

briefing notes road safety issues

Kapiti Coast District

This report details aspects of Kapiti Coast District's traffic crash data. We begin by looking at how the district measures up regarding those areas of high concern prioritised in Safer Journeys (NZ's Road Safety Strategy 2020) as compared to similar authorities and against the national picture. This is followed by an overview of crashes in Kapiti Coast District for 2009. Then we present more detailed analysis of local road safety issues based upon reported crash data and trends for the 2005-2009 period.

Included are graphs, charts and tabulations addressing crash movement, crash factors, road users, location and the social cost of crashes. Trends are determined by looking at the annual data for injury crashes and those injured over the last five year period. The information in this report covers both local roads and state highways.

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

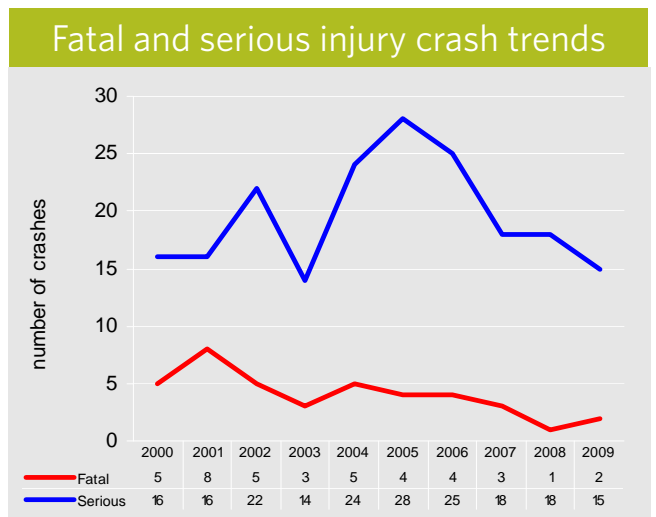
2009 road trauma	
Casualties	Kapiti Coast District
Death	4
Serious injury	18
Minor injury	82
Total casualties	104

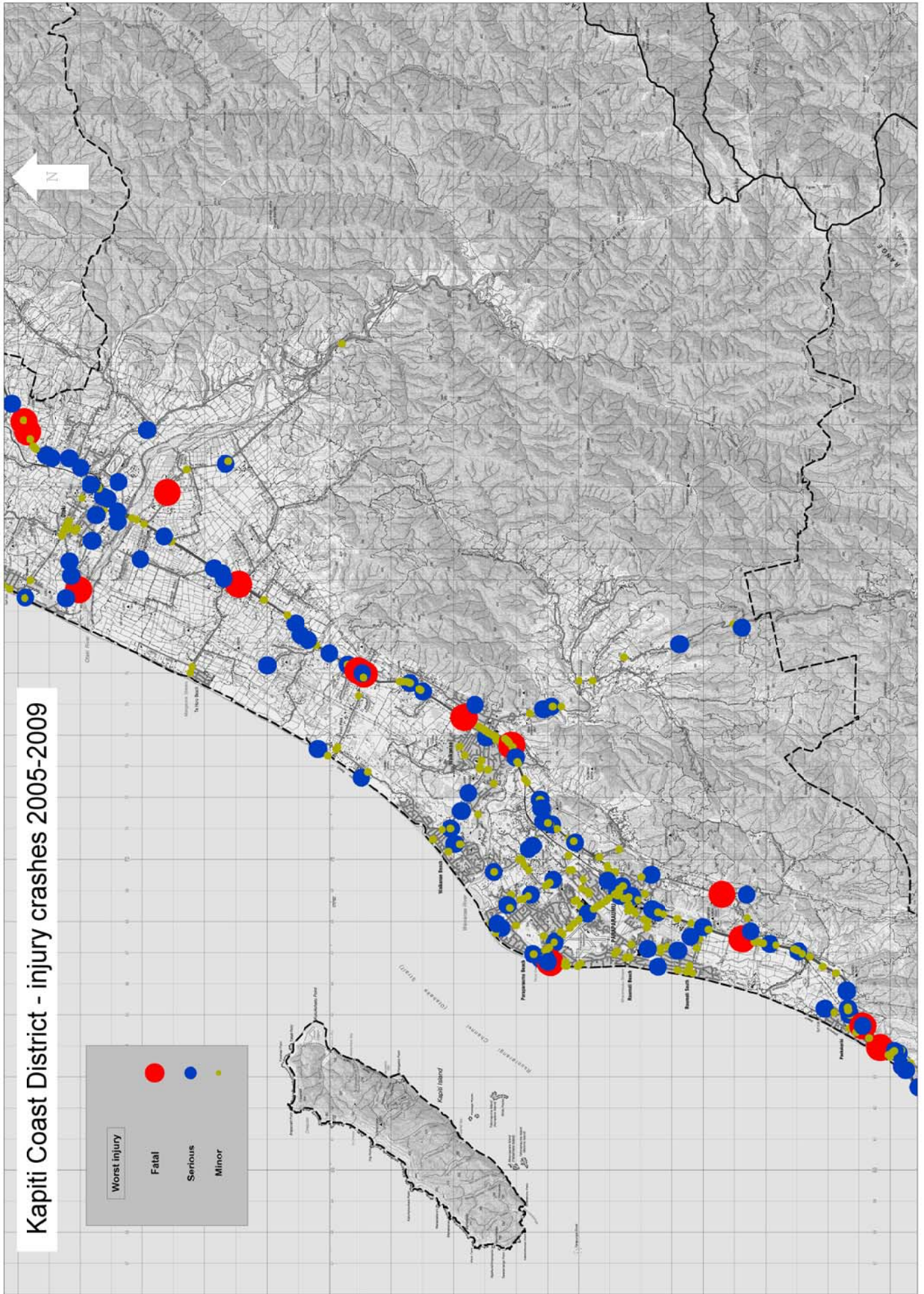
Crashes	Kapiti Coast District
Fatal crashes	2
Serious injury crashes	15
Minor injury crashes	53
Total injury crashes	70
Non-injury crashes	230 reported

2009 - social cost of crashes	
Local roads	\$ 11.61M
State highways	\$ 19.18M
Total	\$ 30.79M

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

Local road safety issues	
Kapiti Coast District	
Loss of control	
Alcohol	
Intersections	
Vulnerable road users; - cyclists	
- motorcyclists	





2020 Safer Journeys

“A safe road system increasingly free of death and serious injury”

Safer Journeys is New Zealand’s Road Safety Strategy for 2010-2020. It identifies actions and interventions to reduce trauma on our roads.

Please take time to visit the Safer Journeys website and study the documents found there:

<http://www.transport.govt.nz/saferjourneys/>

Areas of high concern have been identified. These are the areas where we need to make the most improvement in road safety or maximise efforts towards a safe system approach. Focusing on these areas could make the largest contribution toward reducing costs imposed on the economy by road deaths and injuries.

Areas of high concern are:

- Reducing alcohol/drug impaired driving
- Increasing the safety of young drivers
- Safe roads and roadsides
- Safe driving speeds
- Increasing the safety of motorcyclists

Areas of medium concern are:

- Improving the safety of the light vehicle fleet
- Safe walking and cycling
- Improving the safety of heavy vehicles
- Reducing the impact of driver fatigue
- Addressing driver distraction
- Reducing the impact of high risk drivers

Areas of continued and emerging focus:

- Increasing the level of restraint use
- Increasing the safety of older New Zealanders

Kapiti Coast District

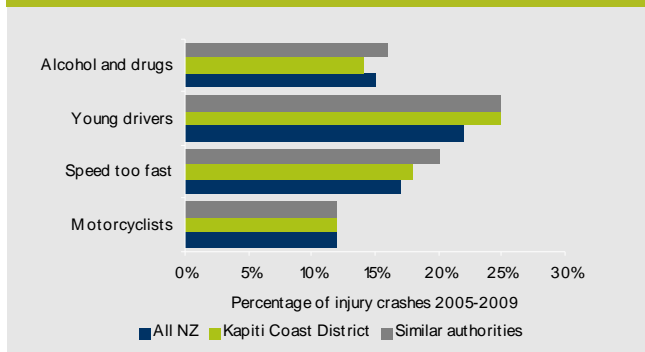
Presented below is a brief look at Kapiti Coast District’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Kapiti Coast District are 93 and 84 percent for front seat and rear seat respectively; while corresponding national rates are 95 and 87 percent.

<http://www.transport.govt.nz/research/safetybeltstatistics/>

Safer Journeys’ areas of high concern



Alcohol and drugs

In Kapiti Coast District, alcohol was recorded in 14 percent of injury crashes in the last five years, resulting in 3 deaths, 28 serious injuries and 51 minor injuries. Alcohol-related crashes were proportionally lower than in similar authorities.

Young drivers

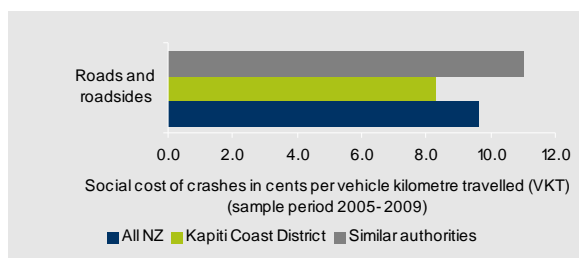
In Kapiti Coast District, young drivers aged 15-19 years were involved in 25 percent of all injury crashes during the last five year period, resulting in 2 deaths, 31 serious injuries and 137 minor injuries. This was proportionally similar when compared to similar authorities.

Speed too fast

Speed too fast was recorded in 18 percent of injury crashes in Kapiti Coast District in the last five years, resulting in 1 death, 24 serious injuries and 77 minor injuries. Speed as a factor in crashes was proportionally lower than in similar authorities.

Motorcyclists

In Kapiti Coast District, motorcyclists were involved in 12 percent of all injury crashes during the last five year period, resulting in 1 death, 18 serious injuries and 41 minor injuries. Injury crashes involving motorcyclists was proportionally similar when compared to similar authorities, however the trend is upwards in the district.



Roads and roadsides

In Kapiti Coast District, there were on average 21 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes is 25 percent lower than the similar authority average (see the graph above).

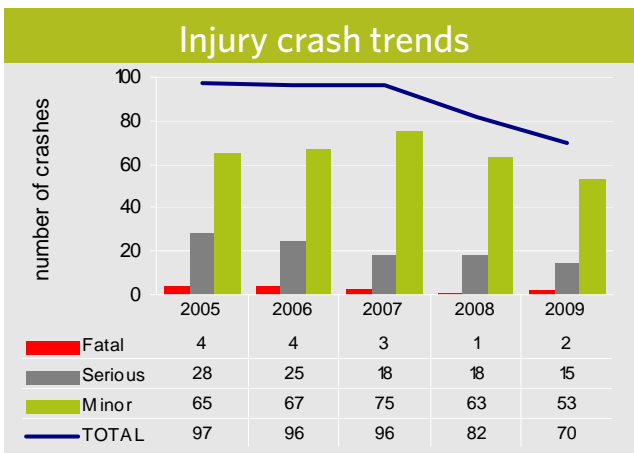
Overview 2009

In 2009 in Kapiti Coast District, 70 injury crashes resulting in 104 casualties and 230 non-injury crashes were reported by the New Zealand Police. Fifty percent of all injury crashes in the district were on state highways. The table below shows the number of injuries resulting from these crashes in the district.

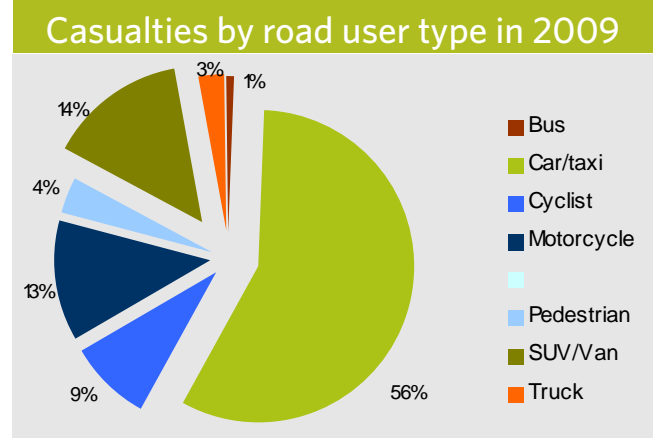
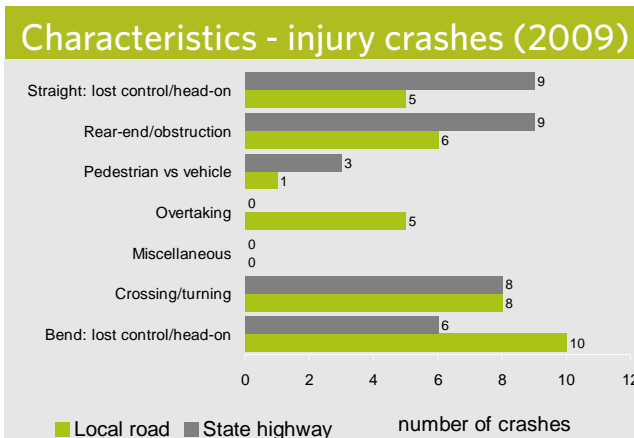
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	4	18	82	104
Local roads vs state highways				
Local roads	0	9	34	43
State highways	4	9	48	61
Rural vs urban roads				
Rural ¹	4	10	34	48
Urban	0	8	48	56

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

The latest five year data shows a downward trend in the total number of injury crashes, and downward trends in all categories of seriousness of injury.



In 2009 two-fifths of injury crashes involved a driver losing control, a quarter a crossing or turning movement and a fifth a rear-end collision.



In 2009 over half the casualties were drivers or passengers of cars, just over an eighth of sports utility vehicles or vans and a quarter were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Kapiti Coast District, young drivers aged 15 to 19 years inclusive were at fault drivers in 19 percent of injury crashes and older drivers, 70 years of age and over, in 19 percent.

Further information about injury crashes in the district during 2009 on:

Local roads

- Total number of injury crashes: 35
- Worst month: August (14 percent)
- Worst days of week: Tuesday, Saturday and Sunday (18 percent each)
- Wet road crashes: 11 percent
- Night time crashes: 20 percent
- Alcohol over limit: 20 percent
- Failed to give way/stop: 14 percent
- Too fast for conditions: 23 percent
- Pedestrian factors : nil
- Crashes at intersection: 40 percent
- Road factors: 17 percent
- At fault male driver: 68 percent
- At fault driver held full NZ licence: 46 percent

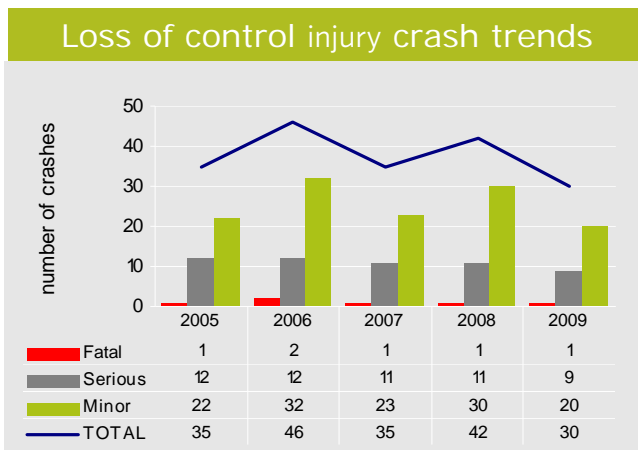
State highways

- Total number of injury crashes: 35
- Worst month: October (14 percent)
- Worst day of week: Thursday (26 percent)
- Wet road crashes: 20 percent
- Night time crashes: 20 percent
- Alcohol over limit: 3 percent
- Too fast for conditions: 11 percent
- Pedestrian factors : 9 percent
- Failed to give way/stop: 29 percent
- Incorrect lane position: 11 percent
- Crashes at intersection: 49 percent
- Road factors: 6 percent
- At fault male driver: 74 percent
- At fault driver held full NZ licence: 74 percent

Loss of control

During the most recent five year period (2005-2009) 43 percent of all injury crashes in Kapiti Coast District occurred due to loss of control. These crashes resulted in 8 deaths, 79 serious injuries and 205 minor injuries. A further 205 non-injury crashes reported involved loss of control.

The latest five year data shows a downward trend in the total number of injury crashes.



Nearly two-fifths of the loss of control crashes occurred on state highways (37 percent) and they accounted for three-quarters of the total fatalities.

The following table shows a breakdown of the general environ of all loss of control crashes (488 crashes) in the district 2005-2009.

Loss of Control	Local Urban	Local Rural	SH urban	SH Rural
At bends	31%	17%	3%	16%
Straight road	12%	3%	3%	15%
Rural roads are roads with a speed of 80km/hr or more				

Two thirds of loss of control crashes occurred at bends (67 percent). These involved a driver losing control of their vehicle, commonly running off the road and hitting a roadside object (78 percent). In over a quarter of the loss of control crashes they collided with another vehicle (29 percent).

The three most common roadside hazards struck in loss of control crashes in the district were fences (27 percent), posts or poles (13 percent) and trees (12 percent).

The following table shows that over two-thirds of loss of control crashes were a single vehicle crashes. Alcohol contributed to a quarter, speed to over a quarter and poor handling to nearly a third of the injury crashes. Nearly half of the crashes occurred during hours of darkness (twilight and night time) and in a quarter wet conditions was a contributing factor in the crash.

Loss of control crashes	
Crash characteristics	Percentage of crashes
Single vehicle	71
Alcohol (injury crashes)	26
Too fast for the conditions (injury crashes)	30
Road factors	9
Poor handling (injury crashes)	35
Rural road	51
Wet road	25
Night time	45

Further information about all loss of control crashes in Kapiti Coast District 2005-2009 on:

Local roads

- 2 deaths, 42 serious injuries and 113 minor injuries
- Worst month: December (37 crashes)
- Worst day of week: Saturday (61 crashes)
- Wet road crashes: 28 percent
- Night time crashes: 49 percent
- Road factors: 10 percent
- Alcohol over limit (injury crashes): 33 percent
- Most common injury crash factors: too fast (46 percent) followed by poor handling (37 percent)
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 46 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old (51 percent)

State highways

- 6 deaths, 37 serious injuries and 92 minor injuries
- Worst month: October (20 crashes)
- Worst day of week: Saturday (31 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 39 percent
- Road factors: 9 percent
- Alcohol over limit (injury crashes): 16 percent
- Most common injury crash factors: fatigue (35 percent) followed by poor handling (33 percent)
- At fault male driver (injury crashes): 78 percent
- At fault driver held full NZ licence (injury crashes): 60 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old (23 percent)

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 NZ legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

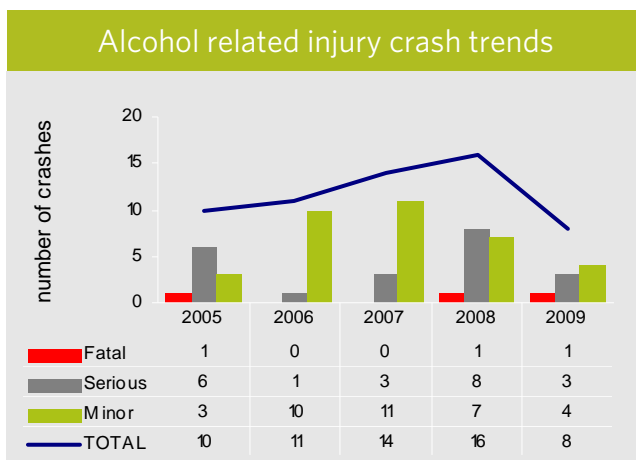
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

Kapiti Coast District

During the last five year period (2005-2009) 14 percent of all injury crashes in Kapiti Coast District were alcohol related which is lower than the latest five year average for similar authorities (17 percent) and the national average (15 percent). Last year 11 percent of all injury crashes in the district recorded alcohol as a contributing factor.

There were 59 injury and 84 non-injury alcohol related crashes reported in the last five years. These crashes resulted in 3 deaths, 28 serious injuries and 52 minor injuries.

The latest five year data shows a level the total number of alcohol-related injury crashes, mainly influenced by the low number of injury crashes last year.



Three quarters of alcohol-related crashes occurred on local roads (74 percent), and these crashes account for two-thirds of the total fatalities (67 percent).

Most alcohol-related crashes on local roads of the occurred in urban areas (87 percent), inversely on state highways in the district most of these crashes occurred in rural areas (79 percent). Two-thirds of all alcohol related crashes (65 percent) occurred during hours of darkness.

Only half of at fault drivers involved in alcohol related crashes in the district held a full NZ driver licence. Just over half of at fault drivers were in the group 15 to 29 years (52 percent).

Alcohol and speed

Speed was a factor in 44 percent of the 83 alcohol related injury crashes in the district 2005-2009, resulting in 14 serious injuries and 24 minor injuries. Speed itself has been a factor in 18 percent of all injury crashes in the district in the last five years.

Eighty-eight percent of the crashes where alcohol and speed were both contributing factors occurred on local roads mostly in dark conditions (76 percent). Seventy-nine percent of these were loss of control at bend type crashes.

Half of at fault drivers in these injury crashes were males in the age group 15-24 years (48 percent). Similarly, half of at fault drivers held a full NZ drivers licence (48 percent), nearly a quarter of at fault drivers were disqualified or never licensed and the remaining quarter held learner or restricted licences.

Further information about alcohol related crashes in Kapiti Coast District 2005-2009 on:

Local roads

- 2 deaths, 22 serious injuries and 35 minor injuries
- Worst months: October and December (12 crashes each)
- Worst day of week: Sunday (25 crashes)
- Wet road crashes: 13 percent
- Night time crashes: 68 percent
- Crashes at intersection: 35 percent
- Excessive speed: 53 percent
- Most common injury crash factors: poor handling (26 percent) and poor observation (14 percent)
- Road factors: 2 percent
- At fault male driver (injury crashes): 87 percent
- At fault driver held full NZ licence (injury crashes): 51 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (24 percent)

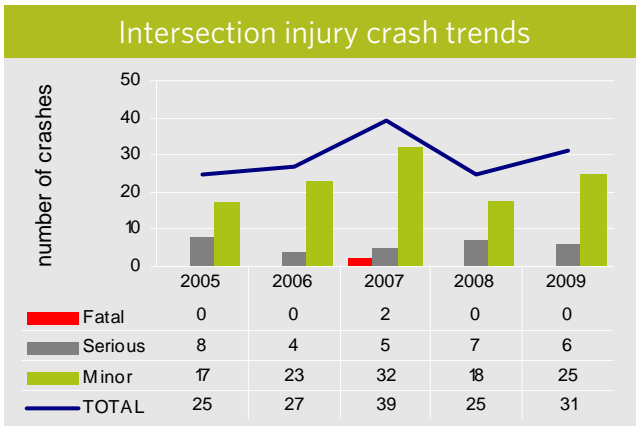
State highways

- 1 death, 6 serious injuries and 17 minor injuries
- Worst month: March (7 crashes)
- Worst day of week: Sunday (10 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 79 percent
- Crashes at intersection: 26 percent
- Excessive speed: 19 percent
- Most common injury crash factors: poor handling (25 percent) and fatigue (19 percent)
- Road factors: 2 percent
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 50 percent
- Most common at fault drivers' age group (injury crashes): 25-39 years old (56 percent)

Intersections

During the last five year period (2005-2009) 33 percent of all injury crashes in Kapiti Coast District occurred at intersections. These crashes resulted in 2 deaths, 39 serious injuries and 170 minor injuries. There were a further 370 non-injury crashes reported.

The latest five year data shows an upward trend in the total number of injury crashes at intersections in the district.



Just over half of these crashes occurred at urban intersections (55 percent). Forty-four percent of intersection crashes occurred on state highways, accounting for 50 percent of fatalities and 49 percent of all serious injuries at intersections in the last five years.

Intersection crashes	Local urban	Local rural	SH urban	SH rural
517 crashes	55%	2%	27%	16%

Rural roads are roads with a speed of 80km/hr or more

The table below shows the locations of intersections with a high number of crashes in Kapiti Coast District (2005-2009).

Intersection name	Total crashes 2005 - 2009	Injury crashes 2005-2009	Total crashes in 2009
SH 1N / Kapiti Road	41	11	11
SH 1N / Otaihanga ROAD	16	7	2
SH 1N / Raumati Road	15	7	6
SH 1N / Forest Lakes Road	6	5	4
Kapiti Road / Te Roto Drive	8	3	1
Otaihanga Road / Makora Road	4	3	1
SH 1N / School Road	6	3	0
SH 1N / Amohia St	15	2	4
SH 1N / Te Kowhai Road	2	2	0

Junction Type	Rural	Urban
T-junction	85	267
Crossroad	7	97
Roundabout	0	31
Y-junction	3	12
Driveway	0	15

Crashes at T-junctions and crossroads in urban areas are the most common types of intersection crashes in Kapiti Coast District, followed by crashes at rural T-junctions, during 2005-2009.

Forty-nine percent of intersection injury crashes occurred due to a driver failing to give way or stop. Forty-five percent of all crashes occurred at give way signs, 15 percent at traffic signals 17 percent at stop signs. Twenty-four percent of all crashes occurred at intersections without any traffic control.

Further information regarding crashes at intersections in Kapiti Coast District 2005-2009 on:

Local roads

- 1 death, 20 serious injuries and 91 minor injuries
- Worst month: June (33 crashes)
- Worst day of week: Friday (49 crashes)
- Wet road crashes: 20 percent
- Night time crashes: 32 percent
- Alcohol over limit (injury crashes): 23 percent
- Most common injury crash factors: failed to give way/stop (45 percent) and poor observation (43 percent)
- At fault male driver (injury crashes): 67 percent
- At fault driver held full NZ licence (injury crashes): 54 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (39 percent)

State highways

- 1 death, 19 serious injuries and 79 minor injuries
- Worst month: September (24 crashes)
- Worst day of week: Friday (38 crashes)
- Wet road crashes: 19 percent
- Night time crashes: 20 percent
- Alcohol over limit (injury crashes): 3 percent
- Most common injury crash factors: failed to give way/stop (55 percent) and poor observation (43 percent)
- At fault male driver (injury crashes): 58 percent
- At fault driver held full NZ licence (injury crashes): 68 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old (28 percent)

Vulnerable road users

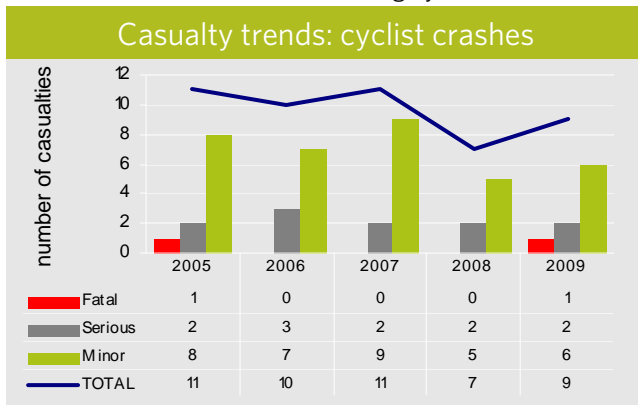
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore more susceptible to severe injuries. These are described as pedestrians, cyclists and motorcyclists.

In Kapiti Coast District, vulnerable road users were involved in 31 percent of all injury crashes in 2005-2009, accounting for 24 percent of all casualties, 29 percent of all deaths and 29 percent of all serious injuries over the five year period.

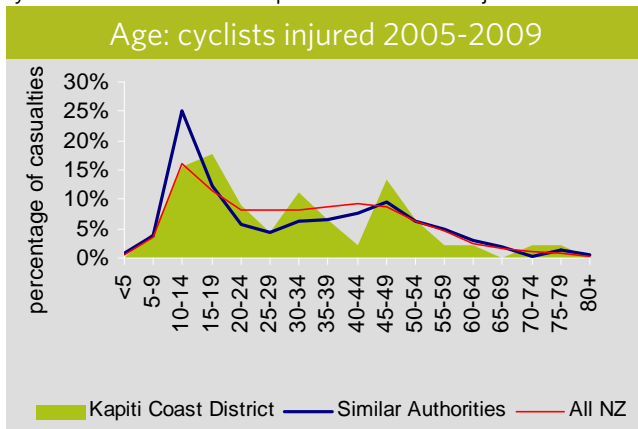
Cyclists

Injury crashes involving cyclists in Kapiti Coast District accounted for 10 percent of all injury crashes during the last 5 year period, resulting in 2 deaths, 11 serious injuries and 35 minor injuries.

The latest five year data shows a downward trend in the total number of casualties involving cyclists.



In Kapiti Coast District during 2005-2009 we find that a third of cyclist injured were in the age group of 10-19 years (34 percent) and cyclists in the group 45-54 years accounted for 20 percent of those injured.



Sixty-three percent of cyclist crashes occurred on local roads in urban areas. Forty-four percent of the cyclist crashes occurred at intersections and most during the daylight hours (93 percent).

Cyclist crashes were concentrated on the arterial and collector roads in Kapiti Coast District. The worst locations or routes 2005-2009 are shown in the following table.

Location / route	Number of Cyclist injury crashes
Generally along SH 1N route and Kapiti Road route	
SH 1N/ Kapiti Road	4
SH 1N/ School Road	2
SH 1N/ Waterfall Road	1
SH 1N/ Fishermans Table	1
SH 1N/ Peka Peka Road	1
Kapiti Road/ Rimu Road	2
Hurley Road/ Kapiti Road	2
Otaihanga Road route	2
Akatarawa Road route	2

The scenarios for crashes involving cyclists were many and varied. The most common scenarios for cyclist injury crashes in Kapiti Coast District 2005-2009 were:

- a vehicle or cyclist turning right from a side road or driveway across a vehicle travelling straight through: 16 percent
- a vehicle or cyclist turning right across an oncoming vehicle: 11 percent
- a following vehicle or cyclist collides with the rear of the slow vehicle ahead: 11 percent

Three-fifths of at fault drivers in these crashes were female (58 percent), with a skew in the age distribution to group 30-59 years for both sexes of at fault drivers (53 percent). Most at fault drivers held a full NZ licence (78 percent).

Further information regarding all crashes involving cyclists in Kapiti Coast District 2005-2009 on:

Local roads

- 9 serious injuries and 25 minor injuries
- Worst month: November (7 crashes)
- Worst day of week: Sunday (7 crashes)
- Most common injury crash factors: failed to give way/stop (47 percent) followed by poor observation (44 percent)
- Wet road crashes: 6 percent
- Night time crashes: 6 percent
- Alcohol over limit (injury crashes): 9 percent
- Crashes at intersection: 38 percent
- Male cyclist injured: (39 percent)

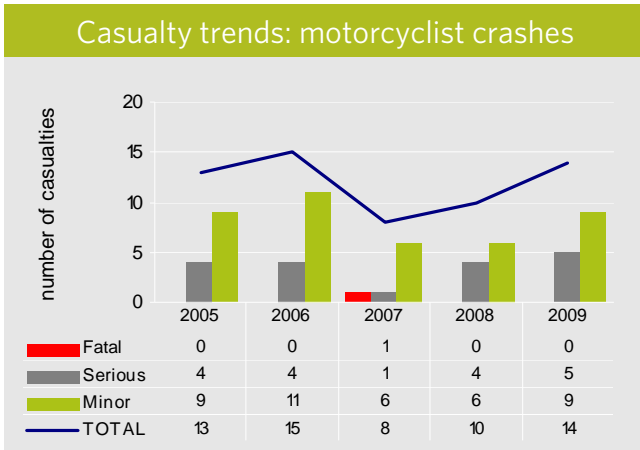
State highways

- 2 deaths, 2 serious injuries and 10 minor injuries
- Worst months: February and September (3 crashes each)
- Worst day of week: distributed on all days
- Most common injury crash factors: poor observation (58 percent) followed by failed to give way/stop (50 percent)
- Wet road crashes: 17 percent
- Night time crashes: 8 percent
- Alcohol over limit (injury crashes): 17 percent
- Crashes at intersection: 58 percent
- Male cyclist injured: (50 percent)

Motorcyclists

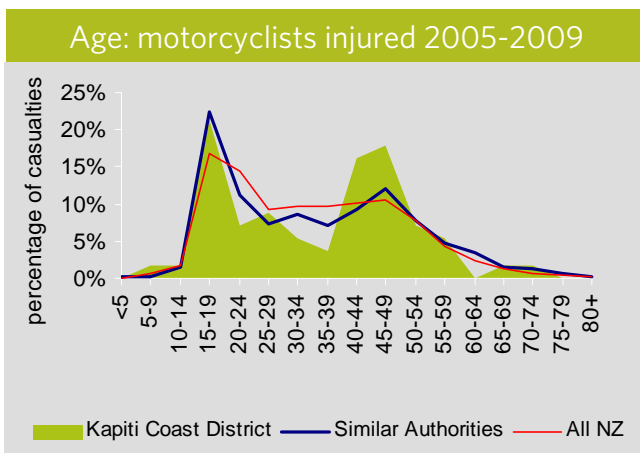
Injury crashes involving motorcyclists represented 13 percent of all injury crashes in Kapiti Coast District during the last five year period, resulting in 1 death, 18 serious injuries and 41 minor injuries.

The latest five year data shows a level trend in the total number of casualties involved in motorcyclist crashes over this period, even with the low casualty numbers three years ago as the trend has been upward since.



Under a third of motorcyclist crashes occurred on the state highway (30 percent) however these accounted for two-thirds of all fatalities (67 percent). Just over a third of all crashes involving motorcyclists happened at intersections (35 percent) and a quarter were reported as single party motorcycle crashes (25 percent).

The age distribution of injured motorcyclists is shown below. Thirty-nine percent of injured motorcyclists were young motorcyclists in the age group 15-19 years. Also commonly injured were those in group 40-49 years (39 percent), which is significantly higher proportionally when compared to similar authorities and the all-NZ averages for this same period.



Most motorcycle crashes occurred during daylight (86 percent) and in dry conditions (88 percent). Just over half were on local roads in urban areas (56 percent).

Location / route	Number of motorcyclist crashes
Generally along SH 1N route and Kapiti Road route	
Kapiti Road/ Te Roto Drive	2
Paekakariki Hill Road/ SH 1N	2
SH 1N/ Ames St	2
Paekakariki Hill Road/ SH 1N	2
Kapiti Road/ Milne Drive	2
Mazengarb Road route	3
Akatarawa Road route	3
Rosetta Road route	3

The high crash locations or routes for motorcycle crashes in the district 2005-2009 are shown in the table above.

The scenarios for crashes involving motorcyclists were many and varied. The most common scenarios in Kapiti Coast District 2005-2009 were:

- loss of control: 32 percent
- a vehicle turning right across an oncoming straight through vehicle: 12 percent
- a vehicle turning right from a side road or driveway across a vehicle travelling straight through: 9 percent

Further information about crashes involving motorcyclists in Kapiti Coast District 2005-2009 on:

Local roads

- 1 death, 13 serious injuries and 30 minor injuries
- Worst month: November (7 crashes)
- Worst day of week: Sunday (10 crashes)
- Alcohol over limit (injury crashes): 15 percent
- Most common injury crash factors: failed to give way/stop (33 percent) and too fast for conditions (25 percent)
- Wet road crashes: 9 percent
- Night time crashes: 17 percent
- Crashes at intersection: 35 percent
- Male motorcyclist injured: 78 percent

State highways

- 5 serious injuries and 11 minor injuries
- Worst month: November (5 crashes)
- Worst day of week: Friday (6 crashes)
- Alcohol over limit (injury crashes): 7 percent
- Most common injury crash factors: failure to give way/stop (27 percent) and too fast for conditions (13 percent)
- Wet road crashes: 20 percent
- Night time crashes: 10 percent
- Crashes at intersection: 34 percent
- Male motorcyclist injured: 76 percent

Further information

This report has been prepared by the Performance Information team at NZ Transport Agency. It is the eleventh such annual road safety issues report. The intent of this report is to highlight local road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries. It has been prepared using data from the Ministry of Transport's Crash Analysis System (CAS) database. This report forms a part of the Briefing Notes series of reports. The Briefing Notes present information derived from pertinent statistics to be used for decision support.

More detailed information may be obtained from either Kapiti Coast District Council (local roads) or NZ Transport Agency.

NZ Transport Agency encourages local bodies, regional councils and NZ Police to study the briefing notes series of reports along with the road safety data reports and the road safety black-spot report. There will be road safety issues beyond those covered in this Road Safety Issues Report and we encourage our partners to use their access to the Crash Analysis System to identify and examine these further.

Contacts

NZ Transport Agency

Wellington Regional Office

PSIS House, L9
20 Ballance Street
PO Box 5084
Wellington 6145
Tel 64 4 894 5400
Fax 64 4 496 6666
<http://www.nzta.govt.nz>

Performance Information / Senior Engineer CAS

James King (04 931 8917)

Senior Programmes Advisor (Engineering)

Eddie Anand (04 931 8920)

Senior Programmes Advisor (Education)

Roy Hitchcock (04 931 8910)

Kapiti Coast District Council

Michael Kargar (04 296 4739) Rooding Manager
Michelle Lewis (04 296 4739) Road Asset Manager

Jane Pearson (04 296 4854)
Road Safety Coordinator

New Zealand Police

Road Policing Manager
Wellington DHQ-WN
PO Box 693, Wellington
Tel 04 381 2000