

# briefing notes road safety issues

## Marlborough 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 Marlborough District.

This report is the eighth road safety report for Marlborough District. Most of the data in this report applies to both local roads and state highways. Where relevant, the details of crashes on the 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 year 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 Marlborough District is compared to similar local bodies and the 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	
Marlborough District	Casualties	
Vulnerable road users	Deaths	3
Crossing/turning	Serious casualties	36
Loss of control at bends	Minor casualties	141
Fatigue		

Nationally	Crashes	
Speed	Fatal crashes	3
Alcohol	Serious injury crashes	31
Failure to give way	Minor injury crashes	92
Restraints	Non injury crashes	285

## Overview of crashes in 2006

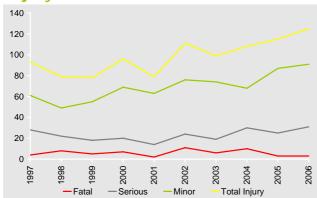
In 2006 on local roads in *Marlborough District* there were 64 injury crashes and 174 non-injury crashes, in addition there were 62 injury crashes and 111 non-injury crashes on state highways, as reported by Police.

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

	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	23	91	117
Urban	0	13	50	63
Total	3	35	131	180

Fatalities in the district have fluctuated in last ten years and have dropped considerably from 10 fatalities in 2004 to 3 fatalities in 2006. Serious and minor injury crashes have shown an upward trend and are highest in 2006 when compared to previous years as shown in the graph below. Overall, total injury crashes are on the rise since 2003.

#### Injury crashes 1997-2006



The following table shows the distribution of the injury and non-injury crashes on local roads and state highways by movement category with urban and rural split:

Movement Category	Urban	Rural	Total
Rear-end/obstruction	102	25	127
Bend-lost control/head on	29	78	107
Crossing/turning	75	16	91
Straight-lost control/head on	16	36	52
Overtaking	11	10	21
Pedestrian vs vehicle	10	0	10

Further information about 2006 injury and non-injury crashes:

#### Local roads

- Worst month— March (29 crashes)
- Worst day— Friday (40 crashes)
- Wet road crashes— 15 percent
- Night time crashes— 29 percent
- Mid-block crashes— 63 percent
- At fault male driver (injury crashes only)— 61 percent
- Full NZ licence (injury crashes only) of at fault drivers— 67 percent
- Social cost of crashes— \$21 million

#### State highways

- Worst months— January, March and November (18 crashes each)
- Worst day— Friday (37 crashes)
- Wet road crashes— 17 percent
- Night time crashes— 25 percent
- Mid-block crashes— 65 percent
- At fault male driver (injury crashes only)— 59 percent
- Full NZ licence (injury crashes only) of at fault drivers— 61 percent
- Social cost of crashes— \$24 million

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 between drivers that are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

Licence status of at fault drivers in injury crashes:

	Injury crashes percentage of at fault drivers		
Licence status	Marlborough District	New Zealand	
Full	64.0	58.4	
Learner	8.0	9.5	
Restricted	15.0	17.6	
Never licensed	0.5	2.2	
Disqualified	0.5	1.7	
Overseas	8.0	4.2	
Expired	0	0.5	
Other/unknown	5.0	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. These are described as pedestrians, motorcyclists and cyclists. In Marlborough District, pedestrians, motorcyclists and cyclists featured in 5 percent, 6 percent and 13 percent of total injuries between 2002 and 2006.

## **Pedestrians**

Although pedestrian injuries do not feature highly in the total road injury picture in Marlborough District for 2002-2006 period, representing only 5 percent of all injuries, they make up 13 percent of all fatalities. The total number of urban pedestrian casualties is higher than similar authorities and all New Zealand.

Pedestrian injuries	2002	2003	2004	2005	2006
Fatal	1	1	2	1	0
Serious	2	0	1	1	2
Minor	9	2	1	7	9
Total	12	3	3	9	11

Most (85 percent) pedestrian crashes occur on urban roads out of which 56 percent occur away from intersections. Twenty-four percent of these crashes occur during hours of darkness.

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

Marlborough District is experiencing problems with younger people crossing the road. Sixty-seven percent of pedestrians injured during this five year period were less then 25 years of age as shown in the graph below. Older people over 80 years of age are involved in 8 percent of pedestrian crashes, higher than similar authorities and all New Zealand.

#### Pedestrian injuries by age 2002-2006



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.

Following are the top three crash factors for pedestrian crashes:

- 20 percent involved pedestrian crossing road heedless of traffic
- 8 percent involved driver failing to give way at pedestrian crossing
- 7 percent involved pedestrians stepping out from behind a parked vehicle

The top five routes/locations (on the basis of injury crashes) for pedestrian crashes in Marlborough District for 2002-2006 period are shown in the table below:

Route/Location	Number of pedestrian injury crashes
SH1 (Blenheim town centre)	4
Maxwell Road	4
Alfred Street	2
Scott Street	2
SH6 (near Springlands)	2

Further information about 2002 -2006 pedestrian injury crashes:

#### Local roads

- The most common crash type— pedestrian crossing the road being hit by a driver approaching from their right (52 percent)
- Number of male pedestrians— 21
- Number of night time crashes— 11
- Worst month— June (6 crashes)
- Worst day of the week— Sunday (8 crashes)
- Number of at fault drivers— 12

- The most common crash type— pedestrian crossing the road being hit by a driver approaching from their right (56 percent)
- Number of male pedestrians— 5
- Number of night time crashes— 3
- Worst month— March (2 crashes)
- Worst days of the week— Sunday, Monday, Tuesday and Saturday (2 crashes each)
- Number of at fault drivers— 3

## **Motorcyclists**

Although motorcyclist injuries do not feature highly in the total road injury picture in Marlborough District representing 6 percent of all injuries, they make up 14 percent of all serious injury crashes.

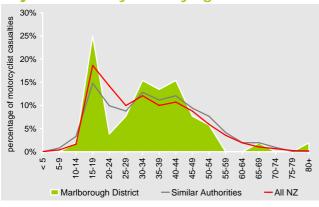
Nationally, motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just 6 percent in 2003.

Since then, there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2006, motorcyclists accounted for 9.5 percent of road fatalities in New Zealand.

Motorcyclist injuries	2002	2003	2004	2005	2006
Fatal	0	1	2	0	0
Serious	2	4	5	4	7
Minor	2	6	2	7	4
Total	4	11	9	11	11

Most (43 percent) motorcycle crashes happen on rural roads away from intersections. Eighty-nine percent of these crashes occurred during daylight hours. Majority (78 percent) of drivers in these crashes were males.

#### Injured motorcyclists by age 2002-2006



Twenty-five percent of motorcycle casualties were in 15 to 19 year age This percentage is higher than similar authorities and all New Zealand group. Similarly, the age group from 30 to 44 is also above the similar authorities and national averages.

Further information about 2002-2006 motorcycle injury crashes:

#### Local roads

- The most common crash type— crossing or turning movement (41 percent)
- Mid-block crashes— 68 percent
- Daytime crashes— 86 percent
- Crashes in dry conditions—91 percent
- Worst months— February, June (4 crashes each)
- Worst day of the week— Sunday (5 crashes)
- Male motorcyclists— 63 percent
- 6 percent of crashes involved road factors, these were mainly slippery surface due to loose material on seal and visibility limited by crest or dip.

- The most common crash type— loss of control on bends (41 percent)
- Mid-block crashes— 68 percent
- Daytime crashes— 91 percent
- Crashes in dry conditions— 91 percent
- Worst month— June (6 crashes)
- Worst day of the week— Friday (7 crashes)
- Male motorcyclists—76 percent
- 7 percent of crashes involved road factors, these were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance.

## **Cyclist**

Although cyclist injuries do not feature highly in the total road injury picture in Marlborough District representing 13 percent of all injuries, they make up 4 percent of all fatalities.

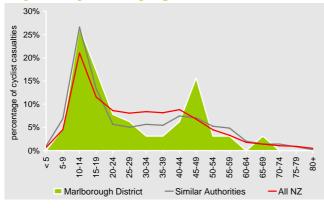
Cyclist injuries	2002	2003	2004	2005	2006
Fatal	0	1	0	0	0
Serious	0	1	6	6	3
Minor	7	11	11	14	11
Total	7	13	17	20	14

There were 69 cyclist injury crashes between 2002 and 2006. This figure is considerable higher when compared to similar authorities and all New Zealand. Most (70 percent) cycling crashes occur on urban roads at intersections with 62 percent during daylight hours.

Last year (2006), more cycles than cars were imported into New Zealand. It is certainly noticeable in many areas across the country that there are many more cyclists using the roads than in past years.

Forty-eight percent of injured cyclists were less than 20 year of age as shown in the graph below. This is higher than the national figure but at par with similar authorities. Sixteen percent of cyclist casualties were in 45 to 49 year age group, the majority of which were females.

#### Injured cyclists by age 2002-2006



The top five routes/locations (on the basis of injury crashes) for cycle crashes in Marlborough District for 2002-2006 period are:

Route/Location	Number of cyclist injury crashes
Alabama Road	11
SH6 (from Roselands to Islington)	11
SH1 through Blenheim	10
Maxwell Road	9
Redwood Street	4

Further information about 2002 to 2006 cycle crashes:

#### Local roads

- The most common crash type— crossing or turning movement (75 percent)
- Intersection crashes—79 percent
- Daytime crashes— 94 percent
- Worst months— June, August (6 crashes each)
- Worst day of the week— Tuesday (11 crashes)
- Number of crashes involving riding on the footpath— 2
- Male cyclist— 58 percent

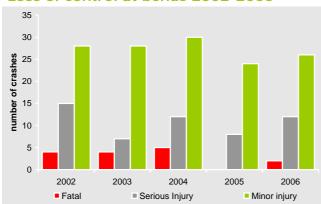
- The most common crash type— crossing or turning movement (59 percent)
- Intersection crashes— 50 percent
- Daytime crashes— 91 percent
- Worst month— February (4 crashes)
- Worst days of the week— Thursday or Friday (5 crashes each)
- Number of crashes involving riding on the footpath— 2
- Male cyclist—71 percent

## Loss of control at bends

Between 2002 and 2006, 37 percent of all injury crashes in Marlborough District occurred at bends. These crashes resulted in 18 fatalities, 72 serious injuries and 219 minor injuries.

Crash numbers have fluctuated in the past five years as shown in the graph below. There were 2 fatalities in 2006 as opposed to none in 2005. Serious and minor injury crashes have also shown an upward trend in the last two years.

#### Loss of control at bends 2002-2006



Most loss of control crashes involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle. After drivers lose control of their vehicles, they often crash into road-side hazards such as ditches, banks, poles or trees. The three most common roadside hazards struck in injury crashes in Marlborough District were cliff/bank (43), fence (39) and ditch (36) from a total of 214 objects struck.

The following table lists the main characteristics of these crashes:

Crash characteristic	
Single vehicle	76 percent
Roadside object struck	80 percent
Alcohol	19 percent
Excessive speed for the conditions	39 percent
Road factors	16 percent
Poor handling	44 percent
Rural road	85 percent
Wet road	23 percent
Night time	33 percent

The following table shows the urban and rural split between crashes at bends on local roads and state highways:

Marlborough District (2002-2006)	Loss of control at bends
Local urban	23
Local rural	55
State highway urban	7
State highway rural	120
Total	205

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

Licence status	Injury crashes percentage of at fault drivers	
	Marlborough District	New Zealand
Full	43.0	51.1
Learner	13.0	10.7
Restricted	26.0	17.9
Never licensed	9.0	4.1
Disqualified	6.0	2.8
Overseas	2.0	5.6
Expired	0.0	0.9
Other/unknown	3.0	6.8

Further facts about 2002-2006 loss of control injury crashes:

#### Local roads

- 4 deaths, 23 serious injuries and 87 minor injuries
- Male drivers— 73 percent
- Most common crash factor— too fast entering corner
- Most common age group— 15 to 19 year olds
- Alcohol related crashes— 21 percent
- Worst month— November (11 crashes)
- Worst day of the week— Sunday (16 crashes)

- 14 deaths, 49 serious injuries and 132 minor injuries
- Male drivers— 73 percent
- Most common crash factor— too fast entering corner
- Most common age group— 15 to 19 year olds
- Alcohol related crashes—18 percent
- Worst month— April (15 crashes)
- Worst day of the week— Sunday (31 crashes)

## Crossing/turning

Crashes due to crossing/turning movements are the second most common crash type in Marlborough District.

During the five year period from 2002 to 2006, there were 104 injury crashes at intersections and 21 injury crashes at driveways. In these crashes, there was 1 fatality, 29 serious injuries and 139 minor injuries.

Crossing/ turning crashes	2002	2003	2004	2005	2006
Injury crash	14	29	27	31	28
Non-injury crash	54	41	47	65	63
Total	68	70	74	96	91

The table below shows the locations of the five intersections with the highest number of crashes between 2002 and 2006:

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
SH6 with Hutcheson Street	20	3	5
SH6 with Battys Road	12	4	1
Alabama with Weld Street	11	1	3
Maxwell with Seymour Street	11	5	3
Alabama with Scott Street	10	6	2

Injury Crashes at Cross-junctions on local roads and Tee-junctions on state highways are the most common type of intersection crash reported as shown in following table:

Junction type	Local roads	State highways
Cross (X)	42	9
Tee	15	14
Roundabout	16	8
Driveways	11	10

The most common crash is one in which drivers failed to give way when turning right from side road or driveway. The second highest is the one in which drivers failed to find safe gap in opposing traffic while making right turn.

Intersections present most drivers with one of their biggest driving challenges. The table below shows licence class of at fault drivers:

Licence status	Injury crashes percentage of at fault drivers	
	Marlborough District	New Zealand
Full	74.0	60.9
Learner	5.0	9.4
Restricted	7.0	14.8
Never licensed	8.0	2.5
Disqualified	1.0	1.6
Overseas	0.0	3.7
Expired	0.0	0.8
Other/ unknown	6.0	6.3

Further facts about 2002-2006 crossing/turning injury crashes:

#### Local roads

- 20 serious and 87 minor injuries
- Male drivers— 58 percent
- Alcohol related crashes—3 percent
- Urban roads—88 percent
- Wet roads crashes—13 percent
- Night time crashes—12 percent
- Worst months— May, November (11 crashes each)
- Worst day of the week— Monday (20 crashes)

- 1 fatality, 9 serious and 48 minor injuries
- Male drivers— 58 percent
- Alcohol related crashes—2 percent
- Urban roads—51 percent
- Wet roads—7 percent
- Night time crashes—19 percent
- Worst month— February (8 crashes)
- Worst day of the week— Friday (11 crashes)

## **Fatigue**

Fatigue is a contributory cause in 10 percent of injury crashes in Marlborough District.

However, fatigue remains a difficult cause to identify and it is accepted that the reported numbers of crashes will be below actual crash numbers.

Even though it is considered socially acceptable to drive while fatigued as opposed to drink driving, research indicates that the effects on cognitive skills are similar. It is extremely difficult for Police to prevent people from driving while fatigued.

For the years 2002 to 2006, fatigue was reported as a contributory factor in around 6 percent of all injury crashes reported by the police in all New Zealand. However, for the same period, fatigue has been implicated in between 11 and 14 percent of all fatal crashes.

Fatigue crash injuries	2002	2003	2004	2005	2006
Fatal	1	0	1	0	1
Serious	1	4	9	4	6
Minor	11	6	9	12	15
Total	13	10	19	16	22

In Marlborough District between 2002 and 2006, there were 54 injury crashes where fatigue was a contributory cause. In these crashes, there were 3 fatalities, 24 received serious injuries and 53 minor injuries.

The following table shows the percentage of injury crashes in different types of driver fatigue identified by Police:

Types of fatigue identified by	Percentage of injury crashes in		
Police	Marlborough District	New Zealand	
General (unspecified)	7.5 percent	4.9 percent	
Long trip	1.79 percent	0.3 percent	
Lack of sleep	0.05 percent	0.5 percent	
Worked long hours before driv- ing	0.05 percent	0.6 percent	
Exceeded driving hours	0.0 percent	0.2 percent	

Fatigue was the primary contributing factor for loss of control crashes on straight sections of road and was also one of the factors for loss of control crashes on bends.

The following table illustrates the licence status of at fault drivers in fatigue related injury crashes:

Licence status	Injury crashes percentage of at fault drivers		
	Marlborough District	New Zealand	
Full	67.0	57.7	
Learner	7.0	10.1	
Restricted	14.0	16.2	
Never licensed	0.0	2.3	
Disqualified	0.0	2.2	
Overseas	4.0	4.2	
Expired	4.0	1.3	
Other/ Unknown	4.0	6.0	

Further facts about 2002-2006 fatigue related injury crashes:

#### Local roads

- 1 fatality, 2 serious and 7 minor injuries
- Male drivers— 75 percent
- Urban roads—40 percent
- Wet roads—14 percent
- Night time crashes—43 percent
- Worst months— November or December (2 crashes each)
- Worst days of the week— Sunday and Monday (2 crashes each)

- 2 fatalities, 22 serious and 46 minor injuries
- Male drivers— 71 percent
- Urban roads—2 percent
- Wet roads—15 percent
- Night time crashes—43 percent
- Worst month— January (8 crashes)
- Worst days of the week— Friday and Sunday (10 crashes each)

## **National** issues

## **Speed**

The contributing factor *too fast* was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Marlborough District, *too fast* was recorded in 19 percent of injury crashes in the last five years resulting in 11 deaths and 93 other injuries. Seventy-six percent of speed-related crashes were loss of control at bends and at straight sections of the road.

Male drivers aged less than 25 years were most involved in speed-related crashes.

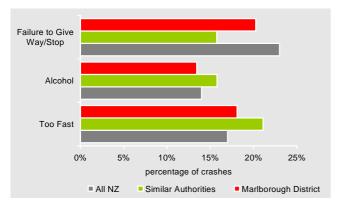
#### **Alcohol**

Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. People that drink and drive (with a blood alcohol level over 80mg per 100ml) are three times more likely to be involved in a crash than a sober driver.

In Marlborough District, alcohol was involved in 13 percent of injury crashes in the district in the last five years resulting in 10 deaths, and 64 other injuries. Fifty-three percent of these were loss of control at bends and at straight sections of the road.

## Failure to give way

While most failure to give way crashes result in noninjury or minor-injury crashes, many can have serious consequences. Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. In Marlborough District, failure to give way or stop was reported in 22 percent of all reported injury crashes for the last five years resulting in 2 fatalities and 120 other injuries.



#### Restraints

Wearing a safety belt reduces the chance of death or serious injury in a crash by 40 percent. Whether you sit in the front or the back seat, the risk of serious or fatal injury is virtually the same

Results from the 2006 national restraint wearing survey showed that the Marlborough District front seat

Safety belt wearing was 95 percent which is same as the national average.

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