

briefing notes road safety issues

Masterton District

This report details aspects of Masterton 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 Masterton 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 Masterton District is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

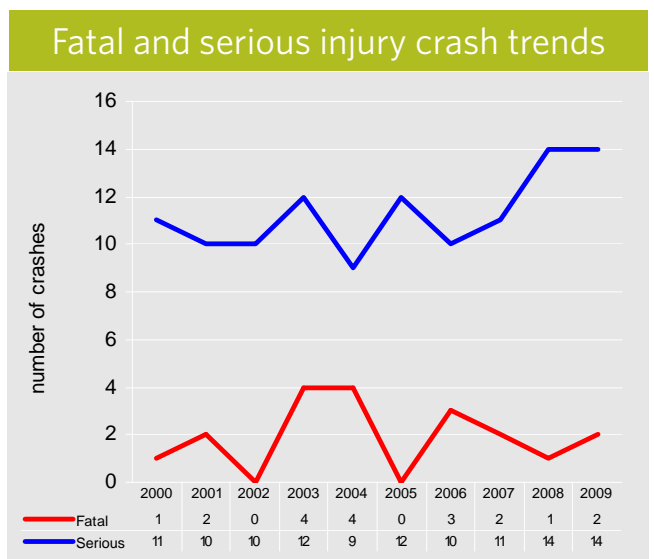
2009 road trauma	
Casualties	Masterton District
Death	2
Serious injury	17
Minor injury	83
Total casualties	102

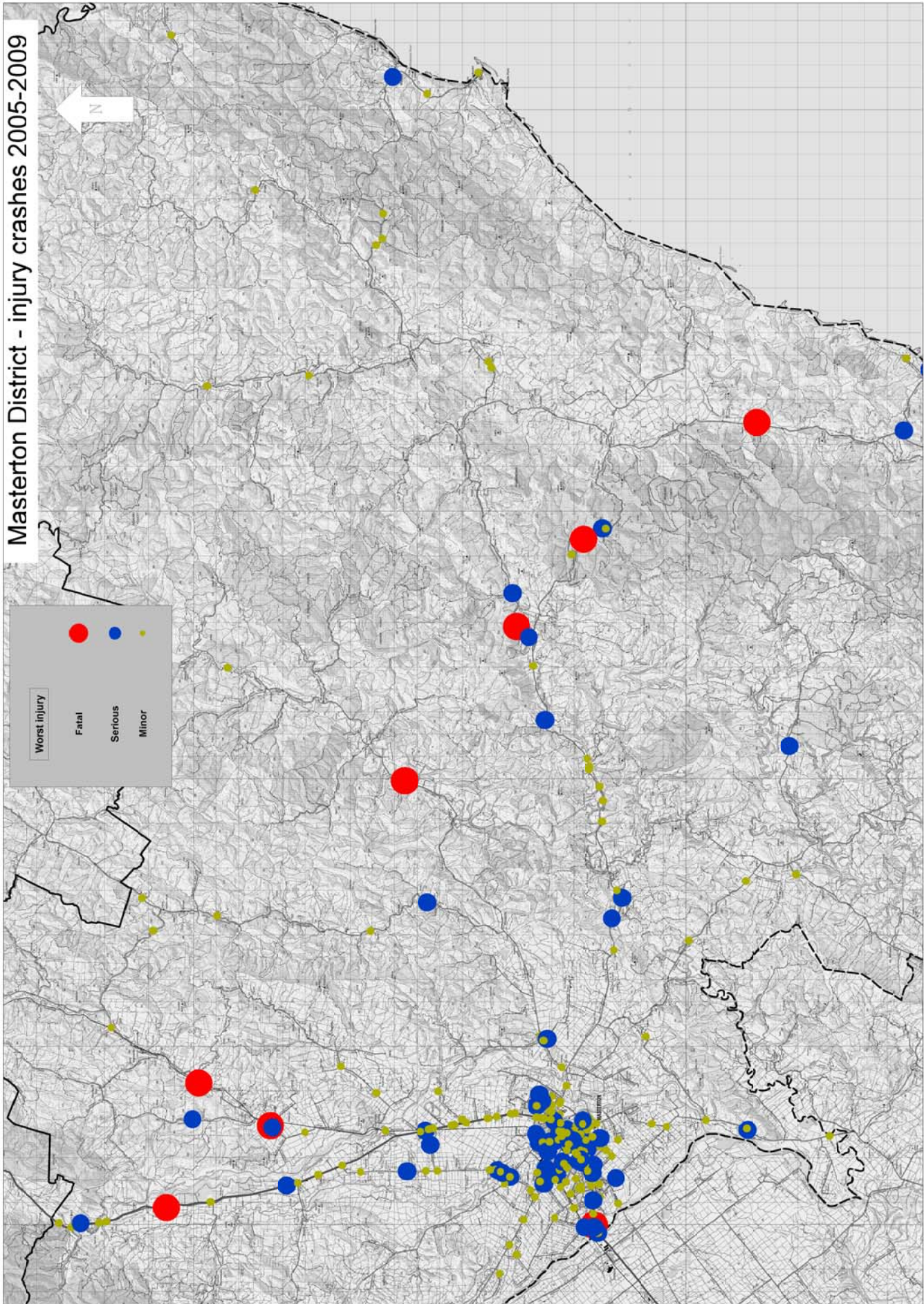
Crashes	Masterton District
Fatal crashes	2
Serious injury crashes	14
Minor injury crashes	60
Total injury crashes	76
Non-injury crashes	180 reported

2009 - social cost of crashes	
Local roads	\$ 23.43M
State highways	\$ 5.46M
Total	\$ 28.89M

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.

Local road safety issues	
Masterton District	
Loss of control	
Alcohol - incl. alcohol & speed	
Young drivers	
Vulnerable road users; 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

Masterton District

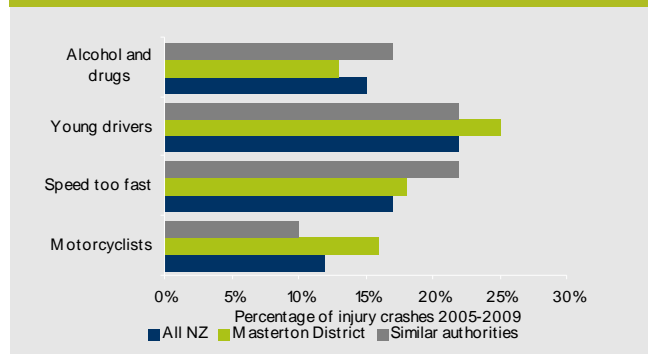
Presented below is a brief look at Masterton District’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Masterton District are 92 and 74 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 Masterton District, alcohol was recorded in 13 percent of injury crashes in the last five years, resulting in 16 serious injuries and 41 minor injuries. Alcohol related crashes were proportionally lower than in similar authorities.

Young drivers

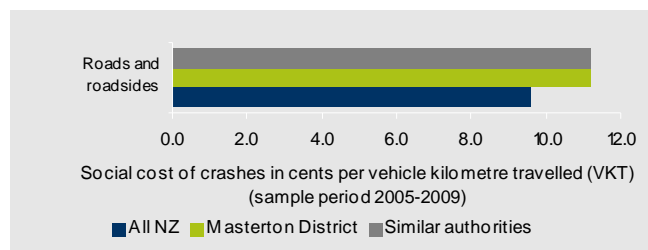
In Masterton District, young drivers aged 15-19 years were involved in 25 percent of all injury crashes during the last five year period, resulting in 1 death, 17 serious injuries and 107 minor injuries. This was proportionally higher compared to similar authorities.

Speed too fast

Speed too fast was recorded in 18 percent of injury crashes in Masterton District in the last five years, resulting in 3 deaths, 17 serious injuries and 70 minor injuries. Speed as a factor in crashes was proportionally lower compared to similar authorities.

Motorcyclists

In Masterton District, motorcyclists were involved in 16 percent of all injury crashes during the last five year period, resulting in 2 deaths, 11 serious injuries and 48 minor injuries. Injury crashes involving motorcyclist were proportionally higher than in similar authorities and the trend is upwards in the district.



Roads and roadsides

In Masterton District, there were on average 37 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes was the same when compared to the similar authority average (see the graph above).

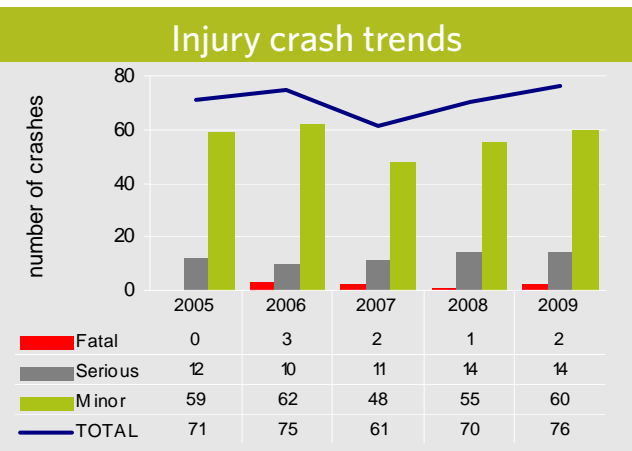
Overview 2009

In 2009 in Masterton District, 76 injury crashes resulting in 102 casualties and 180 non-injury crashes were reported by the New Zealand Police. Twenty-six 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.

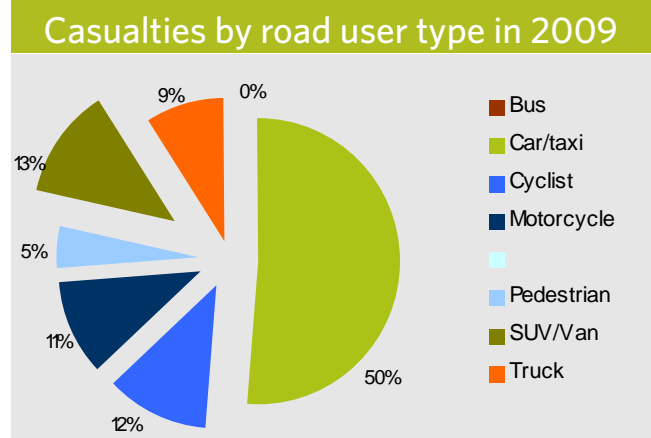
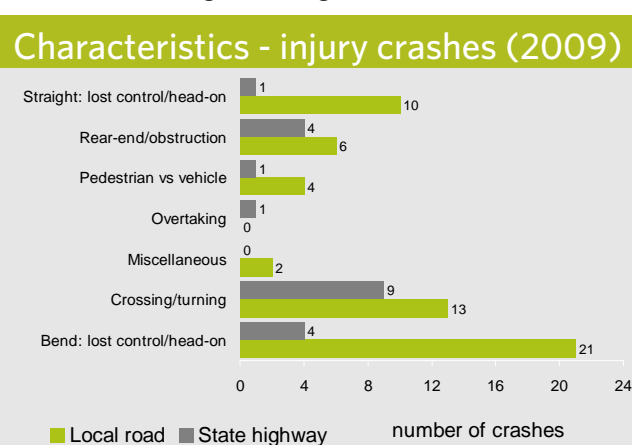
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	2	17	83	102
Local roads vs state highways				
Local roads	2	12	62	76
State highways	0	5	21	26
Rural vs urban roads				
Rural ¹	2	5	29	36
Urban	0	12	54	66

¹ Rural- an area with a speed limit of 80km/h or more

The latest five year data shows a level trend in the total number of injury crashes, however in the last three years there is an upwards trend in injury crash numbers.



In 2009 nearly half of the injury crashes involved a driver losing control of their vehicle and three-fifths involved a crossing or turning movement.



Half the casualties were drivers or passengers of cars, an eighth of sports utility vehicles or vans and over a quarter were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Masterton District, young drivers aged 15 to 19 years inclusive were at fault drivers in 17 percent of injury crashes and older drivers, 70 years of age and over, in 7 percent.

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

Local roads

- Total number of injury crashes: 56
- Worst month: May (14 percent)
- Worst day of week: Friday (20 percent)
- Wet road crashes: 20 percent
- Night time crashes: 34 percent
- Alcohol over limit: 20 percent
- Failed to give way/stop: 23 percent
- Too fast for conditions: 29 percent
- Pedestrian factors : 5 percent
- Crashes at intersection: 31 percent
- Road factors: 9 percent
- At fault male driver: 59 percent
- At fault driver held full NZ licence: 61 percent

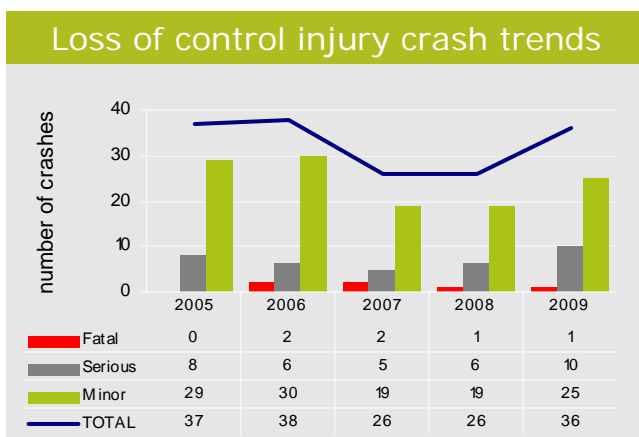
State highways

- Total number of injury crashes: 20
- Worst month: March (30 percent)
- Worst day of week: Thursday (25 percent)
- Wet road crashes: 15 percent
- Night time crashes: 30 percent
- Alcohol over limit: 10 percent
- Too fast for conditions: 10 percent
- Failed to give way/stop: 45 percent
- Fatigue: 10 percent
- Crashes at intersection: 50 percent
- Road factors: 5 percent
- At fault male driver: 60 percent
- At fault driver held full NZ licence : 62 percent

Loss of control

During the most recent five year period (2005- 2009) 46 percent of all injury crashes in Masterton District occurred due to loss of control. These crashes resulted in 6 deaths, 43 serious injuries and 176 minor injuries. There were a further 249 non-injury crashes reported.

The latest five year data shows a downward trend in the total number of injury crashes. However, the trend in serious injury crashes due to a driver losing control of their vehicle is upwards.



Over two-thirds of loss of control crashes occurred at bends (69 percent). These involved a driver losing control of their vehicle, then commonly running off the road or perhaps colliding with another vehicle (18 percent).

The following table shows a breakdown of the general environ of all loss of control crashes (412 crashes) in Masterton District 2005-2009.

Loss of Control	Local Urban	Local Rural	SH urban	SH Rural
At bends	26%	30%	7%	6%
On Straight	13%	9%	5%	4%

Note: Rural roads are roads with a speed limit of 80km/hr or more.

Eighty-three percent of all crashes struck roadside objects. The three most common roadside hazards struck in the district were fences (36 percent), posts or poles (17 percent) and ditches (13 percent) for a total of 460 reported objects struck.

Most of the loss of control crashes were a single vehicle crashes. Alcohol was a factor in a quarter and speed too fast for conditions in a third of injury crashes. Two-fifths of all loss of control crashes occurred during hours of darkness and in just over a third poor handling was recorded as a contributing factor in the crash. There were an equal number of loss of control crashes in the district occurring on urban and on rural roads.

Loss of control crashes	
Crash characteristic	Percentage of crashes
Single vehicle	83
Alcohol (injury crashes)	23
Too fast for the conditions (injury crashes)	32
Road factors	15
Poor handling (injury crashes)	36
Rural road	50
Wet road	27
Night time	42

Further information about all crashes due to loss of control in Masterton District 2005-2009 on:

Local roads

- 5 deaths, 38 serious injuries and 136 minor injuries
- Worst month: March (34 crashes)
- Worst day of week: Saturday (73 crashes)
- Wet road crashes: 26 percent
- Night time crashes: 43 percent
- Alcohol over limit (injury crashes): 25 percent
- Most common injury crash factors: poor handling (40 percent) followed by too fast for conditions (37 percent)
- Road factors: 13 percent
- At fault male driver (injury crashes): 73 percent
- At fault driver held full NZ licence (injury crashes): 54 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years (45 percent)

State highways

- 1 death, 5 serious injuries and 40 minor injuries
- Worst month: September (12 crashes)
- Worst day of week: Friday (22 crashes)
- Wet road crashes: 31 percent
- Night time crashes: 40 percent
- Alcohol over limit (injury crashes): 15 percent
- Most common injury crash factors: fatigue (15 percent) followed by too fast for conditions (12 percent)
- Road factors: 22 percent
- At fault male driver (injury crashes): 53 percent
- At fault driver held full NZ licence (injury crashes): 59 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years (44 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.

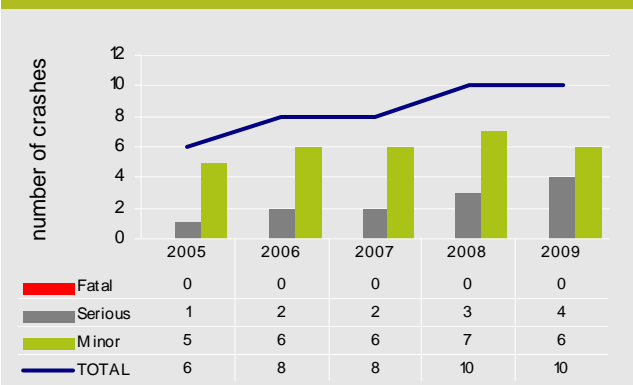
Masterton District

During the most recent five year period (2005-2009) 13 percent of all injury crashes in Masterton District were alcohol-related. Although lower than the latest five year average for similar authorities (17 percent), the trend in the district is increasing. In 2009, 17 percent of all injury crashes in Masterton District recorded alcohol as a contributing factor.

There were 42 injury and 60 non-injury alcohol related crashes reported in the last five years. These crashes resulted in 16 serious injuries and 41 minor injuries.

The latest five year data shows an upward trend in the total number of alcohol related injury crashes.

Alcohol related injury crash trends



A seventh of all of alcohol-related crashes (15 percent) occurred on state highways resulting in nearly two-fifths of those serious injured (38 percent). Three-quarters of alcohol related crashes involved single vehicle crashes (75 percent). Over two-thirds of alcohol related crashes occurred on urban roads (69 percent), with speed limits less than 80km/h.

Three-quarters of alcohol-related crashes occurred during hours of darkness and similarly in dry conditions (77 percent).

Fifty-four percent of at fault drivers involved in alcohol related crashes held a full New Zealand drivers licence, nearly all of these drivers were male (84 percent). Twenty-eight percent of at fault drivers held either a learner or a restricted drivers' licence. Thirty-nine percent of the at fault drivers were in the age group 15-24 years.

Alcohol and speed

Speed was a factor in over a third of the 42 alcohol related injury crashes in the district in the last five years (2005-2009), resulting in 6 serious injuries and 19 minor injuries. There were a further 23 non-injury, alcohol and speed combined, crashes reported.

In crashes where driver alcohol and speed were both contributing factors, more than half of the crashes occurred on local roads in urban areas (57 percent) and were mostly during hours of darkness (79 percent).

Drivers at fault involved in these crashes were predominantly in the age group 20-29 years (38 percent), followed by the group 30-39 years (32 percent). Half the at fault drivers were male full NZ licence holders.

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

Local roads

- 10 serious injuries and 37 minor injuries
- Worst month: February (11 crashes)
- Worst day of week: Saturday (37 crashes)
- Wet road crashes: 27 percent
- Night time crashes: 80 percent
- Crashes at intersection: 32 percent
- Excessive speed: 39 percent
- Most common injury crash factors: poor handling (25 percent) and poor observation (17 percent)
- Road factors: 2 percent
- At fault male driver (injury crashes): 87 percent
- At fault driver held full NZ licence (injury crashes): 49 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years (57 percent)

State highways

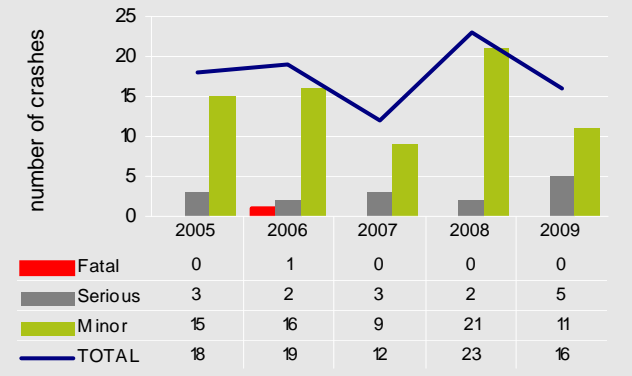
- 6 serious injuries and 4 minor injuries
- Worst month: April (5 crashes)
- Worst day of week: Friday (5 crashes)
- Wet road crashes: nil
- Night time crashes: 60 percent
- Crashes at intersection: 40 percent
- Excessive speed: 17 percent
- Most common injury crash factors: poor observation (33 percent) followed by failed give way/stop and failed keep left (17 percent each)
- Road factors: 7 percent
- At fault male driver (injury crashes): 66 percent
- At fault driver held full NZ licence (injury crashes): 77 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (44 percent)

Young drivers

During the most recent five year period (2005-2009) in Masterton District, 25 percent of all injury crashes involved young drivers, aged 15-19 years. These crashes resulted in 1 death, 17 serious injuries and 107 minor injuries.

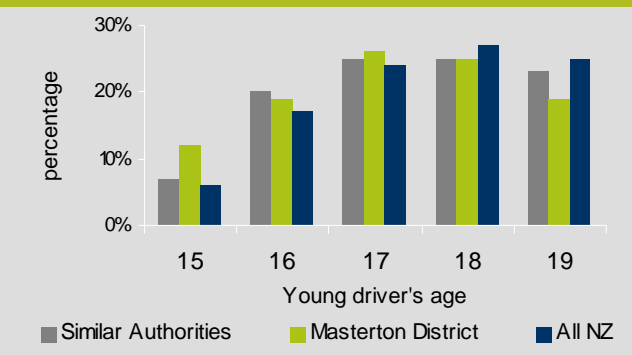
The latest five year data shows a level trend in the total number of injury crashes involving young drivers, however the trend in serious injury crashes is upwards.

Young driver injury crash trends



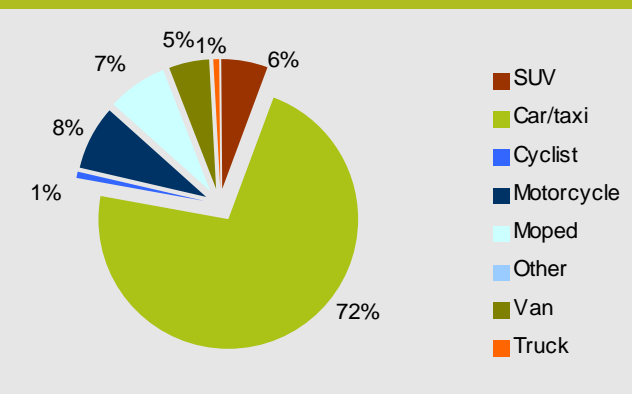
The age distribution of young drivers involved in injury crashes is shown below. Seventy-three percent of these injury crashes show young drivers were at fault or part-fault.

Age distribution of young drivers 2005-2009

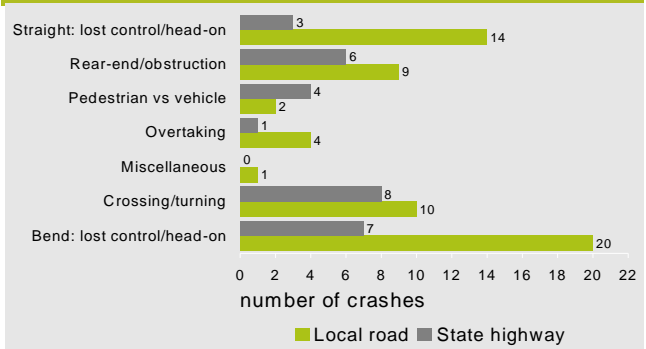


The types of vehicles involved in injury crashes involving young drivers are shown below; nearly three-quarters were cars and one-sixth were motorcycles and mopeds. Nearly half of the crashes were single vehicle crashes.

Vehicle types involved in young driver injury crashes 2005-2009



Characteristics of young driver injury crashes



The chart above shows the general characteristics of injury crashes involving young drivers. The most common general crash movement involves a driver losing control of their vehicle (49 percent):

- loss of control at bends: 26 percent
- loss of control on a straight road: 17 percent
- loss of control head-on collision: 6 percent
- loss of control overtaking: nil

Further information about injury crashes involving young drivers in Masterton District 2005-2009 on:

Local roads

- 14 serious injuries and 71 minor injuries
- Worst month: December (11 crashes)
- Worst days of week: Wednesday and Saturday (12 crashes each)
- Wet road crashes: 10 percent
- Night time crashes: 32 percent
- Alcohol over limit (injury crashes): 12 percent
- Speed too fast (injury crashes): 31 percent
- Most common injury crash factors: poor observation (31 percent) followed by poor judgement (25 percent)
- At fault driver held learner NZ licence (injury crashes): 25 percent
- At fault driver held restricted NZ licence (injury crashes): 36 percent

State highways

- 1 death, 3 serious injuries and 36 minor injuries
- Worst month: March (6 crashes)
- Worst day of week: Thursday (7 crashes)
- Wet road crashes: 31 percent
- Night time crashes: 24 percent
- Alcohol over limit (injury crashes): 7 percent
- Speed too fast (injury crashes): 14 percent
- Most common injury crash factors: poor observation (52 percent) followed by failure to give way/stop (34 percent)
- At fault driver held learner NZ licence (injury crashes): 11 percent
- At fault driver held restricted NZ licence (injury crashes): 43 percent

Vulnerable road users

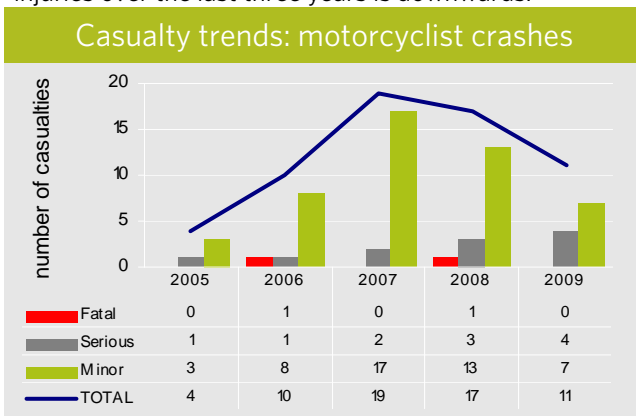
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore more susceptible to severe injuries. These are defined as pedestrians, cyclists and motorcyclists.

In Masterton District vulnerable road users were involved 30 percent of all injury crashes over the last five years (2005-2009), accounting for 25 percent of all deaths and 38 percent of all serious injuries in the district for this period.

Motorcyclists

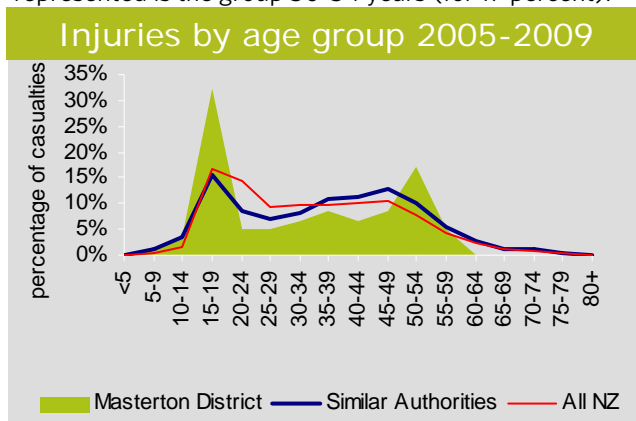
Injury crashes involving motorcyclists represented 16 percent of all injury crashes in Masterton District during the last five year period, resulting in 2 deaths, 11 serious injuries and 48 minor injuries.

The latest five year data shows an upward trend in the total number of casualties involved in motorcyclist crashes, particularly serious injuries. The trend in minor injuries over the last three years is downwards.



Over half of motorcyclist crashes occurred on local urban roads (55 percent) with speed limits less than 80km/hr and over a third were at intersections (37 percent). Two-fifths of crashes are reported as single party motorcycle crashes (41 percent).

A third of injured motorcyclists were in the age group 15-19 years(32 percent), which is significantly higher when compared to similar authorities. Also over represented is the group 50-54 years (for 17 percent).



Location / route	Number of motorcyclist crashes
Church St / Dixon St	4
Church St / Queen St	2
Ngaumutawa Road / Upper Plain Road	2
Dixon St / Bannister St	2
Homewood Road / Waihora Road	1
Whangaehu Valley Road route	3
Colombo Road route	2
Mainly along the SH 2 route; 19 injury crashes	

The high crash locations/routes for motorcycle crashes in the district 2005-2009 are shown in the table above.

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

- loss of control: 32 percent
- at a crossroad both vehicles travelling straight through collide: 14 percent
- a vehicle turning right from a side road or driveway across a vehicle travelling straight through: 9 percent

Further information about crashes involving motorcyclists in Masterton District 2005-2009 on:

Local roads

- 2 deaths, 8 serious injuries and 37 minor injuries
- Worst months: January and August (8 crashes each)
- Worst days of week: Friday and Saturday (11 crashes each)
- Alcohol over limit (injury crashes): 7 percent
- Most common injury crash factors: too fast for conditions (26 percent) followed by failed to give way/stop (24 percent)
- Wet road crashes: 6 percent
- Night time crashes: 19 percent
- Crashes at intersection: 34 percent
- Male motorcyclist injured: 73 percent

State highways

- 3 serious injuries and 11 minor injuries
- Worst months: December (5 crashes)
- Worst days of week: Thursday and Saturday (5 crashes each)
- Alcohol over limit (injury crashes): 7 percent
- Most common injury crash factors: failure to give way/stop (43 percent) and poor handling (21 percent)
- Wet road crashes: 26 percent
- Night time crashes: 26 percent
- Crashes at intersection: 47 percent
- Male motorcyclist injured: 86 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 Masterton 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.

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