

briefing notes - road safety issues

Western Bay of Plenty and Tauranga

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 Western Bay of Plenty and Tauranga area. In this report the Western Bay of Plenty and Tauranga city councils.

This report is the ninth road safety report for the Western Bay of Plenty and Tauranga area. All material unless otherwise stated in this report applies to both local roads and Transit New Zealand (Transit NZ) roads in the Western Bay of Plenty and Tauranga 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 Western Bay of Plenty and Tauranga 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 Issues

Western Bay of Plenty and Tauranga

Tauranga
Intersections
Alcohol
Speed

Bends -	Locc	٥f	Control	
Benas -	LOSS	OΓ	Control	

2007 road trauma			
Casualties			
Deaths	12		
Serious casualties	100		
Minor casualties	327		

Nationally
Speed
Alcohol
Failure to give way
Restraints

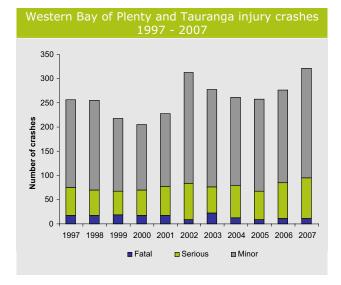
Crashes	
Fatal crashes	11
Serious injury crashes	84
Minor injury crashes	226
Non-injury crashes	975

Overview of 2007

In 2007 on local roads in Western Bay of Plenty and Tauranga there were 177 injury crashes and 615 non-injury crashes, in addition there were 144 injury crashes and 360 non-injury crashes on Transit NZ roads, as reported by the New Zealand Police.

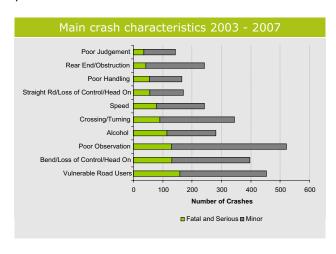
The table below shows the number of injuries resulting from 2007 crashes by rural or urban areas for both local and Transit NZ roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	10	55	156	221
Urban	2	45	171	218
Total	12	100	327	439



Fatal crashes in the districts have fluctuated between 1997 and 2005 but remain steady over the last 2 years.

Serious injury crashes have risen over the last 3 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	28	20			
Too fast	19	17			
At bends	33	28			
At intersections	34	37			
Vulnerable road users					
1. Pedestrians	13	11			
2. Cyclists	8	9			
3. Motorcyclists	17	12			
Roadside hazard struck	49	49			
Road factors	8	10			
Night time	38	32			
Loss of control	47	41			

Further information about 2007 injury and non-injury crashes on local roads in Western Bay of Plenty and Tauranga:

- Worst month March, best January
- Worst day Friday, best day Sunday
- 20 percent wet road
- 34 percent night time
- 60 percent midblock
- 69 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$80m

Further information about 2007 injury and non injury crashes on Transit NZ roads in Western Bay of Plenty and Tauranga:

- Worst month April, best September
- Worst day Friday, best Monday
- 20 percent wet road
- 26 percent night time
- 59 percent midblock
- 65 percent of at fault drivers are male (injury crashes)
- Social cost of crashes in 2007 \$81m

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 Western Bay of Plenty and Tauranga, excessive speed was a factor in 14 percent of injury crashes in 2007.

There were 242 speed related injury crashes reported in the last five years

Speed related injury crashes	2003	2004	2005	2006	2007
Urban	24	24	26	22	19
Rural	26	32	14	28	27
Total	50	56	40	50	46

Males represented 71 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	58	28	86
20 - 24	40	13	53
25 - 29	25	3	28
30 - 39	26	5	31
40 - 49	18	7	25
50 - 59	7	4	11
60 - 69	3	4	7
70+	0	1	1
Total	177	65	242

^{* (}note ranges are not equal)

Further information about speed related injury crashes (2003 to 2007) on local roads in Western Bay of Plenty and Tauranga:

- 7 deaths, 40 serious injuries, 185 minor injuries
- 76 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- 67 percent midblock
- 29 percent wet road
- 55 percent night time
- Worst month February, best October
- Worst day of week Saturday, best Wednesday

Further information about speed related injury crashes (2003 to 2007) on Transit NZ roads in Western Bay of Plenty and Tauranga:

- 13 deaths, 51 serious injuries, 115 minor injuries
- 67 percent of at fault drivers were male
- Most common crash type, Bend loss of control/head on
- 77 percent midblock
- 37 percent wet road
- 57 percent night time
- Worst month April, best August
- Worst day of week Saturday, best Thursday

Intersections

Crashes at intersections are the second most common crash type in urban areas of Western Bay of Plenty and Tauranga.

During the five year period 2003 to 2007 there were 510 injury crashes at intersections and 2161 non-injury crashes. In these 8 people died, 140 received serious injuries and 542 received minor injuries.

Intersection crashes	2003	2004	2005	2006	2007
Injury crash	100	96	104	100	110
Non-injury crash	450	455	426	414	416
Total	550	551	530	514	526

The table below shows the locations of the five intersections with the highest number of crashes in Western Bay of Plenty and Tauranga between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH2/Domain Road	54	11	7
SH29/Welcome Bay Road	38	3	8
SH29/Golf Road	37	0	6
SH 29/Totara Street	34	1	1
SH 2/ Fraser Street	28	2	4

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

Junction type	Rural	Urban
Roundabout	35	603
Tee	283	983
Cross (X)	61	544
Υ	21	34
Other (includes driveways)	17	87

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 Western Bay of Plenty and Tauranga:

- 3 deaths, 89 serious injuries, 314 minor injuries
- 64 percent of at fault drivers were male
- 20 percent involved alcohol
- 18 percent wet roads
- 31 percent night time
- Worst month February, best October
- Worst day of week Saturday, best Tuesday

Further information about injury crashes at intersections (2003 to 2007) on Transit NZ roads in Western Bay of Plenty and Tauranga:

- 5 deaths, 51 serious injuries, 228 minor injuries
- 66 percent of at fault drivers were male
- 11 percent involved alcohol
- 18 percent wet roads
- 26 percent night time
- Worst month May, best July
- Worst day of week Friday, best Sunday

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 Western Bay of Plenty and Tauranga, alcohol was a factor in 18 percent of injury crashes in 2007, a decrease from 2006.

There were 282 alcohol-related injury crashes reported in the last five years.

Western Bay of Plenty and Tauranga rural/urban (injury) alcohol-related crashes 2003-2007

Key locations

The following provides a breakdown of the key locations in Western Bay of Plenty and Tauranga at which drink-driving crashes occurred during the 2003 to 2007 period.

Western Bay of Plenty and Tauranga

SH 29, 100m west of Belk Road

SH 2 / Turret Road intersection

Cameron Road / Kauri Street intersection

Parton Road / Tara Road intersection

Further information about alcohol related injury crashes (2003 to 2007) on local roads in Western Bay of Plenty and Tauranga:

- 8 deaths, 63 serious injuries, 174 minor injuries
- 83 percent of at fault drivers were male
- 39 percent at intersections
- 39 percent urban
- 22 percent wet road
- 85 percent night time
- Worst month February, best October
- Worst day of week Saturday, best Tuesday

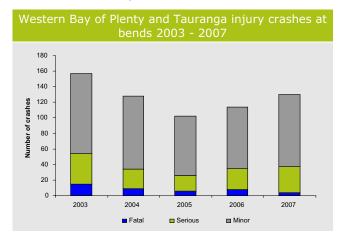
Further information about alcohol related injury crashes (2003 to 2007) on Transit NZ roads in Western Bay of Plenty and Tauranga:

- 24 deaths, 65 serious injuries, 122 minor injuries
- 83 percent of at fault drivers were male
- 18 percent at intersections
- 26 percent urban
- 26 percent wet road
- 66 percent night time
- Worst month April, best May
- Worst day of week Sunday, best Monday

Crashes at bends

Between 2003 and 2007 29 percent of all injury crashes in Western Bay of Plenty and Tauranga occurred at bends. These crashes resulted in 42 fatalities, 144 serious injuries and 445 minor injuries.

Crash numbers declined between 2003 and 2005 but rose over 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 Western Bay of Plenty and Tauranga were banks (77), fences (62) and trees (51) from a total of 390 objects struck.

The following table lists the main characteristics of these crashes.

Crash characteristic	Crashes
Single vehicle	70 percent
Alcohol	36 percent
Excessive speed for the	39 percent
conditions	
Road factors	19 percent
Poor handling	28 percent
Rural road	67 percent
Wet road	29 percent
Night time	50 percent

Further information about injury crashes on bends (2003 to 2007) on local roads in Western Bay of Plenty and Tauranga:

- 5 deaths, 59 serious injuries, 233 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
- 40 percent of crashes involved alcohol
- Worst month February, best June
- Worst day of week Saturday, best Wednesday
- Worst time period, 6 9pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in Western Bay of Plenty and Tauranga:

- 37 deaths, 85 serious injuries, 212 minor injuries
- 76 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 January, best May
- Worst day of week Saturday, best Thursday
- Worst time period, 6 9pm

Rear End Crashes

Between 2003 and 2007 18 percent of all injury crashes in Western Bay of Plenty and Tauranga involved rear end collisions. These crashes resulted in 1 fatality, 46 serious injuries and 302 minor injuries.

Crash numbers have fluctuated over the last 5 years.

Rear End collisions 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	0	3	42	45
2004	0	7	33	40
2005	0	10	46	56
2006	1	12	41	54
2007	0	10	50	60

Most rear end crashes involve a driver failing to see a vehicle slowing with 17 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	9	
Alcohol	12	
Excessive speed for conditions	7	
Road factors	7	
Poor handling	5	
Wet road	17	
Night time	17	
Incorrect lane position	12	

Further information about rear end injury crashes (2003 to 2007) on local roads in Western Bay of Plenty and Tauranga:

- 1 death, 29 serious injuries, 174 minor injuries
- 61 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 January, best May
- 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 Western Bay of Plenty and Tauranga:

- 17 serious injuries, 128 minor injuries
- 62 percent of at fault drivers were male
- Most common crash type, Failing to see slowing or stopped vehicle
- Most common age group 40 49 years
- Worst month May, best August
- Worst day of week Tuesday, 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 Western Bay of Plenty/Tauranga area include:

New Zealand Police

Bay of Plenty District Road Policing Manager Kevin Taylor PO Box 741 Rotorua Phone 07 349 9554

Road Safety Co-ordinator

Western Bay of Plenty/Tauranga Lynette Hines PO Box 1121 Tauranga Phone 07 576 3280

Local Authority Engineers

Western Bay of Plenty District Council Alex Finn Private Bag 12803 Tauranga Phone 07 571 8008

Tauranga City Council Martin Parkes Private Bag 12022 Tauranga Phone 07 577 7185

Accident Compensation Corporation

Western Bay of Plenty/Tauranga Area ACC Injury Prevention Consultant Carole Fleming PO Box 748 Tauranga Phone 07 579 0326

Transit New Zealand Area Engineer

Terry Boyle PO Box 430 Tauranga Phone 07 927 6018

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