

# briefing notes road safety issues

# Gisborne District

This report details aspects of Gisborne District's traffic crash data. We begin by looking at how the district measures up regarding those areas of high concern prioritised in Safer Journeys (NZ's Road Safety Strategy 2020) as compared to similar authorities and against the national picture. This is followed by an overview of crashes in Gisborne District for 2009. Then we present more detailed analysis of local road safety issues based upon reported crash data and trends for the 2005–2009 period.

Included are graphs, charts and tabulations addressing crash movement, crash factors, road users, location and the social cost of crashes. Trends are determined by looking at the annual data for injury crashes and those injured over the last five year period. The information in this report covers both local roads and state highways.

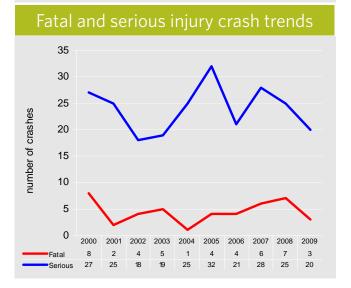
The issues chosen for this report are drawn from the most common crash types, those that appear over-represented when Gisborne District is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

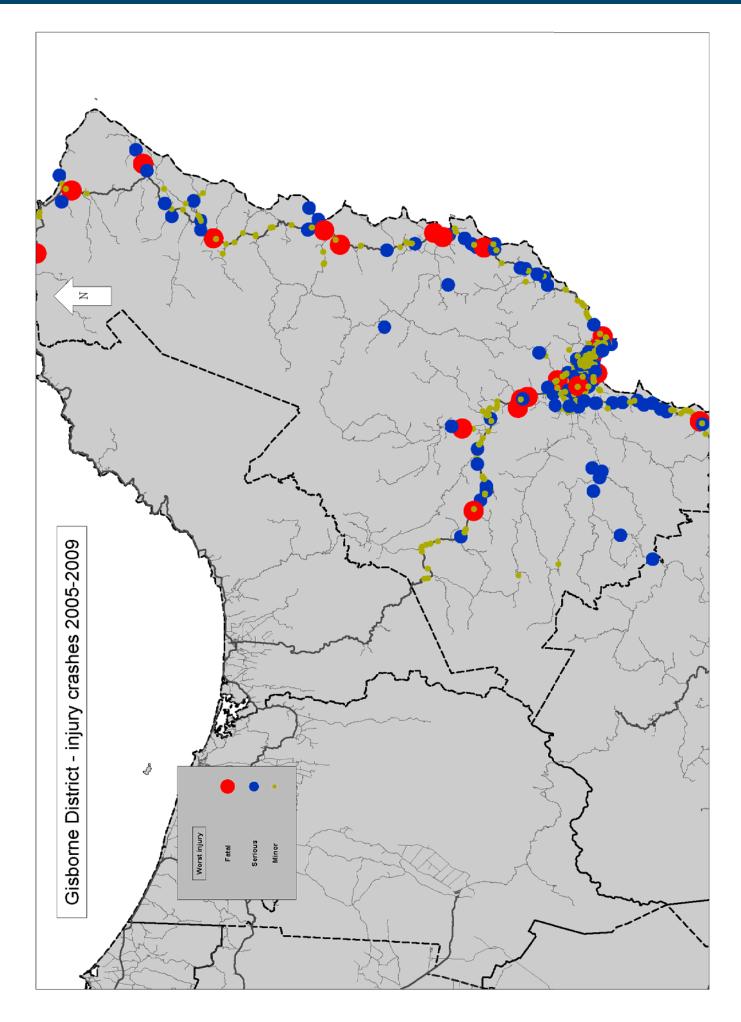
2009 road trauma			
Casualties	Gisborne District		
Death	5		
Serious injury	29		
Minor injury	112		
<b>Total casualties</b>	146		

Crashes	Gisborne District
Fatal crashes	3
Serious injury crashes	20
Minor injury crashes	84
Total injury crashes	107
Non-injury crashes	405 reported

2009 - social cost of crashes			
Local roads	\$ 31.20M		
State highways	\$ 27.84M		
Total	\$ 59.04M		
NOTE: The estimated social cost includes loss of life or quality of life, loss of output due to injuries, medical and rehabilitation costs, legal and court costs, an property damage.			

# Local road safety issues Gisborne District Loss of control on rural roads Alcohol Speed too fast Vulnerable road users; pedestrians motorcyclists





# **2020 Safer Journeys**

#### "A safe road system increasingly free of death and serious injury"

Safer Journeys is New Zealand's Road Safety Strategy for 2010-2020. It identifies actions and interventions to reduce trauma on our roads.

Please take time to visit the Safer Journeys website and study the documents found there:

#### http://www.transport.govt.nz/saferjourneys/

Areas of high concern have been identified. These are the areas where we need to make the most improvement in road safety or maximise efforts towards a safe system approach. Focusing on these areas could make the largest contribution toward reducing costs imposed on the economy by road deaths and injuries.

#### Areas of high concern are:

- Reducing alcohol/drug impaired driving
- Increasing the safety of young drivers
- Safe roads and roadsides
- Safe driving speeds
- Increasing the safety of motorcyclists

#### Areas of medium concern are:

- Improving the safety of the light vehicle fleet
- Safe walking and cycling
- Improving the safety of heavy vehicles
- Reducing the impact of driver fatigue
- Addressing driver distraction
- Reducing the impact of high risk drivers

#### Areas of continued and emerging focus:

- Increasing the level of restraint use
- Increasing the safety of older New Zealanders

#### **Gisborne District**

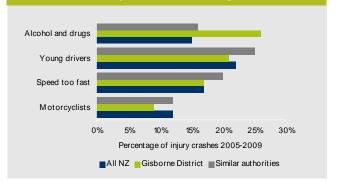
Presented below is a brief look at Gisborne District's position on Safer Journeys' areas of high concern compared to similar authorities' averages and the all-NZ averages (sample period 2005-2009).

#### Restraints

According to 2009 survey results, restraint use rate in Gisborne District are 86 and 79 percent for front seat and rear seat respectively; while corresponding national rates are 95 and 87 percent.

http://www.transport.govt/nz/research/safetybeltstatistics/

#### Safer Journeys' areas of high concern



#### Alcohol and drugs

In Gisborne District, alcohol was recorded in 26 percent of injury crashes in the last five years, resulting in 20 deaths, 62 serious injuries and 174 minor injures. Alcohol-related crashes were proportionally much higher compared to both similar authorities and the national averages.

#### Young drivers

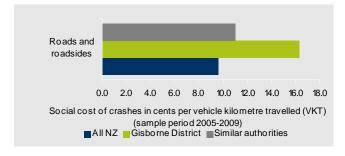
In Gisborne District, young drivers aged 15-19 years were involved in 21 percent of all injury crashes during the last five year period, resulting in 2 death, 35 serious injuries and 160 minor injuries. This was proportionally lower compared to similar authorities.

#### Speed too fast

Speed too fast was recorded in 17 percent of injury crashes in Gisborne District in the last five years, resulting in 12 deaths, 39 serious injuries and 117 minor injuries. Speed as a factor in crashes was lower compared to similar authorities, however numbers are still high in the district.

#### Motorcyclists

In Gisborne District, motorcyclists were involved in 9 percent of all injury crashes during the last five year period, resulting in 3 death, 18 serious injuries and 37 minor injuries. This was proportionally lower than in similar authorities, however the latest trend is upwards.



#### Roads and roadsides

In Gisborne District, there were on average 31 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes is 48 percent higher than the similar authority average (see the graph above).

# **Overview 2009**

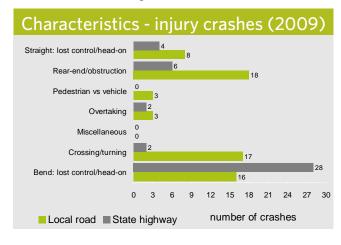
In 2009 in Gisborne District, 107 injury crashes resulting in 146 casualties and 405 non-injury crashes were reported by the New Zealand Police. Thirty-nine percent of all injury crashes in the district were on state highways. The table below shows the number of injuries resulting from these crashes in the district.

Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	5	29	112	146
Local roads vs state highways				
Local roads	2	17	68	87
State highways	3	12	44	59
Rural vs urban roads				
Rural <sup>1</sup>	5	20	47	72
Urban	0	9	65	74
<sup>1</sup> Rural- an area with a speed limit of 80km/h or more				

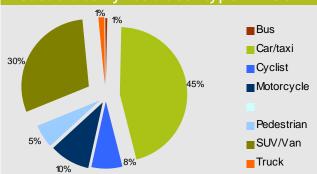
The latest five year data shows a downward trend in the total number of injury crashes, with each degree of seriousness trending downwards.



In 2009 over half of the injury crashes in the district involved a driver losing control of their vehicle.







Nearly half the casualties in 2009 were drivers or passengers of cars, nearly a third of sports utility vehicles or vans, and nearly a quarter were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Gisborne District, young drivers aged 15 to 19 years inclusive were at fault drivers in 16 percent of injury crashes and older drivers, 70 years of age and over, in 5 percent.

Further information about injury crashes in the district during 2009 on:

#### Local roads

- Total number of injury crashes: 65
- Worst month: April (12 percent)
- Worst day of week: Wednesday (19 percent)
- Wet road crashes: 11 percent
- Night time crashes: 42 percent
- Alcohol over limit: 42 percent
- Failed to give way/stop: 28 percent
- Too fast for conditions: 22 percent
- Pedestrian factors: 3 percent
- Crashes at intersection: 40 percent
- Road factors: 5 percent
- At fault male driver: 54 percent
- At fault driver held full NZ licence: 55 percent

- Total number of injury crashes: 42
- Worst months: January, May and October (12 percent each)
- Worst day of week: Friday (27 percent)
- Wet road crashes: 19 percent
- Night time crashes: 38 percent
- Alcohol over limit: 33 percent
- Too fast for conditions: 19 percent
- Fatigue: 17 percent
- Failed to give way/stop: 2 percent
- Crashes at intersection: 32 percent
- Road factors: 26 percent
- At fault male driver: 61 percent
- At fault driver held full NZ licence: 58 percent

# **Rural loss of control**

During the most recent five year period (2005-2009) 39 percent of all injury crashes in Gisborne District occurred due to loss of control on rural roads. These crashes resulted in 25 deaths, 88 serious injuries and 250 minor injuries. There were a further 261 non-injury crashes reported.

The latest five year data shows a slight downward trend in the total number of loss of control injury crashes on rural roads.



Three-quarters of rural loss of control crashes occurred at bends (72 percent). A quarter of those that occurred on state highways record fatigue as a contributing factor (24 percent).

The following table shows a breakdown of the general environment of all rural loss of control crashes (500 crashes) in the district 2005-2009.

Rural loss of control 2005 - 2009			
Loss of control	Local roads	State highways	
At bend	110 crashes	249 crashes	
Straight road	54 crashes	87 crashes	

Eighty-three percent of all loss of control crashes on rural roads struck roadside objects. Most crashes at bends involved a driver losing control of their vehicle, then running off the road or perhaps colliding with another vehicle (13 percent).

The three most common roadside hazards struck during these crashes in the district were ditches (31 percent), fences (26 percent) and banks (20 percent). Hitting these objects can result in more serious injuries than would otherwise be sustained.

The following table shows that the most of these crashes were a single vehicle crashes. Alcohol contributed to a third and speed too fast for conditions to a quarter of injury crashes respectively while a fifth of all crashes were related to road factors.

Rural loss of control crashes				
Crash characteristics or factors	Percentage of crashes			
Single vehicle	87%			
Alcohol (injury crashes)	32%			
Too fast for the conditions (injury crashes)	23%			
Road factors	18%			
Poor handling (injury crashes)	43%			
Wet road	31%			
Night time	45%			

Trucks were involved in five percent of rural loss of control injury crashes in Gisborne District (2005-2009). This trend was upwards, resulting in 4 deaths, 7 serious and 23 minor injuries over this five year period. However we see significant gains in 2009, with trucks accounting for only 2 minor injuries due to loss of control on rural roads last year.

Further information about all rural loss of control crashes in Gisborne District 2005-2009 on:

#### Local roads

- 7 deaths, 34 serious injuries and 72 minor injuries
- Worst day of week: Sunday (30 crashes)
- Wet road: 32 percent
- Night time: 48 percent
- Alcohol over limit: 40 percent
- Most common injury crash factor: poor handling (49 percent) followed by too fast (27 percent)
- Road factors: 12 percent
- At fault male driver (injury crashes): 71 percent
- 29 percent of drivers at fault (injury crashes) were on either restricted or learner license
- Most common at fault drivers' age group (injury crashes): 15 to 24 year (33 percent)

- 18 deaths, 54 serious injuries and 178 minor injuries
- Worst day of week: Saturday (63 crashes)
- Wet road: 31 percent
- Night time: 43 percent
- Alcohol over limit: 28 percent
- Most common injury crash factor: poor handling (40 percent) and fatigue (24 percent)
- At fault male driver (injury crashes): 61 percent
- Road factors: 21 percent
- 25 percent of drivers at fault (injury crashes) were either on restricted or on learner license
- Most common at fault drivers' age group (injury crashes): 15 to 24 years (31 percent)

# **Alcohol**

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the NZ legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

#### Gisborne District

During the last five year period (2005-2009) 26 percent of all injury crashes in Gisborne District were alcohol related. In 2009 alcohol was a factor in two-fifths of all injury crashes in the district (39 percent). This is much higher than the national average and also, more significantly, much higher than in similar authorities (17 percent).

There were 161 alcohol-related injury crashes and 221 non-injury crashes reported during the last five years. These crashes resulted in 20 deaths, 63 serious injuries and 175 minor injuries.

The latest five year data shows an upward trend in the total number of alcohol-related injury crashes in the district. There has been a significant increase in the number of minor injury crashes with alcohol being a contributing factor.



Over a third of alcohol-related crashes show drivers driving too fast for conditions (35 percent). Most crashes involving alcohol were on urban roads (68 percent).

Three-quarters of alcohol-related crashes occurred during hours of darkness (76 percent) and a similar number involved male drivers (72 percent).

Nearly half the at fault drivers in alcohol related injury crashes held a learner or restricted licence or have been disqualified or never been licensed (45 percent). Young drivers (15-19 year olds) constituted 28 percent of at fault drivers in these crashes.

#### Alcohol and speed

Speed was a factor in 32 percent of the 161 alcohol related injury crashes in the district 2005-2009 resulting in 8 deaths, 27 serious injuries and 63 minor injuries. Speed itself has been a factor in 17 percent of all injury crashes in the district in the last five years.

Three-quarters of the crashes where alcohol and speed were both contributing factors occurred within urban speed limits (75 percent), a similar number occurred during hours of darkness (74 percent) and over two-thirds on local roads (68 percent). Most of these were loss of control at bend type crashes (70 percent). Over half of the at fault drivers in these injury crashes were males under 25 years of age (55 percent).

Further information about all alcohol related crashes in Gisborne District 2005-2009 on:

#### Local roads

- 6 deaths, 36 serious injuries and 117 minor iniuries
- Worst month: July and October (31 crashes each)
- Worst day of week: Saturday (78 crashes)
- Wet road: 29 percent
- Night time: 76 percent
- Intersection: 39 percent
- Excessive speed: 39 percent
- Most common injury crash factor: poor handling (21 percent) followed by poor observation (18 percent)
- At fault male driver (injury crashes): 70 percent
- 45 percent of drivers at fault (injury crashes) were either on restricted or learner license or were disaualified
- Most common at fault drivers' age group (injury crashes): 15 to 29 years (62 percent)

- 14 deaths, 27 serious injuries and 58 minor iniuries
- Worst month: March and May (10 crashes each)
- Worst day of week: Saturday (29 crashes)
- Wet road: 26 percent
- Night time: 77 percent
- Intersection: 24 percent
- Excessive speed: 28 percent
- Most common injury crash factor: poor handling (22 percent) followed by fatigue (19 percent)
- At fault male driver (injury crashes): 74 percent
- 46 percent of drivers at fault (injury crashes) were either on restricted or learner license or were disqualified or never licensed
- Most common at fault drivers' age group (injury crashes): 15 to 29 years (47 percent)

# Speed

Speed is a major contributing factor involved in road crashes. In 2009, excessive speed contributed to 31 percent of all fatal crashes and 17 percent of all injury crashes in New Zealand. These crashes resulted in 118 deaths, 553 serious injuries and 2067 minor injuries.

In Gisborne District, travelling too fast for conditions was a factor in 20 percent of all injury crashes in 2009, which was equal to the similar authorities average but proportionally higher when compared the national average (17 percent).

There were 108 speed related injury crashes and 224 non-injury crashes reported during the last five years in Gisborne District. These crashes resulted in 12 deaths, 41 serious injuries and 126 minor injuries.

The latest five year data shows a slight upward trend in the total number of speed-related crashes.



A third of the speed related crashes occurred on state highways (32 percent) accounting for three-fifths of the fatalities (58 percent).

The following table shows a breakdown of the speed limit environ of all speed-related crashes in the district 2005-2009.

Speed related crashes					
	2005	2005	2006	2007	2009
Urban	38	28	39	50	55
Rural	31	25	15	28	23
Total	69	53	54	78	78

Rural roads are roads with a speed limit of 80km/h or more.

Three-quarters of at fault drivers in these crashes were male (73 percent). Over half of the at fault drivers were aged under 25 years of age (56 percent).

Half of the at fault drivers in the injury crashes held either a learner or a restricted licence or never licensed or were disqualified (48 percent).



Further information about speed-related crashes in Gisborne District 2005-2009 on:

#### Local roads

- 5 deaths, 23 serious injuries and 77 minor
- Worst month: July (33 crashes)
- Worst day of week: Saturday (61 crashes)
- Wet road: 30 percent
- Night time: 60 percent
- Alcohol over limit (injury crashes): 64 percent
- Most common crash movement factor: Bend-loss of control (61 percent)
- At fault male driver (injury crashes): 78 percent
- At fault drivers held learner or restricted licence (injury crashes): 38 percent
- Most common age group (injury crashes): 15 to 24 years (63 percent)

- 7 deaths, 18 serious injuries and 49 minor injuries
- Worst month: October (14 crashes)
- Worst day of week: Saturday (27 crashes)
- Wet road: 40 percent
- Night time: 46 percent
- With alcohol over limit (injury crashes): 34 percent
- Most common crash movement factor: Bend-loss of control (82 percent)
- At fault male driver (injury crashes): 65 percent
- At fault drivers held learner or restricted licence (injury crashes): 31 percent
- Most common age group (injury crashes): 15 to 24 years (42 percent)

# Vulnerable road users

Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore more susceptible to severe injuries. These are described as pedestrians, cyclists and motorcyclists.

In Gisborne District, vulnerable road users were involved in 28 percent of all injury crashes in 2005-2009, accounting for 22 percent of all casualties, 15 percent of all deaths and 23 percent of all serious injuries over the five year period.

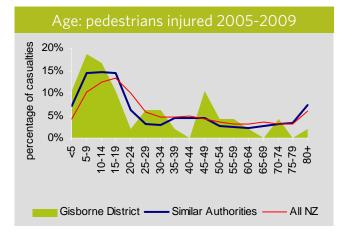
# edestrians

Injury crashes involving pedestrians in Gisborne District accounted for 8 percent of all injury crashes during the last five year period, resulting in 1 death, 14 serious injuries and 42 minor injuries.

The latest five years data shows a level trend in the total number of casualties in crashes involving pedestrians.

#### Casualty trends: pedestrian crashes number of casualties 15 10 5 0 2006 2007 2008 0 0 5 3 3 Serious Minor 11 2 12 10 16 13 -TOTAL

In Gisborne District during 2005-2009, nearly half of pedestrians injured were under 15 years of age (46 percent), this was proportionally higher than similar authorities (36 percent) and the all-NZ average (27 percent) for the same period.



The worst accident locations or routes for pedestrian injury accidents in Gisborne District are as listed in the following table.

Locations/routes	Number of pedestrian injury crashes 2005-2009
Abbott St / Gladstone Road	3
Childers Road / Roebuck Road	2
Childers Road / Collins St	2
Peel St / Gladstone Road	2
SH 35 / Craig Road	2
SH 35 / Harris St	2
Stout ST	3
Stanley Road	2
Lytton Road	2

Nearly all pedestrian crashes occurred on urban roads (96 percent). Just over half were at intersections (54 percent). Three-quarters took place during the hours of daylight (73 percent).

The following were the most commonly reported pedestrian factors involved in these pedestrian crashes:

- 64 percent involved pedestrians crossing roads heedless of traffic
- 24 percent did not see or look for other party until too late
- 10 percent of those injured were children that escaped from supervision
- 8 percent involved pedestrians stepping out from behind parked cars

Seven percent of pedestrian injury crashes record that the driver failed to give way to a pedestrian using a crossing point on the roadway, either at a zebra crossing or when turning at traffic lights.

Further information about pedestrian injury crashes in Gisborne District 2005-2009 on:

#### Local roads

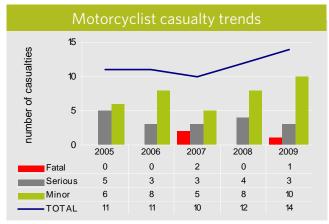
- 5 deaths, 97 serious injuries and 350 minor injuries
- Worst day of week: Wednesday (10 crashes)
- Wet road crashes: 10 percent
- Night time crashes: 31 percent
- Alcohol over limit (injury crashes): 18 percent
- Crashes at intersection: 54 percent
- Pedestrian factors contributed to crashes: 61 percent

- 2 serious injuries and 6 minor injuries
- Worst day of week: Friday (3 crashes)
- Wet road crashes: nil
- Night time crashes: 13 percent
- Alcohol over limit (injury crashes): nil
- Crashes at intersection: 63 percent
- Pedestrian factors contributed to crashes: 88 percent

# **Motorcyclists**

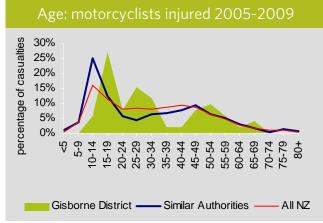
Injury crashes involving motorcyclists represent 9 percent of all injury crashes in Gisborne District during the last five year period, resulting in 3 deaths, 18 serious injuries and 39 minor injuries.

The latest five year data shows an upwards trend in the total number of casualties in crashes involving motorcyclists.



Three-quarters of motorcycle crashes were on urban roads (74 percent), a similar number occurred during daylight hours (72 percent) and mostly in dry conditions (83 percent). Half of the crashes were at intersections (51 percent). Nearly a third were reported as single party motorcycle crashes (30 percent).

The age distribution of injured motorcyclists is shown in the chart below. Over a quarter (27 percent) of all those motorcyclists injured were in the age group 15-19 years. We also see that motorcyclists in the age group 25-34 years are over represented when compared to similar authorities and the all-NZ averages.



The scenarios for crashes involving motorcyclists were many and varied. The most common scenarios in Gisborne District 2005-2009 were:

- loss of control while turning: 22 percent
- a vehicle or a motorcyclist following too closely collides with a vehicle ahead, at crossroads or traffic signals: 12 percent
- at a crossroad both vehicles travelling straight through collide: 11 percent

High motorcyclist crash locations/ routes	Number of motorcyclist crashes 2005-2009
Gladstone Road / Disraeli St	2
Palmerston Road / Cobden St	2
SH 2 / Nicks Head Station Road	1
SH 2 / Bond Road	1
SH 35 / Parkinson St	1
SH 35 / Parau St	1
SH 35 / Rutene Road	1

Routes through the district and city: SH 35, Gladstone Road, SH 2, Ormond Road, Lytton Road

The worst accident locations or routes for motorcyclist accidents in the district are found in the Gisborne District environ as listed above.

Further information about motorcyclist involved crashes in Gisborne District 2005-2009 on:

#### Local roads

- 13 serious injuries and 25 minor injuries
- Most common crash movement: crossing or turning movement (36 percent)
- Most common injury crash factors: failed to give way/stop (33 percent) followed by poor handling (22 percent)
- Wet road: 14 percent
- Night time: 28 percent
- Intersection: 58 percent
- Worst day of week: Friday (11 crashes)
- Male motorcyclist injured: 83 percent

- 3 deaths, 5 serious injuries and 14 minor injuries
- Most common crash movement: lost control cornering (36 percent)
- Most common injury crash factors: overtaking (24 percent) followed by failed to give way/stop (19 percent)
- Wet road: 24 percent
- Night time: 28 percent
- Intersection: 36 percent
- Worst day of week: Wednesday and Saturday (5 crashes each)
- Male motorcyclist injured: 77 percent

# **Further information**

This report has been prepared by the Performance Information team at NZ Transport Agency. It is the eleventh such annual road safety issues report. The intent of this report is to highlight local road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries. It has been prepared using data from the Ministry of Transport's Crash Analysis System (CAS) database. This report forms a part of the Briefing Notes series of reports. The Briefing Notes present information derived from pertinent statistics to be used for decision support.

More detailed information may be obtained from either Gisborne District Council (local roads) or NZ Transport Agency.

NZ Transport Agency encourages local bodies, regional councils and NZ Police to study the briefing notes series of reports along with the road safety data reports and the road safety black-spot report. There will be road safety issues beyond those covered in this Road Safety Issues Report and we encourage our partners to use their access to the Crash Analysis System to identify and examine these further.

# **Contacts**

#### **NZ Transport Agency**

#### **Napier Regional Office**

Dunvegan House, L3 215 Hastings Street PO Box 972 Napier 4140 Tel 06 974 5520 Fax 06 974 5529 http://www.nzta.govt.nz

#### **Performance Information / Senior Engineer CAS**

James King (04 931 8917)

#### **Senior Engineer**

Colin Goble (06 974 5522)

#### **Gisborne District Council**

David Hadfield (06 867 2049) Land Transport Manager

Lenora McDonald (06 867 2049) Road Safety Coordinator

#### **New Zealand Police**

Road Policing Manager Eastern DHQ-NA PO Box 245, Napier Tel 06 831 0700