

New Zealand Government

briefing notes - road safety issues

## Kaipara 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 Kaipara District.

This report is the ninth road safety report for Kaipara District. All the material unless otherwise stated in this report applies to both State Highways and local roads.

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 Kaipara District 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 Kaipara District to use its free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data and maps in this note are from CAS.

Major road safety issues	2007 road trauma		
Kaipara District	Casualties	Kaipara District	
Crashes at bends	Deaths	4	
Loss of control—straight roads	Serious casualties	22	
Alcohol	Minor casualties	119	

Nationally	Crashes	Kaipara District
Speed	Fatal crashes	4
Alcohol	Serious injury crashes	19
Failure to give way	Minor injury crashes	79
Restraints	Non-injury crashes	135

## **Overview**

In 2007 on local roads in Kaipara District there were 52 injury crashes and 57 non-injury crashes. In addition there were 50 injury crashes and 78 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 102 crashes in 2007 by rural or urban areas. (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by injury type 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	14	98	114
Urban	2	8	21	31
Total	4	22	119	145

Fatal and serious crashes in the district have been relatively steady over the last nine years while the number of minor injuries reported has increased.

As the actual number of crashes where minor injuries are the worst injury in the crash has doubled over a decade there is a reasonable probability that the increase in minor injuries can be attributed to an improvement in the reporting rate.

This improvement should be seen as a positive for the district as it gives the councils engineers far more to work with when calculating the benefits of safety improvements and indeed in looking for sites to attend to.

Crash trends in Kainara District

Year	Fatalities	Serious injuries	Minor injuries	Total
1998	7	21	53	81
1999	5	27	49	81
2000	10	22	58	90
2001	5	30	38	73
2002	6	14	50	70
2003	2	12	76	90
2004	5	25	99	129
2005	5	28	97	130
2006	5	21	115	141
2007	4	22	119	145

## Crash types and contributory causes 2003 to 2007

Crash type or contributory cause	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	26	18
Too fast	28	24
At bends	58	56
At intersections	8	18
Pedestrian related	8	4
Road factors	16	23
Lost control—head on straights	21	18
Night time	32	31
Fatigue	11	10
Poor handling	31	27

Further information about 2003 to 2007 injury and non-injury crashes on local roads:

- Worst month December, best October
- Worst day Saturday, best Wednesday
- 26 percent on wet roads
- 32 percent at night
- 22 percent at intersections
- 295 number of roadside objects struck
- 48 percent of at fault drivers (injury crashes) full NZ drivers licence
- Social cost of crashes in 2007 \$20.8m

Further information about 2003 to 2007 injury and non-injury crashes on State Highways:

- Worst month January, best May
- Worst day Friday, best Tuesday
- 37 percent on wet roads
- 31 percent at night
- 18 percent at intersections
- 425 number of roadside objects struck
- 64 percent of at fault drivers (injury crashes) full NZ drivers licence
- Social cost of crashes in 2007 \$23.1m

## **Crashes at bends**

Between 2003 and 2007 fifty-six percent of all injury crashes in Kaipara District occurred at bends. These crashes resulted in 11 fatalities, 64 serious injuries and 285 minor injuries.

Crash numbers rose in 2004 and have remained fairly constant for the past four years.

Crashes at bends 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	0	6	25	31
2004	4	14	38	56
2005	3	9	33	45
2006	2	8	44	54
2007	2	13	42	57
Total	11	50	182	243

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 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 Kaipara District were cliffs or banks (73), trees (29), fences (37), posts or poles (16) and ditches (50) from a total of 235 objects struck.

#### Main characteristics of injury crashes at bends

Crash characteristic	Percentage of crashes
Single vehicle	78
Alcohol	22
Excessive speed for the conditions	33
Road factors	26
Poor handling	37
Rural road	91
Wet road	39
Night time	32

Further information about the 112 injury crashes at bends (2003 to 2007) on local roads in Kaipara District :

- 5 deaths, 23 serious injuries and 134 minor injuries
- 69 percent of at fault drivers were male
- Most common crash type "loss of control turning right "
- Most common at fault driver age group 15 -19 years (23 percent of all at fault drivers)
- 28 percent of crashes involved alcohol
- 27 percent of crashes involved speed too fast for the conditions
- Worst month December, best May and June (equal)
- Worst day of week Saturday, best Friday
- Worst time period 12 midday to 3pm

Further information about the 131 injury crashes at bends (2003 to 2007) on State Highways in Kaipara District:

- 6 deaths, 41 serious injuries and 151 minor injuries
- 69 percent of at fault drivers were male
- Most common crash type "loss of control turning right"
- Most common at fault driver age group 20 - 24 years (18 percent of at fault drivers)
- 18 percent of crashes involved alcohol
- 37 percent of crashes involved speed too fast for the conditions
- Worst month January, best May and September (equal)
- Worst day of week Saturday, best Wednesday
- Worst time period 3pm to 6pm

# Straight road -loss of control or head on

Between 2003 and 2007 eighteen percent of all injury crashes in Kaipara District involved loss of control or head on crashes on straight roads. This was the second highest crash type after crashes bends. In addition there was one crash involving a head on as part of an overtaking manoeuvre on a straight road.

These crashes resulted in 1 fatality, 26 serious injuries and 86 minor injuries.

# Loss of control— straight roads injury crashes 2003 to 2007

Crash year	Fatal crashes	Serious crashes	Minor crashes
2003	0	1	8
2004	0	4	10
2005	1	6	8
2006	0	7	12
2007	0	3	17
Total	1	21	55

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 Kaipara District were cliffs or banks (11), trees (5), fences (17) and ditches (29) from a total of 80 objects struck.

Main characteristics of injury loss of

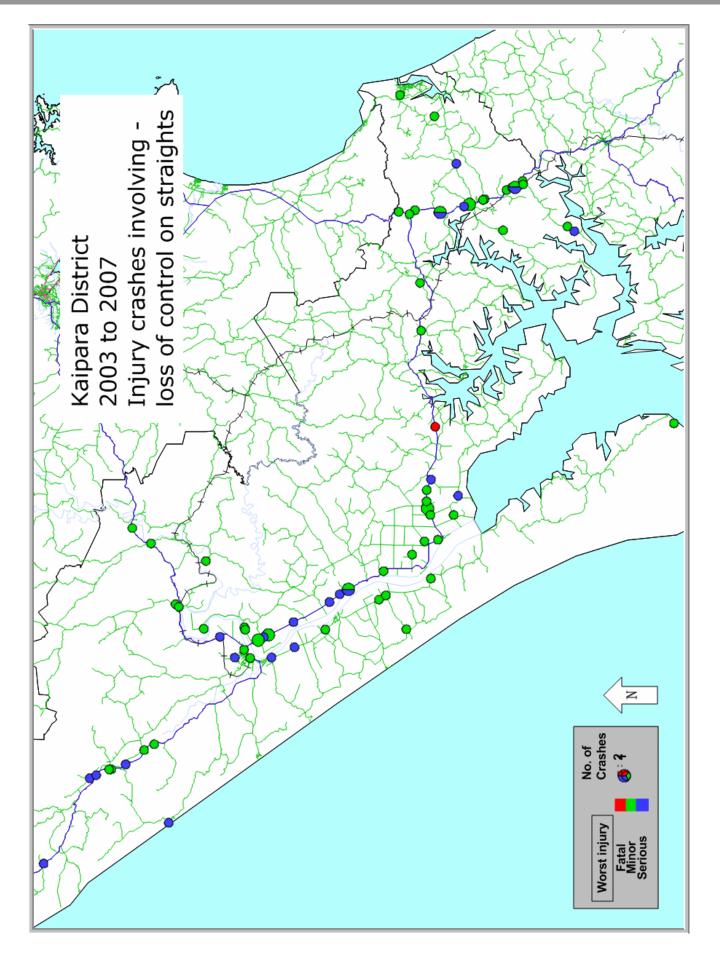
control— straight road crashes			
Crash characteristic	Percentage of crashes		
Single vehicle	83		
Alcohol	18		
Excessive speed for the conditions	13		
Road factors	23		
Poor handling	19		
Rural road	92		
Wet road	30		
Night time	39		

Further information about the 28 injury loss of control crashes on straights (2003 to 2007) on local roads in Kaipara District:

- No deaths, 9 serious injuries and 33 minor injuries
- 56 percent of at fault drivers were female
- Most common crash type "off road to left"
- Most common at fault driver age group 15 to 19 years
- 29 percent of crashes involved alcohol
- 21 percent of crashes involved speed
- 36 percent involved "road factors"
- 4 percent involved fatigue
- 43 percent involved ditches as a struck object
- 18 percent in the wet
- 32 percent at night
- Worst month March, best August
- Worst day of week Saturday, best Tuesday
- Worst time period 3pm to 6pm

Further information about the 49 injury loss of control crashes on straights (2003 to 2007) on State Highways in Kaipara District:

- 1 deaths, 17 serious injuries and 53 minor injuries
- 30 percent of at fault drivers were female
- Most common crash type "off road to left"
- Most common at fault driver age group 15 to 19 years
- 12 percent of crashes involved alcohol
- 8 percent of crashes involved speed
- 16 percent involved "road factors"
- 45 percent involved fatigue
- 35 percent involved ditches as a struck object
- 37 percent in the wet
- 43 percent at night
- Worst month January, best September
- Worst day of week Sunday
- Worst 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 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 33 percent of all fatal crashes (a slight increase on 2006) and 15 percent of all injury crashes (the same as 2006).

There were 8005 alcohol-related injury crashes reported in New Zealand in the last five years.

In Kaipara District, alcohol was a factor in 23 percent of injury crashes in 2007, a rise from 2006 (18 percent).

Number of alcohol related injury crashes				
Crash year	Open road	Urban road	Total	
2003	8	4	12	
2004	11	6	17	
2005	10	1	11	
2006	13	4	17	
2007	14	9	23	
Total	56	24	80	

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

The key crash locations of alcohol related crashes occurring between 2003 and 2007 are shown on the map on the following page.

From the beginning of 2007 Land Transport NZ has been adding driver factor codes to all non-injury crashes for the northern district.

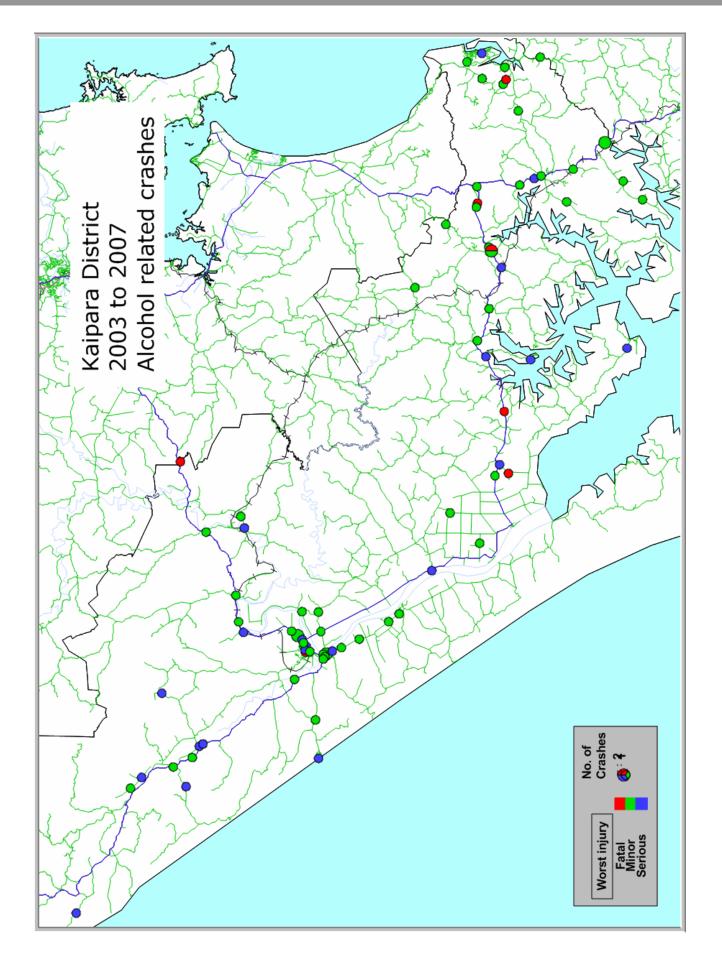
In 2007 there were 16 non-injury alcohol related crashes reported by the Police in the Kaipara District

This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before. Further information about the 45 alcohol related injury crashes in Kaipara District on local roads 2003 to 2007:

- 3 deaths, 15 serious injuries and 46 minor injuries
- 80 percent of at fault drivers were male
- Most common crash type "loss of control turning right"
- 29 percent at intersections
- 38 percent urban
- 22 percent wet road
- 58 percent night time
- Worst time period 9pm to midnight then 3pm to 6pm
- Worst months December and March (equal), best July
- Worst day of week Saturday, best Monday and Thursday

Further information about the 35 alcohol related injury crashes in Kaipara District on local roads 2003 to 2007:

- 4 deaths, 13 serious injuries and 36 minor injuries
- 90 percent of at fault drivers were male
- Most common crash type "loss of control turning right "
- 17 percent at intersections
- 20 percent urban
- 26 percent wet road
- 69 percent night time
- Worst time period 6pm to midnight
- Worst month February, best December
- Worst day of week Saturday, best Tuesday



### National issues

This section contains some brief information on the key national road safety issues as measured in Kaipara District. They may have been covered elsewhere in this document or not be a specific issue.

#### Speed

"Too fast" was recorded in 24 percent of injury crashes in the district in the last five years resulting in seven deaths and 141 other injures. Speed as a factor in crashes is not reducing in the district.

Seventy-seven percent of speed-related crashes were "loss of control on bends. Alcohol and poor handling were the other driver factors often associated with speed.

At fault male drivers aged less than 24 were the most highly represented in speed-related crashes.

#### Alcohol

Alcohol was involved in 18 percent of injury crashes in the district in the last five years resulting in 7 deaths and 110 other injuries. The number of injury crashes involving alcohol is not decreasing.

Most alcohol crashes were in rural areas of the district.

Speed and poor handing were the other factors often associated with alcohol.

#### Failure to give way

Failure to give way or stop was reported in eight percent of all reported injury crashes for the last five years resulting in no deaths and 58 other injuries.

Sixty-one percent of crashes were in urban areas of the district.

#### Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a Regional Council, Police District and local body level.

The front seat belt wearing rate in Kaipara District was 99 percent in 2007.

The results are obtainable from the Ministry of Transport website :

http://www.transport.govt.nz/safety-beltstatistics-front-seat-200-1/

### Contacts

#### Land Transport New Zealand

Partnership Manager (Northern) Peter Kippenberger

Manager Performance Information Chris Hewitt

Private Bag 106 602, Auckland Phone 09 969 9800

Whangarei Office

Manager Programmes: John Garvitch Phone 09 459 6315 Education Advisor: Paul Scott Phone 09 459 6314

Level 2, ANZ Building cnr Rathbone & Robert Streets PO Box 1664 Whangarei Fax 09 459 6318

www.landtransport.govt.nz

#### **Road Safety Co-ordinator**

Road Safety Co-ordinator (Whangarei / Kaipara) Gillian Archer PO Box 1124, Whangarei Phone 0274 938703

#### **New Zealand Police**

Inspector Clifford Paxton Road Policing Manager Private Bag 9016, Whangarei Phone 09 430 4500

Whangarei / Kaipara Area Controller Inspector Paul Dimery PO Box 9016, Whangarei Phone 09 430 4500

#### Transit

Transit New Zealand Area Engineer Auckland North Cyril Gunaratne PO Box 1899, Whangarei Phone 09 430 4355

Highways North Incident reporting 0800 111 655

#### Local Authority

Kaipara District Council Private Bag 1001 Dargaville Phone 09 439 7059 or 0800 727 059