 Defective vision
- 504Medical illness (not sudden) flu, diabetes
- 505 Mental illness (depression, psychosis)
- 506Suicidal (but not successful)
- 507 Impaired ability due to old age

510 Intentional or criminal

- 511 Deliberate homicide (only if succeeded)
- 512 Intentional collision
- 513 Committed suicide (only if succeeded)
- 514 Evading enforcement
- 515 Object deliberately thrown at or dropped on vehicle / shot at
- 516 Object thrown from vehicle
- 517 Stolen vehicle

520 Driver or passenger, boarding, leaving , in vehicle

- 521 Boarding moving vehicle
- 522 Intentionally leaving moving vehicle
- 523 Riding in insecure position
- 524 Interfered with driver

530 Miscellaneous person

531 Casualty drowned

601 Dazzling headlights

603 Headlights failed suddenly

Vehicles

525 Opened door inadvertently

532 Casualty thrown from vehicle

533 Equestrian not keeping to verge

600 Lights and reflectors at fault or dirty

602 Headlights inadequate or no headlights

page 14

534 Cyclist or M/cyclist wearing dark clothing

526 Overloaded vehicle (with passengers) 527 Child playing in parked vehicle 604 Brake-lights or indicators faulty or not fitted 605 Tail-lights inadequate or no tail-lights 606 Reflectors inadequate or no reflectors 607 Lights or reflectors obscured

610 Brakes

- 611 Parking brake failed
- 612 Parking brake defective
- 613 Service brake failed 614 Service brake defective
- 614 Service brak

620 Steering

621 Defective 622 Failed suddenly

630**Tyres**

631 Puncture or blow-out 632 Worn tread on tyre 633 Incorrect tyre type 634 Mixed treads / space savers

640 Windscreen or mirror

641 Shattered windscreen 642 Windscreen or rear window dirty 643 Rear vision mirror not adjusted correctly 644No rear vision mirror 645 Windscreen or rear window misted/frosted 646 Inadequate or no sun-visors 647 Inadequate or no windscreen wipers 648 Cycle / Motorcycle visor, glasses, goggles or screen

650 Mechanical

- 651 Engine failure
- 652 Transmission failure (including chains and gears) 653 Accelerator or throttle jammed

660 Body or chassis

661 Body, chassis or frame (cycle, m/c) failure 662 Suspension failure 663 Failure of door catch or door not shut 664 Inadequate mudguards 665 Inadequate tow coupling 666 Inadequate tow coupling 666 Inadequate or no safety chain 667 Bonnet catch failed 668 Wheel off 669 Broken axle 670 Inconspicuous colour 671 Blind spot 672 Seat belt / restraint failed 673 Air-bag failed to inflate (fully)

680**Load**

681 Load interferes with driver 682 Not well secured or load moved 683 Over-hanging 684 Load obscured vision 685 Excess dimensions not adequately indicated 686 Over dimension vehicle or load 687 Load too heavy 688 Towed vehicle or trailer too heavy or incompatible

690 Miscellaneous vehicle

691 Emergency Vehicle attending emergency 692 Vehicle caught fire 693 Being towed 694 Air-bag contributed to crash or injury 695 Seatbelt / restraint absent or unusable 696 Dangerous goods

Pedestrians

700Walking along road

- 701 Not keeping to footpath
- 702 Not keeping to side of road
- 703 Not facing oncoming traffic
- 704Not on outside of blind curve
- 705 Wheeled ped inconsiderate or dangerous on footpath

710 Crossing road

- 711 Walking heedless of traffic
- 712 Stepping out from behind vehicles
- 713 Running heedless of traffic
- 714 Failed to use pedestrian crossing when one within 20 metres
- 715 Waiting on roadway for moving traffic
- 716 Confused by traffic or stepped back
- 717 Suddenly stepped onto pedestrian crossing
- 718 Not complying with traffic signals or school patrols
- 719 Misjudged speed and / or distance of vehicle

720 Miscellaneous

- 721 Pushing, working on or unloading vehicle
- 722 Playing on road or unnecessarily on road
- 723 Working on road
- 724 Wearing dark clothing
- 725 Vision obscured by umbrella or clothing
- 726 Child escaped from supervision
- 727 Unsupervised child
- 728 Sitting / lying on road
- 729 Pedestrian to /from school bus
- 730 Pedestrian behind reversing / manoeuvring vehicle
- 731 Overseas pedestrian
- 732 Pedestrian attention diverted eg cigarette, cell phone, music player

Road

800Slippery

801 Rain 802Frost or ice 803Snow or hail 804 Loose material on seal 805Mud 806 Oil / Diesel / Fuel 807Painted markings 808 Recently graded 809 Surface bleeding / defective

810 Surface

- 811 Potholed
- 812 Uneven
- 813 Deep loose metal
- 814 High crown
- 815 Curve not well banked
- 816 Edge badly defined or gave way
- 817 Under construction or maintenance
- 818 Unusually narrow
- 819 Broken glass

820 Obstructed

- 821 Fallen tree or branch
- 822 Slip or subsidence
- 823 Flood waters, large puddles, ford
- 824 Road works not adequately lighted
- 825 Road works not adequately signposted 826 Roadside object fell on vehicle
- 827 Object flicked up by vehicle

830Visibility limited

831 Curve 832 Crest 833 Building 834 Trees 835 Hedge or fence 836 Scrub or long grass 837 Bank 838 Temporary obstruction, dust or smoke 839 Parked vehicle

840 Signs and signals

841 Damaged, removed or malfunction 842 Badly located 843 Ineffective or inadequate 844 Necessary 845 Signals turned off

850 Markings

851 Faded
852 Difficult to see under weather conditions
853 Markings necessary
854 Not visible due to geometry or vehicles
855 Old markings not adequately removed

860Street lighting

861 Failed 862 Inadequate 863 Glare on wet road 864 Pedestrian crossing not adequately lighted

870 Raised islands and roundabouts

871 Traffic island(s) difficult to see 872 Traffic island(s) Ineffective, badly located or designed 873 Cyclist squeeze point

Miscellaneous

900 Weather

901 Heavy rain 902 Dazzling sun 903 Strong wind 904 Fog or mist 905 Snow, sleet or hail

910 Animals

- 911 Household pet rushed out or playing
- 912 Farm animal straying
- 913 Farm animal attended, but inadequate warning or unexpected
- 914 Farm animal attended, but out of control
- 915 Wild animal

920 Entering or leaving land use

921 Roadside stall 922 Service station 923 Specialised liquor outlet 924 Take away foods 925 Shopping complex 926 Car parking building / area 927 Other commercial 928 Industrial site 929 Private house / farm 930 Other non-commercial 931 Mobile shop or vendor

970 Unconverted old codes

977 Old 920: Equestrian 978 Old 950: Miscellaneous 979 Old 960: Special Codes 981 Old 131: Swinging wide on bend or intersection 982 Old 138: Lost control - head on collision 983 Old 147: When changing lanes 984 Old 157: Cut in 985 Old 188: At steady red/amber arrows 986 Old 225: Wrong way in one way street or other forbidden movement 987 Old 235: Misjudged speed of other vehicle 988 Old 236: Misjudged distance, size or position of vehicle 989 Old 238: In controlling skid 990 Old 273: Defective vision or illness (not sudden) 991 Old 503: In face of traffic 992 Old 504: Opened door in path of another party 993 Old 512: Interfered with driver or overloaded vehicle 994 Old 737: Physical defect or old age 995 Old 738: Unattended child 996 Old 952: Suicide 997 Old 400: Specific cyclist faults 998 Old 930: Bicycle faults