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







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### More information

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# **Record of amendment**

Amendment number	Description of change	Effective date	Updated by

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# 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: <a href="CAS.Info@nzta.govt.nz">CAS.Info@nzta.govt.nz</a>

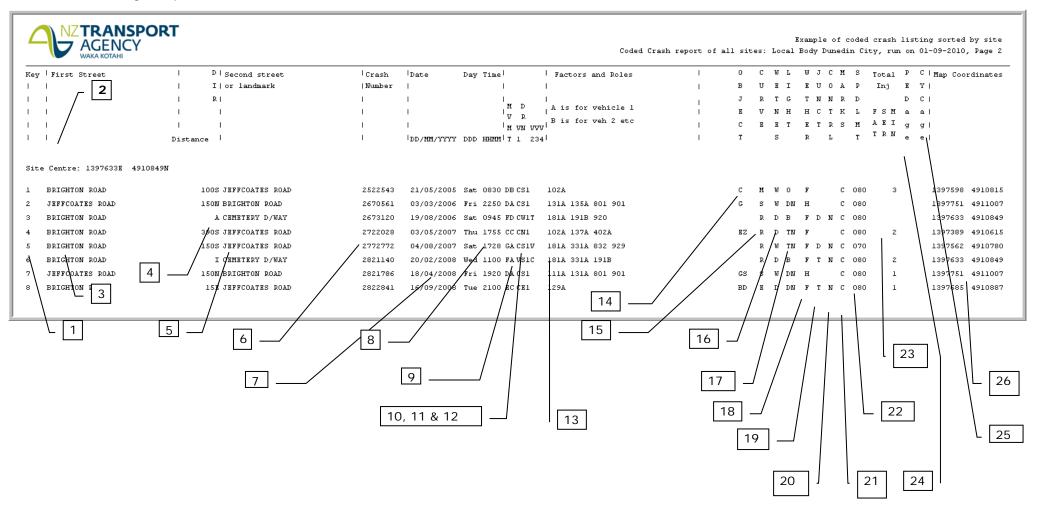
The coded crash listing is one of the basic tools for transport safety work. This document is to assist both the casual and the experienced user to confidently interpret coded crash listing reports from the CAS package.

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.

### 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, (YYXXXXX), 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 streetW1 = 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 <a href="mailto:info@nzta.govt.nz">info@nzta.govt.nz</a>.

# Appendix 1: Vehicle movement coding sheet



# **VEHICLE MOVEMENT CODING SHEET**

For use with crash data from CAS (Version 2.8 May 2010)

	TYPE	Α	В	С	D	Е	F	G	0
Α	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
Е	COLLISION WITH OBSTRUCTION	PARKED VEHICLE	CRASH OR BROKEN DOWN	NON VEHICULAR OBSTRUCTIONS (INCLUDING ANIMALS)	WORKMANS VEHICLE	OPENING DOOR			OTHER
F	REAR END	SLOWER VEHICLE	CROSS TRAFFIC	→→↓ <sup>†</sup> PEDESTRIAN	→ → → QUEUE	→→ O	$\rightarrow$ $\Delta$		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 VEHICLE	TWO TURNING		OTHER
Н	CROSSING (NO TURNS)	RIGHT ANGLE (70° TO 110°)							OTHER
J	CROSSING (VEHICLE TURNING)	RIGHT TURN RIGHT SIDE	OPPOSING RIGHT TURNS	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
М	MANOEUVRING	PARKING OR LEAVING	"U" TURN	"U" TURN	DRIVEWAY MANOEUVRE	ENTERING OR LEAVING FROM OPPOSITE SIDE	ENTERING OR LEAVING FROM SAME SIDE	REVERSING ALONG ROAD	OTHER
N	PEDESTRIANS CROSSING ROAD	LEFT SIDE	RIGHT SIDE	LEFT TURN LEFT SIDE	RIGHT TURN RIGHT SIDE	LEFT TURN RIGHT SIDE	RIGHT TURN LEFT SIDE	MANOEUVRING VEHICLE	OTHER
Р	PEDESTRIANS OTHER	WALKING WITH TRAFFIC	WALKING FACING TRAFFIC	WALKING ON FOOTPATH	CHILD PLAYING (INCLUDING TRICYCLE)	ATTENDING TO VEHICLE	ENTERING OR LEAVING VEHICLE		OTHER
Q	MISCELLANEOUS	₩ >+0/ FELL WHILE BOARDING OR ALIGHTING	>	TRAIN	PARKED VEHICLE RAN AWAY	EQUESTRIAN	FELL INSIDE VEHICLE	TRAILER OR LOAD	OTHER

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
- $172 \; \text{Turned left from incorrect lane}$
- 173 Travelled straight ahead from turning lane or flush median

- 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
- 204Driving 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
- 304When deemed turning by markings, not geometry
- 305 When turning left, to opposing right turning traffic (NOT for crashes occurring after 5am 25<sup>th</sup> March 2012)
- 306To pedestrian on a crossing
- 307 When turning at signals to pedestrians
- 308 When entering roadway from driveway
- $309\, To$  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
- 313 To emergency vehicle
- 314 Driver waved through
- 315 When turning right to opposing left turning traffic (for crashes occurring after 5am 25<sup>th</sup> March 2012)
- 316 To traffic approaching or crossing from the left. (for crashes occurring after 5am 25<sup>th</sup> March 2012

### 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
- 326 At flashing red lights (Rail Xing, Fire Stn etc)
- 327 For police or flag-person

### 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
- 340 Lane 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
- 405Driver under instruction
- 406 At towing trailer / other vehicle
- 407 Driver 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)
- 426 Lights not switched on
- 427 Foot slipped or caught under pedal
- 428 Parking brake not fully applied
- 429 Trailer coupling or safety chain not secured

### 430 Showing off

- 431 Racing
- 432 Playing chicken
- 433 Wheel spins / wheelies / doughnuts / drifting
- 434Intimidating 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)
- 502 Physically 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

### $520\,\mbox{Driver}$ or passenger, boarding, leaving , in vehicle

- 521 Boarding moving vehicle
- 522 Intentionally leaving moving vehicle
- 523 Riding in insecure position
- 524 Interfered with driver
- 525 Opened door inadvertently
- 526 Overloaded vehicle (with passengers)
- 527 Child playing in parked vehicle

### 530 Miscellaneous person

- 531 Casualty drowned
- 532 Casualty thrown from vehicle
- 533 Equestrian not keeping to verge
- 534 Cyclist or M/cyclist wearing dark clothing

# Vehicles

### 600 Lights and reflectors at fault or dirty

- 601 Dazzling headlights
- 602 Headlights inadequate or no headlights
- 603 Headlights failed suddenly

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

615 Jack-knifed

### 620Steering

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

646Inadequate or no sun-visors

647 Inadequate or no windscreen wipers

648Cycle / 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

 $664 In a dequate\ mudguards$ 

665 Inadequate tow coupling

666 Inadequate or no safety chain

667 Bonnet catch failed

668Wheel 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

684Load 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

694Air-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

803 Snow or hail

804 Loose material on seal

805 Mud

806 Oil / Diesel / Fuel

807 Painted 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

### 830 Visibility 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

844Necessary

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

864Pedestrian 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

 $902 \, \text{Dazzling sun}$ 

903 Strong wind 904 Fog or mist

905Snow, 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

### 920Entering or leaving land use

921 Roadside stall

922 Service station

923 Specialised liquor outlet

924Take 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