



briefing notes - road safety issues

New Plymouth 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.

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 New Plymouth District.

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

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 New Plymouth District 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 Issues		2007 road trauma	
New Plymouth District		Casualties	
Intersections		Deaths	8
Alcohol		Serious casualties	46
Speed		Minor casualties	260
Bends – Loss of Control			
Nationally		Crashes	
Speed		Fatal crashes	8
Alcohol		Serious injury crashes	39
Failure to give way		Minor injury crashes	183
Restraints		Non-injury crashes	471

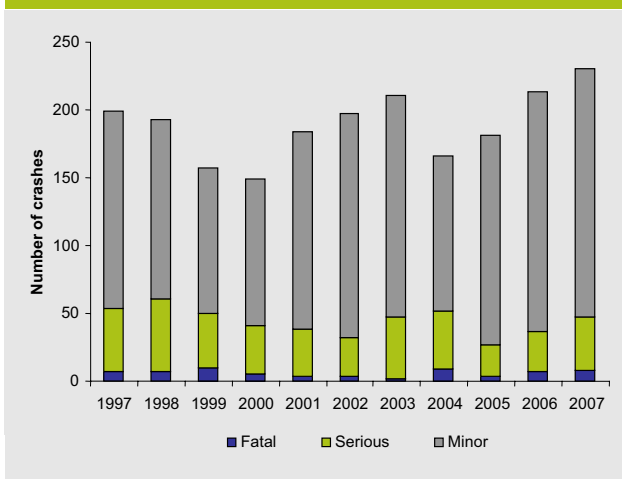
Overview of 2007

In 2007 on local roads in New Plymouth district there were 100 injury crashes and 232 non-injury crashes, in addition there were 130 injury crashes and 239 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).

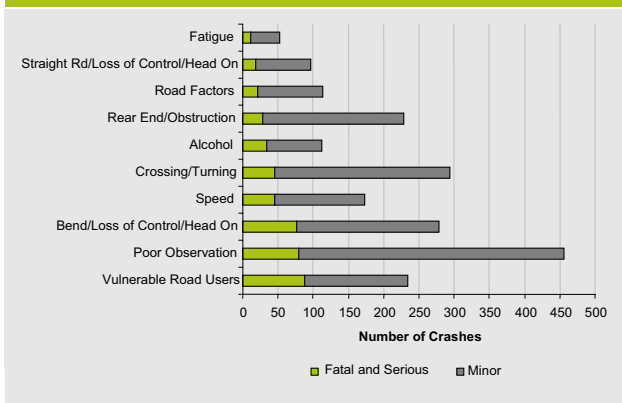
	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	20	119	143
Urban	4	26	141	171
Total	8	46	260	314

New Plymouth District injury crashes 1997 - 2007



Numbers of crashes in the district have risen over the past 4 years.

Main crash characteristics 2003 - 2007



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	19	16
Too fast	29	25
At bends	39	33
At intersections	43	45
Vulnerable road users		
1. Pedestrians	18	8
2. Cyclists	11	8
3. Motorcyclists	23	13
Roadside hazard struck	62	56
Road factors	13	11
Night time	37	31
Loss of control	47	42

Further information about 2007 injury and non-injury crashes on local roads in New Plymouth District:

- Worst month June, best February
- Worst day Friday, best day Tuesday
- 21 percent wet road
- 31 percent night time
- 43 percent at intersections
- 63 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$35m

Further information about 2007 injury and non injury crashes on Transit NZ roads in New Plymouth District:

- Worst month May, best September
- Worst day Thursday, best Sunday
- 27 percent wet road
- 29 percent night time
- 45 percent at intersections
- 62 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$48m

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 New Plymouth district, excessive speed was a factor in 17 percent of injury crashes in 2007.

There were 172 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	20	12	12	14	21
Rural	16	20	21	17	19
Total	36	32	33	31	40

Males represented 69 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	40	23	63
20 - 24	32	5	37
25 - 29	12	1	13
30 - 39	21	14	35
40 - 49	8	3	11
50 - 59	4	5	9
60 - 69	2	1	3
70+	0	1	1
Total	119	53	172

* (note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in New Plymouth District:

- 6 deaths, 28 serious injuries, 135 minor injuries
- 75 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 60 percent midblock
- 24 percent wet road
- 46 percent night time
- Worst month June, best February
- Worst day of week Friday, best Monday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in New Plymouth District:

- 5 deaths, 18 serious injuries, 63 minor injuries
- 57 percent of at fault drivers were male
- Most common crash type, Bend – loss of control/head on
- 70 percent midblock
- 44 percent wet road
- 44 percent night time
- Worst month October, best July
- Worst day of week Thursday, best Tuesday

Intersections

Crashes at intersections are the most common crash type in urban areas of the New Plymouth district.

During the five year period 2003 to 2007 there were 454 injury crashes at intersections and 901 non-injury crashes. In these 8 people died, 82 received serious injuries and 540 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	102	72	85	90	105
Non-injury crash	158	162	187	188	206
Total	260	234	272	278	311

The table below shows the locations of the five intersections with the highest number of crashes in the New Plymouth district between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH44/SH45	32	10	9
SH3/Mangorei Rd	30	7	11
SH3/Mangati Road	26	16	6
SH 3/Princess St	25	10	6
Devon St East/Hobson St	21	4	6

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	-	13
Tee	145	398
Cross (X)	72	649
Y	8	31
Other (includes driveways)	2	35

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

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

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 New Plymouth district:

- 3 deaths, 43 serious injuries, 230 minor injuries
- 58 percent of at fault drivers were male
- 14 percent involved alcohol
- 24 percent wet roads
- 27 percent night time
- Worst month August, best January
- Worst day of week Wednesday, best Monday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in New Plymouth district:

- 5 deaths, 39 serious injuries, 310 minor injuries
- 63 percent of at fault drivers were male
- 6 percent involved alcohol
- 31 percent wet roads
- 23 percent night time
- Worst month March, best August
- Worst day of week Wednesday, best Sunday

Drink-driving

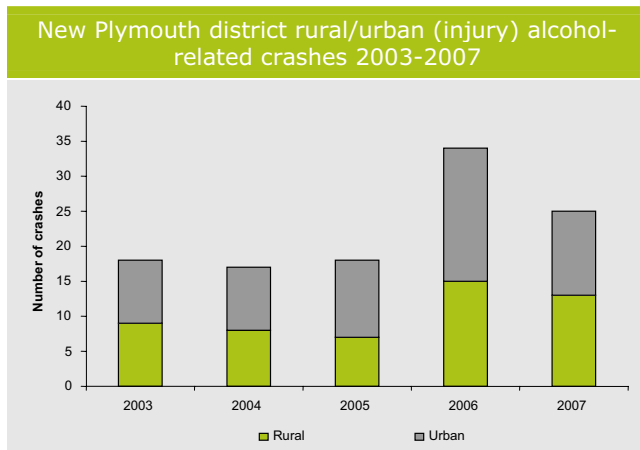
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

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 New Plymouth district, alcohol was a factor in 11 percent of injury crashes in 2007, a decrease from 2006.

There were 112 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in New Plymouth district at which drink-driving crashes occurred during the 2003 to 2007 period.

New Plymouth district	
SH 3 / Johns Road intersection	
SH 3, 100m north of Onaero River Road	
Mangorei Road, 570m north of Baker Road	

Further information about alcohol related injury crashes (2003 to 2007) on local roads in New Plymouth district:

- 3 deaths, 23 serious injuries, 87 minor injuries
- 74 percent of at fault drivers were male
- 40 percent at intersections
- 60 percent urban
- 26 percent wet road
- 74 percent night time
- Worst month December, best August
- Worst day of week Sunday, best Monday

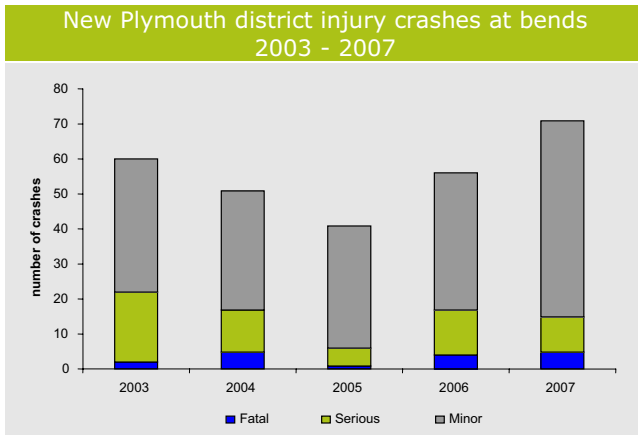
Further information about alcohol related injury crashes (2003 to 2007) on Transit NZ roads in New Plymouth district:

- 7 deaths, 10 serious injuries, 42 minor injuries
- 75 percent of at fault drivers were male
- 38 percent at intersections
- 42 percent urban
- 23 percent wet road
- 80 percent night time
- Worst month June, best September
- Worst day of week Saturday, best Monday

Crashes at bends

Between 2003 and 2007 28 percent of all injury crashes in the New Plymouth district area occurred at bends. These crashes resulted in 18 fatalities, 86 serious injuries and 306 minor injuries.

Crash numbers declined between 2003 and 2005 but rose in the last 2 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 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 New Plymouth district were fences (69), banks (53) and post or pole (38) from a total of 298 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	75 percent
Alcohol	24 percent
Excessive speed for the conditions	41 percent
Road factors	19 percent
Poor handling	35 percent
Rural road	67 percent
Wet road	35 percent
Night time	44 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in New Plymouth district:

- 5 deaths, 41 serious injuries, 171 minor injuries
- 73 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
- 32 percent of crashes involved alcohol
- Worst month March, best September
- Worst day of week Sunday, best Monday
- Worst time period, 3 - 6pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in New Plymouth district:

- 13 deaths, 45 serious injuries, 135 minor injuries
- 64 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
- 15 percent of crashes involved alcohol
- Worst month June, best May
- Worst day of week Sunday, best Wednesday
- Worst time period, 12 - 3pm

Rear End Crashes

Between 2003 and 2007 23 percent of all injury crashes in New Plymouth district involved rear end collisions. These crashes resulted in 3 fatalities, 26 serious injuries and 276 minor injuries.

Crash numbers rose from 2004 to 2006 and declined in 2007.

Rear End collisions 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	-	6	40	46
2004	-	9	29	38
2005	1	4	41	46
2006	1	2	50	53
2007	1	5	39	45

Most rear end crashes involve a driver failing to see a car slowing with 19 percent of all rear end crashes including this factor.

Characteristics of rear end crashes are shown in the table below.

Main characteristics of injury rear end crashes	
Crash characteristics	Percentage of crashes
Following to closely	7
Alcohol	3
Excessive speed for conditions	9
Road factors	7
Poor handling	7
Wet road	23
Night time	22
Incorrect lane position	21

Further information about rear end injury crashes (2003 to 2007) on local roads in New Plymouth District:

- 1 death, 11 serious injuries, 99 minor injuries
- 58 percent of at fault drivers were male
- Most common crash type, Failing to see slowing or stopped vehicle
- Most common age group 15 – 19 years
- Worst month August, best January
- Worst day of week Friday, best Sunday
- Worst time period 3 – 6pm

Further information about rear end injury crashes (2003 to 2007) on Transit NZ roads in New Plymouth District:

- 2 deaths, 15 serious injuries, 177 minor injuries
- 55 percent of at fault drivers were male
- Most common crash type, Failing to see slowing or stopped vehicle
- Most common age group 15 – 19 years
- Worst month March, best September
- Worst day of week Thursday, best Sunday
- Worst time period 3 – 6pm

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 New Plymouth District 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

Accident Compensation Corporation

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

Transit New Zealand

Roger McLeay
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