

briefing notes road safety issues

Kapiti Coast 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.

This report is the ninth road safety report for Kapiti Coast district. Most of the information, unless otherwise stated in this report, applies to both local roads and State highways.

The intent of the report is to highlight the key road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries in the district. More detailed information may be obtained from either Kapiti Coast District Council (local roads) or Transit NZ (State highways). Please refer to the last page for contact details.

The issues chosen for this report are drawn from either the most common crash types or those that appear over-represented when Kapiti Coast district is compared to similar local bodies or those with high social cost of crashes (relating mainly to high numbers of fatal and serious crashes).

We have also included a brief overview of crashes in the district for 2007.

Major road safety issues		2007 road trauma	
Kapiti Coast District		Casualties	Kapiti Coast District
Loss of control		Deaths	3
Crossing/turning		Serious casualties	31
Rear-end/obstruction		Minor casualties	108
Vulnerable road users (pedestrians & cyclists)			
Nationally		Crashes	Kapiti Coast District
Speed		Fatal crashes	3
Alcohol		Serious injury crashes	18
Failure to give way		Minor injury crashes	75
Restraints		Non injury crashes	192

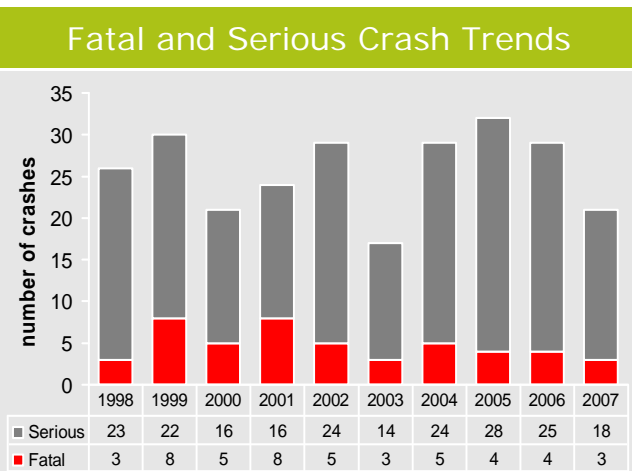
Overview 2007

In 2007, in Kapiti Coast district, there were 96 injury crashes and 192 non-injury crashes reported by the New Zealand Police. Forty-two percent of the total injury crashes in the district were on State highways. The table below shows the number of injuries resulting from these crashes in the district.

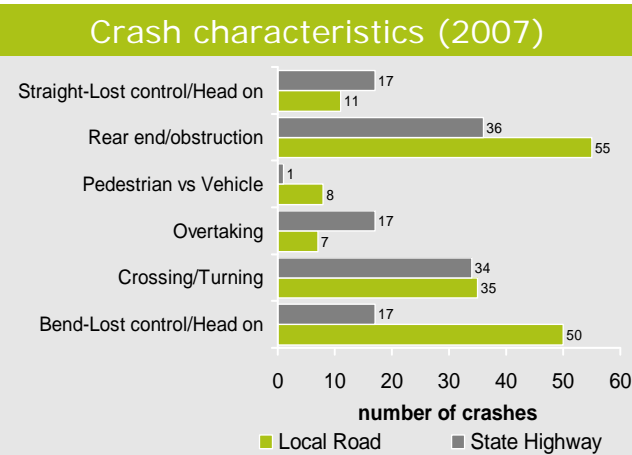
Casualties by injury type in 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Total	3	31	108	142
Local roads Vs State highways				
Local roads	1	16	71	88
State highways	2	15	37	54
Rural Vs Urban roads				
Rural ¹	2	17	37	56
Urban	1	14	71	86

Note: 1/ Rural - area with a speed limit of 80km/h or more

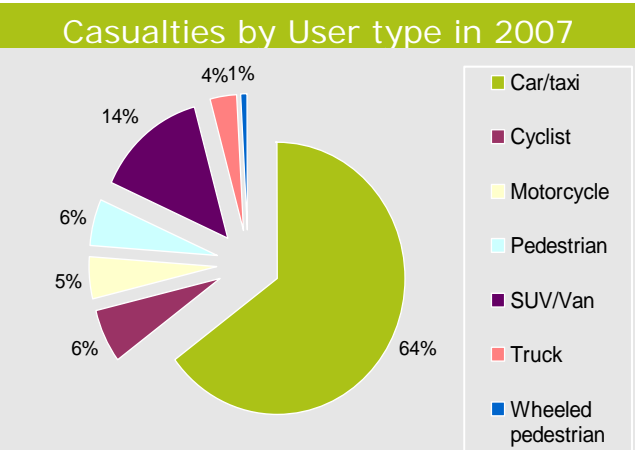
The total number of crashes have shown an upward trend from 2003 to 2006, but dropped in 2007 primarily due to reduction in minor injury crashes.



In 2007, rear end/obstruction was the main type of crash in the district followed by crossing/turning and bend-lost control/head-on crash types.



The highest number of casualties in 2007 were drivers and passengers of car followed by those of SUV/Van.



Further information about all crashes in 2007 on:

Local roads

- Worst months: June and December (11 percent each)
- Worst day of week: Sunday (20 percent)
- Wet road crashes: 12 percent
- Night time crashes: 30 percent
- Alcohol over limit (injury crashes): 21 percent
- Too fast for conditions (injury crashes): 24 percent
- Crashes at intersection: 37 percent
- Road factors: 4 percent
- At fault male driver (injury crashes): 66 percent
- Full NZ licence held by at fault drivers (injury crashes) : 63 percent

State highways

- Worst month: February (14 percent)
- Worst day of week: Wednesday (17 percent)
- Wet road crashes: 14 percent
- Night time crashes: 20 percent
- Alcohol over limit (injury crashes): 6 percent
- Too fast for conditions (injury crashes): 3 percent
- Crashes at intersection: 38 percent
- Road factors: 6 percent
- At fault male driver (injury crashes): 61 percent
- Full NZ licence held by at fault drivers (injury crashes): 74 percent

Social cost of crashes

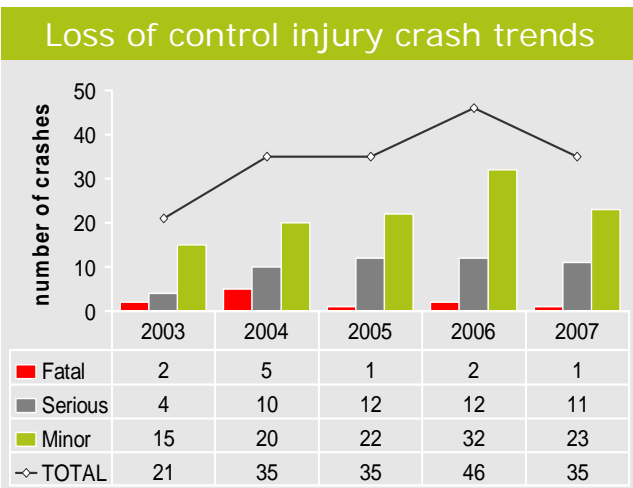
Local roads	\$ 16.37M
State highways	\$ 18.83M
Total	\$ 35.20M

NOTE: The estimated social cost includes loss of life or life quality, loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage.

Loss of control

During the five year period 2003 to 2007, 34 percent of all injury crashes in Kapiti Coast district occurred due to loss of control. These crashes resulted in 12 deaths, 78 serious injuries and 204 minor injuries. There were a further 305 non-injury crashes reported.

The number of minor injury crashes gradually increased between 2003 and 2006. In 2007 it has come down to the 2004 and 2005 level. The total number of fatal and serious injury crashes have stayed relatively steady for the last five years.



The following table shows the split between local roads and State highways, and also between urban and rural areas.

Loss of Control	Local Urban	Local Rural	SH urban	SH Rural
At bends	44%	28%	5%	23%
On Straight	32%	6%	8%	54%

Although only 40 percent of the loss of control crashes occurred on State highways, their share in the total fatalities was more than 90 percent. Sixty eight percent of loss of control crashes occurred at bends.

Main characteristics of Loss of control crashes

Crash characteristic	Percentage of crashes
Single vehicle	72
Alcohol (injury crashes)	24
Too fast for the conditions (injury crashes)	29
Road factors	11
Poor handling (injury crashes)	38
Rural road	54
Wet road	27
Night time	46

Most crashes at bends involved a driver losing control of their vehicle and running off the road or on occasions colliding with another vehicle.

The three most common roadside hazards struck in the district were *fences* (28 percent), *trees* (12 percent) and *posts/poles* (11 percent) out of 512 total reported objects struck.

Further information about all crashes due to loss of control in the district for the period 2003-2007 on:

Local roads

- 1 death, 35 serious injuries and 104 minor injuries
- Worst month: *December* (14 percent)
- Worst day of week: *Sunday* (21 percent)
- Wet road crashes: 27 percent
- Night time crashes: 15 percent
- With alcohol over limit (injury crashes): 26 percent
- Most common injury crash factors: *too fast* (48 percent) followed by *poor handling* (41 percent)
- At fault male driver (injury crashes): 77 percent
- Full NZ licence at fault drivers (injury crashes): 50 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old

State highways

- 11 deaths, 43 serious injuries and 100 minor injuries
- Worst months: *March and July* (11 percent each)
- Worst days of week: *Wednesday, Saturday and Sunday* (17 percent each)
- Wet road crashes: 27 percent
- Night time crashes: 41 percent
- With alcohol over limit (injury crashes): 23 percent
- Most common injury crash factors: *poor handling* (35 percent) followed by *fatigue* (33 percent)
- At fault male driver (injury crashes): 71 percent
- Full NZ licence at fault drivers (injury crashes): 66 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old

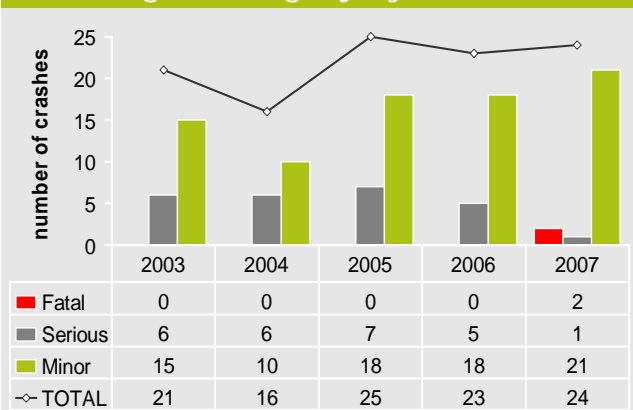
Crossing/turning

Crashes due to a crossing/turning movement are the second most common crash type in Kapiti Coast district.

During the five year period from 2003 to 2007, there were 267 crashes at intersections and 72 crashes at driveways. These crashes resulted in 2 deaths, 27 serious injuries and 120 minor injuries.

The total number of injury crashes remained steady for the last three years. Unlike any other year in the last five year period, there were 2 fatal crashes in 2007.

Crossing /turning injury crash trends



The table below shows the locations of the intersections with the high number of crashes in the district between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
SH 1N/Kapiti Rd	41	8	6
SH 1N/Te Moana Rd	23	4	6
SH 1N/Otahihanga Rd	18	9	2
SH 1N/Raumati Rd	11	6	0
SH 1N/Poplar Ave	10	4	1
Kapiti Rd/Arawhata Rd	8	5	1

Crashes at T (tee) junctions in urban areas are the most common type of intersection crash reported, followed by X (cross) junctions crashes in urban areas.

Junction Type	Rural	Urban
T (tee)	45	134
Driveways	19	58
X (cross)	3	64
Y	1	2
Roundabout	0	10
Unknown	0	3

The most common crash movements are:

- vehicles *failed to give way* when turning right from side road or driveway (35 percent).
- vehicles *failed to find safe gap in on-coming traffic* while making right hand turn (34 percent).

Intersections present drivers with one of their biggest driving challenges. Seventy-two percent of drivers at fault in crossing/turning crashes were full licence holders

Further information about crossing/turning related crashes in the district for the period between 2003 and 2007 on:

Local roads

- 3 deaths, 10 serious injuries and 56 minor injuries
- Worst month: *May (13 percent)*
- Worst day of week: *Thursday (18 percent)*
- Wet road crashes: *14 percent*
- Night time crashes: *16 percent*
- With alcohol over limit (injury crashes): *3 percent*
- Most common injury crash factors: *failed to give way/stop (91 percent)* followed by *poor observation (66 percent)*
- Road factors: *5 percent*
- At fault male driver (injury crashes): *45 percent*
- Full NZ licence at fault drivers (injury crashes): *75 percent*
- Most common at fault drivers' age group (injury crashes): *under 25 and 70+ years old*

State highways

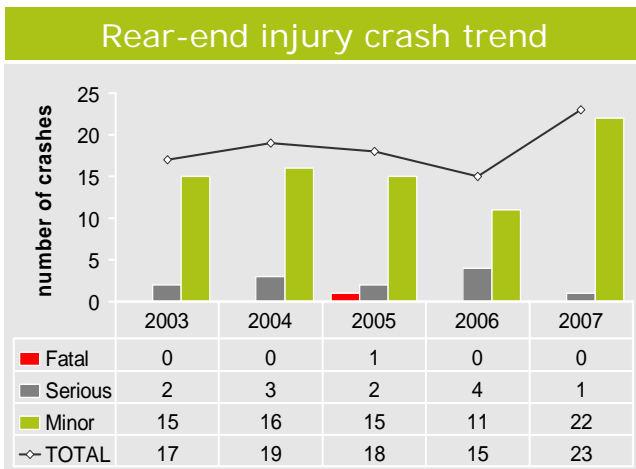
- 1 death, 17 serious injuries and 64 minor injuries
- Worst month: *November (11 percent)*
- Worst day of week: *Friday (19 percent)*
- Wet road crashes: *15 percent*
- Night time crashes: *22 percent*
- With alcohol over limit (injury crashes): *2 percent*
- Most common injury crash factors: *failed to give way/stop (86 percent)* followed by *poor observation (35 percent)*
- Road factors: *1 percent*
- At fault male driver (injury crashes): *54 percent*
- Full NZ licence at fault drivers (injury crashes): *69 percent*
- Most common at fault drivers' age group (injury crashes): *70+ years old*

Rear-end/obstruction

Rear-end and obstruction type crashes were the most common crash type in Kapiti Coast district representing 32 percent of all injury and non-injury crashes in 2007.

Between 2003 and 2007, there were 1 fatal, 12 serious injury, 79 minor injury and 362 non-injury rear-end/obstruction crashes recorded in the district. These crashes resulted in 1 death, 17 serious injuries and 102 minor injuries.

Injury crash numbers have been fluctuating over the last five years. The number of serious injury crashes was the lowest and minor injury crashes was the highest in 2007 in comparison to any single year in last five year period.



The five most common crashes in this category are:

- collision with the end of a queue of traffic
- collision with a parked vehicle
- collision with a U turning vehicle (turning from the left)
- collision with a slower vehicle
- collision with a vehicle waiting to make a right turn near centre line

Rear-end and obstruction crashes are more commonly a route rather than site specific problem.

High rear-end/obstruction crash locations

Paraparaumu: Kapiti Road, Rimu Road and SH1 route between Ruamati Road and Amohia Street

Waikane: SH1 route from North of Kebbell Drive intersection to Nagio Road intersection.

Otaki: SH1 route between Riverbank Road to Waitohu Valley Road

Further information about all rear-end crashes in the district between 2003 and 2007 on:

Local roads

- 8 serious injuries and 48 minor injuries
- Worst month: *June (12 percent)*
- Worst day of week: *Friday (18 percent)*
- Wet road crashes: *13 percent*
- Night time crashes: *20 percent*
- Crashes at intersection: *27 percent*
- Road factors: *2 percent*
- With alcohol over limit (injury crashes): *7 percent*
- Most common injury crash factor: *poor observation (57 percent)* followed by *incorrect lane position (28 percent)*
- At fault male driver (injury crashes): *57 percent*
- Full NZ licence at fault drivers (injury crashes): *68 percent*
- Most common at fault drivers' age group (injury crashes): *20-24 and 70+ years old*

State highways

- 1 death, 9 serious injuries and 54 minor injuries
- Worst month: *January (11 percent)*
- Worst day of week: *Sunday (20 percent)*
- Wet road crashes: *18 percent*
- Night time crashes: *23 percent*
- Crashes at intersection: *20 percent*
- Road factors: *9 percent*
- With alcohol over limit (injury crashes): *7 percent*
- Most common injury crash factors: *poor observation (65 percent)* followed by *incorrect lane position (43 percent)*
- At fault male driver (injury crashes): *71 percent*
- Full NZ licence at fault drivers (injury crashes): *87 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 19 years old*

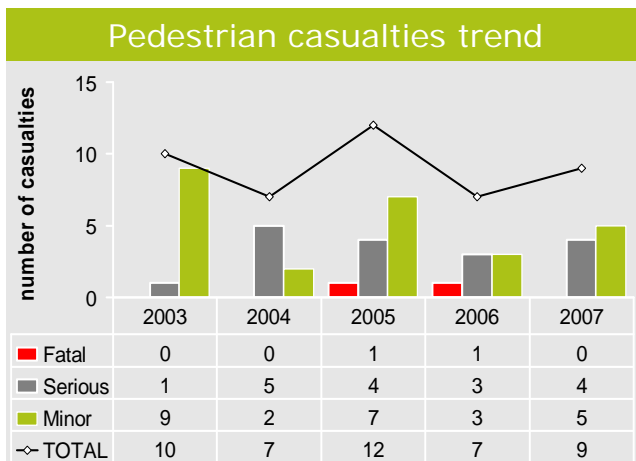
Vulnerable road users

Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries.

Pedestrians

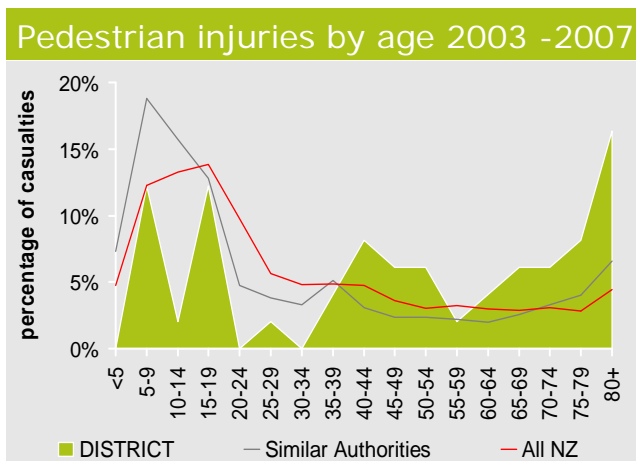
Although pedestrian injuries do not feature highly in the total road injury picture in Kapiti Coast district representing only 8 percent of all injuries, they make up 10 percent of all fatalities. Although pedestrian injuries are low, they are an issue as they are higher than peer group and national averages.

Pedestrian casualties have been fluctuating in the last 5 year period. In 2007, there was no pedestrian fatality and the number of serious injuries were among the second highest in the last five year period.



Most (93 percent) pedestrian crashes occurred on urban roads and 82 percent occurred away from intersections. Thirty-six percent of these crashes occurred during hours of darkness.

The district is experiencing problems with elderly people crossing road. Nearly half of the pedestrian (40 percent) injured during the last five-year period were over 60 years of age as shown in the graph.



Following are the crash factors that involved both pedestrians and drivers:

- 23 percent involved pedestrians crossing roads approaching heedless of traffic.
- 16 percent involved driver who did not see or look for another party until too late.
- 8 percent involved drivers failing to give way to a pedestrian on a crossing, footpath or verge.

The high pedestrian crash locations are shown below:

High pedestrian accident locations

Kapiti Road / Rimu Road intersection and vicinity (approaches to this junction)

SH1 route through Paraparaumu and Waikane

Otaki: Main Street route and its intersection with Aotaki Street

Further information regarding pedestrian injury crashes in the district between 2003 and 2007 are on:

Local roads

- 1 death, 16 serious injuries and 25 minor injuries
- Most common injury crash factor: *pedestrian crossing the road being hit by a driver approaching from their right (39 percent)*.
- Wet road crashes: *26 percent*
- Night time crashes: *32 percent*
- With alcohol over limit (injury crashes): *6 percent*
- Crashes at intersection: *24 percent*

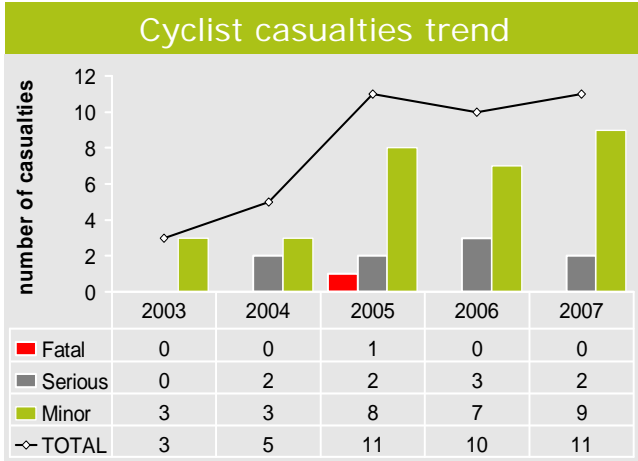
State highways

- 1 death, 2 serious injuries and 6 minor injuries
- Most common injury crash factor: *pedestrians crossing the road hit by a driver approaching from their left (50 percent)*
- Wet road crashes: *none*
- Night time crashes: *50 percent*
- With alcohol over limit (injury crashes): *38 percent*
- Crashes at intersection: *13 percent*

Cyclists

Cyclists injured in Kapiti Coast district, account for 6 percent of all injuries and 5 percent of fatalities in the last five years.

After significant increase in total number of the injured cyclist between 2003 and 2005, the number has remained steady since 2005.

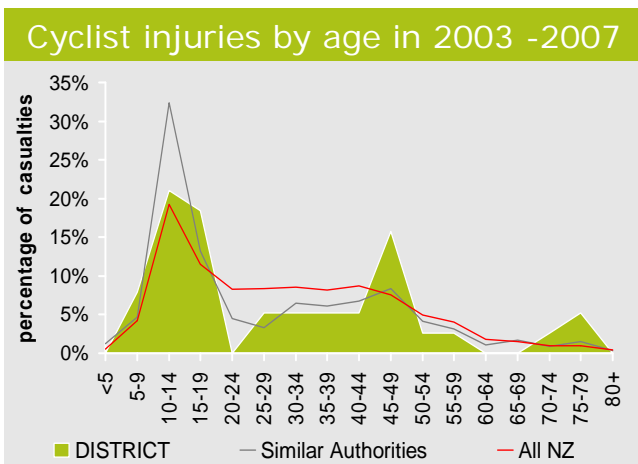


Most (73 percent) cycling crashes occurred on local urban roads. More than half (58 percent) of the cycling crashes occurred at intersections and only 10 percent during night hours.

In 2007 more cycles than cars were imported into New Zealand. It is certainly noticeable in many areas across the country that there are many more cyclists using the roads than in past years. Consequently the number of cyclist casualties have increased nationally.

Cyclist injuries are not spread evenly across all age distributions as shown in the chart below. Approximately half (49 percent) of the injured cyclists were between 5 to 19 years of age.

Second most (16 percent) commonly injured cyclist age group is 45 to 49 years of age.



The routes with high cyclist crashes in the district are:

- High cyclist injury locations/routes**
- SH 1 route through the district
 - Ruamati Road/Kiwi Road
 - Kapiti Road route
 - Intersections on Mazengarb Road route

Further information regarding cyclist crashes in the district between 2003 and 2007 are on:

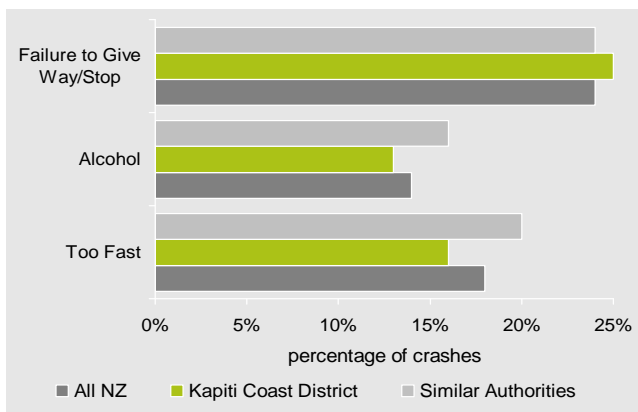
Local roads

- 8 serious injuries and 22 minor injuries
- Worst month: *November (6 crashes)*
- Worst days of week: *Monday and Thursday (6 crashes each)*
- Most common injury crash factors: *failure to giveaway/stop (55 percent)* followed by *poor observation (52 percent)*
- Wet road crashes: *10 percent*
- Night time crashes: *10 percent*
- With alcohol over limit (injury crashes): *none*
- Crashes at Intersection: *55 percent*

State highways

- 1 death, 1 serious injury and 8 minor injuries
- Worst month: *March (4 crashes)*
- Worst day of week: *Tuesday (3 crashes)*
- Most common injury crash factors: *failure to giveaway/stop (75 percent)* followed by *poor observation (38 percent)*
- Wet road crashes: *none*
- Night time crashes: *11 percent*
- With alcohol over limit (injury crashes): *none*
- Crashes at Intersection: *67 percent*

National issues



Speed

In Kapiti Coast district, *too fast* was recorded in 16 percent of injury crashes in the last five years, resulting in 1 death and 104 injures. *Speed* as a factor in crashes is increasing in the district.

Sixty-five percent of *speed* related crashes involved *loss of control/ head-on at bends*. *Alcohol*, *poor handling* and *poor observations* were the driver factors most often associated with *speed* crashes. Male drivers aged under 25 years old were most involved in these crashes.

Alcohol

In Kapiti Coast district, *alcohol* was involved in 13 percent of injury crashes in the last five years, resulting in 5 deaths and 83 other injuries. The number of injury crashes involving *alcohol* is increasing in the district.

Sixty-seven percent of alcohol crashes were in urban areas. Seventy-three percent of these crashes were *loss of control/head-on* crashes. Travelling *too fast* and *poor handling* were the factors often associated with *alcohol* related crashes.

Failure to give way

In Kapiti Coast district, *failure to give way or stop* was reported in 25 percent of all reported injury crashes for the last five years resulting in 2 deaths and 142 other injuries. Most (92 percent) of these were related to *crossing/turning* manoeuvres and often associated with failure to look for other parties. Fifty-six percent of at fault drivers in these crashes were males.

Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2007 survey results restraint rate in Kapiti Coast district for front seat and rear seat are 96 percent and 98 percent respectively (while corresponding national rates are 95 percent and 87 percent).

The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/belts-index/>

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