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

<table>
<thead>
<tr>
<th>Amendment number</th>
<th>Description of change</th>
<th>Effective date</th>
<th>Updated by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>New factor coding sheet and changed contact details</td>
<td>Jan 2016</td>
<td>Chris Hewitt</td>
</tr>
<tr>
<td>1.1</td>
<td>Minor amendments to coding sheet, wording of introduction and contact details</td>
<td>May 2016</td>
<td>Chris Hewitt</td>
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</table>
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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.

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...
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, (YYYYXXX), 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

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
- S1 = south on first street
- E1 = east on first street
- W1 = west on first street
- N2 = north on second street
- S2 = south on second street
- E2 = east on second 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 = roundabout (any number of legs)
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, i.e., 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.

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**Contact details**

If you have any questions or general inquiries in regard to this document or CAS please contact the CAS team at cas.administrator@nzta.govt.nz
Appendix 1: Vehicle movement coding sheet

**VEHICLE MOVEMENT CODING SHEET**
For use with crash data from CAS (Version 2.8 May 2010)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>OVERTAKING AND LANE CHANGE</td>
<td>PULLING OUT OR CHANGING LANE TO RIGHT</td>
<td>HEAD ON</td>
<td>CUTTING IN OR CHANGING LANE TO LEFT</td>
<td>MOST CONTROLLED VEHICLE</td>
<td>SIDE ROAD</td>
<td>MOST CONTROLLED VEHICLE</td>
<td>OTHER</td>
</tr>
<tr>
<td>B</td>
<td>HEAD ON</td>
<td>ON STRAIGHT</td>
<td>CUTTING CORNER</td>
<td>SWERVING WIDE</td>
<td>LEFT CONTROL</td>
<td>LEFT CONTROL</td>
<td>OTHER</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>LOST CONTROL OR OFF ROAD (STRAIGHT ROADS)</td>
<td>OUT OF CONTROL OR OFF ROAD</td>
<td>OFF ROADWAY TO LEFT</td>
<td>OFF ROADWAY TO RIGHT</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>CORNERING</td>
<td>LOST CONTROL TURNING RIGHT</td>
<td>TURNING LEFT OR RIGHT</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>COLLISION WITH OBSTRUCTION</td>
<td>PARKEO VEHICLE</td>
<td>CRASH OR BREAKDOWN</td>
<td>NON VEHICLE OBSTRUCTIONS</td>
<td>WORKING VEHICLE</td>
<td>OTHER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>REAR END</td>
<td>OVERLAP</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>TURNING VERSUS OTHER</td>
<td>LEFT TURNING VEHICLE</td>
<td>LEFT TURNING WITH OBJECT</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>CROSSING (NO TURNS)</td>
<td>RIGHT TURNS (20 TO 170)</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>CROSSING (VEHICLE TURNING)</td>
<td>RIGHT TURN</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>K</td>
<td>MERGING</td>
<td>LEFT TURN ON</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>RIGHT TURN AGAINST</td>
<td>LEFT TURN ON</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>MANOEUVRING</td>
<td>PARKING OR LENGTHENING</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>PEDESTRIANS CROSSING ROAD</td>
<td>LEFT SIDE</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>PEDESTRIANS OTHER</td>
<td>WALKING OR CARRYING OBJECT</td>
<td>OTHER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q</td>
<td>MISCELANEOUS</td>
<td>OTHER</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

New Zealand Government

* = Movement applies for left and right hand bends, curves or turns
Appendix 2 Factor codes

All road user factors

Alcohol
101 Alcohol suspected
102 Alcohol test below limit
103 Alcohol test above limit or test refused
105 Impaired non-driver (pedestrian / cyclist / passenger, etc.)
100 Other - alcohol

Drugs
108 Drugs suspected
109 Drugs present
221 Impaired non-driver (pedestrian / cyclist / passenger, etc.)
220 Other drugs

Misjudged speed, distance, size or position of
381 Another vehicle
383 Pedestrian
385 Size or position of fixed object or obstacle.
386 Own vehicle
387 Misjudged intentions of another party
380 Other - misjudged speed, distance, size or position

Illness
501 Sudden illness
504 Medical illness
505 Mental illness
506 Attempted suicide
500 Other illness

Disability
502 Physical impairment
503 Defective vision
507 Impaired ability due to old age.
508 Other disability

Driver or passenger boarding, leaving or in vehicle
521 Intentionally leaving/boarding moving vehicle
523 Riding in insecure position.
524 Interfered with driver.
525 Opened door inadvertently
527 Child playing in parked vehicle
520 Other - driver or passenger boarding, leaving or in vehicle

Reason for death/injury
531 Casualty drowned
534 Medical illness
536 Unsecured child seat
537 Child restrained failure/inappropriate
672 Seatbelt failed/defective
673 Air bag failed/defective
530 Other - reasons for death/injury

Driver only factors

Inappropriate speed
111 Entering on curve
112 On straight
113 Approaching a traffic control
115 When passing school bus.
116 At temporary speed limit
117 At crash or emergency
118 For road conditions
119 For weather conditions
182 Travelling unreasonably slowly
110 Other inappropriate speed conditions

Position on road
121 Swung wide on bend
122 Swung wide at intersection
123 Cutting corner on bend
124 Cutting corner at intersection
125 Too far right
126 Vehicle crossed flush median
129 Too far left
120 Other position on road

Lost control
131 Lost control when turning
132 Lost control under braking
133 Lost control under acceleration
134 Lost control while returning to seal from unsealed shoulder
135 Lost control - road conditions
136 Lost control - vehicle fault
137 Lost control avoiding another party
130 Other lost control

Appropriate signalling
141 Failed to signal in time
145 Incorrect signal
140 Other failed to signal

Overtaking
151 Overtaking line of traffic or queue
152 Overtaking in the face of oncoming traffic
156 With insufficient visibility
157 Overtaking at an intersection
158 On left without due care
159 Cut in after overtaking
160 Vehicle signalling turn
150 Other overtaking

Wrong lane or turned from wrong position
171 Turned from incorrect lane
173 Travelled straight from turning lane or flush median
174 Turned from incorrect position on road
176 Turned into incorrect lane
177 Weaving or cut in on multi-lane roads
179 Long vehicle tracked outside lane
184 Incorrect merging / diverging
170 Other wrong lane or position

Following too close
183 Motorist crowded cyclist
181 Following too closely
180 Other - too close

Sudden action
191 Suddenly braked
192 Suddenly turned left/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
199 Swerved avoiding emergency vehicle
190 Other sudden action

Forbidden movements
201 Wrong way on road/ motorway
202 Non-compliance with regulatory device with sign or marking
204 Driving / riding in pedestrian space
208 Motor vehicle in special purpose lane
200 Other - forbidden movements

Did not stop
321 At Stop sign
322 At full red traffic signal
324 At amber traffic signal
326 At flashing red signals (railway crossing, fire stations, etc.).
327 For traffic controller
328 For school patrol / kea crossing
320 Other - did not stop

Failed to give way
301 At a priority traffic control
303 When turning to non-turning traffic.
304 When priority defined by road markings
306 To a pedestrian
308 When entering roadway from driveway
309 To traffic approaching or crossing from the right
312 Entering roadway not from driveway or intersection.
313 Failed to give way to emergency vehicle
314 Driver waved through
315 When turning right to opposing left turning traffic
316 To traffic approaching or crossing from the left
300 Other - failed to give way
**Attention diverted by**

- Inside vehicle
  - 351 Passengers
  - 354 Animal or insect in vehicle
  - 357 Emotionally upset / road rage
  - 359 Cell phone
  - 361 Navigation device
  - 364 Vehicle console inbuilt features: radio/heater/etc.
  - 365 Objects under driver’s pedals
  - 366 Food, cigarettes, beverages
  - 362 Non cell communication device
- Outside vehicle
  - 352 Scenery or persons outside vehicle
  - 353 Other traffic
  - 355 Trying to find intersection, house number, destination, etc
  - 363 Driver dazzled

**350 Other – attention diverted by**

- LQVLGHRURXWVLGHYHKLFOH

**Failed to notice**

- 331 Vehicle slowing, stopping or stationary in front
- 332 Bend in road
- 333 Indication of vehicle in front
- 334 Failed to notice control
- 335 Failed to notice road works
- 336 Failed to notice signs
- 337 Failed to notice markings
- 338 Another party wearing dark clothing

**Did not see or look for other parties until too late**

- 371 Did not check/notice another party behind
- 375 Did not check/notice another party
- 377 When visibility obstructed by other traffic.
- 370 Other – did not see or look

**Lack of experience**

- 401 In driving in fast complex or heavy traffic
- 402 New driver/ under instruction
- 403 Driving unfamiliar with vehicle/towing
- 404 Overseas / migrant driver fails to adjust to NZ road rules and road conditions
- 407 Driver over-reacted
- 408 Other lack of experience

**Fatigue (drowsy, tired or fell asleep)**

- 411 Long trip
- 412 Lack of sleep
- 414 Long day (working/recreation)
- 415 Exceeded driving hours
- 410 Other fatigue

**Vehicle control mistakes**

- 421 Started in gear / stalled
- 423 Wrong pedal / foot slipped
- 426 Lights not switched on
- 428 Parking brake not fully applied.
- 429 Trailer coupling or safety chain not secured.
- 420 Other vehicle controls

**Parking**

- 441 Parked vehicle is not visible
- 443 Incorrectly parked vehicle
- 447 Not clear of rail Xing
- 440 Other parking

**Intentional action**

**Showing off**

- 431 Racing
- 432 Playing ‘chicken’
- 433 Wheel spins / wheelies / doughnuts / drifting etc
- 434 Intimidating driving
- 430 Other intentional actions

**Intentional or criminal**

- 511 Homicide/suicide (successful)
- 512 Intentional collision
- 514 Exceeding speed limit
- 515 Object thrown (at/bjy from)
- 518 Over the speed limit
- 510 Other intentional or criminal

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**Pedestrian factors**

**Walking along road**

- 701 Not keeping to footpath.
- 702 Not keeping to side of road
- 703 Not facing oncoming traffic
- 704 Not on outside of blind curve
- 705 Wheeled pedestrian behaviour
- 700 Other – pedestrian walking along the road

**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 carriageway/confused by traffic
- 717 Stepping suddenly onto crossing
- 718 Not complying with traffic signals or school patrols.
- 719 Misjudged speed and/or distance of vehicle.
- 740 Looking the wrong way
- 710 Other – pedestrian crossing the road

**Miscellaneous Pedestrian**

- 721 Pushing, working on or unloading vehicle.
- 722 Playing / unnecessarily on road.
- 723 Working on road
- 725 Vision obscured by umbrella or hood
- 726 Child escaped from supervision
- 727 Unsupervised child
- 729 Person from or to school bus
- 730 Pedestrian behind reversing / manoeuvring vehicle
- 731 Overseas pedestrian
- 732 Pedestrian attention diverted by cigarette, cell phone, music player
- 733 Pedestrian from or to scheduled service
- 734 Equestrian not keeping to verge
- 720 Other – pedestrian

**Vehicle factors**

**Lights**

- 601 Dazzling headlights
- 602 Headlights inadequate/ no headlights or 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
- 608 Confusing/dazzling lights
- 609 Lights or reflectors at fault or dirty
- 600 Other - lights or reflectors

**Brakes**

- 611 Parking brake failed/defective
- 613 Service brake failed
- 614 Service brake defective
- 615 Jack- knife – uneven braking
- 610 Other – brakes

**Steering**

- 621 Defective
- 622 Failed suddenly
- 620 Other – steering

**Tyres**

- 631 Puncture or blowout
- 632 Worn tread on tyre
- 633 Incorrect tyre type
- 634 Mixed types (tread)/space savers
- 630 Other – tyres

**Windscreens, mirrors, visors**

- 641 Shattered windscreen
- 642 Vehicle windows/helmet visors/ goggles/glasses/misted/dirty/ windscreen wipers
- 643 Rear vision mirror
- 640 Other – windscreen/mirror

**Mechanical**

- 651 Engine failure
- 652 Transmission failure / broken axil
- 653 Accelerator or throttle jammed
- 650 Other mechanical
Chassis/running gear
661 Body, chassis or frame (cycle/motorcycle) failure
662 Suspension failure
665 Inadequate tow coupling
666 Inadequate or no safety chain
668 Wheel off
660 Other – chassis/gear

Body/doors
667 Door/bonnet catch failed, defective or not shut
670 Inconspicuous colour
671 Blind spot
664 Other body/doors

Load
681 Load interferes with driver
682 Not well secured
683 Over-hanging
686 Over-dimensional vehicle or load
687 Load too heavy
688 Towed vehicle or trailer too heavy or incompatible
680 Other – load

Miscellaneous vehicle
691 Emergency vehicle
692 Vehicle caught fire
693 Being towed
697 Software failure
690 Other – vehicle

Road factors

Road condition
804 Loose material on seal
807 Painted markings
808 Recently graded
809 Surface bleeding/defective
813 Deep loose metal
828 Steel/iron covers and joints

Wet surfaces
801 Rain
802 Frost or ice
803 Snow or hail
805 Mud/effluent
806 Oil/fuel
800 Other – slippery

Surface condition
811 Potholed
812 Uneven
814 High crown
815 Curve not well banked
816 Edge badly defined or gave way
817 Under construction or maintenance
818 Unusually narrow
810 Other – surface condition

Obstructions and objects
821 Fallen tree or branch
822 Slip or subsidence
823 Flood waters, large puddles and fords.
824 Road works not adequately lit/sign posted
826 Roadside object fell on vehicle
827 Object flicked by other vehicle
820 Other – road obstructed

Visibility limited by road feature
831 Curve
832 Crest
837 Bank
849 Traffic signs

Visibility limited by other feature
833 Building
834 Trees
835 Hedge or fence
836 Scrub, long grass or foliage
838 Temporary obstruction, dust or smoke
839 Parked vehicle
829 Signs/billboards/hoardings
830 Other – road feature limit visibility

Signs and signals
841 Damaged removed or malfunction
842 Badly located
843 Ineffective / inadequate/obscured
844 Necessary
845 Signals off
840 Other – signs or signals

Markings/islands/barriers
851 Faded
852 Difficult to see due to weather or geometry
853 Markings necessary
872 Traffic island(s) ineffective, badly located or designed.
884 Barriers necessary
885 Island necessary
850 Other – markings/islands/barriers

Street lighting
861 Failed
862 Inadequate for road and pedestrian crossing
860 Other - street lighting factors

Environment factors
Weather
901 Heavy rain
902 Dazzling sun
903 Strong wind
904 Fog or mist
905 Snow, sleet or hail
900 Other – weather

Animals
910 Other – animal factors
911 Household pets rushed out or playing.
912 Farm animals straying
913 Farm animals attended, but inadequate warning or unexpected.
914 Farm animals attended, but out of control.
915 Wild animal

No identifiable factors
999 Unknown

Old codes from 1989 – 2015 coding scheme - not for future coding use - reference only - searchable
920 other entering or leaving land use
921 roadside stall
922 service station
923 specialised liquor outlet
924 take- away food outlet
925 shopping complex
926 car parking building/area
927 other commercial activity
928 industrial site
929 private house or farm
930 non-commercial activities
931 mobile shop or vendor
305 when turning left, to opposing right turning traffic (old road rule)
517 Stolen vehicle
358 Cigarette, radio, glove box, heater, AC, obj under drivers feet/ pedals etc (factor split in 3 - new scheme)