

New Zealand Government





# briefing notes crash analysis a Safe System approach

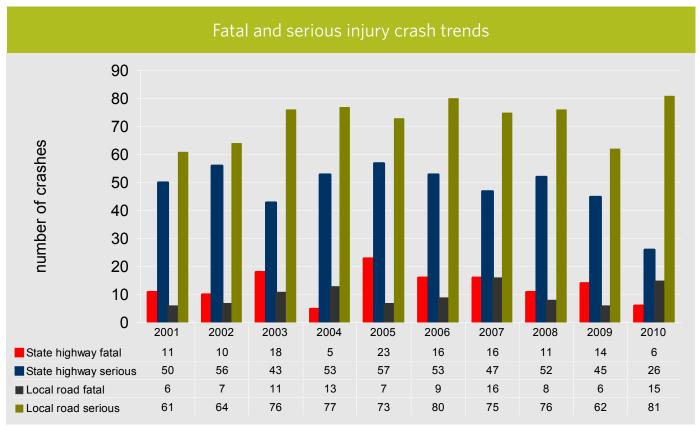
# Hawke's Bay Gisborne road safety region

This report provides a snapshot of the Hawke's Bay Gisborne road safety region's traffic crash data. This is the 12<sup>th</sup> year we have produced a set of briefing notes reporting on traffic crash data and addressing road safety issues across all territorial authorities.

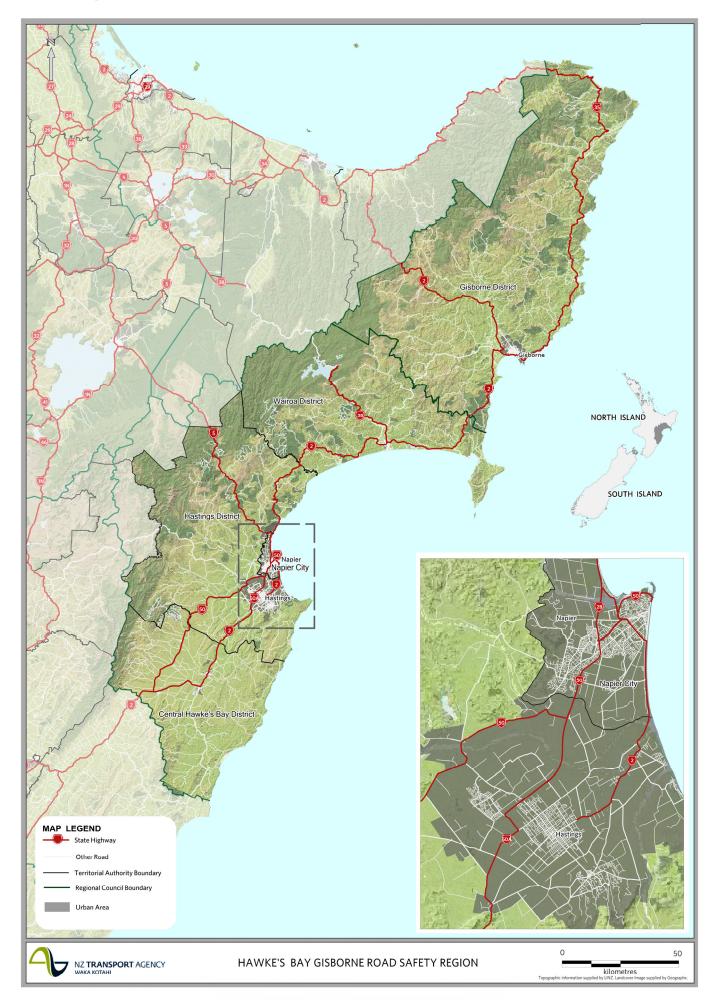
Safer Journeys (NZ's Road Safety Strategy 2020) is built upon a Safe System approach to road safety, where the emphasis is on reducing the effects of crashes as much as the numbers, and most importantly on reducing fatal and serious casualties on our roads. A crash is a single event that may involve multiple parties, many contributing factors and various casualties.

We have focused on the areas of high, medium and emerging concern, set out in Safer Journeys, that are a strategic priority when compared nationally. Each area of concern is assessed locally and regionally by calculating the individual road user's risk of a fatal or a serious injury.

We present 2010 overviews of the region and its local bodies based upon reported crash data, and the latest trends and crash characteristics for the 2006-2010 period. The identified regional issues are discussed in more detail. The information in this report covers both local roads (council owned roads) and state highways. Injury crash data is used throughout the report in charts, tables and maps, unless otherwise stated.



## The region

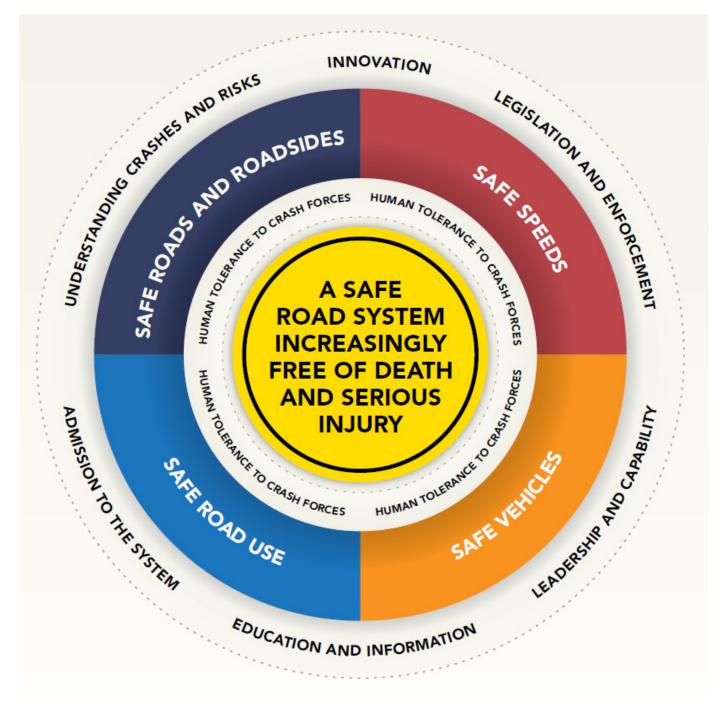


## Safe System approach

Safer Journeys, New Zealand's Road Safety Strategy 2010–2020, envisions a safe road system increasingly free of death and serious injury and introduces the Safe System approach to New Zealand.

This approach represents a fundamental shift in the way we think about road safety. A Safe System approach is about acknowledging that:

- Human beings make mistakes and crashes are inevitable
- The human body has a limited ability to withstand crash forces
- System designers and users must all share responsibility for managing crash forces to a level that does not result in death or serious injury
- It will take a whole-of-system approach to implement the Safe System approach in New Zealand



## Taking a Safe System approach - a case study

The following case study is an example of what can go wrong while driving a vehicle on a public road. The parents of the crash victims referred to in the case study have expressed the wish that their tragic story will contribute to safer journeys for all New Zealanders in the future.

It was late afternoon one day In January 2007 when two teenage sisters aged 18 and 15 were tragically killed as a result of a crash. They were on an over bridge when their car slid sideways, crossed the centreline and hit an oncoming truck. They were killed instantly.

The coroner's report identified a number of factors which contributed to the crash. These factors included the tyres fitted to the vehicle, and also the possibility that the driver was texting while driving and may have been distracted.

In a safe road system we are encouraged to look at all aspects around crashes on the roads as we work to have a road network increasingly free from death and serious injury.

This incident demonstrates the many factors typically involved in a crash. To avoid similar fatalities we need to look beyond driver blame and work on strengthening all parts of the system: the roads and roadsides, the speed, the vehicle and the road use. The response to a problem may lie in more than one of these four cornerstones of a safe road system. For instance, in future, better management of both speed and loss of control may lie in vehicle technology.

Using the principles of a Safe System approach in this case, the following has been observed:

- Safe roads and roadsides: This section of State Highway 1 has a 100km/h speed limit and is rated a 'two star' road using the KiwiRAP\* system for rating roads. The bridge where the crash occurred had a moderate right hand curve and a speed advisory of 85km/h. Records indicate that there had been five injury crashes reported in the immediate vicinity of the bridge. These included four lost control crashes, one of which resulted in a head-on crash.
  - KiwiRAP rates roads from one to five stars according to their safety features.
- Safe vehicles: The vehicle driven by the sisters was a 1998 Japanese imported Toyota Trueno, which was unrated in the ANCAP\* system. The vehicle had a current warrant of fitness at the time of the crash, but it was found that the tyres were not matched and the rear ones were both low in tread, and designed for cold/snow conditions. If the vehicle involved in this crash had been a five star ANCAP rated vehicle, the chances of fatality would have been reduced. Evidence suggests that this vehicle had lost control on more than one occasion previously due to driver input and had previously been involved in a crash and subsequently repaired.

\* The Australasian New Car Assessment Programme (ANCAP) tests the protection provided to front seat occupants in serious head-on and side-impact crashes. These ratings allows comparison of the crash protection offered in a serious crash by different vehicles of similar weight.

- **Safe road use**: The driver of the car was an 18 year old who held a restricted drivers licence and had been driving for about two years. Evidence indicates that she may have been texting while driving and may have been distracted. In 2010 the law changed making cell phone use while driving illegal.
- **Safe speeds**: Since the crash the advisory speed has been reduced to 75km/h, and the sign is highlighted by a large white background. The Police investigation established that this vehicle was likely to have lost control due to fast steering input and that excessive speed could not be supported as a cause of the crash.

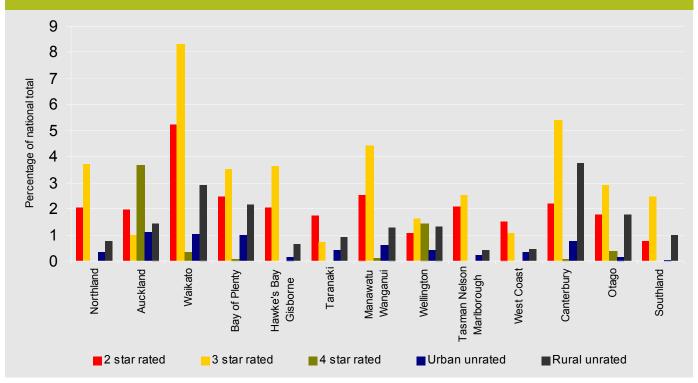
While this tragic crash is still fresh in the memory of these teenagers' loved ones, the lessons we can learn from a Safe System approach are of immense value. Road controlling authorities are encouraged to apply the Safe System approach in all their planning. Together we can achieve safer journeys for all New Zealanders.



## A view across the Safe System approach

## Safe roads & roadsides

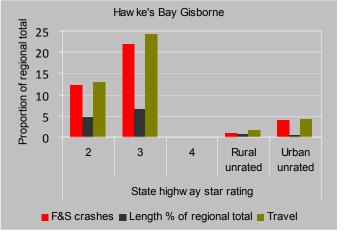
Regional distribution crashes state highway star rating (2008-2010 fatal & serious)

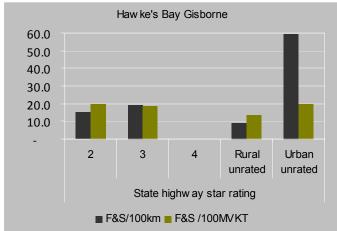


These three charts show the distribution of fatal and serious crashes on our state highway network. The chart above shows the regional distribution of all New Zealand fatal and serious crashes on our state highway network according to the star rating of that section of road where they occur.

The chart below left shows the distribution of fatal and serious crashes in Hawke's Bay Gisborne road safety region on the regions state highway network according to the star rating of that section of road where they occur. This is compared to the regional total length of and the distribution of regional travel on those star rated roads sections.

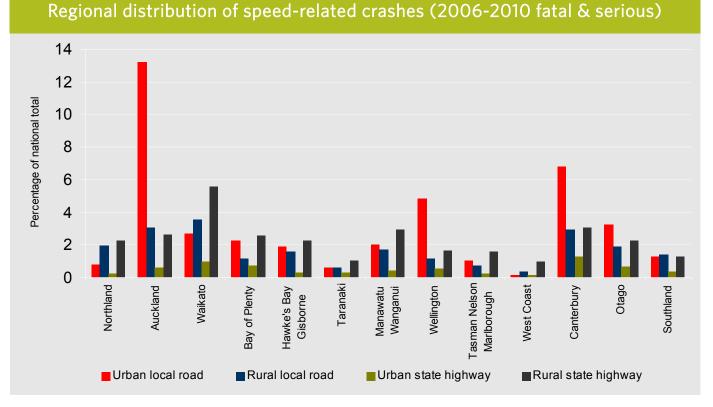
The chart below right shows the risk of a fatal and serious crash in Hawke's Bay Gisborne road safety region on the regions state highway network by both road length and individual use according to the star rating of that section of road where they occur.





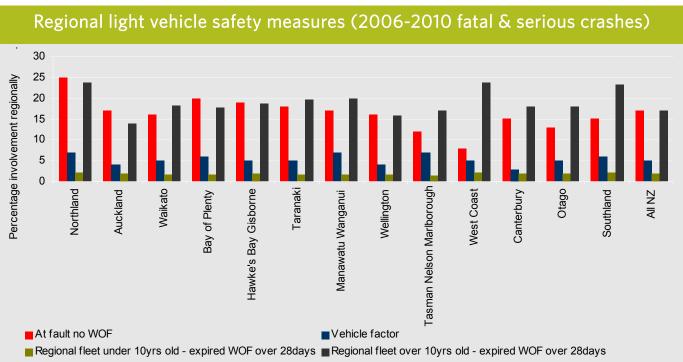
### Safe speeds

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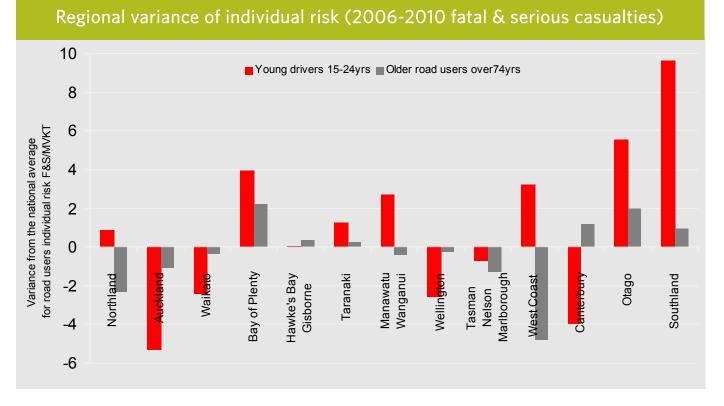
These two charts show the distribution of fatal and serious crashes across the road safety regions. The chart above shows speed-related crashes, split to show rural & urban speed zoning and local roads & state highways.

The chart below shows the involvement of light vehicles at fault with no current WOF and those with a vehicle fault in fatal or serious crashes. Also the regional proportion of light vehicles, showing both under and over 10 year old vehicles, that have an expired WOF of over 28 days.

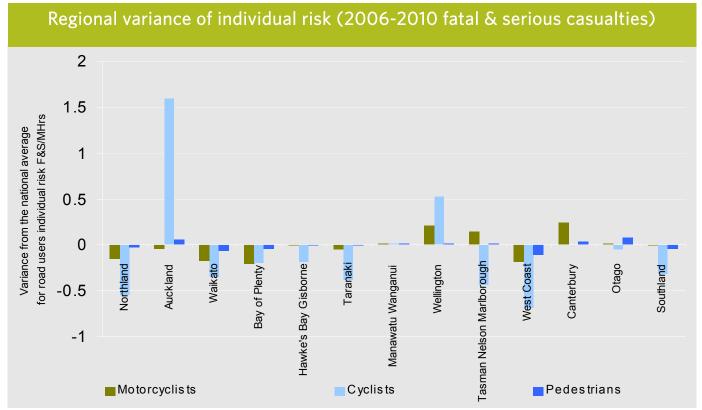


## Safe vehicles

# Safe road use



These two charts show the variance of individual risk to specific road users across the road safety regions. The chart above show young drivers of light vehicles, that is those aged 15-24 years, compared with older road users, those persons aged over 74 years. The chart below shows and compares the individual risk to vulnerable road users, these are motorcyclists, cyclists and pedestrians. This measure of risk has been used in this series of reports to select specific issue to be discussed at a regional level.



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# Risk levels across Safer Journeys' areas of concern

Hawke's Bay Gisborne road safety region selected areas of concern							
Hawke's Bay Gisborne	Safer Journeys' area of concern		Gisborne District	Wairoa District	Hastings District	Napier City	Central Hawke's Bay District
	Young drivers						
	Alcohol & drugs	Safer Journeys areas of high concern					
	Roads & roadsides: Rural roads						
	Roads & roadsides: Urban intersections						
	Too fast for conditions						
	Motorcyclists						
	Cyclists	⊳					
	Pedestrians	Areas of medium concern					
	Attention diverted						
	Fatigue	ц.					
	Older road users	Emerging concern					

Each area of concern is assessed locally and regionally by calculating the individual road user's risk of a fatal or serious injury. The degree of risk for each issue has been ranked nationally and the significance of this is shown above. For further information - <u>http://www.nzta.govt.nz/resources/communities-at-risk-register/</u>

Key:	Red	High individual risk
	Amber	Medium-high individual risk
	Green	Above average individual risk

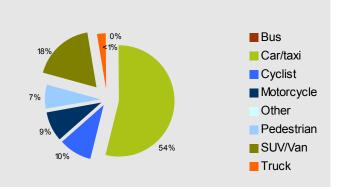
# 2010 regional overview

2010 road trauma			
Casualties	Hawke's Bay Gisborne road safety region		
Death	25		
Serious injury	136		
Minor injury	637		
Total casualties	798		

Police reported crashes	Hawke's Bay Gisborne road safety region
Fatal crashes	21
Serious injury crashes	107
Minor injury crashes	477
Total injury crashes	605
Non-injury crashes	1379

#### Casualties by road user type in 2010

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#### 2010 MoT calculation social cost of all crashes

Local roads	\$183.06M
State highways	\$ 76.78M
Total	\$ 259.84M

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 and property damage.



## **Regional local roads**

In the 2006-2010 period in Hawke's Bay Gisborne road safety region there were 2058 injury crashes on local roads resulting in 60 deaths and 465 serious injuries.

The latest five year data shows a steady trend in the number of fatal crashes, however the number of serious injury crashes shows a downward trend.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban/rural 2006 -2010				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	41	221	608	870
Urban	19	244	1526	1789
Total	60	465	2134	2659

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes were loss of control or head-on crashes at bends. Nearly a quarter of the fatal and serious injury crashes involved crossing and turning type movements.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

A third of fatal and serious injury crashes involved poor observation. A quarter of the fatal and serious injury crashes involved alcohol and failing to give way or stop each. A fifth of the fatal and serious injury crashes involved speed too fast for the conditions and poor handling each.

Local roads 2006-2010			
Crash factor	Percentage fatal and serious crashes	Percentage all injury crashes	
Alcohol	28	19	
Too fast (for the conditions—not over the speed limit necessarily)	18	15	
Failed to give way or stop	24	28	
Failed to keep left	5	4	
Overtaking	3	3	
Incorrect lane or position	6	7	
Poor handling (for example losing control while braking)	19	16	
Poor observation (not checking properly)	36	45	
Poor judgement (for example misjudging speed of others)	13	13	
Fatigue	6	4	
Disabled / ill	5	5	
Pedestrian factors	8	6	
Vehicle factors	5	5	
Other (misc)	12	8	
Road factors	9	8	
Weather	3	3	

Factors contributing to crashes

Further information about injury crashes on local roads 2006-2010:

- 17 percent on wet roads
- 32 percent during night time
- 45 percent at intersections
- 41 percent of crashes struck roadside objects (in total 1195 objects hit)
- Most represented five year age group in at fault drivers in crashes, 15 to 24 years (38 percent of at fault drivers)
- 12 percent of crashes involved motorcycles
- 53 percent of at fault driver held full NZ licence

## Regional state highways

Between 2006 and 2010 period in Hawke's Bay Gisborne road safety region there were 1022 injury crashes on state highways resulting in 73 deaths and 324 serious injuries.

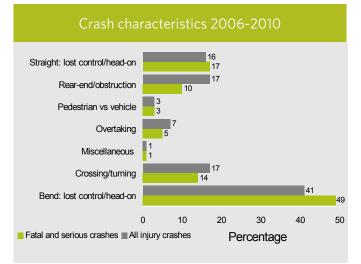
The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban/rural 2006 -2010				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	70	284	917	1271
Urban	3	40	240	283
Total	73	324	1157	1554

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Half of fatal and serious injury crashes were loss of control or head-on crashes at bends. A sixth of the fatal and serious injury crashes were loss of control or head-on crashes on straight roads.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

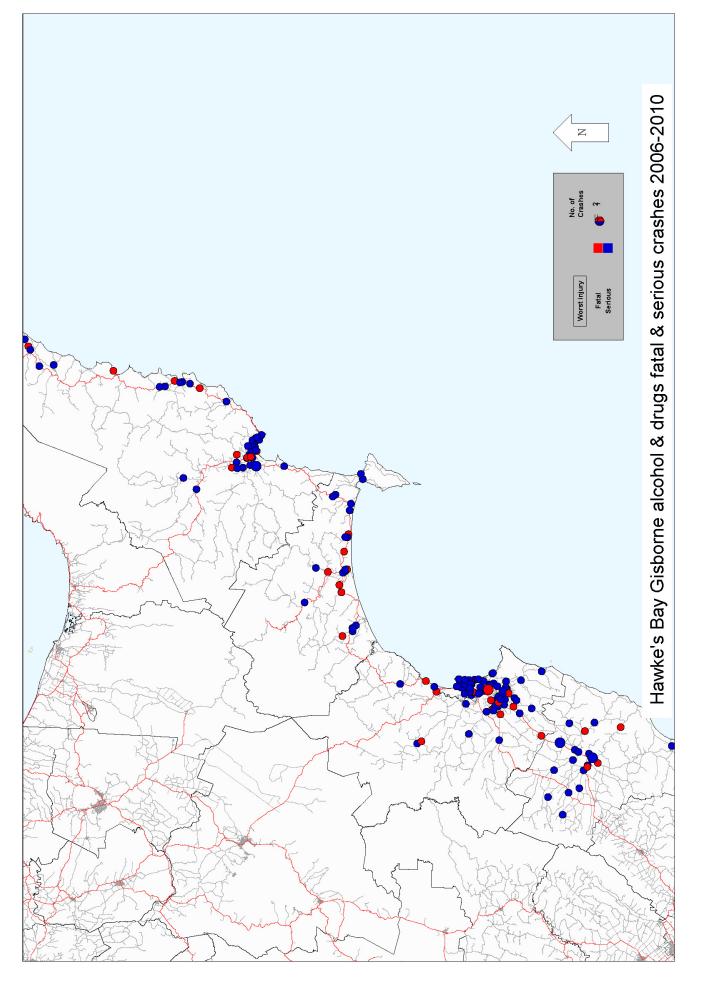
Nearly a third of fatal and serious injury crashes involved poor observation. A quarter of the fatal and serious injury crashes involved alcohol and speed too fast for the conditions each. Nearly a sixth of the fatal and serious injury crashes involved driver fatigue.

Factors contributing to crashes State highways 2006-2010				
Crash factor	Percentage fatal and serious crashes	Percentage all injury crashes		
Alcohol	20	15		
Too fast (for the conditions—not over the speed limit necessarily)	20	18		
Failed to give way or stop	14	17		
Failed to keep left	12	7		
Overtaking	4	4		
Incorrect lane or position	5	7		
Poor handling (for example losing control while braking)	25	24		
Poor observation (not checking properly)	29	35		
Poor judgement (for example misjudging speed of others)	8	11		
Fatigue	15	13		
Disabled / ill	7	4		
Pedestrian factors	3	2		
Vehicle factors	7	6		
Other (misc)	8	8		
Road factors	9	12		
Weather	3	4		

Further information about injury crashes on state highways 2006-2010:

- 22 percent on wet roads
- 32 percent during night time
- 29 percent at intersections
- 53 percent of crashes struck roadside objects (in total 772 objects hit)
- Most represented five year age group in at fault drivers in crashes, 15 to 24 years (31 percent of at fault drivers)
- 9 percent of crashes involved motorcycles
- 57 percent of at fault driver held full NZ licence

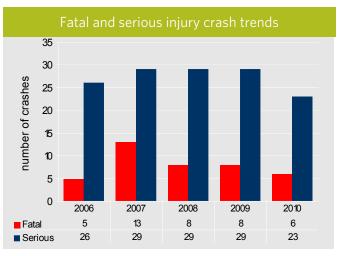
# Regional alcohol/drug-related fatal & serious crashes



# Alcohol and drugs

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 legal limit (80mg of alcohol per 100ml of blood) is sixteen times more likely to be involved in a fatal crash than a sober driver.

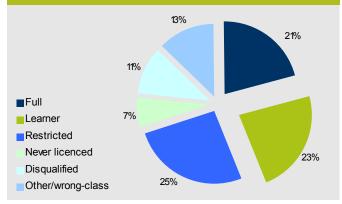
In Hawke's Bay Gisborne road safety region, alcohol was a factor in 559 injury crashes 401 on local roads and 158 on state highways.

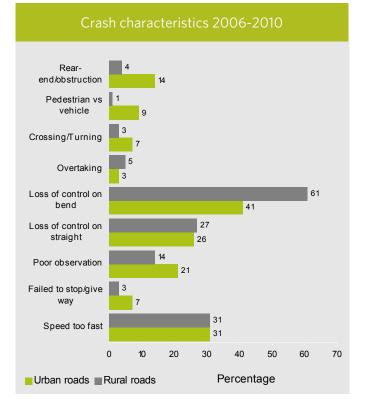


Three-quarters of at fault drivers in alcohol related injury crashes were male and nearly half were under 25 years of age. Nearly two-thirds of at fault drivers in these injury crashes held a full NZ licence.



Licence status of at fault drivers





Further information about alcohol related injury crashes in the region 2006-2010:

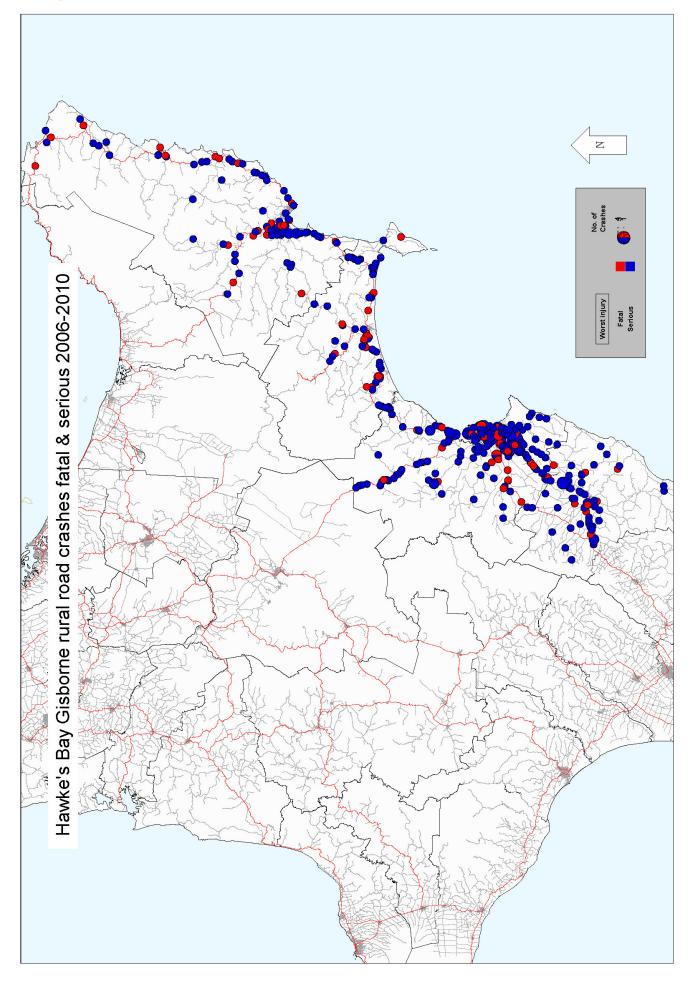
#### Local roads

- 29 deaths, 130 serious injuries and 403 minor injuries
- Most common crash type lost control/head on at a bend (110 crashes)
- 35 percent at intersections
- 77 percent night time
- Worst three hour time period, 9pm to midnight
- Worst day Saturday, best Tuesday
- Number of roadside objects struck, 456
- Most common object struck, fence

#### State highways

- 19 deaths, 68 serious injuries and 171 minor injuries
- Most common crash type lost control/head on at a bend (91 crashes)
- 18 percent at intersections
- 77 percent night time
- Worst three hour time period, 9pm to midnight
- Worst day Saturday, best Monday
- Number of roadside objects struck, 189
- Most common object struck, fence

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## **Rural roads**

High risk rural roads are a high priority for Safer Journeys and many of the issues for these road are around the provision of a safe road environment. This includes appropriate geometric design, good delineation, adequate surface skid resistance and a roadside free of unforgiving hazards.

Between 2006 and 2010 in Hawke's Bay Gisborne road safety region there were 1390 injury crashes on rural roads (that is roads with a speed limit of 80km/hr or more). This represents 62 percent of all fatal and serious crashes in the region.



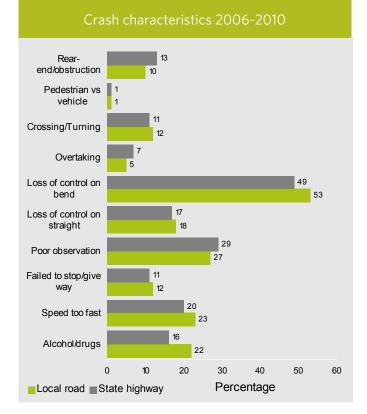
A significant problem on rural roads are roadside hazards which contribute to the overall crash outcome by increasing injury severity but can in themselves be a contributory factor in a crash.

For example occupants in an errant vehicle striking a large tree close to the road edge are likely to sustain worse injuries than if the tree was not present.

CAS records roads conditions and road faults at the time of the crash if they are reported by the attending officer and these are detailed below.

Types of road factors in injury crashes			
Road factor type	Number of times reported		
Slippery road*	87		
Road surface in poor condition	61		
Road obstructed	6		
Visibility limited	23		
Signs or signals (needed or faulty)	4		
Markings (needed or faulty)	2		
Street lighting	1		

\* note that NZTA does not assume that a road that is wet is necessarily slippery. This factor is only added to CAS if the attending Police Officer specifically mentions a slippery road.



Further information about injury rural road crashes in the region 2006-2010:

#### Local roads

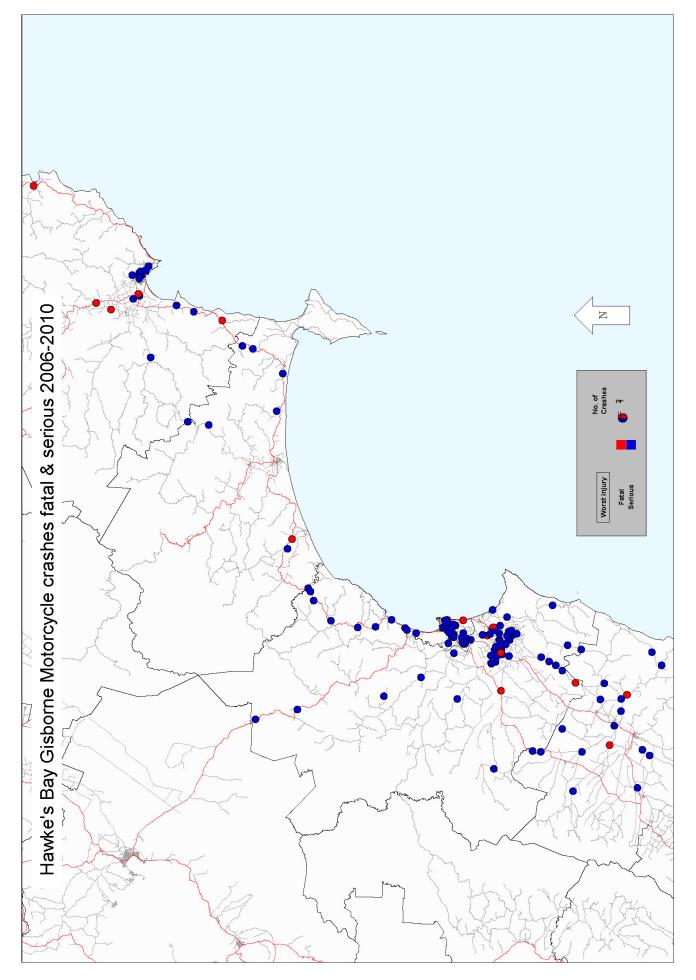
- In 583 crashes there were 41 deaths, 221 serious injuries and 608 minor injuries
- Most common crash type was loss of control/head on at bends (308 crashes)
- 20 percent at intersections
- 19 percent wet road
- 37 percent night time
- 10 percentage of crases included a contributory road related crash factor
- Most common at fault driver age group, 15 to 19 years (21 percent of at fault drivers)

#### State highways

- In 807 crashes there were 70 deaths, 285 serious injuries and 920 minor injuries
- Most common crash type loss of control/head on at a bend (396 crashes)
- 17 percent at intersections
- 25 percent wet road
- 34 percent night time
- 13 percentage of crases included a contributory road related crash factor
- Most common at fault driver age group, 15 to 24 years (34 percent of at fault drivers)

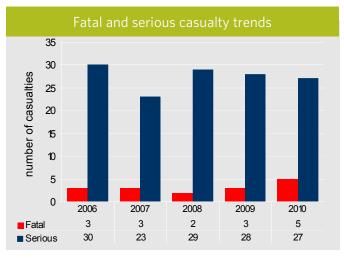
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# Regional motorcycle fatal & serious crashes

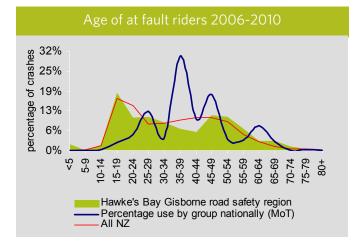


## Motorcyclists

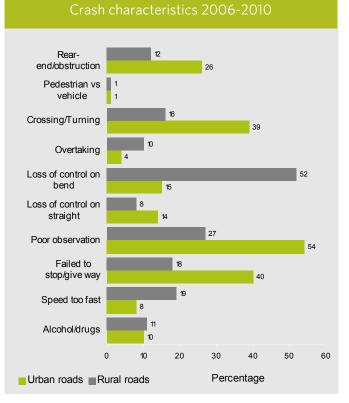
In Hawke's Bay Gisborne road safety region 19 percent of all fatal and serious crashes involve a motorcyclist or moped.



The chart below illustrates age of at fault riders in crashes for Hawke's Bay Gisborne road safety region as well as all of New Zealand. In addition there is national distance ridden information taken form the Ministry of Transport (MoT) Household Travel Survey. It shows that young riders are highly over-represented.







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Further information about motorcycle and moped injury crashes in the region 2006-2010:

#### Local roads

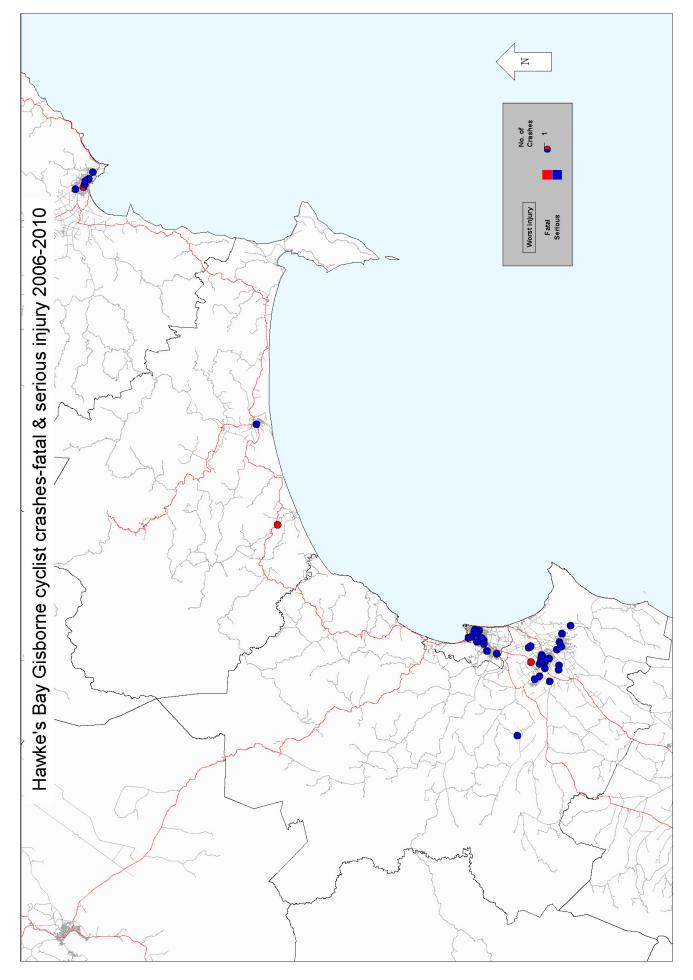
- In 258 crashes 8 motorcyclists died, 96 received serious injuries and 170 minor injuries
- 11 percent involved speed too fast for the conditions
- Most common crash type was failure to giveway/stop
- 22 percent at night
- 12 percent of crashes involved a road related factor, the most common of which was slippery road because of rain
- Worst month May, best June
- Worst day Wednesday, best Tuesday

#### State highways

- In 86 crashes 7 motorcyclist died, 39 received serious injuries and 52 minor injuries
- 16 percent involved speed too fast for the conditions
- Most common crash type was loss of control or head on crashes at bends
- 23 percent at night
- 19 percent of crashes involved a road related factor the most common of which was slippery road because of oil, diesel, fuel
- Worst month May, best June
- Worst day Saturday, best Wednesday

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## Regional cyclist fatal & serious crashes

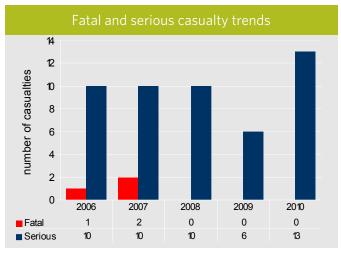


#### July 2011

## Cyclists

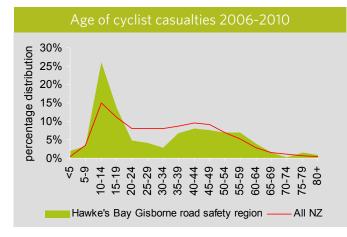
In Hawke's Bay Gisborne road safety region between 2006 and 2010 cyclists represent 10 percent of all injury crashes and 7 percent of fatal and serious crashes.

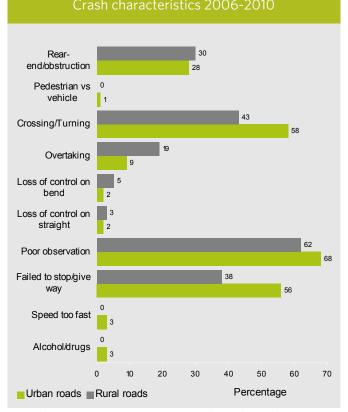
Cycling is an area of medium concern in Safer Journeys. The goal for 2020 is to reduce the risk for cyclists as well as encouraging an increased use of this mode through safer roading infrastructure.



Cycling crashes are largely spread over the region but the locations with most injury cycle crashes in the last five years are listed in below:

- Gisborne-Central (20 crashes)-includes Childers Road (5 crashes)' Gladstone Road (5 crashes)
- Gisborne-Mangapapa (10 crashes) )-includes Ormond Road/Wi Pire St (3 crashes)
- Hastings-St Leonards (18 crashes)-includes Heretaunga St West(5 crashes) and ST Aubyn St West (4 crashes)
- Napier-Onekawa (19 crashes)-includes Austin St (3 crashes), Kennedy Road (3 crashes)
- Napier-Primai (8 crashes)-includes Kennedy Road (4 crashes)
- Napier-Greenmeadows (12 crashes)-includes Kennedy Road (5 crashes)





The three most common types of crashes that cyclists have in the region are :

- collision between a vehicle and a cyclist not intending to make any turns at an intersection (68 crashes)
- a vehicle or cyclist makes left or right turn from side road to merge is struck by a vehicle travelling straight through the intersection in the same direction(41 crashes)
- a vehicle or cyclist turning right from a side road or driveway across a vehicle travelling straight through (36 crashes)

Further information about injury cycle crashes in the region 2006-2010:

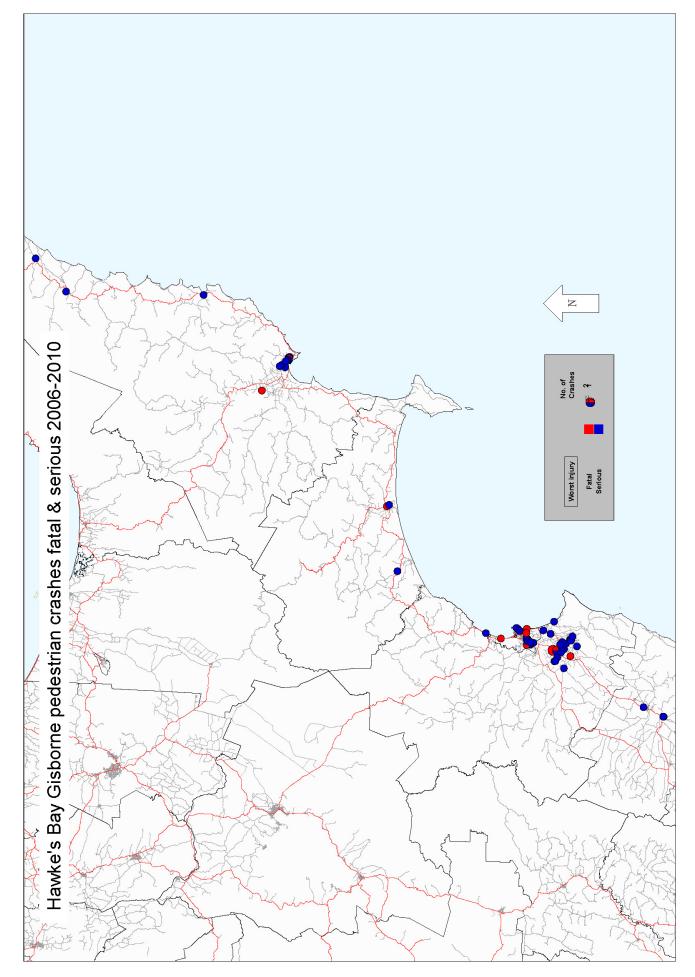
#### Local roads

- 67 percent at intersections
- 12 percent at night
- Worst month May, best January
- Worst day Tuesday, best Sunday
- Worst three hour time period 3pm till 6pm

#### State highways

- 62 percent at intersections
- 21 percent at night
- Worst month February, best September
- Worst day Thursday, best Friday
- Worst three hour time period 6am till 9am

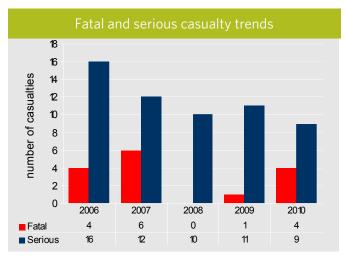
## Regional pedestrian fatal & serious crashes



#### July 2011

## Pedestrians

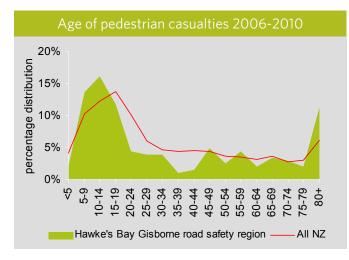
In the last five years in Hawke's Bay Gisborne road safety region 9 percent of fatal and serious crashes and 7 percent of all injury crashes involved a pedestrian.



Over time, there has been a change in the national age distribution of pedestrians being injured in New Zealand. In Hawke's Bay Gisborne road safety region between 1980 and 1984 (the earliest years covered by CAS) 3 percent of injury crashes involved pedestrians aged 19 or less. In the last five years 40 percent of injured pedestrians were in this age range. A compounding factor here is the national drop in the number of young people walking to school.

The Ministry of Transport (MoT) Household Travel Survey shows that, twenty years ago, 42 percent of children walked to school in New Zealand. Four years ago this had dropped to 25 percent. The implication of this is a need to target actions more towards an older age group than in the past.

The chart below show the age distribution of injured pedestrians in Hawke's Bay Gisborne road safety region compared to the national average.



Top ten locations for injury pedestrian crashes in the last five years - including at least one crash in 2010

Location	Number of crashes 2006 to 2010	2010
Gladstone Road, Gisborne	7	3
Childers Road, Gisborne	4	3
Ormond Road, Gisborne	4	2
Stout St, Gisborne	4	1
Riverbend Road, Napier	4	1
Heretaunga St, Hastings	4	1
Esplanade, Gisborne	2	1
Gloucester St, Napier	2	1
SH 35/Craig Road, Gisborne	3	1
Carlyle St/Faraday St, Napier	4	1

Further information about injury pedestrian crashes in the region 2006-2010:

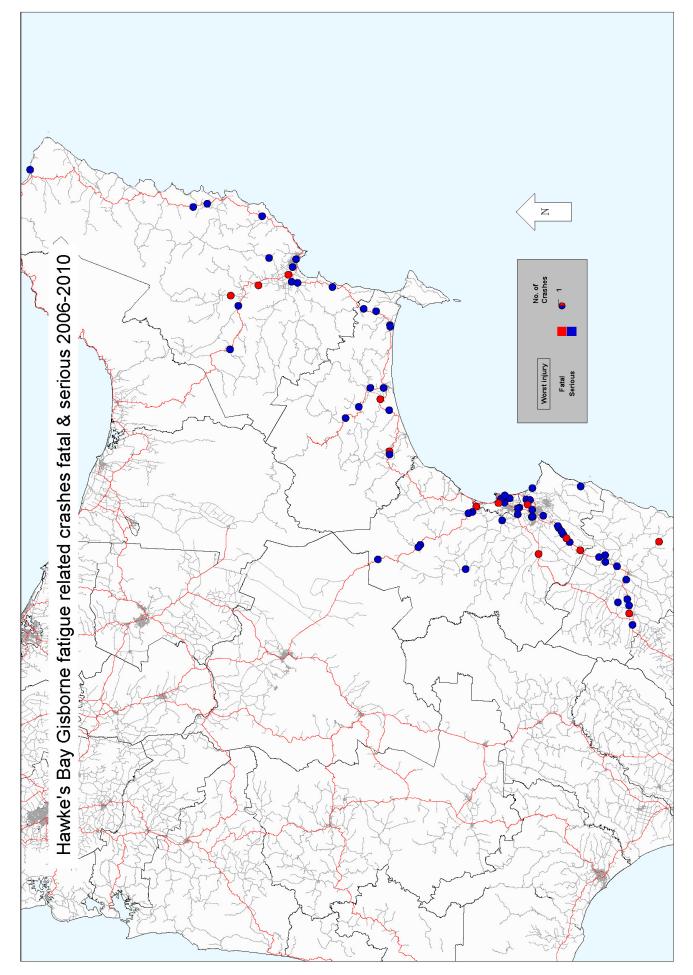
#### Local roads

- In 188 injury crashes there were 8 pedestrian deaths, 51 serious injuries and 139 minor injuries
- The most common crash type is when a pedestrian is crossing the road and is hit by a vehicle approaching from their right (72 crashes).
- Worst three hour time period 3pm to 6pm
- 30 percent at night
- 31 percent at intersections
- Most common age block of at fault drivers 15 to 24 (34 crashes)

#### State highways

- In 29 injury crashes there were 6 pedestrian deaths, 6 serious injuries and 19 minor injuries
- The most common crash type is when a pedestrian is crossing the road and is hit by a vehicle approaching from their right (9 crashes).
- Worst three hour time period 3pm to 6pm
- 48 percent at night
- 31 percent at intersections
- Most common age block of at fault drivers 30 to 39 (6 crashes)

# Regional fatigue-related fatal & serious crashes



#### July 2011

## Fatigue

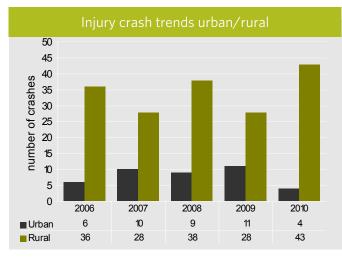
Reducing the impact of fatigue is an area of medium concern for Safer Journeys. It has long been recognised that fatigue is under-reported in New Zealand. In fact overseas research suggests that up to 25 percent of all fatal crashes could be fatigue related. Fatigue is a condition that is present long before a driver falls asleep.

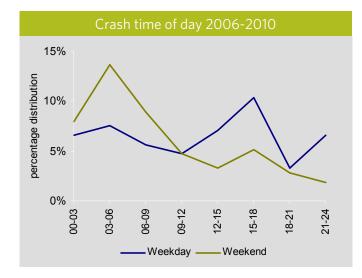
It has negative impacts on reaction time, the ability to concentrate, and a driver's understanding of the prevailing road and traffic conditions.

In Hawke's Bay Gisborne road safety region there were 213 fatigue related injury crashes representing 7 percent of all injury crashes.



Individual fatigue	Percentage of injury crashes			
causes	Road safety region	New Zealand		
General (drowsy, tired, fell asleep)	6.0	4.4		
Long trip	0.1	0.2		
Lack of sleep	0.4	1.2		
Worked long hours before driving	0.3	0.3		





A seventh of all fatigue related crashes occurred on a weekend between 3pm and 6pm, and half of these were on state highways.

Further information about fatigue related injury crashes in the region 2006-2010:

#### Local roads

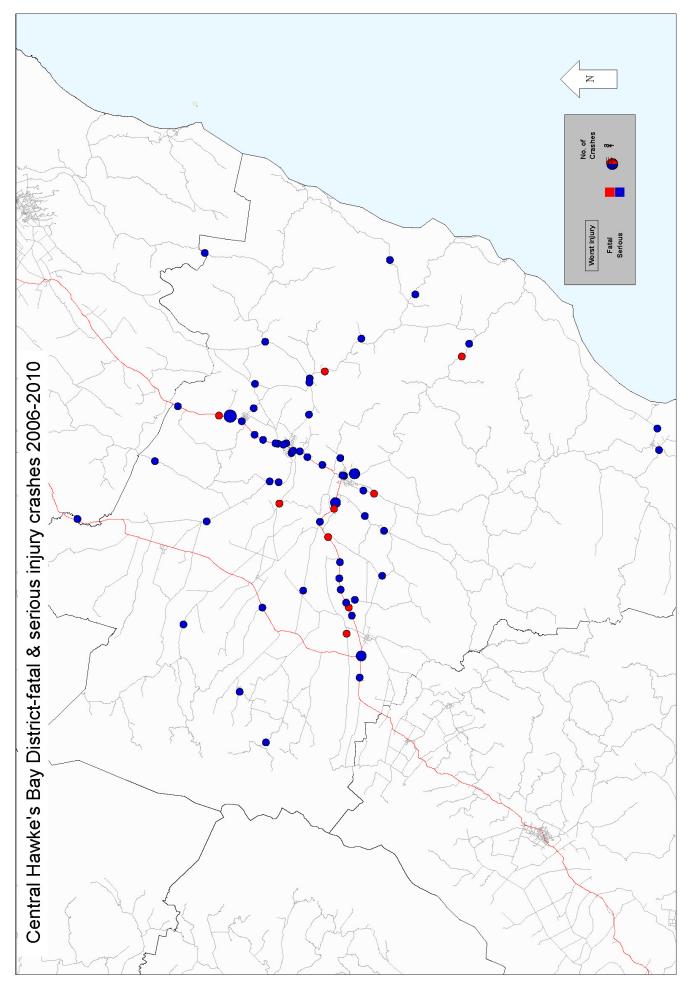
- In 79 crashes there were 6 deaths, 30 serious injuries, 83 minor injuries
- 23 percent at intersections
- 48 percent included alcohol as factor
- 57 percent rural
- 82 percent were single vehicle crashes
- 63 percent night time
- Most common crash type was loss of control or head on crash on straight roads
- Worst day of week Sunday
- Worst three hour time period 3 am till 6 am

#### State highways

- In 134 crashes there were 9 deaths, 55 serious injuries, 137 minor injuries
- 4 percent at intersections
- 24 percent included alcohol as factor
- 96 percent rural
- 87 percent were single vehicle crashes
- 42 percent night time
- Most common crash type was loss of control or head on crash at bends
- Worst day of week Sunday
- Worst three hour time period 3 pm till 6 pm

#### July 2011

# Central Hawke's Bay District fatal & serious crashes



# Central Hawke's Bay District 2010 overview

2010 road trauma			
Casualties	Central Hawke's Bay District		
Death	2		
Serious injury	16		
Minor injury	43		
Total casualties	61		

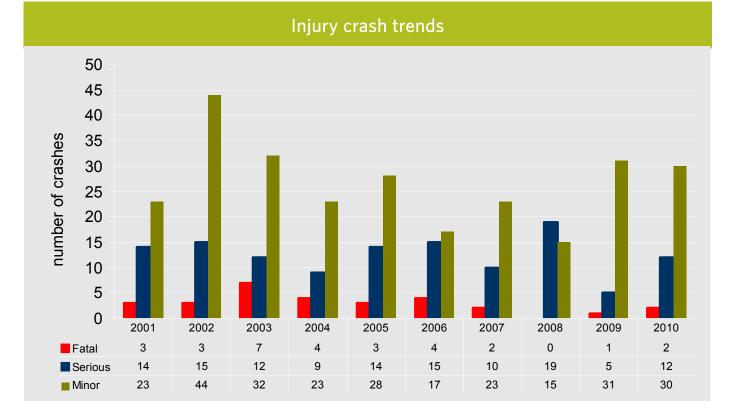
Police reported crashes	Central Hawke's Bay District
Fatal crashes	2
Serious injury crashes	12
Minor injury crashes	30
Total injury crashes	44
Non-injury crashes	69

# Safer Journeys areas of high concern

25

2010 MoT calculation social cost of all crashes			
Local roads	\$ 17.73M		
State highways	\$ 4.53M		
Total	\$ 22.26M		

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 and property damage.



## Central Hawke's Bay District local roads

In the 2006-2010 period in Central Hawke's Bay District there were 96 injury crashes on local roads resulting in 5 deaths and 44 serious injuries.

The latest five year data shows a level but fluctuating trend in combined fatal and serious injury crashes on local roads.

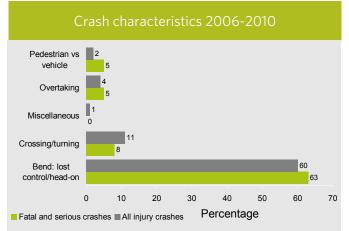
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

#### Casualties by urban / rural 2006 to 2010 Local roads

	Fatalities	Serious injuries	Minor injuries	Total
Rural	5	32	62	99
Urban	0	12	26	38
Total	5	44	88	137

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over three-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. Nearly a tenth of the fatal and serious injury crashes involved crossing and turning movements.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Two-fifths of fatal and serious injury crashes involved alcohol. A third of the fatal and serious injury crashes involved speed too fast for the conditions and slightly fewer involved incorrect lane or position. Nearly a sixth of the fatal and serious injury crashes involved failing to give way or stop.

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies	
Alcohol	32	40	30	
Too fast (for the conditions—not over the speed limit necessarily)	29	33	30	
Failed to give way or stop	16	15	9	
Failed to keep left	6	8	9	
Overtaking	3	3	2	
Incorrect lane or position	5	30	6	
Poor handling (for example losing control while braking)	34	25	38	
Poor observation (not checking properly)	27	8	23	
Poor judgement (for example misjudging speed of others)	9	10	19	
Fatigue	7	5	5	
Disabled / ill	3	3	3	
Pedestrian factors	1	3	5	
Vehicle factors	2	10	7	
Other (misc)	11	13	12	
Road factors	10	5	21	
Weather	3	0	5	

Further information about injury crashes on local roads in the district 2006-2010:

- 24 percent on wet roads
- 46 percent during night time
- 22 percent at intersections
- 70 percent of injury crashes struck roadside objects (in total 95 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (47 percent of at fault drivers)
- 20 percent of crashes involved motorcycles
- 50 percent of at fault driver held full NZ licence

#### Local road crash characteristics 2006 to 2010

27

## Central Hawke's Bay District state highways

In the 2006-2010 period in Central Hawke's Bay District there were 90 injury crashes on state highways resulting in 4 deaths and 43 serious injuries.

The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

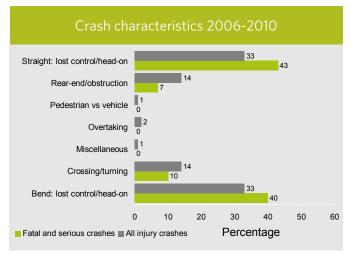
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

#### Casualties by urban / rural 2006 to 2010 State highways

	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	38	65	107
Urban	0	5	24	29
Total	4	43	69	136

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over two-fifths of fatal and serious injury crashes were loss of control or head-on crashes on straight roads. Twofifths of the fatal and serious injury crashes were loss of control or head-on crashes at bends.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

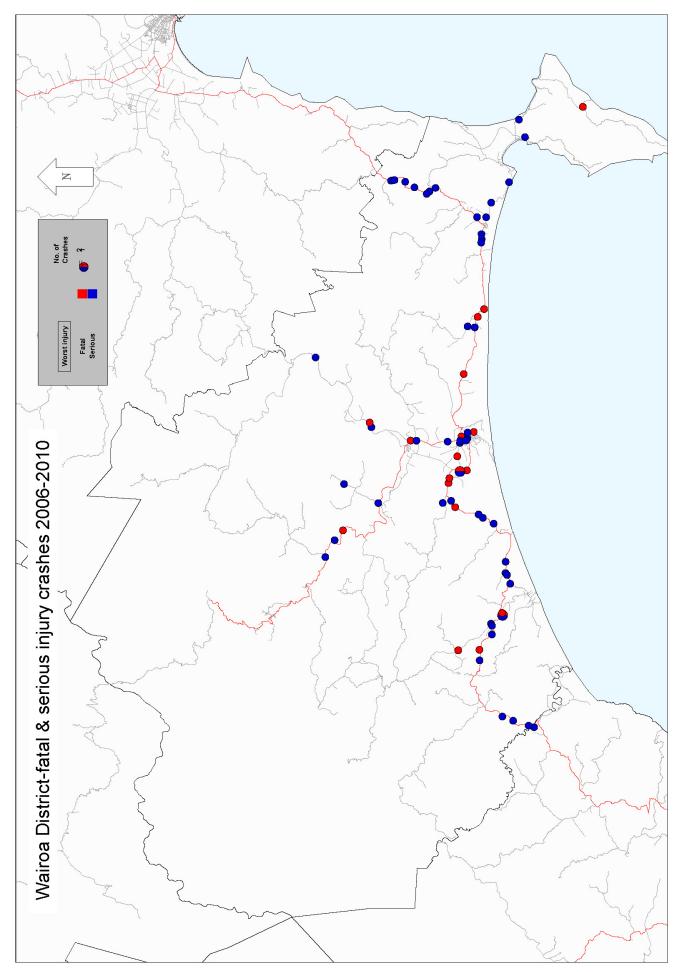
Nearly a quarter of fatal and serious injury crashes involved poor observation. Over a fifth of the fatal and serious injury crashes involved alcohol and driver fatigue each. A sixth of the fatal and serious injury crashes involved speed too fast for the conditions and use of incorrect lane or position each.

Crash factorPercentage all injury crashesPercentage fatal and serious crashesPercentage fatal and serious crashesAlcohol192021Too fast (for the conditions—noti over the speed limit necessarily)121722Failed to give way or stop1277Failed to keep left71010Overtaking104Incorrect lane or position8178Poor handling (ror example losing control while praking)232038Poor bandling (ror example losing control while praking)332323Poor bandling (ro checking properly)12315Fatigue20201810Posabled / ill81044Pedestrian factors1033Pother (misc)2381Pother (misc)9793Vehicle factors2381Road factors1010181Pother (misc)9791	State flighways crash characteristics 2006 to 2010				
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(for example misjudging speed of others)12315Fatigue202018Disabled / ill8104Pedestrian factors103Vehicle factors238Other (misc)979Road factors101018	(not checking	33	23	23	
Disabled / ill8104Pedestrian factors103Vehicle factors238Other (misc)979Road factors101018	(for example misjudging speed	12	3	15	
Pedestrian factors103Vehicle factors238Other (misc)979Road factors101018	Fatigue	20	20	18	
Vehicle factors238Other (misc)979Road factors101018	Disabled / ill	8	10	4	
Other (misc)979Road factors101018	Pedestrian factors	1	0	3	
Road factors 10 10 18	Vehicle factors	2	3	8	
	Other (misc)	9	7	9	
Weather 8 7 5	Road factors	10	10	18	
	Weather	8	7	5	

Further information about injury crashes on state highways in the district 2006-2010:

- 19 percent on wet roads
- 29 percent during night time
- 19 percent at intersections
- 63 percent of injury crashes struck roadside objects (in total 81 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (26 percent of at fault drivers)
- 6 percent of crashes involved motorcycles
- 57 percent of at fault driver held full NZ licence

## Wairoa District fatal & serious crashes



# Wairoa District 2010 overview

2010 road trauma		
Casualties	Wairoa District	
Death	1	
Serious injury	13	
Minor injury	49	
Total casualties	63	

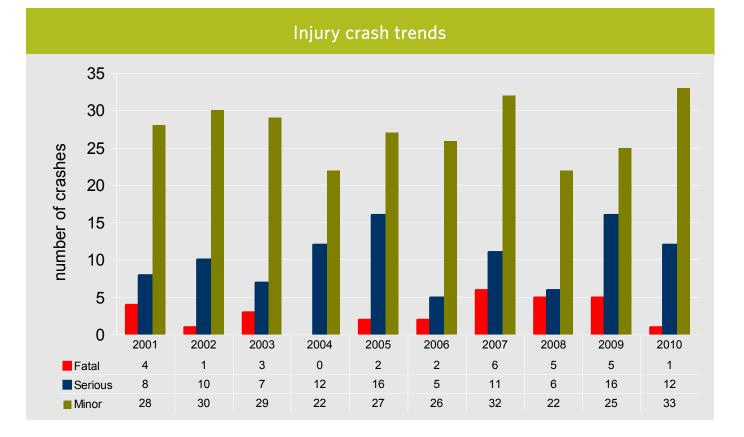
Police reported crashes	Wairoa District
Fatal crashes	1
Serious injury crashes	12
Minor injury crashes	33
Total injury crashes	46
Non-injury crashes	62



#### 2010 MoT calculation social cost of all crashes

Local roads	\$ 9.41M
State highways	\$ 9.06M
Total	\$18.47M

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 and property damage.



## Wairoa District local roads

In the 2006-2010 period in Wairoa District there were 73 injury crashes on local roads resulting in 6 deaths and 27 serious injuries.

The latest five year data shows a downward trend in fatal crashes and an upward trend in serious injury crashes on local roads.

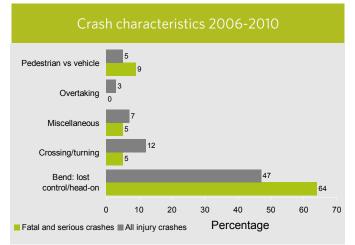
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

30

	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	15	43	62
Urban	2	12	35	49
Total	6	27	78	111

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Nearly two-thirds of fatal and serious injury crashes were loss of control or head-on crashes at bends. A tenth of the fatal and serious injury crashes involved pedestrians.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Half of fatal and serious injury crashes involved alcohol. Nearly a third of the fatal and serious injury crashes involved poor handling and a quarter involved speed too fast for the conditions. A seventh of the fatal and serious injury crashes involved road factors.

	Local road crash characteristics 2006 to 2010				
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies		
Alcohol	29	50	30		
Too fast (for the conditions—not over the speed limit necessarily)	21	23	30		
Failed to give way or stop	12	9	9		
Failed to keep left	11	9	9		
Overtaking	1	0	2		
Incorrect lane or position	4	9	6		
Poor handling (for example losing control while braking)	26	32	38		
Poor observation (not checking properly)	22	14	23		
Poor judgement (for example misjudging speed of others)	15	18	19		
Fatigue	5	5	5		
Disabled / ill	1	5	3		
Pedestrian factors	4	5	5		
Vehicle factors	8	0	7		
Other (misc)	23	32	12		
Road factors	5	14	21		
Weather	0	0	5		

Further information about injury crashes on local roads in the district 2006-2010:

- 19 percent on wet roads •
- 42 percent during night time •
- 23 percent at intersections •
- 48 percent of injury crashes struck roadside objects • (in total 47 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (39 percent of at fault drivers)
- 5 percent of crashes involved motorcycles
- 51 percent of at fault driver held full NZ licence

State highways crash characteristics 2006 to 2010

## Wairoa District state highways

In the 2006-2010 period in Wairoa District there were 133 injury crashes on state highways resulting in 16 deaths and 41 serious injuries.

The latest five year data shows a downward trend in fatal crashes and an upward trend in serious injury crashes on state highways.

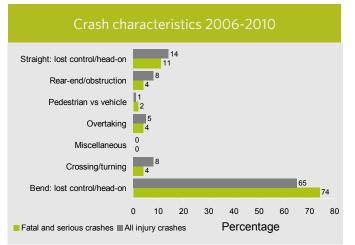
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

#### Casualties by urban / rural 2006 to 2010 State highways

	Fatalities	Serious injuries	Minor injuries	Total
Rural	15	38	119	172
Urban	1	3	13	17
Total	16	41	132	189

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Three-quarters of fatal and serious injury crashes were loss of control or head-on crashes at bends. A tenth of the fatal and serious injury crashes were loss of control or head-on crashes on straight roads.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

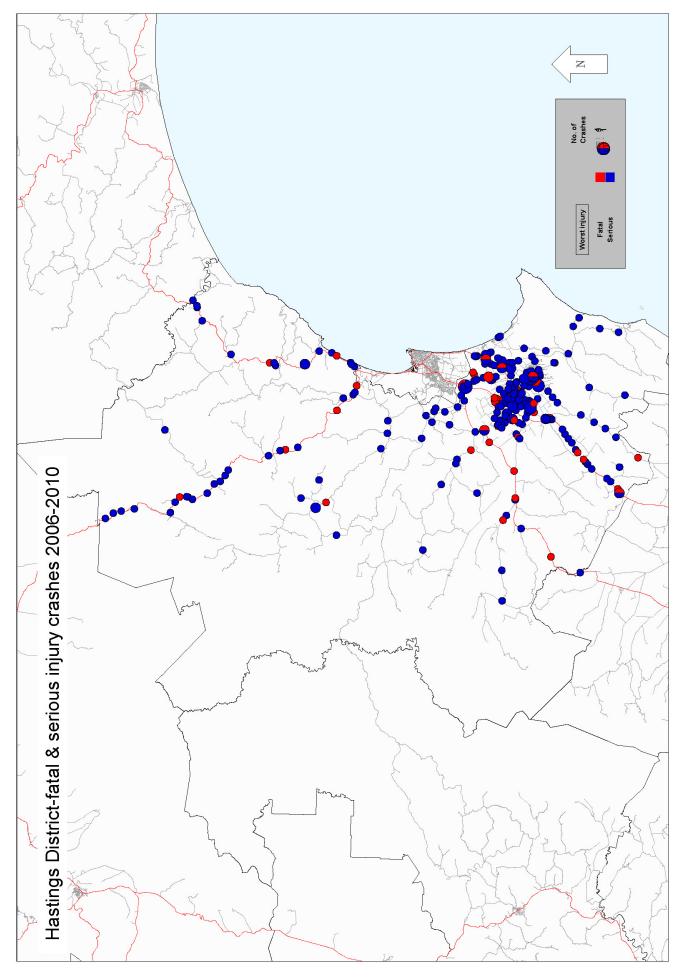
Over a third of fatal and serious injury crashes involved poor handling. Over a quarter of the fatal and serious injury crashes involved alcohol and speed too fast for the conditions each. Nearly a quarter of the fatal and serious injury crashes involved driver fatigue while 15 percent involved vehicle factors.

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	20	28	21
Too fast (for the conditions—not over the speed limit necessarily)	26	26	22
Failed to give way or stop	7	4	7
Failed to keep left	8	15	10
Overtaking	4	4	4
Incorrect lane or position	4	4	8
Poor handling (for example losing control while braking)	35	38	38
Poor observation (not checking properly)	19	15	23
Poor judgement (for example misjudging speed of others)	11	4	15
Fatigue	21	23	18
Disabled / ill	3	2	4
Pedestrian factors	0	0	3
Vehicle factors	10	15	8
Other (misc)	13	13	9
Road factors	10	6	18
Weather	5	9	5

Further information about injury crashes on state highways in the district 2006-2010:

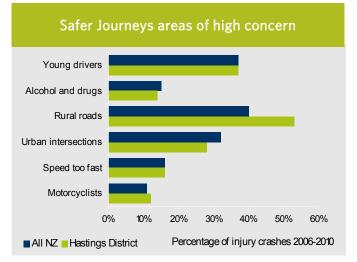
- 24 percent on wet roads
- 33 percent during night time
- 14 percent at intersections
- 73 percent of injury crashes struck roadside objects (in total 144 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (27 percent of at fault drivers)
- 5 percent of crashes involved motorcycles
- 56 percent of at fault driver held full NZ licence

## Hastings District fatal & serious crashes

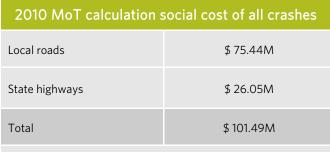


## Hastings District 2010 overview

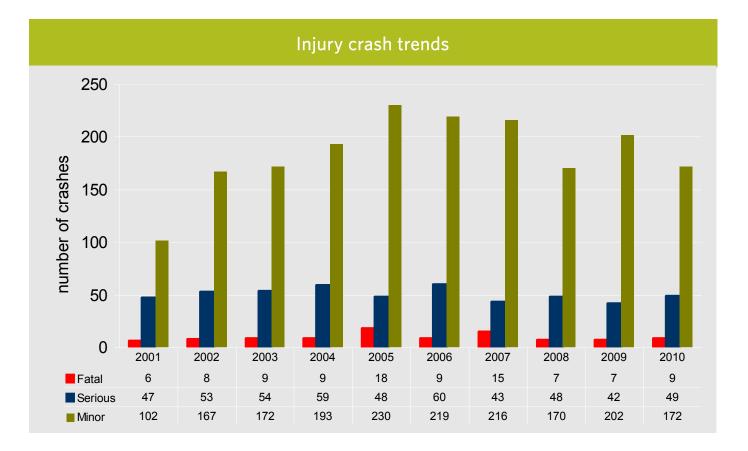
2010 road trauma		
Casualties	Hastings District	
Death	12	
Serious injury	68	
Minor injury	239	
Total casualties	319	



Police reported crashes	Hastings District
Fatal crashes	9
Serious injury crashes	49
Minor injury crashes	172
Total injury crashes	230
Non-injury crashes	489



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 and property damage.



#### July 2011

## Hastings District local roads

In the 2006-2010 period in Hastings District there were 920 injury crashes on local roads resulting in 29 deaths and 215 serious injuries.

The latest five year data shows an upward trend in fatal crashes and a downward trend in serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

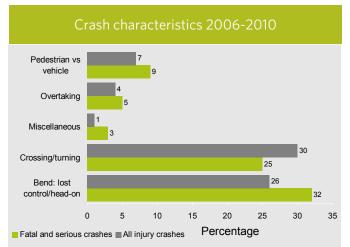
#### Casualties by urban / rural 2006 to 2010 Local roads

34

	Fatalities	Serious injuries	Minor injuries	Total
Rural	19	125	386	530
Urban	10	90	598	698
Total	29	215	984	1228

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes were loss of control or head-on crashes at bends. A quarter of the fatal and serious injury crashes involved crossing and turning movements.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Over a third of fatal and serious injury crashes involved poor observation. A quarter of the fatal and serious injury crashes involved alcohol and a similar proportion involved failing to give way or stop. A sixth of the fatal and serious injury crashes involved speed too fast for the conditions.

Local road crash characteristics 2006 to 2010			
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	16	22	27
Too fast (for the conditions—not over the speed limit necessarily)	14	17	26
Failed to give way or stop	30	25	19
Failed to keep left	4	6	7
Overtaking	3	3	2
Incorrect lane or position	7	8	6
Poor handling (for example losing control while braking)	17	20	24
Poor observation (not checking properly)	46	37	30
Poor judgement (for example misjudging speed of others)	15	17	16
Fatigue	4	6	5
Disabled / ill	5	5	5
Pedestrian factors	6	7	8
Vehicle factors	5	7	5
Other (misc)	7	10	11
Road factors	9	9	11
Weather	3	3	3

Local road crash characteristics 2006 to 2010

Further information about injury crashes on local roads in the district 2006-2010:

- 17 percent on wet roads
- 28 percent during night time
- 45 percent at intersections
- 39 percent of injury crashes struck roadside objects (in total 522 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (37 percent of at fault drivers)
- 13 percent of crashes involved motorcycles
- 54 percent of at fault driver held full NZ licence

## Hastings District state highways

In the 2006-2010 period in Hastings District there were 348 injury crashes on state highways resulting in 25 deaths and 113 serious injuries.

The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

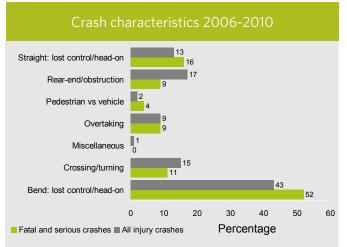
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010	
State highways	

	Fatalities	Serious injuries	Minor injuries	Total
Rural	24	109	385	518
Urban	1	4	35	40
Total	25	113	420	558

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Half of fatal and serious injury crashes were loss of control or head-on crashes at bends. A sixth of the fatal and serious injury crashes were loss of control or head-on crashes on straight roads.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved poor observation and poor handling each. A quarter of the fatal and serious injury crashes involved speed too fast for the conditions. Driver fatigue contributed to 17 percent of these crashes while road factors accounted for 13 percent.

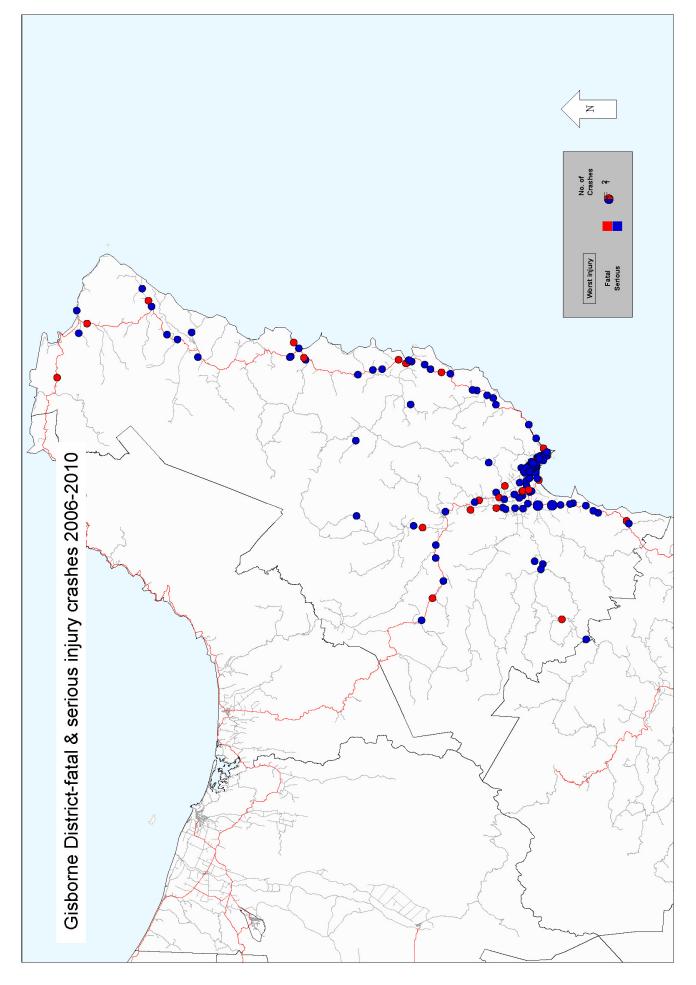
State highways crash characteristics 2006 to 2010			
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	10	12	19
Too fast (for the conditions—not over the speed limit necessarily)	22	23	18
Failed to give way or stop	15	11	17
Failed to keep left	7	12	10
Overtaking	6	5	4
Incorrect lane or position	8	4	8
Poor handling (for example losing control while braking)	26	28	24
Poor observation (not checking properly)	35	32	32
Poor judgement (for example misjudging speed of others)	12	6	11
Fatigue	12	17	15
Disabled / ill	3	9	6
Pedestrian factors	2	4	6
Vehicle factors	7	5	6
Other (misc)	7	4	8
Road factors	16	13	11
Weather	3	3	4

Further information about injury crashes on state highways in the district 2006-2010:

- 25 percent on wet roads
- 33 percent during night time
- 26 percent at intersections
- 52 percent of injury crashes struck roadside objects (in total 249 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (32 percent of at fault drivers)
- 9 percent of crashes involved motorcycles
- 59 percent of at fault driver held full NZ licence

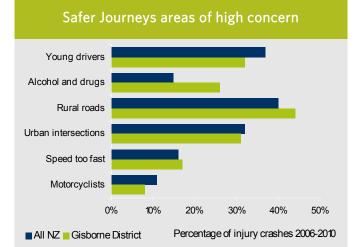
#### State highways crash characteristics 2006 to 2010

## Gisborne District fatal & serious crashes



# Gisborne District 2010 overview

2010 road trauma		
Casualties	Gisborne District	
Death	6	
Serious injury	24	
Minor injury	151	
Total casualties	181	



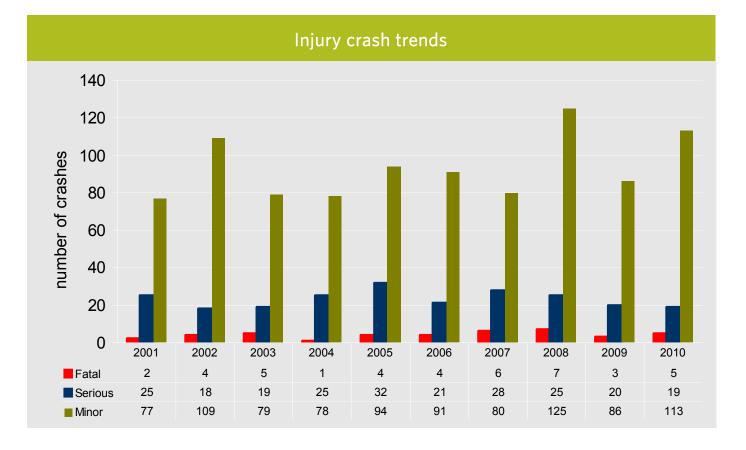
37

Police reported crashes	Gisborne District
Fatal crashes	5
Serious injury crashes	19
Minor injury crashes	113
Total injury crashes	137
Non-injury crashes	362

#### 2010 MoT calculation social cost of all crashes

Local roads	\$ 44.08M
State highways	\$ 28.08M
Total	\$ 72.16M

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 and property damage.



## Gisborne District local roads

In the 2006-2010 period in Gisborne District there were 389 injury crashes on local roads resulting in 14 deaths and 78 serious injuries.

38

The latest five year data shows a level trend in both fatal and serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 Local roads				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	11	36	84	131
Urban	3	42	327	372
Total	14	78	411	503

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes were loss of control or head-on crashes at bends. Nearly a fifth of the fatal and serious injury crashes involved crossing and turning movements.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly two-fifths of fatal and serious injury crashes involved alcohol. A third of the fatal and serious injury crashes involved poor observation. Speed too fast for the conditions and failure to give way or stop each contributed to a fifth of the fatal and serious injury crashes.

Local road crash characteristics 2006 to 2010				
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies	
Alcohol	28	38	27	
Too fast (for the conditions—not over the speed limit necessarily)	14	19	26	
Failed to give way or stop	24	20	19	
Failed to keep left	4	7	7	
Overtaking	2	3	2	
Incorrect lane or position	7	1	6	
Poor handling (for example losing control while braking)	17	17	24	
Poor observation (not checking properly)	44	33	30	
Poor judgement (for example misjudging speed of others)	12	13	16	
Fatigue	5	9	5	
Disabled / ill	3	1	5	
Pedestrian factors	8	10	8	
Vehicle factors	3	6	5	
Other (misc)	8	19	11	
Road factors	6	7	11	
Weather	4	3	3	

Further information about injury crashes on local roads in the district 2006-2010:

- 16 percent on wet roads
- 40 percent during night time
- 44 percent at intersections
- 43 percent of injury crashes struck roadside objects (in total 247 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (37 percent of at fault drivers)
- 9 percent of crashes involved motorcycles
- 53 percent of at fault driver held full NZ licence

## Gisborne District state highways

In the 2006-2010 period in Gisborne District there were 244 injury crashes on state highways resulting in 16 deaths and 75 serious injuries.

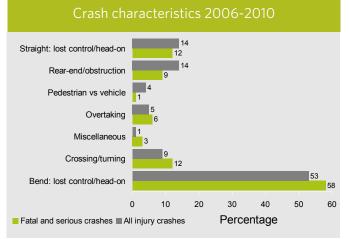
The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 State highways					
Fatalities Serious Minor Total					
Rural	16	60	226	302	
Urban	0	15	57	72	
Total	16	75	283	374	

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Nearly three-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. Over a tenth of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved alcohol. A quarter of the fatal and serious injury crashes involved poor handling and poor observation each. Nearly a quarter of the fatal and serious injury crashes involved speed too fast for the conditions.

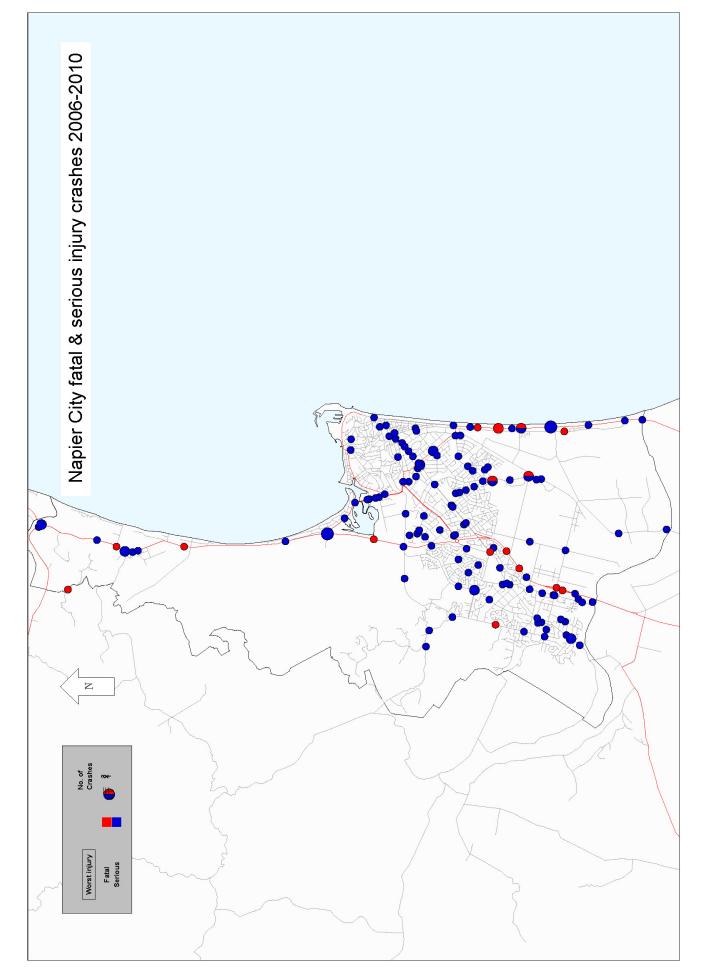
State highways crash characteristics 2006 to 2010				
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies	
Alcohol	23	30	19	
Too fast (for the conditions—not over the speed limit necessarily)	20	23	18	
Failed to give way or stop	9	13	17	
Failed to keep left	6	12	10	
Overtaking	4	6	4	
Incorrect lane or position	4	1	8	
Poor handling (for example losing control while braking)	27	28	24	
Poor observation (not checking properly)	27	25	32	
Poor judgement (for example misjudging speed of others)	8	10	11	
Fatigue	16	13	15	
Disabled / ill	2	4	6	
Pedestrian factors	4	1	6	
Vehicle factors	7	7	6	
Other (misc)	8	10	8	
Road factors	14	12	11	
Weather	4	7	4	

Further information about injury crashes on state highways in the district 2006-2010:

- 22 percent on wet roads
- 36 percent during night time
- 23 percent at intersections
- 63 percent of injury crashes struck roadside objects (in total 216 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (33 percent of at fault drivers)
- 7 percent of crashes involved motorcycles
- 54 percent of at fault driver held full NZ licence

#### State highways crash characteristics 2006 to 2010

## Napier City fatal & serious crashes



# Napier City 2010 overview

2010 road trauma		
Casualties	Napier City	
Death	4	
Serious injury	15	
Minor injury	155	
Total casualties	174	



Police reported crashes	Napier City	
Fatal crashes	4	
Serious injury crashes	15	
Minor injury crashes	130	
Total injury crashes	149	
Non-injury crashes	396	

#### 2010 MoT calculation social cost of all crashes

Local roads	\$ 36.38M		
State highways	\$ 9.06M		
Total	\$ 45.44M		

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 and property damage.



## Napier City local roads

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In the 2006-2010 period in Napier City there were 580 injury crashes on local roads resulting in 6 deaths and 101 serious injuries.

The latest five year data shows an upward trend in fatal crashes and a downward trend in serious injury crashes on local roads.

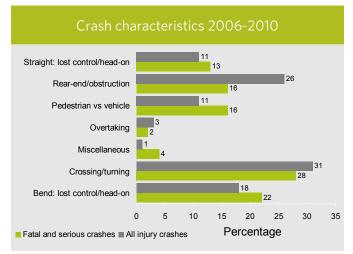
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 Local roads

	Fatalities	Serious injuries	Minor inju- ries	Total
Rural	2	13	33	48
Urban	4	88	540	632
Total	6	101	573	680

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over a quarter of fatal and serious injury crashes involved crossing and turning movements. A fifth of fatal and serious injury crashes were loss of control or head-on crashes at bends.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Over two-fifths of fatal and serious injury crashes involved poor observation. Nearly a quarter of the fatal and serious injury crashes involved alcohol and a third involved failure to give way or stop. Thirteen percent of the fatal and serious injury crashes involved pedestrian factors.

Local road crash characteristics 2006 to 2010				
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies	
Alcohol	16	23	20	
Too fast (for the conditions—not over the speed limit necessarily)	13	15	20	
Failed to give way or stop	32	29	34	
Failed to keep left	3	1	4	
Overtaking	3	3	2	
Incorrect lane or position	8	6	6	
Poor handling (for example losing control while braking)	12	11	14	
Poor observation (not checking properly)	51	43	50	
Poor judgement (for example misjudging speed of others)	10	8	13	
Fatigue	2	5	2	
Disabled / ill	6	8	5	
Pedestrian factors	6	13	9	
Vehicle factors	4	3	5	
Other (misc)	7	8	9	
Road factors	7	9	13	
Weather	3	4	5	

Further information about injury crashes on local roads in the city 2006-2010:

- 17 percent on wet roads
- 30 percent during night time
- 52 percent at intersections
- 35 percent of injury crashes struck roadside objects (in total 284 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (40 percent of at fault drivers)
- 14 percent of injury crashes involved motorcycles
- 51 percent of at fault driver held full NZ licence

#### Local road crash characteristics 2006 to 201

## Napier City state highways

In the 2006-2010 period in Napier City there were 207 injury crashes on state highways resulting in 12 deaths and 52 serious injuries.

The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

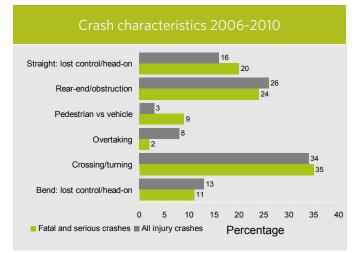
The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

#### Casualties by urban / rural 2006 to 2010 State highways

	Fatalities	Serious injuries	Minor injuries	Total
Rural	11	39	122	172
Urban	1	13	111	125
Total	12	52	233	297

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes involved crossing and turning movements. A quarter of the fatal and serious injury crashes involved rear-end/obstruction type crashes.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Half of fatal and serious injury crashes involved poor observation. Over a third of the fatal and serious injury crashes involved failure to give way or stop. A tenth of the fatal and serious injury crashes involved speed too fast for the conditions and alcohol each.

State highways crash characteristics 2006 to 2010				
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious on similar state highways	
Alcohol	10	13	17	
Too fast (for the conditions—not over the speed limit necessarily)	9	4	9	
Failed to give way or stop	35	35	34	
Failed to keep left	6	11	7	
Overtaking	3	2	2	
Incorrect lane or position	10	4	8	
Poor handling (for example losing control while braking)	11	7	15	
Poor observation (not checking properly)	55	50	46	
Poor judgement (for example misjudging speed of others)	11	17	13	
Fatigue	3	2	6	
Disabled / ill	5	9	4	
Pedestrian factors	3	9	8	
Vehicle factors	4	4	6	
Other (misc)	6	11	9	
Road factors	5	2	10	
Weather	1	0	4	

Further information about injury crashes on state highways in the city 2006-2010:

- 14 percent on wet roads
- 27 percent during night time
- 53 percent at intersections
- 28 percent of injury crashes struck roadside objects (in total 82 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (34 percent of at fault drivers)
- 12 percent of crashes involved motorcycles
- 58 percent of at fault driver held full NZ licence

## Contacts

#### NZ Transport Agency

#### Napier Regional Office

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#### New Zealand Police

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## **Further information**

This report has been prepared by the Crash Analysis team at the NZ Transport Agency. The intent of this report is to highlight 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 NZTA and Ministry of Transport's Crash Analysis System (CAS) database. The Briefing Notes present information derived from pertinent statistics to be used for decision support.

More detailed information may be obtained from either the local council (local roads), regional council or the NZ Transport Agency.

The NZ Transport Agency encourages local bodies, regional councils and NZ Police to study the briefing notes reports. 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.

# Useful web-links

- <u>http://www.nzta.govt.nz/</u>
- <u>http://www.smartmovez.org.nz/</u>
- <u>http://www.localgovt.co.nz/</u>
- <u>http://www.transport.govt.nz/</u>
- <u>http://www.decadeofaction.org/</u>