

# *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 2002–2006 period.

The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in Masterton District.

This report is the eighth road safety report for Masterton District. Most of the data in this report applies to both local roads and state highways. Where relevant the details of the crashes on local roads and state highways are provided and discussed.

In each new report the latest year's data is added to a five-year block and the oldest dropped, so it is unlikely that the core issues for any local body would change radically from report to report.

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

We have included a brief overview of crashes in the District for 2006.

Major road safety issues		2006 road trauma	
<b>Masterton District</b>		<b>Casualties</b>	
Vulnerable road users		Deaths	3
Loss of control at bends		Serious casualties	10
Intersections		Minor casualties	82
<b>Nationally</b>		<b>Crashes</b>	
Speed		Fatal crashes	3
Alcohol		Serious injury crashes	10
Failure to give way		Minor injury crashes	61
Restraints		Non injury crashes	145

## Overview of crashes in 2006

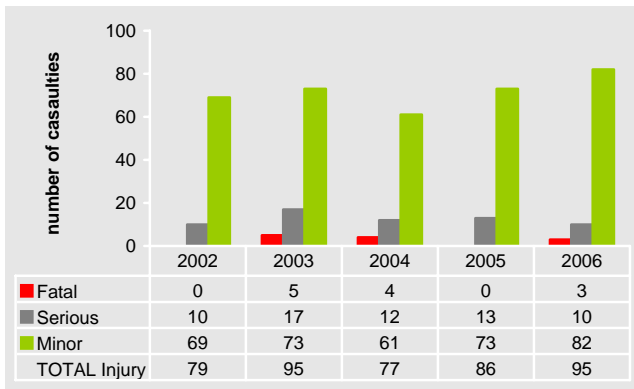
In 2006 on local roads in Masterton District there were 46 injury crashes and 97 non-injury crashes, in addition there were 28 injury crashes and 48 non-injury crashes on State Highways, as reported by the New Zealand Police.

The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

	Casualties 2006			
	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	7	41	50
Urban	1	3	41	45
Total	3	10	82	95

Number of casualties in the district have fluctuated in last 5 years with 2003 and 2006 being the worst in total number of injuries.

### Casualties trend 2002 -2006



The following table shows the distribution of the injury and non-injury crashes on local roads in year 2006 by movement category with urban/rural split.

Movement category	Urban	Rural	Total
Rear-end/obstruction	73	4	77
Bend-lost control/head on	24	36	60
Crossing/turning	40	5	45
Straight-lost control/head on	8	10	18
Overtaking	5	6	11
Pedestrian vs vehicle	8	0	8

The high number of *rear-end/obstruction* crashes are not at intersections or attributable to any specific situation in Masterton District. They are mostly non-injury crashes due to driver inattention.

Further information about 2006 injury and non-injury crashes on:

#### Local roads

- Worst months June and December (17 crashes)
- Worst day Friday (31 crashes)
- Wet road 18 percent
- Night time 29 percent
- Midblock 67 percent
- Social cost of crashes \$14m
- At fault male driver (injury crashes only) 75 percent
- Full NZ licence (injury crashes only) 59 percent of at fault drivers held a full NZ licence

#### State highways

- Worst month June (11 crashes)
- Worst day Thursday (18 crashes)
- Wet road 29 percent
- Night time 30 percent
- Midblock 56 percent
- Social cost of crashes \$12m
- At fault male driver (injury crashes only) 60 percent
- Full NZ licence (injury crashes only) 64 percent of at fault drivers held a full NZ licence

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

In Masterton District, 61 percent of at fault drivers in injury crashes held a full driver licence (58.4 percent nationally) in year 2006 as shown in following table. Similarly comparatively higher proportion of restricted and never licensed drivers were found to be at fault.

Licence status	Injury crashes percentage of at fault drivers	
	Masterton District	New Zealand
Full	60.6	58.4
Learner	5.6	9.5
Restricted	23.9	17.6
Never licensed	4.2	2.2
Disqualified	1.4	1.7
Overseas	0	4.2
Expired	0	0.5
Other/unknown	4.2	5.6

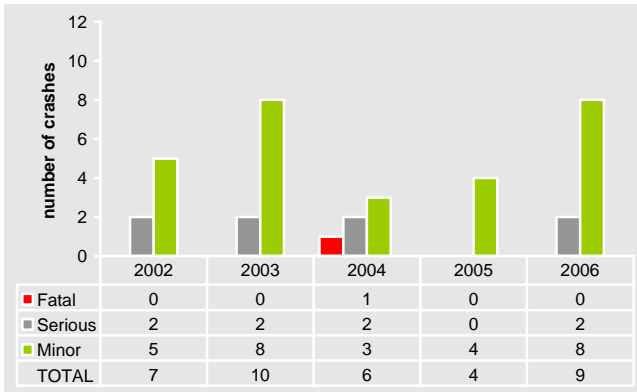
## Vulnerable road users

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

### Pedestrians

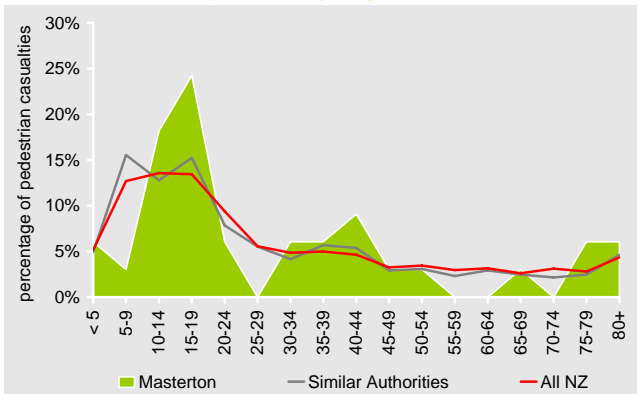
Pedestrian injuries do not feature highly in the total road injury picture in Masterton District. However the number of casualties in 2006 is the highest after 2003 in the last five year period.

#### Casualties trend 2002 -2006



Young people are the most commonly injured in pedestrian crashes. This may be because they walk more than other age groups. However many of them may not be mature enough to make the correct road crossing decisions.

#### Pedestrian injured by age 2002 -2006



Road designers and motorists alike need to understand that children do not think like “mini adults” when they are walking and playing near the road. The road environment needs to be made as safe as possible to mitigate against the unpredictable actions that children take.

The recent decision by Police to enforce a lower speed tolerance around schools is a strong step in creating a safer lower speed environment for young pedestrians.

Pedestrian crashes are concentrated on arterial and collector roads. The top locations (on the basis of fatal and serious injuries) are shown in the table below.

Location	Number of incidents
SH 2 Chapel @ Jackson	4
Dixon St (between Opaki and Bruce)	5
Queen St (Between Perry and Jackson)	4

Further information about 2002-2006 pedestrian injury crashes on:

#### Local roads

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (50 percent). The second was pedestrian crossing the road and being hit by a driver approaching for the left (25 percent)
- Worst month July (15 percent)
- Worst day of week Friday (31 percent)

#### State highways

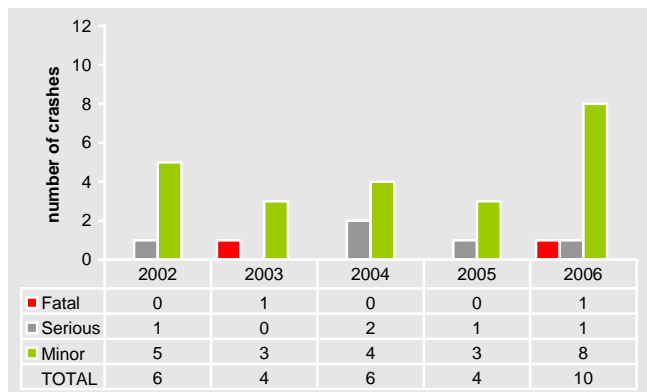
- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (56 percent). The second was crossing the road and being hit by a driver approaching for the left (33 percent)
- Worst month March (30 percent)
- 60 percent of the incidents were over Friday, Saturday and Sunday period

Pedestrians were principally at fault through not looking for vehicles.

### Motorcyclists

Although motorcyclist injuries do not feature highly in the total road injury picture in Masterton District representing 7 percent of all injuries they make up 33 percent of all fatalities.

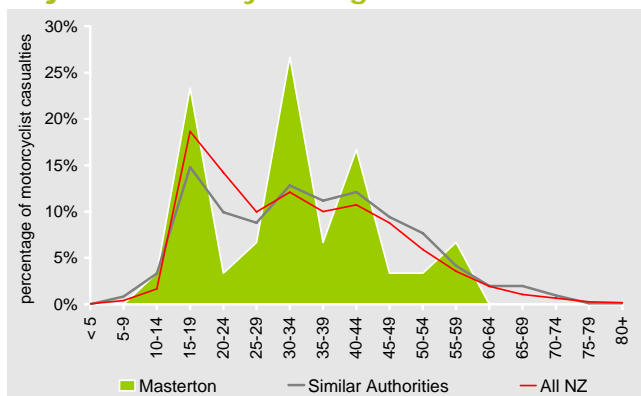
#### Casualties trend 2002 -2006



Nationally motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just six percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2006 motorcyclists accounted for 9.5 percent of road fatalities in New Zealand.

Motorcycling injuries are not spread evenly across all age distributions as shown in the chart below.

### Injured motorcyclist age 2002-2006



Further information about 2002-2006 motorcycle crashes on:

#### All roads

- The most common crash type was a *crossing or turning movement* (27 percent) and *rear end obstructions* (27 percent)
- Mid-block crashes 50 percent
- 86 percent in daylight hours
- 91 percent in dry conditions
- Worst months April and December (13 percent each)
- Worst day of week Friday (32 percent)
- 67 percent of motorcyclists injured were male

## Cyclist

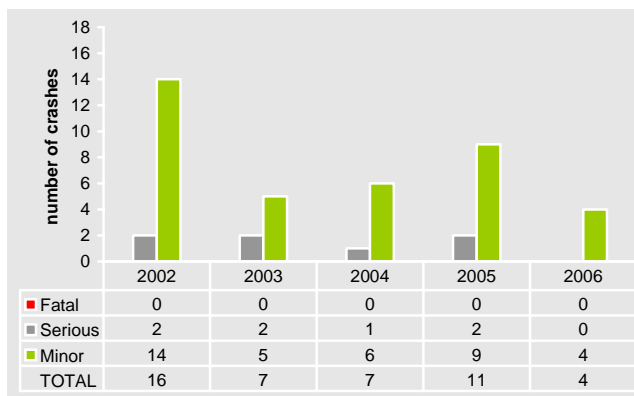
Cyclist injuries do not feature highly in the total road injury picture in Masterton District, representing only 10 percent of all injuries. There were no cyclist fatalities.

There were 41 cyclist injury crashes between 2002 and 2006. This figure is considerably higher when compared to similar authorities and all New Zealand. However it should be noted that the number of injury crashes is the lowest in the last five year period.

Most (96 percent) cycling crashes occur on urban roads at intersections with 89 percent during daylight hours.

Last year (2006) more cycles than cars were imported into New Zealand. It is certainly noticeable in many

### Casualties trend 2002 -2006

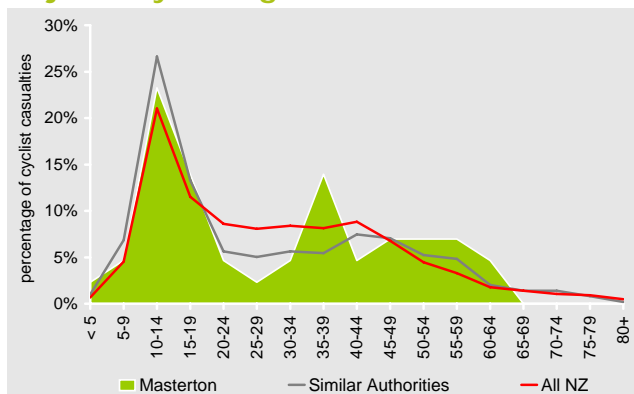


areas across the country that there are many more cyclists using the roads than in past years.

Cyclist injuries are not spread evenly across all age distributions as shown in the chart below.

The top three locations (on the basis of injury

### Injured cyclist age 2002-2006



crashes) for cycle crashes in Masterton District for 2002-2006 period are shown in the table below:

Further information about 2002-2006 cycle crashes:

Location	Number of cyclist injury crashes
SH2 Chapel St	9
Queen St/ Dixon St	7
SH2 Opaki Rd	4

- The most common crash type was a *crossing or turning movement* (56 percent). The second was *rear end or obstruction types* (35 percent)
- 58 percent at intersections
- 89 percent in daylight hours
- Worst month August (22 percent)
- Worst day of the week Wednesday (27 percent)
- 70 percent of cyclists injured were male

## Intersections

During the five year period 2002 to 2006 there were 118 injury crashes at intersections and 278 non-injury crashes. In these 1 person died, 13 received serious injuries and 128 received minor injuries.

Intersection crashes	2002	2003	2004	2005	2006
Injury crash	24	26	17	24	26
Non-injury crash	47	47	67	62	55
Total	71	73	84	86	81

The table below shows the locations of the intersections with the highest number of crashes in Masterton District between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
Pownall St / Renall St	13	9	1
Queen St / Russell St	12	8	2
Dixon St / Bannister St	8	7	3
Church St / Queen St	8	7	2
Ngaumutawa Rd / Upper Manaia Rd	8	8	1
Ngaumutawa Rd / Renall St	7	3	1
Lincoln Rd/ Villa St	7	4	2

Injury crashes at cross junctions on local roads and T junctions on state highways are the most common type of intersection crash reported as shown in following table:

Junction Type	Rural	Urban
Roundabout	1	49
T	32	163
Cross (X)	1	119
Y	4	11
Other (includes driveways)	12	13
TOTAL	40	355

The main causes contributing to crashes described in Police reports were:

- Failure to stop and give way
- Poor observation
- Poor handling

Intersections present drivers with one of their biggest driving challenges and as a result less experienced drivers are highly represented in these crashes as illustrated in the table below showing licence class of at fault drivers.

Licence status	Injury crashes percentage of at fault drivers	
	Masterton District	New Zealand
Full	63.0	60.9
Learner	8.9	9.4
Restricted	18.7	14.8
Never licensed	3.6	2.5
Disqualified	0.9	1.6
Overseas	0.9	3.7
Expired	0.9	0.8
Other/unknown	2.7	6.3

Further facts about 2002-2006 intersections related crashes on:

### Local roads

- 1 death, 117 serious injuries and 103 minor injuries
- Male driver 69 percent at fault in injury crashes
- Most common crash type failed to give way/stop
- 9 percent alcohol over limit in injury crashes
- 89 percent urban
- 25 percent wet roads
- 28 percent night time
- Worst months February, May and December, best months January, April and October
- Worst day of week Friday

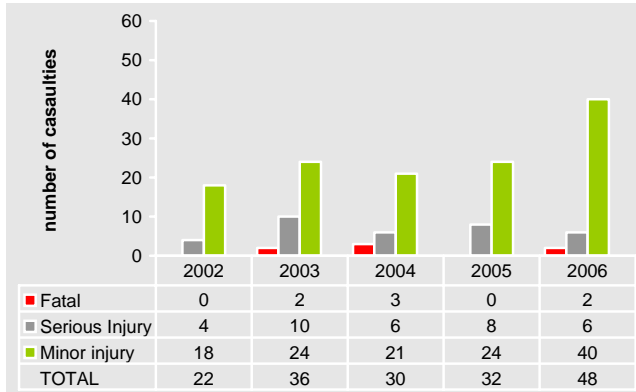
### State highways

- 5 serious injuries and 38 minor injuries
- Male driver 70 percent at fault in injury crashes
- 2 percent alcohol over limit in injury crashes
- 90 percent urban
- 26 percent wet roads
- 27 percent night time
- Worst month May (20 crashes)
- Worst day of week Friday (11 crashes)

## Loss of control at bends

Between 2002 and 2006, 108 of all injury crashes in Masterton District occurred at bends. These crashes resulted in 7 fatalities, 34 serious injuries and 127 minor injuries.

### Injury Crashes at bends 2002-2006



Most crashes at bends involved a driver losing control of their vehicle and either running off the road or 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 off-road event turning into something far more serious.

The three most common roadside hazards struck in Masterton District were fence (139), posts or poles (62) and ditch (46) from a total of 427 objects struck.

The following table lists the main characteristics of these crashes:

Crash characteristic	
Single vehicle	84 percent
Roadside object struck (fence-most common)	37 percent
Alcohol	17 percent
Excessive speed for the conditions	39 percent
Road factors	20 percent
Poor handling	44 percent
Intersections	32 percent
Wet road	38 percent
Night time	44 percent

The following table lists the licence status of at fault drivers of loss of control crashes at bends:

Licence Status	Injury crashes percentage of at fault drivers	
	Masterton District	New Zealand
Full	52.8	51.1
Learner	15.1	10.7
Restricted	22.6	17.9
Never licensed	1.9	4.1
Disqualified	2.8	2.8
Overseas	1.9	5.6
Expired	0	0.9
Other/unknown	2.8	6.8

Further facts loss of control at bends crashes in 2002—2006 period on:

### Local roads

- 4 deaths, 23 serious injuries and 96 minor injuries
- Male drivers 33 percent at fault in injury crashes
- Most common age group 15-19 years old
- 15 percent over alcohol limit in injury crashes
- Worst month February (26 crashes), best month September (9 crashes)
- Worst day of week Saturday (41 crashes)

### State highways

- 3 deaths, 11 serious injuries and 31 minor injuries
- Male drivers 33 percent at fault in injury crashes
- Most common age group 15-19 year
- Eight percent over alcohol limit in injury crashes
- Worst month June (8 crashes), best month May (1 crash)
- Worst day of week Wednesday (13 crashes)

## National issues

### Speed

Speed *too fast* was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Masterton District this has resulted in 5 deaths and 55 other injuries. Speed as a factor in crashes is not reducing in the district.

Nationally 80 percent of speed related crashes involved loss of control/head-on. Alcohol and poor handling were the other driver factors most often associated with speed. Male drivers aged under 40 years old were most involved in speed related crashes.

### Alcohol

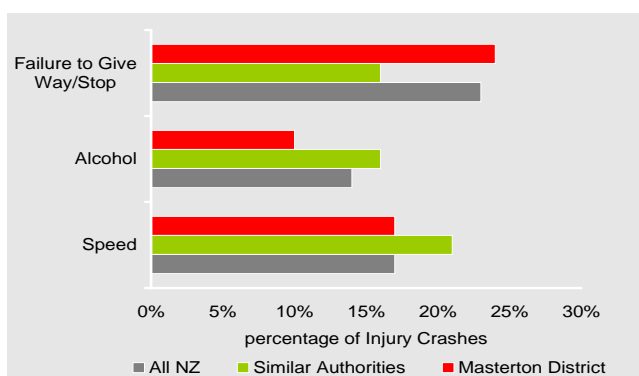
Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Masterton District this has resulted in 1 death and 29 other injuries. The number of injury crashes involving alcohol is increasing.

Nationally 58 percent of alcohol crashes were in urban areas. Seventy 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

Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. In Masterton District this has resulted in 1 death and 82 other injuries.

Nationally 90 percent of these are crossing/turning manoeuvres often associated with failure to look for other parties. For drivers at fault in injury crashes 60



percent are male and all age groups are represented.

### Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

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

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