

Bends - Loss of Control

# briefing notes - road safety issues

# South Taranaki and Stratford

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.

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 South Taranaki and Stratford area. In this report the South Taranaki and Stratford area includes South Taranaki and Stratford district councils.

This report is the ninth road safety report for the South Taranaki and Stratford area. All material unless otherwise stated in this report applies to both local roads and Transit New Zealand (Transit NZ) roads in the South Taranaki and Stratford area.

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 South Taranaki and Stratford area is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

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

# Major Road Safety Issues2007 road traumaSouth Taranaki and StratfordCasualtiesIntersectionsDeaths3AlcoholSerious casualties31SpeedMinor casualties112

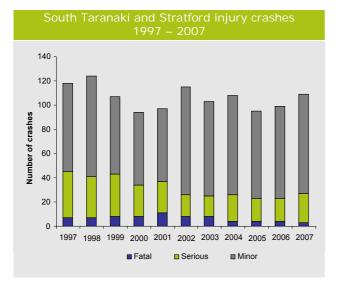
Nationally	Crashes	
Speed	Fatal crashes	3
Alcohol	Serious injury crashes	24
Failure to give way	Minor injury crashes	82
Restraints	Non-injury crashes	185

### **Overview of 2007**

In 2007 on local roads in South Taranaki and Stratford districts there were 39 injury crashes and 104 non-injury crashes, in addition there were 70 injury crashes and 81 non-injury crashes on Transit NZ roads, as reported by the New Zealand Police.

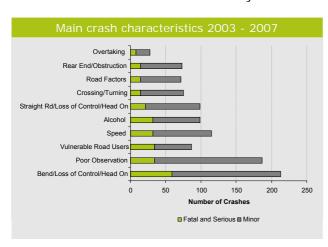
The table below shows the number of injuries resulting from 2007 crashes by rural or urban areas for both local and Transit NZ roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	28	91	122
Urban	-	3	21	24
Total	3	31	112	146



Fatal crashes in the area rose between the years 1997 and 2001 and have declined since.

Serious injury crashes have declined between 1997 and 2003 but have fluctuated over the last 4 years.



Local road fatal and serious crashes			
Crash type or contributory cause 2003- 2007	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause	
Alcohol	29	21	
Too fast	28	26	
At bends	38	34	
At intersections	28	33	
Vulnerable road users			
1. Pedestrians	7	6	
2. Cyclists	9	6	
3. Motorcyclists	17	9	
Roadside hazard struck	59	56	
Road factors	12	13	
Night time	41	39	
Loss of control	55	54	

Further information about 2007 injury and non-injury crashes on local roads in South Taranaki and Stratford districts:

- Worst month September, best March
- Worst day Friday, best day Sunday
- 25 percent wet road
- 39 percent night time
- 36 percent at intersections
- 69 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$16m

Further information about 2007 injury and non injury crashes on Transit NZ roads in South Taranaki and Stratford districts:

- Worst month January, best August
- Worst day Friday, best Tuesday
- 32 percent wet road
- 37 percent night time
- 25 percent at intersections
- 67 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$26m

# Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2007, excessive speed contributed to around 33 percent of fatal crashes and 18 percent of injury crashes.

During 2007, there were 2103 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 speed can produce up to a three percent reduction in injury crashes.

In the South Taranaki and Stratford districts, excessive speed was a factor in 26 percent of injury crashes in 2007.

There were 115 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	3	3	6	7	5
Rural	19	17	19	13	23
Total	22	20	25	20	28

Males represented 72 percent of at fault drivers in speed related injury crashes.

Drivers at fault or part fault in speed related injury crashes (2003- 2007) *	 Male	Female	Total
15- 19 years	30	8	38
20 - 24	16	5	21
25 - 29	5	6	11
30 - 39	9	3	12
40 - 49	12	5	17
50 - 59	7	3	10
60 - 69	2	1	3
70+	0	1	1
Total	81	32	113

<sup>\* (</sup>note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in South Taranaki and Stratford districts:

- 4 deaths, 19 serious injuries, 62 minor injuries
- 72 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- 78 percent midblock
- 23 percent wet road
- 38 percent night time
- · Worst month December, best August
- Worst day of week Saturday, best Thursday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in South Taranaki and Stratford districts:

- 5 deaths, 18 serious injuries, 61 minor injuries
- 72 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- 80 percent midblock
- 45 percent wet road
- 33 percent night time
- Worst month December, best March
- Worst day of week Friday, best Monday

#### **Intersections**

Crashes at intersections are the most common crash type in urban areas of the South Taranaki and Stratford districts.

During the five year period 2003 to 2007 there were 142 injury crashes at intersections and 257 non-injury crashes. In these 5 people died, 33 received serious injuries and 177 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	32	34	26	27	23
Non-injury crash	35	58	51	47	66
Total	67	82	77	74	88

The table below shows the locations of the five intersections with the highest number of crashes in the South Taranaki and Stratford districts between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
Princes St/ Glover Rd	11	2	4
SH45/ Ketemarae Rd	7	4	-
High St/ Camberwell Rd	6	1	1
Eltham Rd/ Hastings Rd	6	5	-
SH 43/Orlando St	5	1	3

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

Junction type	Rural	Urban
Roundabout	-	22
Tee	83	115
Cross (X)	30	129
Υ	9	4
Other (includes driveways)	1	6

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

- Failure to stop and give way
- Not checking properly
- Loss of control

The most common crash is one when a driver fails to give way and crosses the path of a vehicle coming at a right angle to them. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right.

Further information about injury crashes at intersections (2003 to 2007) on local roads in South Taranaki and Stratford districts:

- 3 deaths, 20 serious injuries, 88 minor injuries
- 68 percent of at fault drivers were male
- 11 percent involved alcohol
- 16 percent wet roads
- 34 percent night time
- Worst month, April best February
- Worst day of week Friday, best Sunday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in South Taranaki and Stratford districts:

- 2 death, 13 serious injuries, 89 minor injuries
- 63 percent of at fault drivers were male
- 14 percent involved alcohol
- 24 percent wet roads
- 27 percent night time
- Worst month February, best April
- Worst day of week Saturday, best Monday

# **Drink-driving**

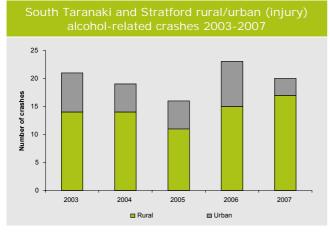
Alcohol effects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

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 2007, alcohol-affected drivers contributed to 34 percent of all fatal crashes and 15 percent of all injury crashes.

In South Taranaki and Stratford districts, alcohol was a factor in 18 percent of injury crashes in 2007, a decrease from 2006.

There were 99 alcohol-related injury crashes reported in the last five years.



#### **Key locations**

The following provides a breakdown of the key locations in South Taranaki and Stratford at which drink-driving crashes occurred during the 2003 to 2007 period.

South Taranaki and Stratford districts	
SH 45, Ketemarae Road intersection	
SH 45, 170m east of Winks Road	
SH 3, 100m east of Powerhouse Road	
SH 3, 3400m south of Whareroa Road	

Further information about alcohol related injury crashes (2003 to 2007) on local roads in South Taranaki and Stratford districts:

- 6 deaths, 15 serious injuries, 53 minor injuries
- 83 percent of at fault drivers were male
- 17 percent at intersections
- 69 percent rural
- 29 percent wet road
- 83 percent night time
- Worst month December, best November
- Worst day of week Sunday, best Monday

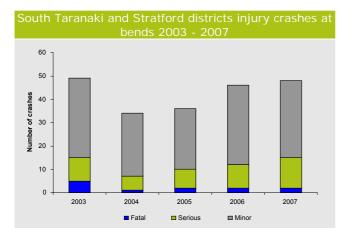
Further information about alcohol related injury crashes (2003 to 2007) on Transit NZ roads in South Taranaki and Stratford districts:

- 6 deaths, 15 serious injuries, 52 minor injuries
- 78 percent of at fault drivers were male
- 18 percent at intersections
- 75 percent rural
- 27 percent wet road
- 59 percent night time
- Worst month February, best March
- · Worst day of week Sunday, best Wednesday

# **Crashes at bends**

Between 2003 and 2007 41 percent of all injury crashes in the South Taranaki and Stratford districts area occurred at bends. These crashes resulted in 14 fatalities, 59 serious injuries and 234 minor injuries.

Crash numbers have risen between 2004 and 2007.



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 loose control their vehicles they often crash into roadside hazards such as ditches, banks, poles and 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 South Taranaki and Stratford districts were fences (65), cliffs and banks (44) and ditches (30) from a total of 293 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	80 percent
Alcohol	29 percent
Excessive speed for the	39 percent
conditions	
Road factors	20 percent
Poor handling	38 percent
Rural road	67 percent
Wet road	36 percent
Night time	43 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in South Taranaki and Stratford districts:

- 6 deaths, 20 serious injuries, 84 minor injuries
- 74 percent of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 15-19 years
- 33 percent of crashes involved alcohol
- Worst month September, best March
- · Worst day of week Sunday, best Tuesday
- Worst time period, 6 9pm

Further information about injury crashes on bends (2003 to 2007) on Transit roads in South Taranaki and Stratford districts:

- 8 deaths, 39 serious injuries, 150 minor injuries
- 67 of at fault drivers were male
- Most common crash type, Too fast for conditions causing loss of control
- Most common age group 30-39 years
- 26 percent of crashes involved alcohol
- Worst month December, best March
- Worst day of week Sunday, best Wednesday
- Worst time period, 3 6pm

#### **Loss of Control**

Between 2003 and 2007 61 percent of all injury crashes in the South Taranaki and Stratford districts involved loss of control. These crashes resulted in 16 fatalities, 82 serious injuries and 339 minor injuries.

Crash numbers declined between 2003 and 2005 and rose over the past 2 years.

Loss of Control Crashes				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	5	13	50	68
2004	1	15	46	62
2005	2	10	42	54
2006	3	12	46	61
2007	3	16	48	67
Total	14	66	232	312

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 their vehicles often crash into roadside hazards such as ditches, banks, poles and 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 South Taranaki and Stratford districts were fences (94), cliffs or banks (54), post or pole (41) and from a total of 434 objects struck.

Main characteristics of loss of control injury crashes			
Crash characteristic	Percentage of		
	crashes		
Bend	68		
Straight road	32		
Single vehicle	83		
Alcohol	26		
Excessive speed for the	32		
conditions			
Road factors	18		
Poor handling	39		
Rural road	87		
Wet road	33		
Night time	43		

Further information about loss of control injury crashes (2003 to 2007) on local roads in South Taranaki and Stratford districts:

- 7 deaths, 30 serious injuries, 141 minor injuries
- 72 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- Most common age group 15-19 years
- 30 percent alcohol over limit
- · Worst month December, best July
- · Worst day of week Sunday, best Thursday

Further information about loss of control injury crashes (2003 to 2007) on Transit NZ roads in South Taranaki and Stratford districts:

- 9 deaths, 52 serious injuries, 198 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- Most common age group 40-49 years
- 24 percent over alcohol limit
- Worst month November, best March
- Worst day of week Sunday, best Wednesday

# **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 South Taranaki and Stratford districts 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**

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

#### **Transit New Zealand Area Engineer**

Roger McLeay PO Box 345 Wanganui Phone 06 345 4173

# **Contacts**

#### **Land Transport New Zealand**

Rosalie Orr
Partnership Manager - Midlands
See contact details at end.

Andrew McKillop

Manager Programmes – Waikato/Bay of
Plenty/Taranaki
See contact details at end.



Midland Regional Office

183 Collingwood Street Private Bag 3081 HAMILTON

Telephone 07 958 7840 Fax 07 958 7866

www.landtransport.govt.nz