

briefing notes road safety issues

Masterton District

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 period.

This report is the ninth road safety report for Masterton district. Most of the information, unless otherwise stated in this report, applies to both local roads and State highways.

The intent of the report is to highlight the key road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries in the district. More detailed information may be obtained from either Masterton District Council (local roads) or Transit NZ (State highways). Please refer to the last page for contact details.

The issues chosen for this report are drawn from either the most common crash types or those that appear over-represented when Masterton district is compared to similar local bodies or those with high social cost of crashes (relating mainly to high numbers of fatal and serious crashes).

We have also included a brief overview of crashes in the district for 2007.

Major road safety issues		2007 road trauma	
Masterton District		Casualties	Masterton District
Crossing/turning		Deaths	2
Loss of control		Serious casualties	17
Vulnerable road users: (Cyclists & Motorcyclists)		Minor casualties	65
Nationally		Crashes	Masterton District
Speed		Fatal crashes	2
Alcohol		Serious injury crashes	12
Failure to give way		Minor injury crashes	47
Restraints		Non injury crashes	163

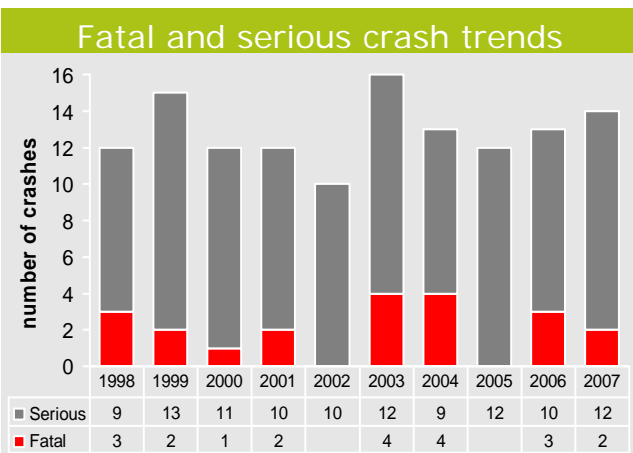
Overview 2007

In 2007, in Masterton district there were 61 injury crashes and 163 non-injury crashes reported by the New Zealand Police. Twenty seven percent of the total injury crashes in the district were on State highways. The table below shows the number of injuries resulting from these crashes in the district.

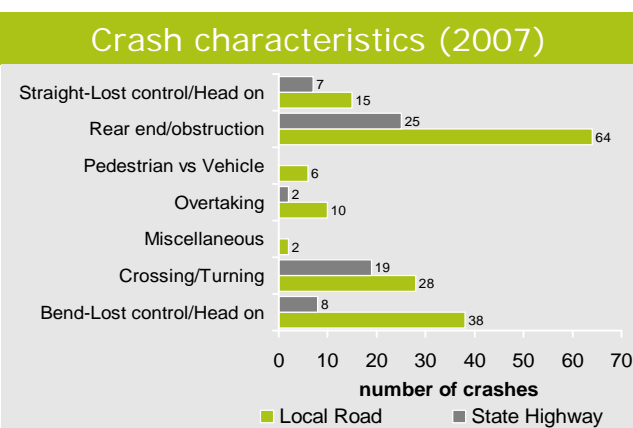
Casualties by injury type in 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Total	2	17	65	84
Local roads Vs State highways				
Local roads	2	12	48	62
State highways	0	5	17	22
Rural Vs Urban roads				
Rural ¹	2	8	23	33
Urban	0	9	42	51

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

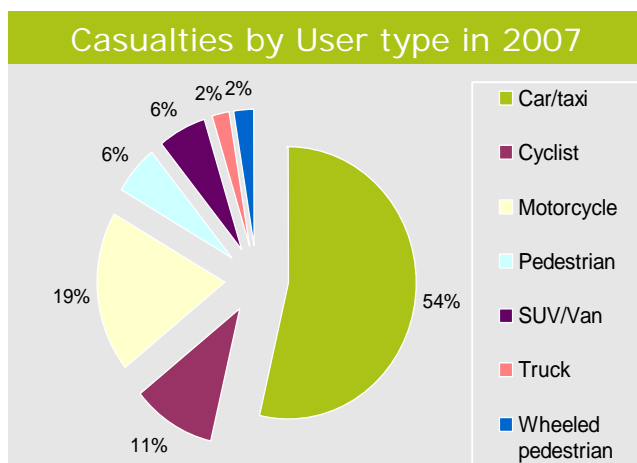
The number of serious injury and fatal crashes has been fluctuating in the last ten years. Fatal crashes show a declining trend over the last five years however total injury crashes are gradually increasing since 2005.



In 2007 rear end/obstruction was the main crash type followed by crossing/turning and bend-lost control/head-on crash types.



The highest number of casualties in 2007 were drivers and passengers of cars followed by motorcyclists and cyclists.



Further information about all crashes in 2007 on:

Local roads

- Worst month: August (12 percent)
- Worst day of week: Thursday (22 percent)
- Wet road crashes: 12 percent
- Night time crashes: 23 percent
- Alcohol over limit (injury crashes): 17 percent
- Too fast for conditions (injury crashes): 22 percent
- Crashes at intersection: 34 percent
- Road factors: 9 percent
- At fault male driver (injury crashes): 70 percent
- Full NZ licence held by at fault drivers (injury crashes): 64 percent

State highways

- Worst month: March (13 percent)
- Worst day of week: Friday (23 percent)
- Wet road crashes: 30 percent
- Night time crashes: 26 percent
- Alcohol over limit (injury crashes): 13 percent
- Too fast for conditions (injury crashes): 20 percent
- Crashes at intersection: 57 percent
- Road factors: 11 percent
- At fault male driver (injury crashes): 65 percent
- Full NZ licence held by at fault drivers (injury crashes): 59 percent

Social cost of crashes

Local roads	\$ 20.19M
State highways	\$ 3.96M
Total	\$ 24.15M

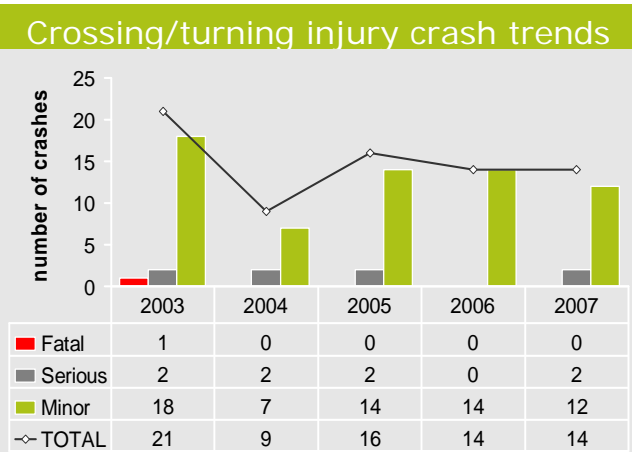
NOTE: The estimated social cost includes loss of life or life quality, loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage.

Crossing/turning

Crashes due to a crossing/turning movement are the third most common crash type in Masterton district.

During the five year period from 2003 to 2007, there were 189 crashes at intersections and 37 crashes at driveways. These crashes resulted in 1 death, 10 serious injuries and 80 minor injuries.

The number of crossing/turning related injury crashes have been steady since 2005.



The table below shows the locations of the intersections with the high number of crashes in the district between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH 2/Rennall St	13	2	4
Queen St/Russell St	10	3	1
Rennall St/Pownall St	9	2	1
Lincoln Rd/ Villa St	9	3	2
Church St/Dixon St	8	5	3
Dixon St/Bannister St	8	4	2
SH 2/ Te Ore Ore Rd	7	2	2

Crashes at X (cross) junctions in urban areas are the most common type of intersection crash reported, followed by T (tee) junctions crashes in urban areas.

Junction Type	Rural	Urban
T (tee)	13	57
Driveways	1	39
X (cross)	0	83
Y	0	1
Roundabout	1	30
Multi-Road Join	0	1

The most common crash is where vehicles collide when crossing each others path at right angles (35 percent). The second highest is the one in which vehicles failed to find safe gap in on-coming traffic while making right hand turn (25 percent).

Intersections present drivers with one of their biggest driving challenges. Seventy-six percent of drivers at fault in crossing/turning crashes were full licence holders.

Further information about crossing/turning related all crashes in the district for the period 2003 to 2007 on:

Local roads

- 1 death, 5 serious injuries and 57 minor injuries
- Worst month: *April (11 percent)*
- Worst day of week: *Friday (24 percent)*
- Wet road crashes: *24 percent*
- Night time crashes: *17 percent*
- Alcohol over limit (injury crashes): *2 percent*
- Most common injury crash factors: *failed to give way/stop (98 percent)* followed by *poor observation (56 percent)*
- Road factors: *5 percent*
- At fault male driver (injury crashes): *59 percent*
- Full NZ licence at fault drivers (injury crashes): *75 percent*
- Most common at fault drivers' age group (injury crashes): *30 to 39 and 70+ years old*

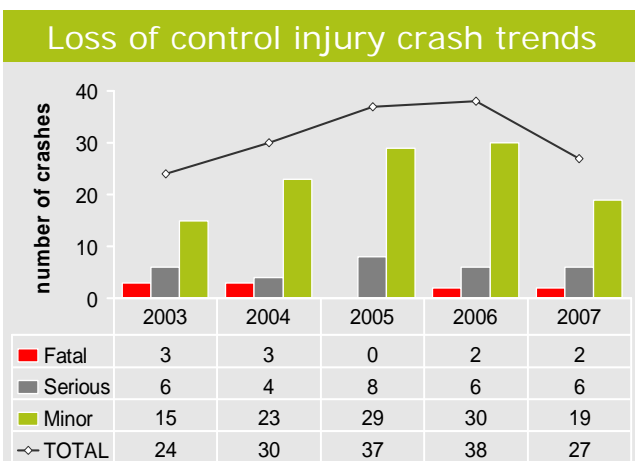
State highways

- 5 serious injuries and 23 minor injuries
- Worst month: *November (13 percent)*
- Worst day of week: *Thursday (28 percent)*
- Wet road crashes: *25 percent*
- Night time crashes: *22 percent*
- Alcohol over limit (injury crashes): *4 percent*
- Most common injury crash factors: *failed to give way/stop (75 percent)* followed by *poor observation (71 percent)*
- Road factors: *10 percent*
- At fault male driver (injury crashes): *70 percent*
- Full NZ licence at fault drivers (injury crashes): *83 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 24 years old*

Loss of control

During the five year period 2003 to 2007, 48 percent of all injury crashes in Masterton district occurred due to loss of control. These crashes resulted in 11 deaths, 42 serious injuries and 175 minor injuries. There were a further 225 non-injury crashes reported.

The number of fatal and serious injury crashes have stayed steady for the last five years. After gradual increment, there was significant decrease in minor injury crashes in 2007, making total injury crashes the lowest in the last four year period.



Seventy-two percent of loss of control crashes occurred at bends.

Loss of Control	Local Urban	Local Rural	SH urban	SH Rural
At bends	34%	46%	8%	12%
On Straight	43%	25%	13%	19%

Most crashes at bends involved a driver losing control of their vehicle and running off the road or on occasions colliding with another vehicle. After drivers lose control, their vehicles often crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor event turning into something far more serious.

Main characteristics of crashes with loss of control

Crash characteristic	Percentage of crashes
Single vehicle	83
Alcohol (injury crashes)	18
Too fast for the conditions (injury crashes)	32
Road factors	16
Poor handling (injury crashes)	40
Rural road	54
Wet road	30
Night time	41

The three most common roadside hazards struck in the district were *fences* (38 percent), *post/poles* (16 percent) and *ditches* (13 percent) for a total of 432 reported objects struck.

Further information about all crashes due to loss of control in the district for the period 2003-2007 on:

Local roads

- 8 deaths, 30 serious injuries and 133 minor injuries
- Worst months: *April* and *December* (11 percent each)
- Worst day of week: *Saturday* (19 percent)
- Wet road crashes: 28 percent
- Night time crashes: 42 percent
- With alcohol over limit (injury crashes): 20 percent
- Most common injury crash factors: *poor handling* (43 percent) followed by *too fast* (36 percent)
- At fault male driver (injury crashes): 77 percent
- Full NZ licence at fault drivers (injury crashes): 54 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old

State highways

- 3 deaths, 12 serious injuries and 42 minor injuries
- Worst month: *June* (16 percent)
- Worst day of week: *Friday* (20 percent)
- Wet road crashes: 36 percent
- Night time crashes: 39 percent
- With alcohol over limit (injury crashes): 9 percent
- Most common injury crash factors: *poor handling* (26 percent) followed by *too fast* (18 percent)
- At fault male driver (injury crashes): 56 percent
- Full NZ licence at fault drivers (injury crashes): 64 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old

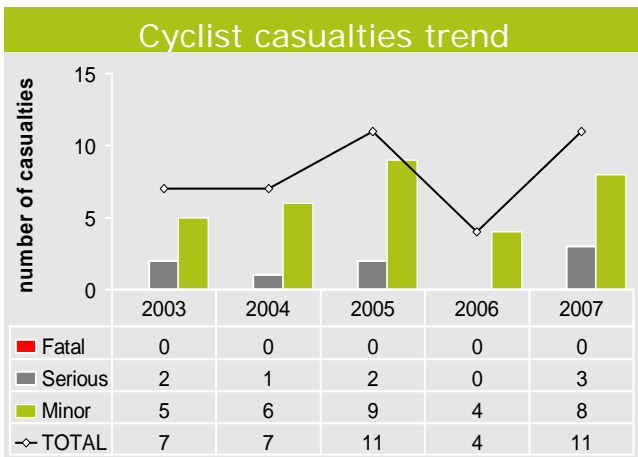
Vulnerable road users

Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries.

Cyclists

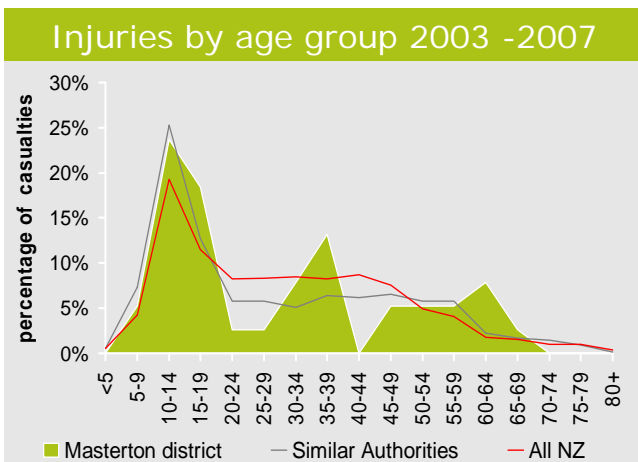
Cyclists injured in Masterton district account for 9 percent of all injuries in the last five years.

The number of cyclist casualties have been fluctuating for last five years. The total number of cyclist casualties especially, in the urban areas, remained high when compared with similar authorities and all New Zealand average.



Most (93 percent) cycling crashes occurred on urban roads, 53 percent at intersections and 91 percent during daylight hours.

Cyclist injuries are not spread evenly across all age groups, although the spectrum of the injured cyclists ranges from 5 year to 69 year old. The most commonly injured cyclists (41 percent in total) were of 10 to 14 years and 15 to 19 year age groups.



Second most (21 percent) commonly injured cyclist age group is 30 to 39 years of age. Injured age groups 30 to 39 and 60 to 64 are well above the peer group and national average.

The high cyclist crash locations/routes (on the basis of injury crashes) in the district are shown in the table below:

High cyclist crash locations/routes
SH2 route through Masterton town
Dixon Street route
Renall Street intersections along this route

Further information about cyclist injury crashes between 2003 and 2007 on:

Local roads

- 6 serious injuries and 23 minor injuries
- Worst month: *February* (6 crashes)
- Worst day of week: *Friday* (7 crashes)
- Most common injury crash factors: *poor observation* (63 percent) followed by *failure to give way /stop* (52 percent)
- Crashes at intersection: 44 percent
- Wet road crashes: 16 percent
- Night time crashes: 3 percent
- Most common age group of injured cyclists: 10 to 19 and 30 to 39 years old

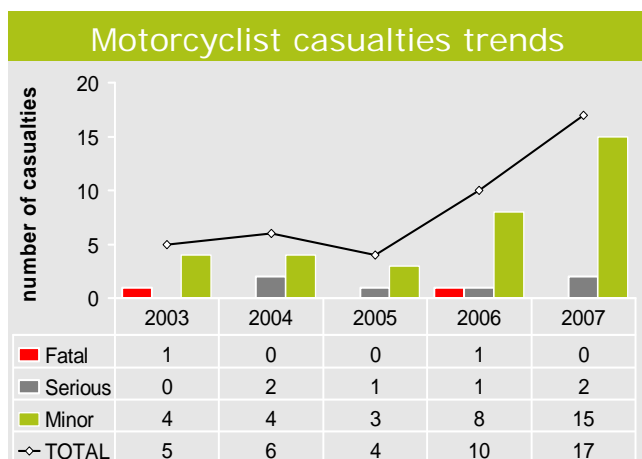
State highways

- 2 serious injuries and 8 minor injuries
- Worst month: *October* (3 crashes)
- Worst day of week: *Wednesday* (4 crashes)
- Most common injury crash factors: *poor observation* (70 percent) followed by *failure to give way /stop* (60 percent)
- Crashes at intersection: 77 percent
- Wet road crashes: 15 percent
- Night time crashes: 23 percent
- Most common age group of injured cyclists: 10 to 19 years old

Motorcyclists

Motorcyclists in Masterton district make up 10 percent of all injuries and 14 percent of fatalities in the last five year period.

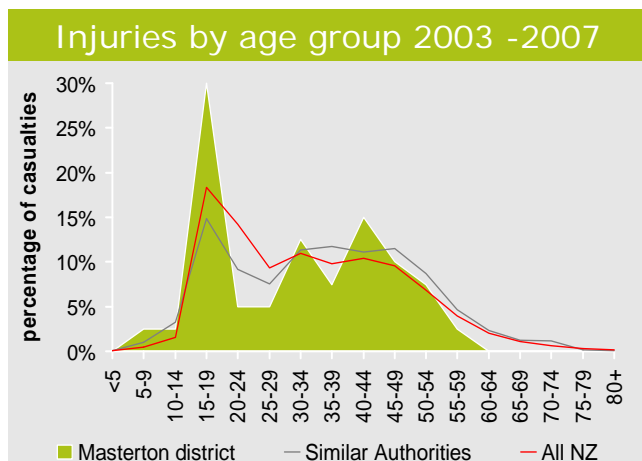
The total number of fatal and serious motorcyclist casualties have been steady for the last five years, whereas minor injuries have significantly increased since 2005. The total injuries in 2007 was the highest in any single year in the last five year period.



Nationally motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just 6 percent in 2003. Since then, there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2007 motorcyclists accounted for 11 percent of road fatalities in New Zealand.

Most (75 percent) motorcycling crashes in Masterton district occurred on urban roads. More than half of the motorcycling crashes (61 percent) occurred away from the intersections.

The motorcyclist casualties, during the last five-year period, are distributed through out the 15 to 60 years age range. Young motorcyclists of 15 to 19 years of age were the most (30 percent) commonly injured group. The share of this age group in total motorcyclist casualties was much higher than similar authorities and all New Zealand averages.



The high motorcyclist crash locations/routes (on the basis of injury crashes) in the district are shown in the table below:

High motorcyclist crash locations

Dixon Street

Queen Street

Te Ore Ore Road

Opaki Road

Further information about motorcyclist injury crashes between 2003 and 2007 on:

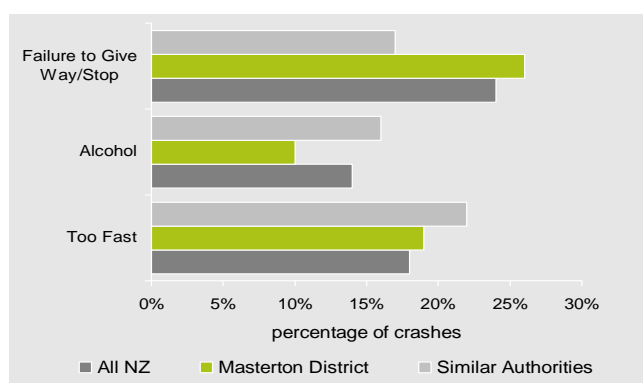
Local roads

- 2 deaths, 2 serious injuries and 27 minor injuries
- Worst month: *December (5 crashes)*
- Worst day of week: *Friday (9 crashes)*
- Most common injury crash factors: *poor observation (33 percent)* followed by *failure to give way/stop (26 percent)*
- Wet road crashes: *8 percent*
- Night time crashes: *16 percent*
- With alcohol over limit (injury crashes): *4 percent*
- Crashes at intersection: *38 percent*
- Most common age group of injured motorcyclists: *15 to 19 and 40 to 44 years old*

State highways

- 4 serious injuries and 7 minor injuries
- Worst months: *May, July, August and December (2 crashes each)*
- Worst days of week: *Wednesday, Thursday and Friday (3 crashes each)*
- Most common injury crash factors: *poor observation (27 percent)* and *failure to give way/stop (27 percent)*
- Wet road crashes: *43 percent*
- Night time crashes: *14 percent*
- With alcohol over limit (injury crashes): *nil*
- Crashes at intersection: *43 percent*
- Most common age group of injured motorcyclists: *15 to 19 and 30 to 34 years old*

National issues



Speed

In Masterton district *too fast* was recorded in 19 percent of injury crashes in the last five years, resulting in 7 deaths and 82 other injures. *Speed* as a factor in crashes is increasing in the district.

Seventy-five percent of *speed* related crashes involved *loss of control / heads-on at bends*. *Alcohol* and *poor handling* were the driver factors most often associated with these crashes. Male drivers aged under 25 years old were most involved in these crashes.

Alcohol

In Masterton district, *alcohol* was involved in 10 percent of injury crashes in the last five years, resulting in 2 deaths and 43 other injuries. The number of injury crashes involving *alcohol* is increasing.

Sixty-six percent of *alcohol* crashes were in urban areas. Sixty-six percent of these crashes involved *loss of control/head-on crashes*. Travelling *too fast* and *poor handling* were the factors often associated with *alcohol*.

Failure to give way

In Masterton district, *failure to give way or stop* was reported in 26 percent of all reported injury crashes for the last five years resulting in 1 death and 101 other injuries. Most (88 percent) of these were during *crossing/turning* manoeuvres and often associated with *failure to look for other parties*. Fifty-six percent of at fault drivers in these crashes were males.

Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2007 survey results restraint rate in Masterton district for front seat and rear seat are 94 percent and 85 percent respectively (while corresponding national rates are 95 percent and 87 percent). The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/belts-index/>

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