

# briefing notes - road safety issues

## Eastern Bay of Plenty

New Zealand Transport Agency has prepared this road safety issues report. It is based on reported crash data and trends for the 2004–2008 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 Eastern Bay of Plenty. In this report the Eastern Bay of Plenty area includes Whakatane, Opotiki and Kawerau District Councils.

This report is the tenth road safety report for the Eastern Bay of Plenty. All the material unless otherwise stated in this report applies to both local roads and state highways.

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 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 Eastern Bay of Plenty 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 districts.

We encourage councils in the Eastern Bay of Plenty to use their free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data in this report is from CAS.

Major road safety issues *		2008 road trauma	
Eastern Bay of Plenty		Casualties	Eastern Bay of Plenty
Alcohol		Deaths	12
Speed		Serious casualties	40
Bend / Loss of Control		Minor casualties	147
Intersections			
Nationally		Crashes	Eastern Bay of Plenty
Speed		Fatal crashes	11
Alcohol		Serious injury crashes	33
Failure to give way		Minor injury crashes	90
Restraints		Non-injury crashes	174

\* Issues are not in any specific order of importance

## Overview

In 2008 on local roads in the Eastern Bay of Plenty there were 80 injury crashes and 113 non-injury crashes. In addition there were 54 injury crashes and 61 non-injury crashes on state highways both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 134 injury crashes on local roads and state highways.

### Casualties by urban / rural 2008

	Fatalities	Serious injuries	Minor injuries	Total
Rural	10	32	94	136
Urban	2	8	53	63
Total	12	40	147	199

	Fatalities	Serious injuries	Minor injuries	Total
Local roads	2	24	93	119
State highways	10	16	54	80
Total	12	40	147	199

### Crash trends in the Eastern Bay of Plenty

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Injury Crashes
1999	12	27	57	96
2000	9	16	35	60
2001	9	23	42	74
2002	12	27	81	120
2003	12	27	76	115
2004	12	28	85	125
2005	11	33	67	111
2006	9	29	71	109
2007	12	33	84	129
2008	11	33	90	134

### Local road crashes

Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	38	23
Too fast	37	28
At bends	48	46
At intersections	22	26
Pedestrians	5	5
Cyclists	7	6
Motorcyclists	20	10
Road factors	15	15
Night time	38	32

Further information about 2004 to 2008 injury and non-injury crashes on **local roads** in the Eastern Bay of Plenty :

- Worst month December, best March & April (equal)
- Worst day Friday, best Monday
- 22 percent on wet roads
- 34 percent at night
- 31 percent at intersections
- 585 roadside objects struck
- Social cost of crashes in 2008 \$36m

Further information about 2004 to 2008 injury and non-injury crashes on **state highways** in the Eastern Bay of Plenty :

- Worst month May, best September
- Worst day Friday, best Sunday
- 25 percent on wet roads
- 36 percent at night
- 25 percent at intersections
- 452 roadside objects struck
- Social cost of crashes in 2008 \$56m

## Speed

Nationally, speed is one of the major contributing factors to road crashes. Reducing speeds 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 situations and it leads to more serious injuries. Research has shown that a 1 km/h reduction in mean speed can produce a 3 percent reduction in injury crashes.

Between 2004 and 2008 27 percent of injury crashes in the Eastern Bay of Plenty involved travelling too fast for the conditions. These crashes resulted in 25 fatalities, 70 serious injuries and 106 minor injuries.

Crash numbers have remained fairly constant over the last 4 years.

### Speed related injury crashes

Speed related crashes	2004	2005	2006	2007	2008
Rural	29	19	24	27	24
Urban	12	8	8	6	6
Total	41	27	32	33	30

The other main causes contributing to speed related crashes were:

- Handling errors
- Alcohol
- General errors of judgement

### Speed related injury crashes by location

Road (road lengths may differ)	Social cost of crashes 2004-2008
SH 30 / Thornton Rd intersection	\$2,400,000
Ohope Rd—400m east of Burma Rd	\$4,700,000
SH 2 / SH 30 intersection	\$1,300,000
Kohi Point Lookout Rd—1300m west of Otarawairere Rd	\$1,300,000
SH 2—710m west of Fraser Rd	\$4,800,000

### Age and sex of at fault drivers in speed related injury crashes

Drivers age *	Male	Female	Total
2004 - 2008			
15-19 years	44	9	53
20 - 24	21	5	26
25 - 29	14	3	17
30 - 39	30	7	37
40 - 49	9	6	15
50 - 59	6	-	6
60 - 69	2	1	3
70+	1	2	3
<b>Total</b>	<b>127</b>	<b>33</b>	<b>160</b>

\* note age ranges are not equal

Further information about the 91 speed related injury crashes in the Eastern Bay of Plenty on **local roads** 2004 to 2008:

- 8 deaths, 43 serious injuries and 108 minor injuries
- Most common crash type 'Lost control on right hand bend'
- 85 percent midblock
- 32 percent wet road
- 48 percent night time
- Worst month April, best May & August (equal)
- Worst day of week Saturday, best Tuesday
- Worst three hour time period 9pm to midnight

Further information about the 72 speed related injury crashes in the Eastern Bay of Plenty on **state highways** 2004 to 2008:

- 17 deaths, 27 serious injuries and 75 minor injuries
- Most common crash type 'Lost control on right hand bend'
- 82 percent midblock
- 38 percent wet road
- 53 percent night time
- Worst months March, May & June (equal) best January & September (equal)
- Worst day of week Friday, best Thursday
- Worst three hour time period 6pm to 9pm

## Intersections

During the five year period 2004 to 2008 within the Eastern Bay of Plenty there was a total of 431 crashes at intersections, 140 of these were injury crashes and 291 non-injury.

69 percent of these were in urban areas and 5 people were killed, 42 received serious injuries and 172 received minor injuries.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury crash	32	26	27	25	30
Non-injury crash	50	54	54	65	68
Total	82	80	81	90	98

Locations with the most injury crashes 2004 to 2008		
Intersection name (Within a radius of 50m)	Injury crashes 2004 - 2008	total Injury crashes 2008
SH 30 / Paroa Rd	8	2
Thornton Rd / West Bank Rd	5	1
SH 2 / Western Drain Rd	5	-
Stewart St / Hinemoa St	3	1
Hinemoa St / Bridge St	3	1

Junction control Injury and non-injury crashes				
Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	2	120	175	128

The most common crash type at intersections is when a driver turns right and is hit by a vehicle approaching from the right.

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

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

Junction type Injury and Non-injury crashes		
Junction Type	Open	Urban
Roundabout	3	60
Tee	92	151
Cross (X)	27	65
Y	6	7
Other (includes driveways)	4	16

Further information about the 82 injury crashes at intersections on **local roads** in the Eastern Bay of Plenty 2004 to 2008:

- 3 deaths, 22 serious injuries and 97 minor injuries
- 16 percent wet roads
- 27 percent night time
- Worst month August, best April
- Worst day of week Saturday, best Monday
- Worst three hour time period 3pm to 6pm

Further information about the 58 injury crashes at intersections on **state highways** in the Eastern Bay of Plenty 2004 to 2008:

- 2 deaths, 20 serious injuries and 75 minor injuries
- 16 percent wet roads
- 29 percent night time
- Worst month June, best September
- Worst day of week Tuesday, best Monday
- Worst three hour time period 6am to 9am and midday to 3pm (equal)

## Alcohol

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 a sober driver 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 2008, alcohol-affected drivers contributed to 34 percent of all fatal crashes (the same as 2007) and 15 percent of all injury crashes (the same as 2007).

In the Eastern Bay of Plenty alcohol was a factor in 21 percent of injury crashes in 2008.

### Number of alcohol related injury crashes

Crash year	Open road	Urban road	Total
2004	18	10	28
2005	26	8	34
2006	9	7	16
2007	17	11	28
2008	16	7	23
Total	86	43	129

(Open road is classified as any area with a speed limit of 80km/hr or more).

From the beginning of 2007 New Zealand Transport Agency (formally Land Transport NZ) has been adding driver factor codes to all non-injury crashes for the Eastern Bay of Plenty .

This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before.

In 2008 there were 21 non-injury alcohol related crashes reported by the Police in the Eastern Bay of Plenty.

### Alcohol related injury crashes by location

Road (road lengths may differ)	Social costs of crashes 2004-2008
SH 30 / Thornton Rd intersection	\$3,000,000
SH 2 at Taneatua Rail Bridge	\$170,000
SH 2—2000m north of Ohiwa Beach Rd	\$4,800,000
SH 2 / Forsyth St intersection	\$900,000
SH 30—700m west of Tahuna Rd	\$4,800,000

Further information about the 74 alcohol related injury crashes in the Eastern Bay of Plenty on **local roads** 2004 to 2008:

- 10 deaths, 38 serious injuries and 70 minor injuries
- 78 percent of at fault drivers were male
- Most common crash type 'Lost control on right hand curve'
- 20 percent at intersections
- 42 percent urban
- 26 percent wet road
- 66 percent night time
- Worst three hour time period 9pm to midnight
- Worst months February & December, best March
- Worst day of week Saturday, best Monday & Tuesday (equal)

Further information about the 55 alcohol related injury crashes in the Eastern Bay of Plenty on **state highways** 2004 to 2008:

- 12 deaths, 25 serious injuries and 44 minor injuries
- 84 percent of at fault drivers were male
- Most common crash type 'Lost control on right hand curve'
- 13 percent at intersections
- 22 percent urban
- 25 percent wet road
- 67 percent night time
- Worst three hour time period 9pm to midnight
- Worst month October & December (equal) best July

## Bends – loss of control or head on

Between 2004 and 2008 46 percent of all injury crashes in the Eastern Bay of Plenty were loss of control or head on crashes on bends. These crashes resulted in 35 fatalities, 97 serious injuries and 331 minor injuries.

Total crash numbers have increased over the last 4 years.

Crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	8	10	40	58
2005	7	10	23	40
2006	6	11	43	59
2007	7	21	33	60
2008	6	14	45	65
Total	32	66	184	282

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 most common roadside hazards struck in injury loss of control or head on crashes on bends in the Eastern Bay of Plenty were fences (56), cliffs or banks (49), trees (40), and ditches (30) from a total of 291 objects struck.

Main characteristics of injury lost control or head on crashes at bends	
Crash characteristic	Percentage of crashes
Single vehicle	79
Alcohol	31
Excessive speed for the conditions	47
Road factors	21
Poor handling	42
Rural road	78
Wet road	30
Night time	43

Further information about the 149 injury loss of control or head on crashes on bends on **local roads** in the Eastern Bay of Plenty 2004 to 2008:

- 11 deaths, 51 serious injuries and 179 minor injuries
- 70 percent of at fault drivers were male
- Most common at fault driver age group was 15 to 19 years (33 percent of all at fault drivers)
- 36 percent of crashes involved alcohol
- 50 percent of crashes involved 'too fast for the conditions'
- Worst month December, best August
- Worst day of week Saturday, best Tuesday
- Worst three hour time period 3pm to 6pm

Further information about the 133 injury loss of control or head on crashes on bends on **state highways** in the Eastern Bay of Plenty 2004 to 2008:

- 24 deaths, 46 serious injuries and 152 minor injuries
- 70 percent of at fault drivers were male
- Most common at fault driver age group was 30 to 39 years (22 percent of at fault drivers)
- 26 percent of crashes involved alcohol
- 44 percent of crashes involved 'too fast for the conditions'
- Worst month October, best February
- Worst day of week Tuesday, best Wednesday
- Worst three hour time period midday to 3pm

## Straight road – loss of control or head on

Between 2004 and 2008 17 percent of fatal and serious crashes and all injury crashes in the Eastern Bay of Plenty involved loss of control or head on crashes on straight roads. These 103 crashes resulted in 8 fatalities, 33 serious injuries and 112 minor injuries.

Loss of control — straight roads injury crashes 2004 to 2008			
Crash year	Fatal crashes	Serious crashes	Minor crashes
2004	2	5	10
2005	1	9	18
2006	-	4	10
2007	4	4	16
2008	11	5	14
Total	8	27	68

Most of these crashes occurred when a driver loses control of their vehicle and either runs off the road or collides 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 most common roadside hazards struck in injury crashes in the Eastern Bay of Plenty were ditches (20), cliffs or banks (17), poles or posts (17), and fences (12) from a total of 116 objects struck.

Main characteristics of injury loss of control crashes — straight roads 2004 to 2008	
Crash characteristic	Percentage of crashes
Single vehicle	82
Alcohol	24
Excessive speed for the conditions	9
Road factors	7
Poor handling	17
Rural road	80
Wet road	10
Night time	33

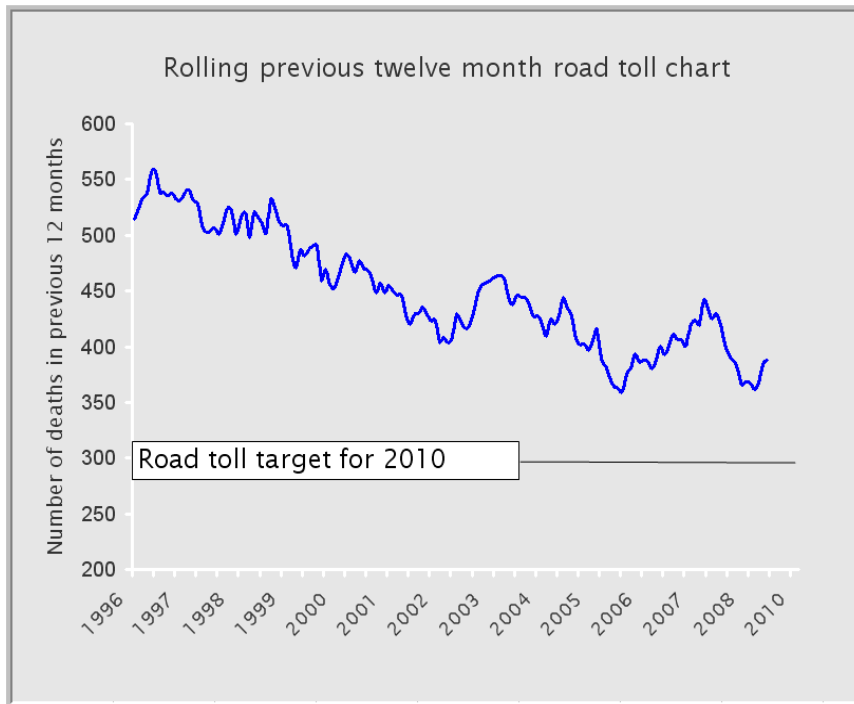
Further information about the 47 injury loss of control crashes on straights on **local roads** in the Eastern Bay of Plenty 2004 to 2008):

- 4 deaths, 15 serious injuries and 57 minor injuries
- 63 percent of at fault drivers were male
- Most common crash type ‘off road to left’
- Most common at fault driver age group 30 to 39 years
- 28 percent of crashes involved alcohol
- 15 percent of crashes involved speed
- 11 percent involved “road factors”
- 17 percent involved fatigue
- 19 percent involved post or pole as a struck object
- 13 percent in the wet
- 36 percent at night
- Worst month March, best January, May & July (equal)
- Worst day of week Thursday, best Tuesday
- Worst three hour time period 9pm to midnight and 9am to midday (equal)

Further information about the 56 injury loss of control crashes on straights on **state highways** in the Eastern Bay of Plenty 2004 to 2008:

- 4 deaths, 18 serious injuries and 55 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type ‘off road to left’
- Most common at fault driver age group was 30 to 39 years
- 21 percent of crashes involved alcohol
- 4 percent of crashes involved speed
- 4 percent involved “road factors”
- 50 percent involved fatigue
- 30 percent involved ditches as a struck object
- 7 percent in the wet
- 30 percent at night
- Worst month October, best May
- Worst day of week Saturday, best Thursday
- Worst three hour time period 6am to 9am

## The next ten years—moving beyond Road Safety 2010



In August this year the Ministry of Transport will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

Information will be published on their web site and we would encourage any person or group with an interest in road safety to watch the site carefully for developments. Follow this link :

<http://www.transport.govt.nz/ourwork/Land/landsafety/SaferJourneys-RoadSafetyStrategyto2020/>

The chart on the left illustrates the progress made during the life of the Road Safety 2010 strategy and although progress has been made it would seem highly unlikely that the target of 300 or fewer fatalities will be met.

### Restraints

The Ministry of Transport (MoT) conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level.

See the MoT website : <http://www.transport.govt.nz/research/safetybeltstatistics/>

## Contacts

### New Zealand Transport Agency

Regional Director (Waikato / Bay of Plenty)  
Harry Wilson

Programme and Funding Manager  
Andrew McKillop

Area Engineer State Highways  
Terry Boyle

Regional Communications Advisor  
Julie Hannam

Private Bag 3081, Hamilton  
Phone 07 958 7840

[www.nzta.govt.nz](http://www.nzta.govt.nz)

### Local Authority

Road Safety Co-ordinator  
Whakatane, Opotiki & Kawerau  
Maurice Tooke

Transportation Manager  
Whakatane District Council  
Martin Taylor

Engineering Manager  
Opotiki District Council  
Jim Finlay

Operations Manager  
Kawerau District Council  
Tom McDowall

### New Zealand Police

Kevin Taylor  
Road Policing Manager  
New Zealand Police  
Bay of Plenty  
PO Box 741  
Rotorua

Phone 07 349 9554  
[www.police.govt.nz](http://www.police.govt.nz)