

briefing notes - road safety issues

Taranaki

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 the Taranaki region.

This report is the eighth road safety report for the Taranaki region. The data in this report applies to local roads and State Highways in the Taranaki region.

In each new report one 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 the Taranaki region is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

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

We encourage local authorities to use the Ministry of Transport's Crash Analysis System (CAS) to further investigate the highlighted issues.

Major Road Safety Issues	2006 road trauma	
Taranaki	Casualties	
Intersections	Deaths	12
Alcohol	Serious casualties	58
Speed	Minor casualties	353
Bends – Loss of Control		

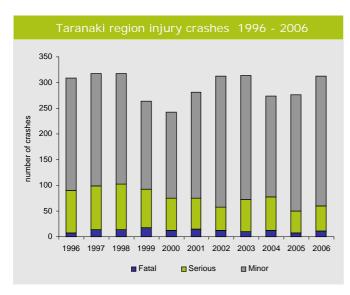
Nationally	Crashes	
Speed	Fatal crashes	11
Alcohol	Serious injury crashes	49
Failure to give way	Minor injury crashes	250
Restraints	Non-injury crashes	530

Overview of 2006

In 2006 on local roads in the Taranaki region there were 142 injury crashes and 248 non-injury crashes, in addition there were 168 injury crashes and 282 non-injury crashes on State Highways, as reported by the New Zealand Police.

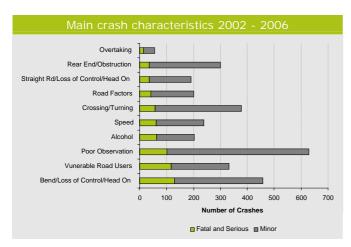
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and Transit roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	11	41	172	224
Urban	1	17	181	199
Total	12	58	353	423



Fatalities in the district have been fluctuating over the last 10 years.

Serious injuries on the other hand fell between 1998 and 2002 but now seem to be fluctuating.



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

- Worst month December (18), best July (8)
- Worst day Friday (77), best Monday (35)
- Wet road 24 percent
- · Night time 34 percent
- Mid block 61 percent
- 64 percent of at fault drivers are male (injury crashes)
- 50 percent of at fault drivers in injury crashes have a full NZ licence

Further information about 2006 injury and non injury crashes on Transit roads

- Worst month October (21), best August (10)
- Worst day Thursday (73), best Sunday (52)
- Wet road 28 percent
- · Night time 32 percent
- Mid block 56 percent
- 67 percent of at fault drivers are male (injury crashes)
- 65 percent of at fault drivers in injury crashes have 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.

This is certainly true in the Taranaki region with only 58 percent of at fault drivers in injury crashes being the holder of a full driving licence.

Driver licence status (injury crashes, at fault drivers all Taranaki roads)	Percentage of total at fault drivers (NZ value in brackets)
Full	58.4 (58.4) %
Learner	9.6 (9.5) %
Restricted	18.9 (17.6) %
Never Licenced	2.7 (2.2) %
Disqualified	1.4 (1.7) %
Overseas	3.1 (4.2) %
Expired	0.7 (0.5) %
Other / unknown	5.2 (5.6) %

Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2006, excessive speed contributed to around 31 percent of fatal crashes and 16 percent of injury crashes.

During 2006, there were 1,839 injury crashes where the driver was travelling too fast for conditions.

Reducing speeds to appropriate levels is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speeds can produce up to a three percent reduction in injury crashes.

In the Taranaki region, excessive speed was a factor in 16 percent of injury crashes in 2006.

Speed related injury crashes	2002	2003	2004	2005	2006
Urban	12	20	14	21	21
Rural	20	35	36	30	28
Total	32	55	50	51	49

There were 237 speed-related injury crashes reported in the last five years.

Males are also highly represented as at fault drivers in speed related crashes, accounting for 71 percent of drivers

Drivers at fault or part fault in seed related injury crashes (2002- 2006) *	Male	Female	Total
15- 19 years	54	26	80
20 - 24	40	7	47
25 - 29	19	3	22
30 - 39	25	13	38
40 - 49	17	10	27
50 - 59	9	6	15
60 - 69	4	2	6
70+	0	0	0
Total	168	67	235

^{* (}note ranges are not equal)

The following table illustrates the licence status of at fault drivers in speed related crashes in Taranaki region and all New Zealand (2006).

Driver licence status, speed related injury crashes, at fault drivers in the Taranaki region	Percentage of total at fault drivers in speed related crashes (NZ value in brackets)
Full	45.0 (43.0) percent
Learner	16.4 (15.3) percent
Restricted	23.9 (22.5) percent
Never licenced	0.3 (4.5) percent
Disqualified	2.9 (4.1) percent
Overseas	1.3 (3.7) percent
Expired	1.3 (0.5) percent
Other / unknown	5.9 (6.2) percent

Further facts about speed related crashes in Taranaki region (divided into local roads and Transit roads) (2002 -2006)

Local roads

- 7 deaths, 33 serious injuries, 173 minor injuries
- Male drivers 77 percent
- Most common crash type, Bend (loss of control/head on)
- 66 percent at midblock
- 29 percent wet road
- 41 percent night time
- Worst month November, best February
- Worst day of week Friday, best Monday

- 9 deaths, 33 serious injuries, 103 minor injuries
- Male 63 percent
- Most common crash type, Bend (loss of control/head on)
- 77 percent at midblock
- 49 percent wet road
- 41 percent night time
- · Worst month January, best July
- · Worst day Thursday, best Tuesday

Intersections

Crashes at intersections are the most common crash type in urban areas of the Taranaki region.

During the five year period 2002 to 2006 there were 592 injury crashes at intersections and 1125 non-injury crashes. In these 18 people died, 99 received serious injuries and 723 received minor injuries.

Intersection crashes	2002	2003	2004	2005	2006
Injury crash	123	135	106	111	117
Non-injury crash	239	193	220	238	235
Total	362	328	326	349	352

The table below shows the locations of the five intersections with the highest number of crashes in the Taranaki region between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
SH3/Mangati Rd	32	15	3
SH3/SH45	25	9	7
SH3/Mangorei Rd	24	7	3
SH3/Princess St	21	8	6
SH3/Smart Rd	20	8	4

Crashes at X type junctions in urban areas are the most common type of intersection crash reported, followed by crashes at Tee type urban junctions.

Junction type	Rural	Urban
Roundabout	-	37
Tee	235	500
Cross (X)	104	738
Υ	16	42
Other (includes driveways)	5	39

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

- Failure to stop and give way
- Not checking properly
- Too fast.

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

Driver licence status, intersection related injury crashes, at fault drivers in the Taranaki region	Percentage of total at fault drivers in intersection related crashes (NZ value in brackets)
Full	62.1 (60.9) %
Learner	10.8 (9.4) %
Restricted	16.9 (14.8) %
Never Licenced	1.5 (2.5) %
Disqualified	1.2 (1.6) %
Overseas	1.9 (3.7) %
Expired	1.3 (0.8) %
Other / unknown	4.4 (6.3) %

Further facts about intersection related crashes in the Taranaki region 2002 to 2006 (divided into local roads and Transit roads):

Local roads

- 8 deaths, 53 serious injuries, 303 minor injuries
- 62 percent of at fault drivers are male
- Most common crash type, crossing/turning
- 7 percent alcohol over limit
- 85 percent urban
- 22 percent wet roads
- 30 percent night time
- · Worst month August, best January
- Worst day of week Wednesday, best Sunday

- 10 deaths, 46 serious injuries, 420 minor injuries
- 64 percent of at fault drivers are male
- Most common crash type, crossing/turning
- 4.4 percent alcohol over limit
- 60.7 percent urban
- 29.1 percent wet roads
- 23.0 percent night time
- Worst month March, best January
- Worst day of week Wednesday, best Monday

Drink-driving

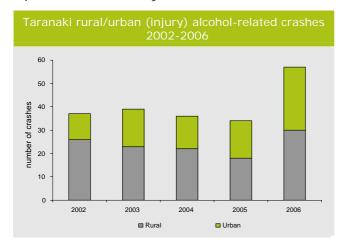
Alcohol effects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2006, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes.

In the Taranaki region, alcohol was a factor in 18 percent of injury crashes in 2006, an increase from 2005, and increasing in line with the national trend.

There were 202 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in the Taranaki region at which drink-driving crashes occurred during the 2002 to 2006 period.

Taranaki region

SH 3, in the vicinity of Rugby and Johns Roads Tariki

SH 3/Maire Road intersection, Hawera

SH 45/Ketemarae Road, Tokaora

SH 3/Glover Road, Hawera

The following table illustrates the licence status of at fault drivers in alcohol related crashes in the Taranaki region and all New Zealand (2006).

Driver licence status, alcohol related injury crashes, at fault drivers in the Taranaki region	Percentage of total at fault drivers in alcohol related crashes (NZ value in brackets)
Full	42.8 (41.6) percent
Learner	12.2 (15.8) percent
Restricted	26.5 (20.8) percent
Never Licenced	4.1 (4.6) percent
Disqualified	6.1 (6.2) percent
Overseas	0 (1.0) percent
Expired	2.0 (1.4) percent
Other / unknown	6.1 (8.2) percent

Further facts about alcohol related crashes in the Taranaki region (divided into local roads and Transit roads) (2002 -2006)

Local roads

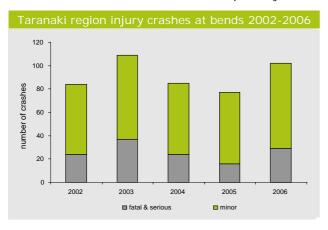
- 7 deaths, 36 serious injuries 135 minor injuries
- Male driver 77 percent
- Most common crash type, Bend (lost control/head on)
- 32 percent at intersections
- 48 percent urban
- 31.0 percent wet road
- 77 percent night time
- Worst month December, best April
- · Worst day of week Sunday, best Monday

- 12 deaths, 26 serious injuries 93 minor injuries
- Male drivers 75 percent
- Most common crash type, Bend (lost control/head on)
- 28 percent at intersections
- 34 percent urban
- 26 percent wet road
- 68 percent night time
- Worst month May & Dec, best April & Sept
- Worst day of week Sunday, best Wednesday

Crashes at bends

Between 2002 and 2006, 31 percent of all injury crashes in the Taranaki region occurred at bends. These crashes resulted in 31 fatalities, 138 serious injuries and 501 minor injuries.

Crash numbers have fluctuated for the past 5 years.



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 injury crashes in the Taranaki region were fences (119), banks (98) and posts or poles (56) from a total of 522 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	80 percent
Alcohol	25 percent
Excessive speed for the conditions	37 percent
Road factors	21 percent
Poor handling	42 percent
Rural road	76 percent
Wet road	36 percent
Night time	46 percent

The following table illustrates the licence status of at fault drivers for crashes occurring at bends in the Taranaki region and all New Zealand (2006).

Driver licence status, bend related injury crashes, at fault drivers in the Taranaki region	Percentage of total at fault drivers in bend related crashes (NZ value in brackets)	
Full	51.5 (51.1) percent	
Learner	13.3 (10.7) percent	
Restricted	21.0 (17.9) percent	
Never Licenced	3.2 (4.1) percent	
Disqualified	2.5 (2.8) percent	
Overseas	2.3 (5.6) percent	
Expired	1.1 (0.9) percent	
Other / unknown	5.0 (6.8) percent	

Further information about crashes on bends in the Taranaki region:

Local roads

- 11 deaths, 61 serious injuries, 252 minor injuries
- Male drivers 72 percent
- Most common crash type, loss of control/head on
- Most common age group 15 19
- 31 percent alcohol over limit
- Worst months December & May, best August
- · Worst day of week Saturday, best Monday

- 20 deaths, 77 serious injuries, 249 minor injuries
- Male drivers 67 percent
- Most common crash type, loss of control/head on
- Most common age group 15 19
- 21 percent over alcohol limit
- Worst month December, best August
- Worst day of week Sunday, best Wednesday

Road factors

A safe road environment incorporates numerous design principles, appropriate geometric design standards, good delineation under all conditions, adequate surface skid resistance and a roadside free of unforgiving hazards. It should also serve the safety needs of all vehicles and road users.

Road factors that contribute to crashes include those that affect the way a driver reacts to the driving conditions, such as:

- · a slippery road surface
- · obstructions on the road, such as slips
- · limited visibility
- signs, signals and/or road markings being damaged or in poor condition.

Nationally, road factors were a contributing factor in 12 percent of injury crashes in 2006, with slippery road surfaces being the key factor.

In the Taranaki region, road factors were a factor in 12 percent of injury crashes in 2006, a decrease from 2005.

There were 200 road factor related injury crashes reported in the last five years.

Road factors were predominantly a rural issue in the Taranaki region in 2006 (rural is defined as an area with a speed limit of 80km/h or more).

Road factor related injury crashes	2002	2003	2004	2005	2006
Urban	14	15	8	14	8
Rural	37	27	26	26	25
Total	51	42	34	40	33

Key locations

The following provides a list of the key locations at which road factor crashes occurred during the 2002-2006 period.

Taranaki	region

SH3, 500m south of Muggeridge Road

SH 43/Standish Road intersection

SH3, 300m south of Rangikura Road

The following table shows the number of various road factors involved in injury crashes for the Taranaki region during the period 2002-2006.

Number of occasions Police reported this factor 2002 to 2006	Local road	Transit road
Slippery road	33	68
Road surface in poor condition	28	21
Road obstructed	2	3
Visibility limited	43	16
Signs or signals (needed or faulty)	6	2
Markings (needed or faulty)	2	1
Street lighting	2	3

Further facts about road factor related crashes in the Taranaki region (2002 -2006) by local and Transit roads.

Local roads

- 3 deaths, 22 serious injuries, 102 minor injuries
- Most common crash type, Bend (loss of control/head on)
- 25 percent at intersections
- 42 percent urban
- 41 percent wet road
- 24 percent night time
- Worst month March, best September

- 6 deaths, 20 serious injuries, 122 minor injuries
- Most common crash type, Bend (loss of control/head on)
- 25 percent at intersections
- 17 percent urban
- 61 percent wet road
- 32 percent night time
- Worst month November, best August

Partnerships

Land Transport NZ works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers.

Some of the key road safety partners in the Taranaki area include:

New Zealand Police

Central District Road Policing Manager Neil Wynne Cuba Street Palmerston North Phone 06 351 3600

Road Safety Co-ordinator

Taranaki Marion Webby Private Bag 902 Hawera Phone 06 278 0555

Local Authority Engineers

New Plymouth District Council Stephen Bowden Private Bag 2025 New Plymouth Phone 06 759 6060

South Taranaki District Council Vincent Lim Private Bag 902 Hawera Phone 06 278 0555

Stratford District Council Barry Jagersma Private Bag 320 Stratford Phone 06 765 6099

Accident Compensation Corporation

Taranaki Area ACC Injury Prevention Consultant Kath Forde Private Bag New Plymouth Phone 06 759 0730

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