

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 2002–2006 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 Kapiti Coast District.

This report is the eighth road safety report for Kapiti Coast District. Most of the data in this report applies to both local roads and state highways. Where relevant the crash details on the local roads and state highways are provided and discussed.

In each new report, the latest year's data is added to a five year block and the oldest year dropped, so it is unlikely that the core issues for any local body 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 Kapiti Coast District is compared to similar local bodies and the national average, or those with high social cost (relating mainly to high numbers of fatal and serious crashes).

We have included a brief overview of crashes in the district for 2006.

| Major road safety issues | | 2006 road trauma | |
|---------------------------------|--|-------------------------|-----|
| Kapiti Coast District | | Casualties | |
| Vulnerable road users | | Deaths | 4 |
| Rear-end/obstruction | | Serious casualties | 38 |
| Loss of control | | Minor casualties | 106 |
| Crossing/turning | | | |
| Nationally | | Crashes | |
| Speed | | Fatal crashes | 4 |
| Alcohol | | Serious injury crashes | 25 |
| Failure to give way | | Minor injury crashes | 67 |
| Restraints | | Non injury crashes | 207 |

Overview of crashes in 2006

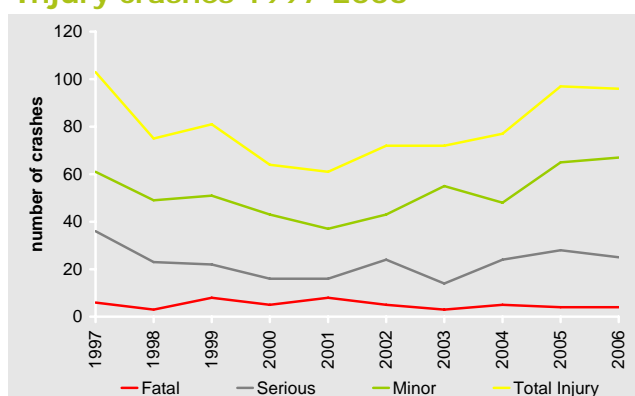
In Kapiti Coast District, there were 48 injury crashes and 134 non-injury crashes on local roads, in addition there were 48 injury crashes and 73 non-injury crashes on state highways, as reported by Police.

The table below shows the number of fatalities and injuries resulting from crashes in rural and urban areas on local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

| | Fatalities | Serious injuries | Minor injuries | Total |
|--------------|------------|------------------|----------------|------------|
| Rural | 4 | 27 | 60 | 91 |
| Urban | 0 | 11 | 46 | 57 |
| Total | 4 | 38 | 106 | 148 |

Fatalities in the district have been fluctuating over the last 10 years as shown in the graph below. Serious injury crashes on the other hand increased after 2003 and remained high thereafter. Minor injury crashes are consistently on the rise and are highest in 2006 as compared to the last 10 years.

Injury crashes 1997-2006



The table below shows the distribution of the injury and non injury crashes by movement category with urban and rural split:

| Movement Category | Urban | Rural | Total |
|-------------------------------|-------|-------|-----------|
| Bend-lost control/head on | 39 | 39 | 78 |
| Crossing/turning | 60 | 12 | 72 |
| Rear-end/obstruction | 59 | 33 | 92 |
| Straight-lost control/head on | 21 | 14 | 35 |
| Pedestrian vs Vehicle | 5 | 1 | 6 |
| Overtaking | 8 | 8 | 16 |
| Miscellaneous | 2 | 3 | 5 |

Further information about injury and non-injury crashes:

Local roads

- Worst months— June and July (24 crashes each)
- Worst day of the week— Monday (32 crashes)
- Wet road crashes— 26 percent
- Night time crashes— 27 percent
- Mid-block crashes— 63 percent
- At fault (injury crashes only) male driver— 75 percent
- Social cost of crashes— \$14 million

State highways

- Worst month— October (16 crashes)
- Worst day of the week— Sunday (22 crashes)
- Wet road crashes— 22 percent
- Night time crashes— 26 percent
- Mid-block crashes— 67 percent
- At fault (injury crashes only) male driver— 59 percent
- Social cost of crashes— \$28 million

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish between the drivers that are truly inexperienced from those that should have moved to a full licence.

The following table shows the licence status of at fault drivers in injury crashes:

| Licence status | Injury crashes percentage of at fault drivers | |
|----------------|---|-------------|
| | Kapiti Coast District | New Zealand |
| Full | 64.3 | 58.4 |
| Learner | 7.6 | 9.5 |
| Restricted | 13.8 | 17.6 |
| Never licensed | 2.2 | 2.2 |
| Disqualified | 4.9 | 1.7 |
| Overseas | 2.2 | 4.2 |
| Expired | 0.0 | 0.5 |
| Other/unknown | 4.0 | 5.6 |

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. These are described as pedestrians, motorcyclists and cyclists. In Kapiti Coast District, pedestrians, motorcyclists and cyclists featured in 7 percent, 8 percent and 5 percent of total injuries between 2002 and 2006. Because of low cyclist casualty numbers, only pedestrians and motorcyclists are discussed in this report.

Pedestrians

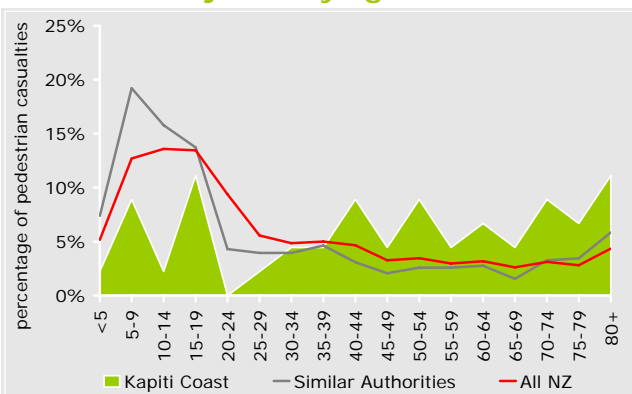
Although pedestrian injuries do not feature highly in the total road injury picture in Kapiti Coast District representing only 7 percent of all injuries, they make up 10 percent of all fatalities. The total number of urban pedestrian casualties for 2002-2006 period is higher than similar authorities and all New Zealand.

| Pedestrian injuries | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------|-----------|-----------|----------|-----------|----------|
| Fatal | 0 | 0 | 0 | 1 | 1 |
| Serious | 5 | 1 | 5 | 4 | 3 |
| Minor | 7 | 9 | 3 | 10 | 3 |
| Total | 12 | 10 | 8 | 15 | 7 |

Most (91 percent) pedestrian crashes occurred on urban roads out of which 80 percent occurred away from intersections. Thirty-nine percent of these crashes occurred during hours of darkness.

Kapiti Coast District is experiencing problems with elderly people crossing the road. Fifty-one percent of pedestrians injured during this five-year period were over 50 years of age as shown in the graph below:

Pedestrian injuries by age 2002 -2006



Young people under 20 years of age are the second most (24 percent) commonly injured people in pedestrian crashes.

The recent decision by Police to enforce a lower speed tolerance around schools is a strong step in creating a

safer lower speed environment for young pedestrians.

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

- 48 percent involved pedestrian crossing roads heedless of traffic
- 16 percent involved pedestrians stepping from behind the parked vehicle
- 14 percent involved drivers failing to give way

The top five routes/locations (on the basis of fatal and serious injuries) are shown in the table below:

| Route/Location | Number of pedestrian injury crashes |
|---|-------------------------------------|
| SH1N/1023 (between Raumati South and Paraparaumu) | 6 |
| Rimu Road | 3 |
| SH1N/1012 (through Waikanae) | 3 |
| Kapiti Road | 2 |
| Main Street, Otaki | 2 |

Further information regarding 2002 to 2006 pedestrian injury crashes:

Local roads

- The most common crash — *pedestrian crossing the road hit by a driver approaching from their right (39 percent)*
- Worst months— February, May, June and July (5 crashes each)
- Worst days of the week— Tuesday, Thursday and Friday (7 crashes each)
- Worst time of the day— 8am to 12pm (11 crashes)
- Night time crashes— 30 percent
- Number of at fault drivers—5

State highways

- The most common crash— *pedestrian crossing the road hit by a driver approaching from their right (33 percent)*.
- Worst months— March, September and December (2 crashes each)
- Worst day of the week— Saturday (3 crashes)
- Worst time of the day— 8pm to 12am (4 crashes)
- Night time crashes— 64 percent
- There were no reported crashes with drivers at fault

Motorcyclists

Although motorcyclist injuries do not feature highly in the total road injury picture in Kapiti Coast District, they represent 8 percent of all injuries, and make up 13 percent of all serious injury crashes.

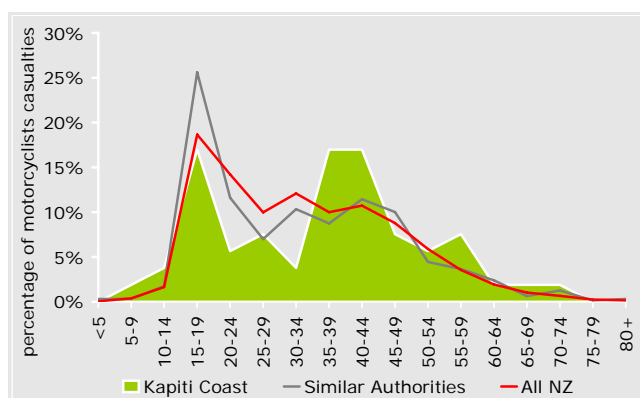
Nationally, motorcycle fatalities dropped from a high of 20 percent of all fatalities in 1988 to just 6 percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2006, motorcyclists accounted for 9.5 percent of road fatalities in New Zealand.

| Motorcyclist injuries | 2002 | 2003 | 2004 | 2005 | 2006 |
|-----------------------|----------|-----------|----------|-----------|-----------|
| Fatal | 0 | 0 | 0 | 0 | 0 |
| Serious | 1 | 6 | 2 | 3 | 4 |
| Minor | 6 | 4 | 7 | 9 | 6 |
| Total | 7 | 10 | 9 | 12 | 10 |

Most (77 percent) motorcycling crashes occurred on rural roads away from intersections and during daylight hours.

Thirty-four percent of motorcycle casualties were in the 35 to 44 year age group, the majority of which were males. Next is the 15 to 19 year age group which accounted for 17 percent of casualties as shown below:

Injured motorcyclists by age 2002 -2006



Further information regarding 2002 to 2006 motorcycle injury crashes:

Local roads

- The most common crash types— *crossing or turning movement (35 percent) and loss of control at bends (35 percent)*.
- Crashes at intersections—23 percent
- Crashes at night—4 percent
- Crashes on wet roads—4 percent
- Worst month— October (6 crashes)
- Worst days of the week— Sunday and Monday (6 crashes each)
- Male motorcyclists—88 percent
- 9 percent of crashes involving road factors. These were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance.

State highways

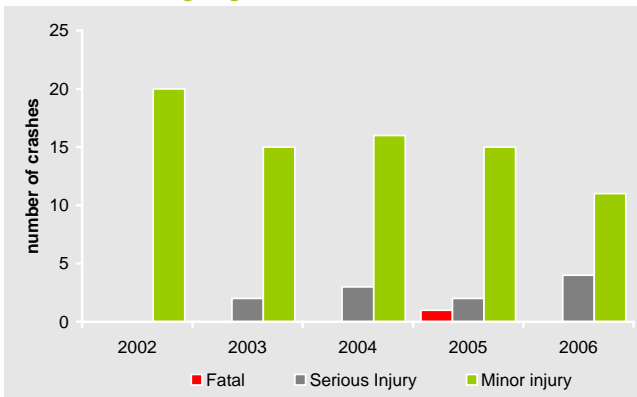
- The most common crash type— *crossing or turning movement (38 percent)*
- Crashes at intersections—25 percent
- Night time crashes—19 percent
- Wet road crashes—13 percent
- Worst months— November and January (3 crashes each)
- Worst days of the week— Sunday and Thursday (4 crashes each)
- Male motorcyclists— 94 percent
- 5 percent of crashes involving road factors. These were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance.

Rear-end/obstruction

Rear-end and obstruction type crashes are the third most common crash type in Kapiti Coast District representing 22 percent of the injury crashes. If reported non-injury crashes are included, they represent 33 percent of all crashes.

Serious crash numbers have shown a marginal increase in 2006 whereas minor injury crashes are showing a decreasing trend as shown in the following graph:

Rear-end injury crashes 2002-2006



The five most common crashes (arranged in descending order) 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

When examining the times that these crashes occur, the weekday evening hours from 3pm to 6pm are the most hazardous. The weekend peak crash hour occurs between 12pm and 2pm.

Driver factors play a significant part in crashes of this type. The number of crashes involving poor observation, which includes the driver failing to notice other traffic in front slowing, has increased in recent years. Unsafe following distances is also commonly recorded as a contributing factor in 2006.

These crashes were grouped together to identify any obvious problem spots. Majority of these crashes occurred on state highway 1 between Paekakariki and Paraparaumu. The most common place on local roads is Kapiti Road especially the approach to Rimu Road intersection.

Rear-end and obstruction crashes can more commonly be a route rather than a site specific problem. A combination of engineering, education and enforcement interventions can be used to address these crashes.

Licence status of at fault drivers is shown below:

| Licence status | Injury crashes percentage of at fault drivers | |
|----------------|---|-------------|
| | Kapiti Coast District | New Zealand |
| Full | 78.0 | 43.0 |
| Learner | 0.0 | 15.3 |
| Restricted | 10.0 | 22.5 |
| Never licensed | 0.0 | 4.5 |
| Disqualified | 5.0 | 4.1 |
| Overseas | 2.0 | 3.7 |
| Expired | 0.0 | 0.5 |
| Other/ unknown | 5.0 | 6.2 |

Further information regarding 2002 to 2006 rear-end and obstruction type injury crashes :

Local roads

- 5 serious and 43 minor injuries
- Male drivers at fault in injury crashes- 42 percent
- Most common crash factor— *attention diverted*
- Most common age groups— 20 to 24 and 55 to 59 years old
- Alcohol related crashes- 1 percent
- Worst months— January and May (6 crashes each)
- Worst day of the week— Friday (9 crashes)

State highways

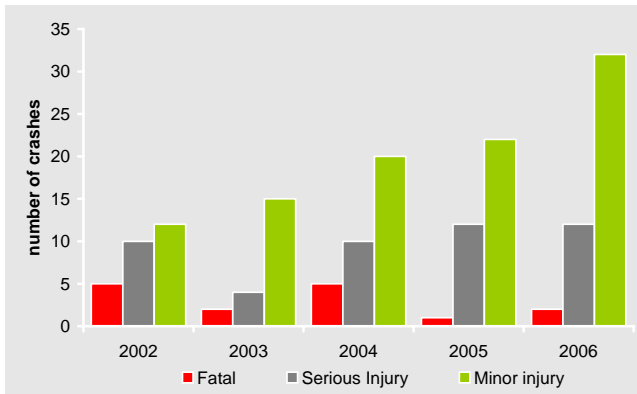
- 1 fatality, 9 serious and 64 minor injuries
- Male drivers at fault in injury crashes- 38 percent
- Most common crash factor— *following too closely*
- Most common age groups— 15 to 19 and 35 to 39 years old
- Alcohol related crashes- 6 percent
- Worst months— October and December (6 crashes each)
- Worst day of the week— Friday (9 crashes)

Loss of control

Between 2002 and 2006, 69 percent of all loss of control injury crashes in Kapiti Coast District occurred at bends. These crashes resulted in 17 fatalities, 81 serious injuries and 185 minor injuries.

There is a consistent increase in minor injury crashes in the last five years as shown in the table below. There is also a marginal increase in serious injury crash in the last two years when compared with previous years.

Loss of control injury crashes 2002-2006



The following table shows the split between crashes at bends and straights on local roads and state highways (SH):

| Loss of control | Local Urban | Local Rural | SH Urban | SH Rural |
|-----------------|-------------|-------------|----------|-----------|
| At Bends | 31 | 33 | 4 | 45 |
| On Straights | 15 | 2 | 4 | 30 |
| Total | 46 | 35 | 8 | 75 |

The following table lists the main characteristics of these injury crashes:

| Crash characteristics | Percentage |
|------------------------------------|------------|
| Single vehicle | 64 percent |
| Roadside object struck | 73 percent |
| Alcohol | 23 percent |
| Excessive speed for the conditions | 26 percent |
| Road factors | 10 percent |
| Poor handling | 37 percent |
| Rural road | 67 percent |
| Wet road | 19 percent |
| Night time | 45 percent |

The following table shows licence status of at fault drivers:

| Licence status | Injury crashes percentage of at fault drivers | |
|----------------|---|-------------|
| | Kapiti Coast District | New Zealand |
| Full | 57.0 | 51.1 |
| Learner | 10.0 | 10.7 |
| Restricted | 15.0 | 17.9 |
| Never licensed | 3.0 | 4.1 |
| Disqualified | 7.0 | 2.8 |
| Overseas | 3.0 | 5.6 |
| Expired | 0.0 | 0.9 |
| Other/ Unknown | 5.0 | 6.8 |

Most loss of control crashes involved drivers losing control of their vehicle and either running off the road or colliding with another vehicle. The three most common roadside hazards struck in injury crashes were fence (32), tree (22) and cliff/bank (19) from a total of 158 objects struck.

Further information regarding 2002 to 2006 injury crashes:

Local roads

- 2 fatalities, 35 serious and 88 minor injuries
- Male drivers at fault in injury crashes- 77 percent
- Most common crash factors— *too fast for conditions* and *poor handling*
- Most common age group— 15 to 19 years old
- Alcohol related crashes— 12 percent
- Worst month— February (11 crashes)
- Worst day of the week— Sunday (20 crashes)

State highways

- 15 fatalities, 46 serious and 97 minor injuries
- Male drivers at fault in injury crashes- 69 percent
- Most common crash factors— *poor handling* and *fatigue*
- Most common age groups— 15 to 19 and 30 to 34 years old
- Alcohol related crashes—15 percent
- Worst month— November (12 crashes)
- Worst day of the week— Sunday (19 crashes)

Crossing/turning

Crashes due to crossing/turning movements are the second most common crash type in Kapiti Coast District.

During the five year period from 2002 to 2006, there were 69 injury crashes at intersections and 29 injury crashes at driveways. In these crashes, 32 received serious injuries and 66 received minor injuries.

| Crossing/turning crashes | 2002 | 2003 | 2004 | 2005 | 2006 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|
| Injury crash | 13 | 21 | 16 | 25 | 23 |
| Non-injury crash | 35 | 61 | 38 | 37 | 48 |
| Total | 48 | 82 | 54 | 62 | 71 |

The table below shows the locations of five intersections with the highest number of crossing/turning crashes in Kapiti Coast District between 2002 and 2006:

| Intersection name | Total crashes 2002 - 2006 | Injury crashes 2002 - 2006 | Total crashes in 2006 |
|--------------------|---------------------------|----------------------------|-----------------------|
| SH1/Kapiti Road | 37 | 6 | 6 |
| SH1/Otaihanga Road | 15 | 8 | 2 |
| SH1/Raumati Road | 11 | 5 | 1 |
| SH1/Te Moana Road | 10 | 2 | 3 |
| SH1/Poplar Avenue | 7 | 4 | 1 |

Crashes at Tee-junctions in urban and rural areas are the most common type of intersection crashes reported, followed by crashes at driveways.

| Junction type | Rural | Urban |
|---------------|-------|-------|
| Tee | 25 | 28 |
| Driveways | 8 | 21 |
| Cross (X) | 0 | 12 |
| Y-type | 0 | 3 |

The most common crash is one in which vehicles failed to give way when turning right from a side road or driveway. The second highest is the one in which vehicles failed to find a safe gap in opposing traffic while making right turn.

Intersections present most drivers with one of their biggest driving challenges. The table below showing licence status of at fault drivers:

| Licence status | Injury crashes percentage of at fault drivers | |
|----------------|---|-------------|
| | Kapiti Coast District | New Zealand |
| Full | 71.0 | 60.9 |
| Learner | 4.0 | 9.4 |
| Restricted | 15.0 | 14.8 |
| Never licensed | 3.0 | 2.5 |
| Disqualified | 0.0 | 1.6 |
| Overseas | 6.0 | 3.7 |
| Expired | 0.0 | 0.8 |
| Other/ Unknown | 1.0 | 6.3 |

Further facts about 2002 to 2006 crossing/turning injury crashes :

Local roads

- 14 serious injuries and 45 minor injuries
- Male driver— 59 percent
- Most common crash factor— *failure to give way when turning to non turning traffic*
- Alcohol related crashes— 6 percent
- Crashes in urban areas—96 percent
- Crashes on wet roads—11 percent
- Crashes at night time—11 percent
- Worst months— January and August (6 crashes each)
- Worst day of the week— Thursday (11 crashes)

State highways

- 20 serious injuries and 72 minor injuries
- Male driver— 61 percent
- Most common crash factor— *failure to give way when turning to non turning traffic*
- Alcohol related crashes— 2 percent
- Crashes in urban areas—39 percent
- Crashes on wet roads—18 percent
- Crashes at night time—20 percent
- Worst month— March (7 crashes)
- Worst day of the week— Friday (11 crashes)

National issues

Speed

"Too fast" was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Kapiti Coast District, "Too fast" was recorded in 15 percent of injury crashes in the district in the last five years resulting in 1 death and 60 injuries. Sixty-two percent of speed-related crashes were loss of control at bends and at straight sections of the road.

Male drivers aged less than 30 years were most involved in speed-related crashes.

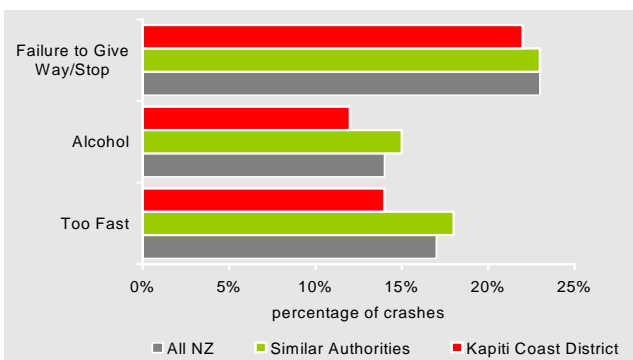
Alcohol

Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Kapiti Coast District, alcohol was involved in 13 percent of injury crashes in the district in the last five years resulting in 6 deaths, and 47 other injuries. Fifty-three percent of these were loss of control crashes at bends and at straight sections of the road.

People that drink and drive (with a blood alcohol level over 80mg per 100ml) are three times more likely to be involved in a crash than a sober driver.

Failure to give way

While most failure to give way crashes result in non-injury or minor-injury crashes, many can have serious consequences. Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. 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 35 serious and 67 minor injuries.



Restraints

Wearing a safety belt reduces the chance of death or serious injury in a crash by 40 percent. Whether you sit in the front or the back seat, the risk of serious or fatal injury is virtually the same.

Results from the 2006 national restraint wearing survey showed that the national average of front seat safety belt wearing was 95 percent, compared to 96 percent for Kapiti Coast District.

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