

briefing notes - road safety issues

East Waikato

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 East Waikato. In this report the East Waikato area includes Thames-Coromandel, Hauraki and Matamata-Piako District Councils.

This report is the tenth road safety report for the East Waikato. 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 East Waikato 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.

We encourage councils in the East Waikato 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 *

East Waikato

Alcohol

Speed

Bend / Loss of Control

Motorcycles

Nationally

Speed

Alcohol

Failure to give way

Restraints

2008 road trauma

Casualties

East Waikato

Deaths 26

Serious casualties 79

Minor casualties 319

Crashes

East Waikato

Fatal crashes 25

Serious injury crashes 59

Minor injury crashes 212

Non-injury crashes 463

* Issues are not in any specific order of importance

Overview

In 2008 on local roads in the East Waikato there were 130 injury crashes and 183 non-injury crashes. In addition there were 167 injury crashes and 280 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 296 injury crashes on local roads and state highways.

Casualties by urban / rural 2008

	Fatalities	Serious injuries	Minor injuries	Total
Rural	21	58	216	295
Urban	5	21	103	129
Total	26	79	319	424

	Fatalities	Serious injuries	Minor injuries	Total
Local roads	12	40	131	183
State highways	14	39	188	241
Total	26	79	319	424

Crash trends in the East Waikato

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Injury Crashes
1999	16	59	155	230
2000	20	52	11	183
2001	18	40	110	168
2002	12	42	146	203
2003	13	57	157	227
2004	16	53	173	242
2005	17	57	185	259
2006	12	61	172	245
2007	24	46	195	265
2008	25	59	212	296

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	28	23
Too fast	34	28
At bends	46	41
At intersections	20	27
Pedestrians	7	5
Cyclists	3	3
Motorcyclists	18	9
Road factors	15	15
Night time	32	35

Further information about 2004 to 2008 injury and non-injury crashes on **local roads** in the East Waikato

- Worst month January, best September
- Worst day Friday, best Monday
- 24 percent on wet roads
- 38 percent at night
- 31 percent at intersections
- 1062 roadside objects struck
- Social cost of crashes in 2008 \$86m

Further information about 2004 to 2008 injury and non-injury crashes on **state highways** in the East Waikato :

- Worst month January, best May
- Worst day Saturday, best Tuesday
- 34 percent on wet roads
- 31 percent at night
- 25 percent at intersections
- 1591 roadside objects struck
- Social cost of crashes in 2008 \$96m

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 25 percent of injury crashes in the East Waikato involved travelling too fast for the conditions. These crashes resulted in 37 fatalities, 106 serious injuries and 355 minor injuries.

Crash numbers have risen over the last 4 years and crashes in urban areas have more than doubled between 2007 and 2008.

Speed related crashes					
Speed related crashes	2004	2005	2006	2007	2008
Rural	49	38	58	60	58
Urban	6	16	6	8	22
Total	55	54	64	68	80

The other main causes contributing to speed related crashes were:

- Handling errors
- Alcohol
- General errors of judgement

Speed related crashes by location	
Road (road lengths may differ)	Social cost of crashes 2004-2008
Morrinsville Tahuna Rd—1000m north of Cameron Rd	\$109,000
SH 27—8000m north of SH 2	\$376,000
SH 25A—7300m east of SH 26	\$282,000
SH 27 - 900m north of Kaihere Rd	\$280,000
SH 25A—400m east of SH 26	\$4,860,000

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

Drivers age *	Male	Female	Total
2004 - 2008			
15-19 years	73	30	103
20 - 24	45	17	62
25 - 29	24	6	30
30 - 39	38	12	50
40 - 49	36	8	44
50 - 59	14	6	20
60 - 69	6	5	11
70+	2	-	2
Total	238	84	322

* note age ranges are not equal

Further information about the 135 speed related injury crashes in the East Waikato on **local roads** 2004 to 2008:

- 13 deaths, 46 serious injuries and 146 minor injuries
- Most common crash type 'Lost control on a bend'
- 81 percent midblock
- 34 percent wet road
- 43 percent night time
- Worst months February & March (equal), best April, September, October (equal)
- Worst day of week Saturday, best Monday
- Worst three hour time period 6pm to 9pm

Further information about the 186 speed related injury crashes in the East Waikato on **state highways** 2004 to 2008:

- 24 deaths, 60 serious injuries and 209 minor injuries
- Most common crash type 'Lost control on bend'
- 89 percent mid-block
- 47 percent wet road
- 35 percent night time
- Worst month December, best September
- Worst day of week Saturday, best Friday
- Worst three hour time period 3pm to 6pm

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 East Waikato alcohol was a factor in 17 percent of injury crashes in 2008.

Number of alcohol related injury crashes

Crash year	Open road	Urban road	Total
2004	22	10	32
2005	37	10	47
2006	35	10	45
2007	41	11	52
2008	28	22	50
Total	163	63	226

(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 (formerly Land Transport NZ) has been adding driver factor codes to all non-injury crashes for the East Waikato district.

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 60 non-injury alcohol related crashes reported by the Police in the East Waikato.

Alcohol related injury crashes by location

Road (road lengths may differ)	Social cost of crashes 2004-2008
SH 26—200m south of Hubbard Rd	\$283,000
SH 2—80m north of Fisher Rd	\$764,00
SH 2—300m east of Waitawheta Rd	\$4,800,000
SH 25—190m south of Gregory Ln	\$188,000
SH 25—500m north of Tiki Quarry Rd	\$5,430,000

Further information about the 109 alcohol related injury crashes in the East Waikato on **local roads** 2004 to 2008:

- 11 deaths, 39 serious injuries and 107 minor injuries
- 79 percent of at fault drivers were male
- Most common crash type 'Lost control on bend'
- 28 percent at intersections
- 36 percent urban
- 25 percent wet road
- 84 percent night time
- Worst three hour time period 9pm to midnight
- Worst month February, best October
- Worst day of week Saturday, best Monday

Further information about the 117 alcohol related injury crashes in the East Waikato on **state highways** 2004 to 2008:

- 16 deaths, 45 serious injuries and 101 minor injuries
- 72 percent of at fault drivers were male
- Most common crash type 'Lost control on bend'
- 18 percent at intersections
- 21 percent urban
- 24 percent wet road
- 71 percent night time
- Worst three hour time period 9pm to midnight
- Worst month September, best May
- Worst day of week Saturday, best Monday & Tuesday (equal)

Bends – loss of control or head on

Between 2004 and 2008 45 percent of all injury crashes in the East Waikato were loss of control or head on crashes on bends. These crashes resulted in 59 fatalities, 182 serious injuries and 602 minor injuries.

Crash numbers have fluctuated over the last 5 years

Crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	12	25	70	107
2005	7	22	80	109
2006	7	34	75	116
2007	13	25	94	132
2008	7	32	83	122
Total	46	138	402	586

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 East Waikato were cliffs or banks (119), fences (97), and ditches (85) from a total of 539 objects struck.

Main characteristics of injury lost control or head on crashes at bends	
Crash characteristic	Percentage of crashes
Single vehicle	73
Alcohol	21
Excessive speed for the conditions	44
Road factors	23
Poor handling	38
Rural road	88
Wet road	38
Night time	35

Further information about the 198 injury loss of control or head on crashes on bends on **local roads** in the East Waikato 2004 to 2008:

- 10 deaths, 65 serious injuries and 201 minor injuries
- 70 percent of at fault drivers were male
- Most common at fault driver age group was 15 to 19 years (28 percent of all at fault drivers)
- 29 percent of crashes involved alcohol
- 53 percent of crashes involved ‘too fast for the conditions’
- Worst month January, best October
- Worst day of week Saturday, best Monday
- Worst three hour time period 3pm to 6pm

Further information about the 388 injury loss of control or head on crashes on bends on **state highways** in the East Waikato 2004 to 2008:

- 49 deaths, 117 serious injuries and 401 minor injuries
- 70 percent of at fault drivers were male
- Most common at fault driver age group was 30 to 39 and 40 to 49 years (equal) (18 percent of at fault drivers)
- 17 percent of crashes involved alcohol
- 40 percent of crashes involved ‘too fast for the conditions’
- Worst month January, best May
- Worst day of week Saturday, best Tuesday & Thursday (equal)
- Worst three hour time period 3pm to 6pm

Straight road – loss of control or head on

Between 2004 and 2008 20 percent of all injury crashes in the East Waikato involved loss of control or head on crashes on straight roads. 19 percent of fatal and serious crashes in the district were of this type. These 264 crashes resulted in 24 fatalities, 58 serious injuries and 286 minor injuries.

Loss of control — straight roads injury crashes 2004 to 2008			
Crash year	Fatal crashes	Serious crashes	Minor crashes
2004	1	11	31
2005	6	17	44
2006	2	8	37
2007	3	7	42
2008	10	6	39
Total	22	49	193

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 East Waikato were ditches (67), fences (59), cliffs or banks (27) and poles or posts (11) from a total of 276 objects struck.

Main characteristics of injury loss of control crashes— straight roads 2004 to 2008	
Crash characteristic	Percentage of crashes
Single vehicle	80
Alcohol	23
Excessive speed for the conditions	11
Road factors	11
Poor handling	23
Rural road	87
Wet road	24
Night time	36

Further information about the 105 injury loss of control crashes on straights on **local roads** in the East Waikato 2004 to 2008:

- 11 deaths, 20 serious injuries and 108 minor injuries
- 68 percent of at fault drivers were male
- Most common crash type “off road to left”
- Most common at fault driver age group 15 to 19 years
- 31 percent of crashes involved alcohol
- 17 percent of crashes involved speed
- 12 percent involved “road factors”
- 20 percent involved fatigue
- 31 percent involved ditches as a struck object
- 24 percent in the wet
- 39 percent at night
- Worst months January & November (equal), best October
- Worst days of week Sunday & Wednesday (equal), best Tuesday
- Worst three hour time period midday to 3pm

Further information about the 159 injury loss of control crashes on straights on **state highways** in the East Waikato 2004 to 2008:

- 13 deaths, 38 serious injuries and 178 minor injuries
- 69 percent of at fault drivers were male
- Most common crash type “off road to left”
- Most common at fault driver age group was 15 to 19 years
- 18 percent of crashes involved alcohol
- 6 percent of crashes involved speed
- 9 percent involved “road factors”
- 36 percent involved fatigue
- 21 percent involved ditches as a struck object
- 24 percent in the wet
- 34 percent at night
- Worst month December, best June
- Worst day of week Saturday, best Tuesday
- Worst three hour time period 3pm to 6pm

Motorcyclists

Nationally motorcycling fatalities dropped from 20 percent of all fatalities in 1988, to just six percent in 2003. Since then there has been an increase in motorcycle registrations and this has reversed the downward trend.

In 2008 motorcyclists accounted for 14 percent of road fatalities in New Zealand. In early 2009 this had risen to over 20 percent.

Motorcyclist injuries feature highly in the overall crash statistics in the East Waikato representing 13 percent of all injuries however, they make up 20 percent of fatal and serious injuries.

Motorcyclist injuries

	2004	2005	2006	2007	2008
Fatal	1	1	3	4	3
Serious	6	14	13	11	14
Minor	9	12	12	20	24
Total	16	27	28	35	41

The most common type of motorcycle crash is when a motorcyclist loses control while cornering.

One third of the motorcycle crashes in the East Waikato occur during weekends.

Locations with most cyclist crashes

Location	Number of motorcycle injury crashes
SH 25—1200m north of Oceanbeach Rd	3
SH 25 / Hot Water Beach Rd intersection	2
SH 25—200m north of Otuturu Rd	2
SH 25A—2000m east of summit	2

Ages of motorcycle casualties

Ages	Male	Female	Total
0 to 4	-	-	-
5 to 9	-	-	-
10 to 14	3	1	4
15 to 19	7	1	8
20 to 24	10	1	11
25 to 29	8	2	10
30 to 34	13	3	16
35 to 39	17	2	19
40 to 44	19	1	20
45 to 49	20	4	24
50 to 54	17	2	19
55 to 59	5	-	5
60 to 64	6	-	6
65 to 69	3	1	4
70 to 74	-	-	-
75 and over	1	-	1

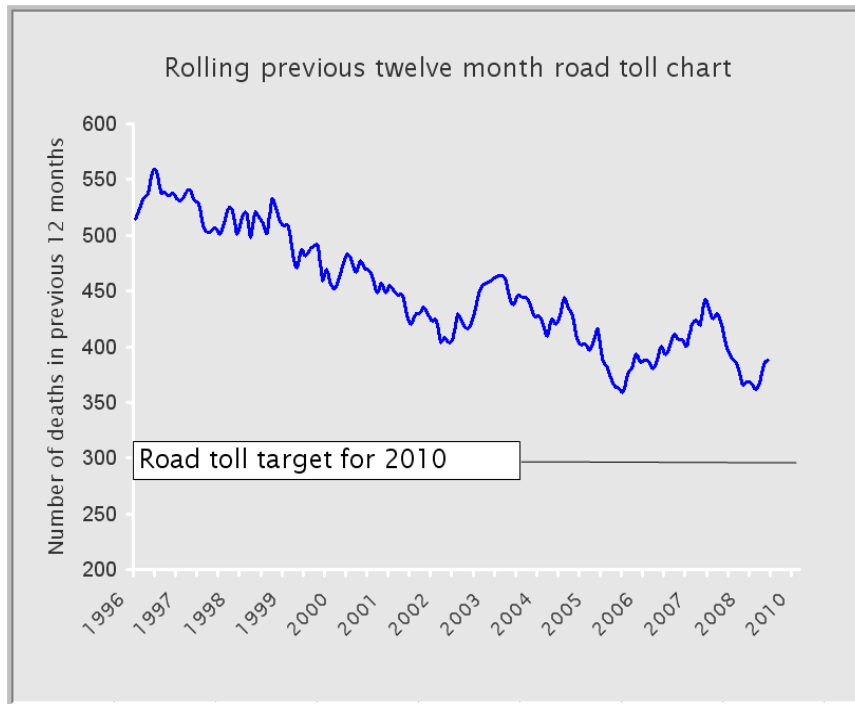
Further information about the 42 injury motorcyclist crashes on **local roads** in the East Waikato 2004 to 2008:

- 2 motorcyclists died, 22 serious injuries and 24 minor injuries
- 17 percent were in the wet
- 31 percent at night
- Worst month March, best July
- Worst day of week Saturday, best Thursday

Further information about the 87 injury motorcyclist crashes on **state highways** in the East Waikato 2004 to 2008:

- 9 motorcyclists died, 36 serious injuries and 53 minor injuries
- 22 percent were in the wet
- 13 percent at night
- Worst month March, best June
- Worst day of the week Saturday, best Monday & Friday (equal)

The next ten years—moving beyond



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
Alan Burkett

Regional Communications Advisor
Julie Hannam

Private Bag 3081, Hamilton
Phone 07 958 7840

www.nzta.govt.nz

Local Authority

Road Safety Co-ordinator
Ingrid Le Ferve
Thames-Coromandel District Council

Roading Manager
Thames - Coromandel District Council
Matt Busch

Roading Manager
Hauraki District Council
Gene Thomsen

Roading Manager
Matamata-Piako District Council
Susanne Frischknecht (Acting)

New Zealand Police

Inspector Leo Tooman
Road Policing Manager
New Zealand Police
Waikato
PO Box 3078
Hamilton

Phone 07 858 6200
www.police.govt.nz