

briefing notes road safety issues

Gisborne 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 Gisborne District.

This report is the eighth road safety report for Gisborne District. Most of the data in this report applies to both local roads and state highways. Where relevant the details of the crashes 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 Gisborne District is compared to similar local authorities 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	
Gisborne District	Casualties	
Rural loss of control	Deaths	4
Intersection	Serious casualties	27
Vulnerable road users (cyclists, pedestrians & motorcyclists)	Minor casualties	136
Alcohol		
Nationally	Crashes	
Speed	Fatal crashes	4
Alcohol	Serious injury crashes	21
Failure to give way	Minor injury crashes	89
Restraints	Non injury crashes	325

Overview of crashes in 2006

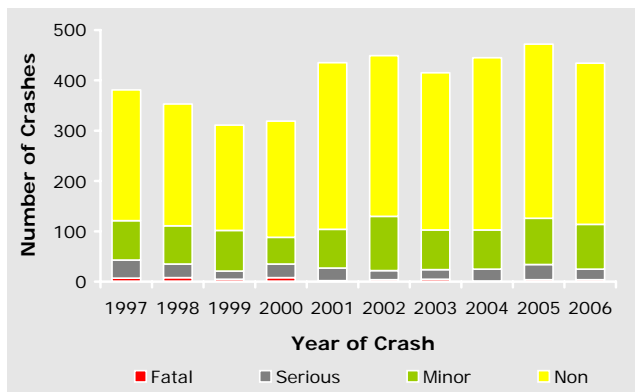
In 2006 there were 64 injury crashes and 243 non-injury crashes on local roads in the Gisborne District. In addition there were 50 injury crashes and 82 non-injury crashes on State Highways, as reported by the New Zealand Police.

The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and state highways (rural is defined as an area with a speed limit of 80km/h or more).

	Casualties in 2006			
	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	15	65	83
Urban	1	12	71	84
Total	4	27	136	167

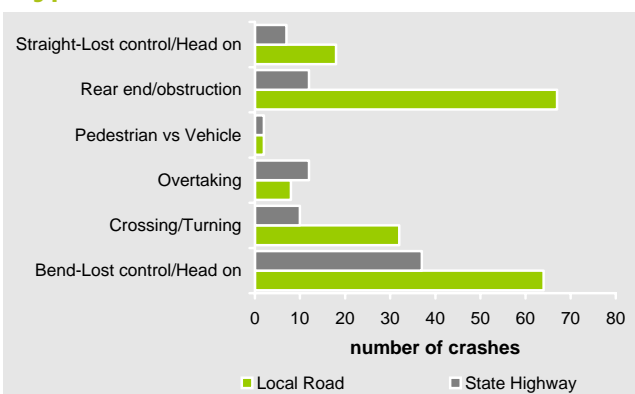
Fatalities, being rare and random, have varied widely in numbers over the last ten years in the district .

Crash trend 1997-2006



In 2006 on local roads both loss of control and crossing/turning related crashes are highly represented in injury crashes and as has been the case in previous years both these will be covered in this note.

Types of crash 2006



Rear end/Obstruction crashes may also be of concern however they include a high percent of minor manoeuvring incidents.

Further information about 2006 injury and non-injury crashes on:

Local roads

- Worst month February (11 percent)
- Worst day Friday (18 percent)
- Wet road 19 percent
- Night time 35 percent
- Mid-block 59 percent
- Multi-vehicle 72 percent
- Social cost of crashes \$35m
- 81 percent of at fault drivers are male (injury crashes)
- 48 percent of at fault drivers in injury crashes have a full NZ licence

State highways

- Worst month July (12 percent)
- Worst day Saturday (19 percent)
- Wet road 32 percent
- Night time 40 percent
- Mid-block 68 percent
- Single vehicle (59 percent)
- Social cost of crashes \$25m
- 61 percent of at fault drivers are male (injury crashes)
- 55 percent of at fault drivers in injury crashes have a full NZ licence

It has been observed nationally that there is a growing group of drivers who have not been progressing from learner or restricted licences to full licences.

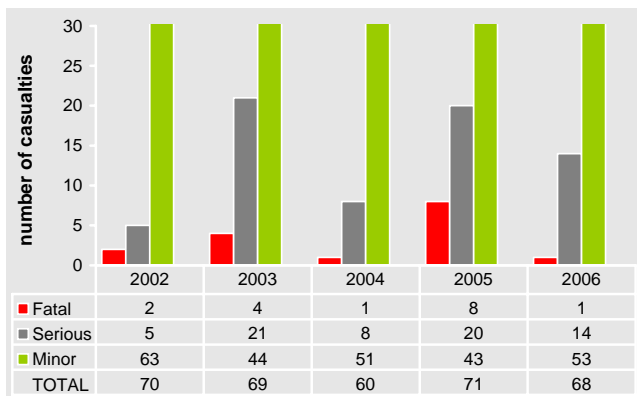
License Status	Injury crashes percentage of at fault drivers	
	Gisborne District	New Zealand
Full	50.5	58.4
Learner	13.1	9.5
Restricted	14.0	17.6
Never Licensed	4.6	2.2
Disqualified	3.7	1.7
Overseas	2.8	4.2
Expired	1.8	0.5
Other/Unknown	9.3	5.6

Loss of control at bends

Between 2002 and 2006, 37 percent of all injury crashes in Gisborne District were loss of control at bends. These crashes resulted in 16 fatalities, 68 serious injuries and 254 minor injuries. There were also 345 non-injury loss of control crashes reported.

Seventy percent of these occurred in a rural environment and 49 percent on local roads. Most crashes at bends involved a driver either running off the road or, on occasions colliding with another vehicle.

Loss of control casualties 2002-2006



When vehicles have left the road they often collide with roadside hazards such as ditches, banks, poles or trees. Hitting such objects can result in a more serious injury event.

The three most common roadside hazards, after fences (144), reported as struck in loss of control crashes in Gisborne District were ditches (106), into (87) or over (56) banks and poles (69) from a total of 621 objects struck.

The following table lists the main characteristics of

Crash characteristic	Crashes
Single vehicle	80 percent
Roadside object struck	621 in total
Alcohol (injury crashes)	29 percent
Too fast for the conditions (injury crashes)	32 percent
Road factors (surface conditions)	19 percent
Poor handling (injury crashes)	45 percent
On state highways	52 percent
Wet road	31 percent
Night time	46 percent

loss of control crashes.

Male drivers are deemed at fault in 67 percent of loss of control injury related crashes and in particular drivers between 30 and 49 years of age.

License status	Injury crashes percentage of at fault drivers	
	Gisborne District	New Zealand
Full	56.4	51.1
Learner	11.8	10.7
Restricted	15.6	17.9
Never licensed	4.7	4.1
Disqualified	2.8	2.8
Overseas	1.9	5.6
Expired	0.5	0.9
Other/ Unknown	6.2	6.8

The following table lists the license status of at fault drivers in loss of control injury crashes at bends:

Further facts about loss of control at bends crashes are:

Local roads

- 4 deaths, 26 serious injuries and 112 minor injuries
- 39 percent of at fault drivers are aged between 15-24 years old
- 43 percent of injury crashes involved alcohol
- 43 percent of injury crashes involved "speed"
- Worst periods mid summer and mid winter
- Worst day of week Saturday (26 percent)

State highways

- 12 deaths, 42 serious injuries and 142 minor injuries
- 52 percent of at fault drivers are aged between 30-49 years old
- 20 percent of injury crashes involve alcohol
- 24 percent of injury crashes involve "speed"
- Fatigue is a factor in 20 percent of injury crashes
- 3 pm to 6 pm over the weekends is the worst time period

Recommended actions

Engineering

- Establish programmes to review, upgrade and maintain warning signs, markings and delineation
- Maintain roadsides clear of hazards and provide side protection where appropriate
- Widen carriageways & seal shoulders to provide additional vehicle wander. Improve geometry
- Maintain pavement surfaces to provide good standards for skid resistance

Education

- Focus on raising awareness of concerns about inappropriate speed
- Raise drivers awareness of key speed issues and the need to drive according to road conditions
- Raise property owners' awareness of their responsibility to have secure road frontage fencing to prevent stock from wandering

Enforcement

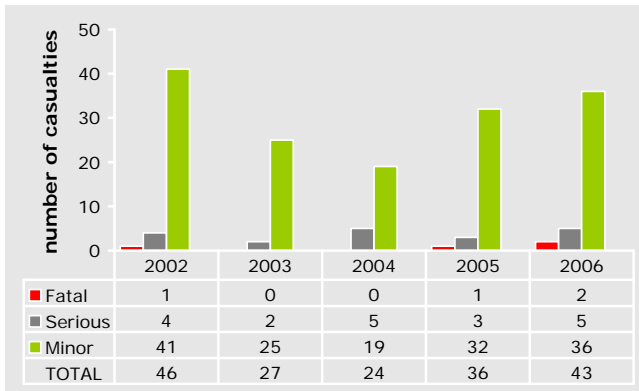
- Continued enforcement focusing on inappropriate speed in rural area

Intersections

Thirty-four percent of the injury crashes, reported in Gisborne District for the period 2002-2006, occurred at intersections.

These crashes resulted in 3 deaths, 41 serious injuries and 220 minor injuries. There were also 603 non-injury crashes reported.

Casualties trend 2002-2006



The table below shows intersections with high number of injury crashes on local roads in Gisborne District between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
Gladstone/Disraeli	7	3	2
Stanley/Childers	5	4	1
Rutene/De Lautour	13	3	3
Wi Pere/Stout	11	6	1
Gladstone/Lytton	11	5	2

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

Junction Type	Rural	Urban
T	55	232
Driveways	2	23
Cross (X)	15	292
Y	11	12
Roundabout	3	150
Total	89	711

The main factors contributing to injury crashes at intersections described in the crash reports were:

- Failure to stop and give way (90 percent)
- Not checking properly (61 percent)
- General errors of judgement (16 percent)

Intersections present drivers with one of their biggest driving challenges and this is reflected in the 25 percent of less experienced drivers being deemed at fault in these crashes as illustrated in the table below showing licence class of at fault drivers .

Licence Status	Injury crashes Percentage of at fault drivers	
	Gisborne District	New Zealand
Full	56.2	60.9
Learner	11.9	9.4
Restricted	17.0	14.8
Never Licensed	4.5	2.5
Disqualified	1.7	
Overseas	2.3	3.7
Expired	0.5	
Other/ Unknown	5.7	6.3

Further facts about crashes at intersections in Gisborne District from 2002 to 2006 on:

Local roads

- 1 death, 23 serious injuries and 161 minor injuries
- Male drivers (64 percent) at fault in injury crashes
- Drivers aged between 15-19 years old at fault in injury crashes (18 percent)
- Principal factor in injury crashes *failed to give way/stop* (60 percent)
- Poor observation/judgement shown in over 52 percent of injury crashes
- 96 percent crashes at urban intersections
- 21 percent wet roads
- 27 percent night time
- Alcohol involved in 17 percent injured crashes
- Excessive speed involved in 9 percent of injured crashes
- Worst months February, May, July and August (10 percent each)
- Worst day of week Friday (21 percent)
- Between 3 pm and 6 pm (29 percent) on any weekday

State highways

- 2 deaths, 18 serious injuries and 59 minor injuries
- Male drivers (76 percent) at fault in injury crashes
- Drivers aged between 15-19 years old most at fault in injury crashes (30 percent)
- Principal factor in injury crashes *poor observations* (48 percent)
- Failure to give way shown in over 41 percent of injury crashes
- 63 percent at urban intersections
- 22 percent wet roads
- 32 percent night time
- Alcohol involved in 22 percent injured crashes
- Excessive speed involved in 20 percent of injured crashes
- Worst month December (12 percent) then June (11 percent)
- Worst days of week Thursday and Friday (17 percent each)
- Between 3 pm and 6 pm (29 percent) on any weekday

Recommended actions

Engineering

- Ensure there is appropriate sight distance at intersections and correct intersection controls are in place
- Carry out safety audits and continue with crash reduction studies to investigate and if required, carry out remedial work at intersections
- Remedy deficiencies in roundabout design to further address crashes at roundabouts

Education

- Focus on road-user behaviour at intersections, including roundabouts
- Consider targeted advertising promotions involving community consultation when determining appropriate media channel and style of resource to be developed

Enforcement

- Increase enforcement of compliance with controls at intersections
- Conduct enforcement campaigns targeting intersections with high crash rates and at times when crashes most frequently occur

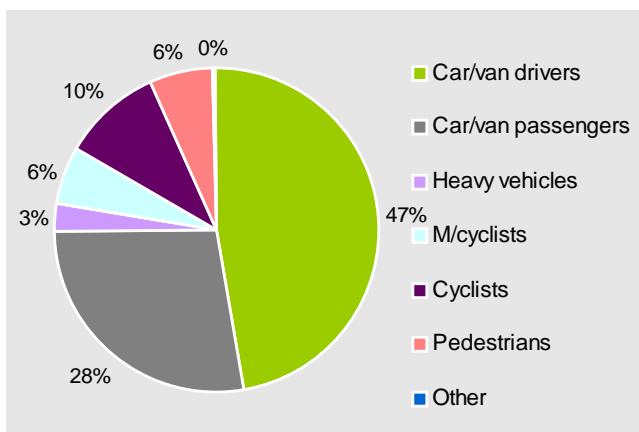
Vulnerable road users

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

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport.

It is vitally important to recognise that promotion alone of cycling and walking is not going to be effective at increasing their mode share unless they can be made safer.

Casualty types 2002-2006



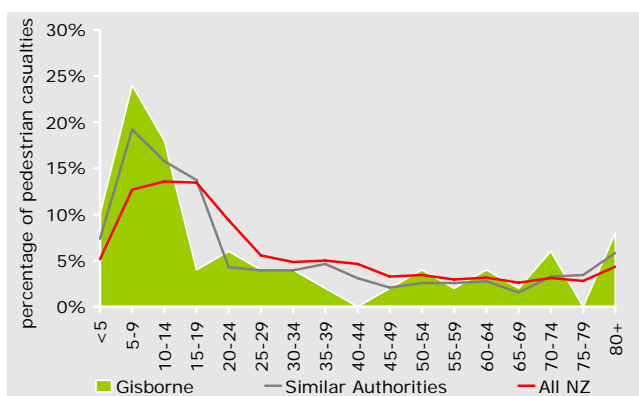
Pedestrians

Pedestrians in Gisborne District, represent 6 percent of all road injuries. Fortunately there have been no fatalities in the last five years.

Most (95 percent) pedestrian accidents occurred in urban areas. Half have occurred at intersections, and 24 percent occurred during the hours of darkness.

A significant number (52 percent) of the pedestrians injured are under 15 years old.

Pedestrian casualty age 2002-2006



Recommended actions

Education

- Promotion of safe walking habits.
- Continue to support 'walking school bus' programmes
- Raise driver awareness of pedestrians as vulnerable road users.

Engineering

- Continue to improve pedestrian facilities in Gisborne City particularly on routes where pedestrians are more frequently injured.
- Ensure adequate sight distance is provided at pedestrian crossing points.
- Programme and implement recommendations from Gisborne District's Cycling and Walking Strategy.

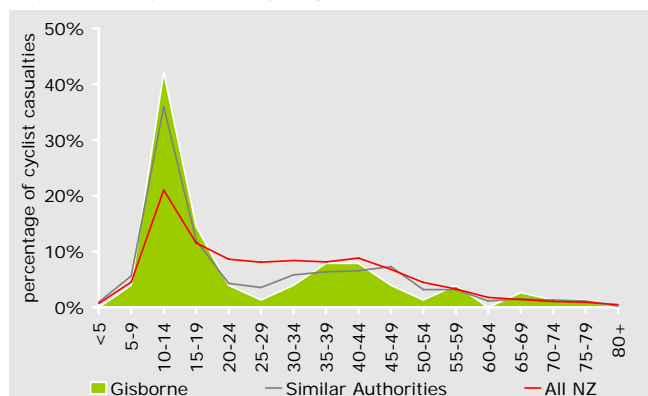
Cyclists

Cyclist injuries represent 10 percent of all injuries in the last 5 years. Most (96 percent) cycling crashes occur on urban roads at intersections and during day-light hours.

Last year (2006) 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 casualties have been found to be increasing.

The cyclists injured are not spread evenly across all ages as shown in the chart below. Approximately a third of all the injured cyclist were young children of age between 10 and 14 years.

Cyclist injuries by age 2002 -2006



Further information regarding 2002 to 2006 cycling crashes in local roads and state highways:

- 1 death, 6 serious injuries and 76 minor injuries
- The most common crash type was a *crossing or turning movement*. The second was *rear end or obstruction collisions*.
- 90 percent on local roads
- 67 percent at intersections
- 67 percent of drivers and 28 percent of cyclists failed to give way
- 47 percent of drivers and 24 percent of cyclists were not looking for other parties
- 16 percent at night
- Worst month March (15 percent)
- Worst day of the week Thursday (26 percent)
- 84 percentage of cyclist injured that were male

Recommended actions

Education

- Continue to support safe cycling programmes in schools
- Continue to focus on improving driver awareness of cyclists, especially at intersections
- Implement activities to work in conjunction with nationally driven campaigns, such as National Bike Week and back to school promotions

Enforcement

- Co-ordinate enforcement campaigns targeting cycle safety, working in conjunction with community programmes
- Increase enforcement of road-user compliance with Give Way, Stop and signal controls at intersections

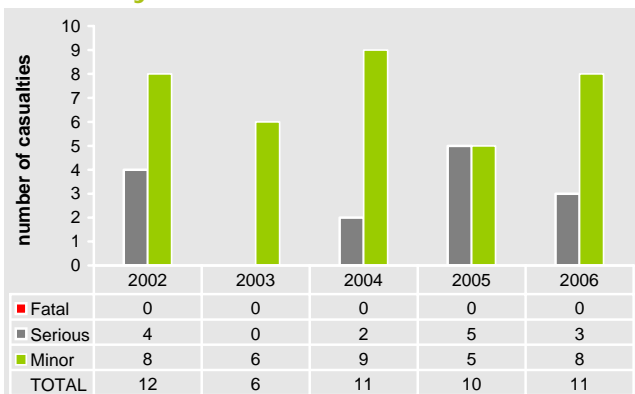
Engineering

- Progress the development of a cycling strategy for the Gisborne city
- Continue to provide cycle facilities such as formal marked cycle lanes and establish cycleways to improve safety for cyclists

Motorcyclists

Nationally motorcycling 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.

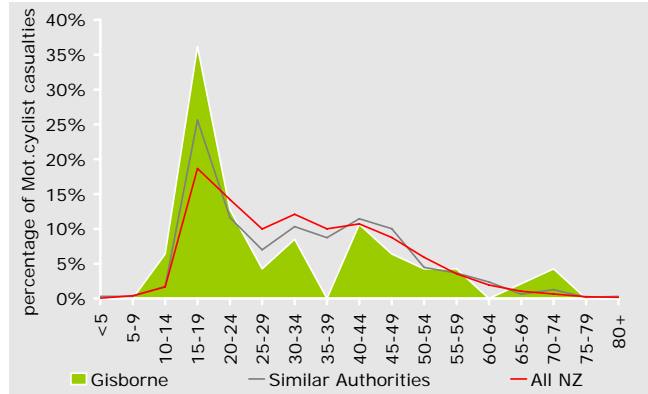
Casualty trend 2002-2006



Motorcyclist injuries in Gisborne District represent 10 percent of all injuries. There has been little variation in the total number of injuries in the last 5 year period.

Almost 50 percent of motorcycle casualties were in the 15 to 30 year age group the majority of which were males. The 20 to 24 year age group accounted for more than 20 percent of casualties.

Motorcyclist injuries by age 2002 -2006



Further information regarding 2002 to 2006 motorcycling crashes:

- 14 serious and 36 minor injuries
- The most common crash type was a *crossing or turning movement* (42 percent), followed by *rear end/obstruction* (26 percent) and *loss of control at bend* (17 percent)
- 22 percent on state highways
- 52 percent at intersections
- 20 percent at night and 14 percent in the wet
- Worst month May (18 percent)
- Worst day of week Friday (24 percent)
- 90 percent of motorcyclists injured were male
- 22 percent single motorcycle crash
- Motorcyclist at fault in 35 percent of multi-vehicle crashes
- 9 percent of crashes involving road factors which were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance

Recommended actions

Education

- Focus on improving driver awareness of motorcyclists especially at intersections
- Develop safe riding courses for motorcyclists.
- Continue to involve motorcycling groups/clubs (eg. Ulysses) in raising motorcyclist and other road users awareness of concerns with the safety relating to motorcyclists
- Promote the wearing of high visibility clothing by motorcyclists

Enforcement

- Co-ordinate enforcement campaigns targeting cycle and motorcycle safety
- Increase enforcement of road-user compliance with give way, stop and signal controls at intersections

Engineering

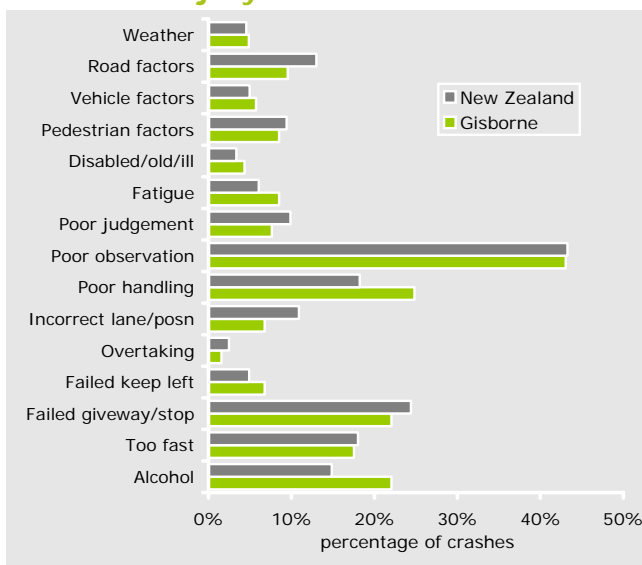
- Ensure adequate visibility is provided and maintained at intersections
- Ensure pavement skid resistance quality is maintained

Alcohol

In New Zealand for the 12 months to December 2006, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 16 percent of all injury crashes.

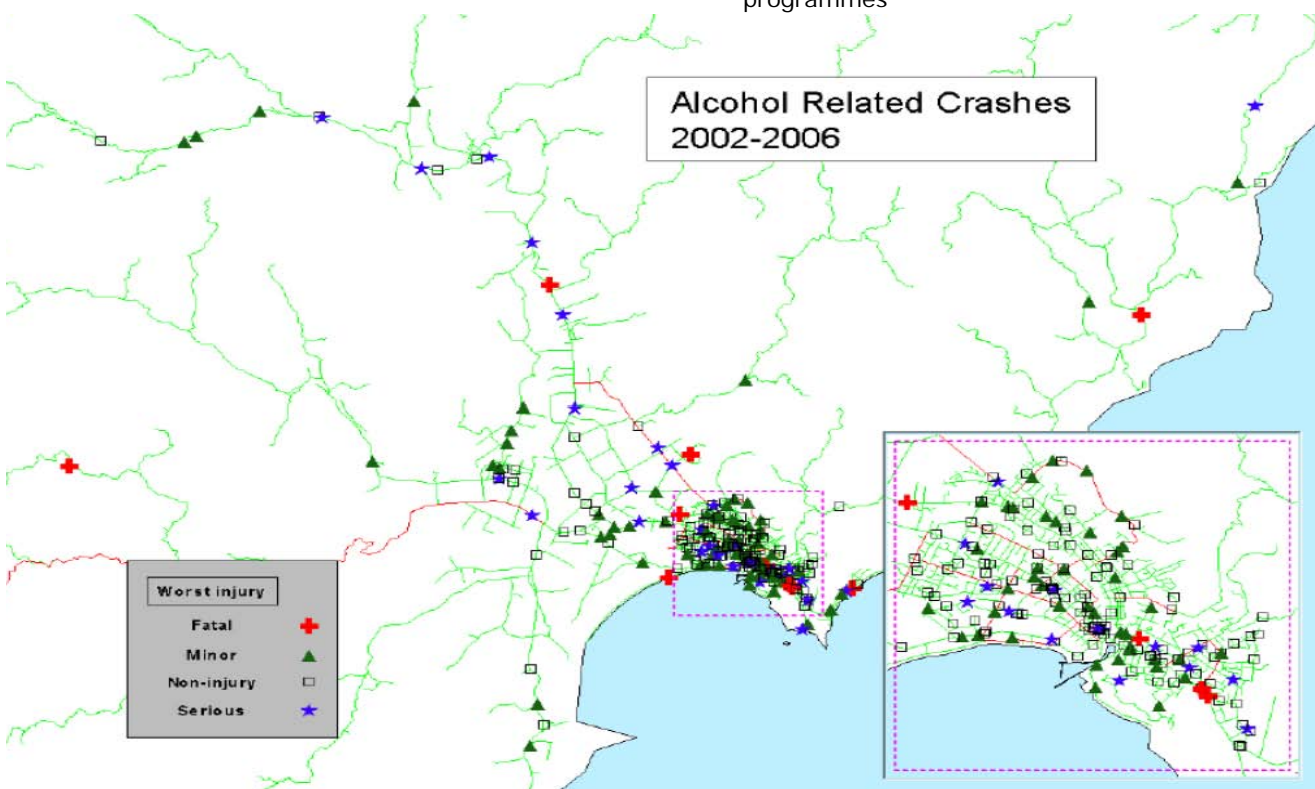
In the Gisborne District, alcohol was a factor in 22 percent of injury crashes in 2006, a slight decrease from 2005, but still notably above national level. There were 127 alcohol-related injury crashes reported in the last five years. Seventy-three percent of crashes involving alcohol were in local roads and 68 percent in urban areas. Sixty-eight percent of crashes involved single vehicle. Wet road was factor for 28 percent of crashes.

Factors in injury crashes 2002-2006



Key locations

The following map gives an indication of some of the locations in Gisborne District at which drink-driving crashes occurred during the 2002 to 2006 period.



The following table illustrates the licence status of at fault drivers in alcohol related injury crashes.

License status	Percentage of at fault drivers	
	Gisborne	New Zealand
Full	42.7	41.6
Learner	13.7	15.8
Restricted	15.3	20.8
Never licensed	4.8	4.6
Disqualified	7.3	6.2
Overseas	1.6	1.0
Expired	1.6	1.4
Other/unknown	12.9	8.2

Further facts about alcohol related crashes in Gisborne District 2002-2006:

- 17 deaths, 46 serious injuries 131 minor injuries
- 124 injury and 166 non-injury crashes reported
- 79 percent of at fault drivers are male
- Most common crash type *loss of control/head-on at bends* (48 percent)
- 72 percent night time
- Worst month March (11 percent)
- Worst day of week Saturday (31 percent)

Recommended actions

Education

- Promote safe drinking and driving habits, particularly among male drivers aged 15 to 40
- Encourage and support licensees to actively promote host responsibility practices and designated driver schemes
- Work with community groups to convey sober driver messages to young drivers

Enforcement

- Target enforcement at known high-risk areas and times and to the appropriate age group.
- Co-ordinate enforcement campaigns targeting drink-driving
- Continue to support compulsory breath testing programmes

National issues

Speed

Speed *too fast* was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Gisborne District this has resulted in 3 deaths and 148 other injuries. Speed as a factor in crashes is not reducing in the district.

Eighty percent of speed-related crashes involved loss of control of vehicles or, on occasions head on with others. Alcohol and poor handling were the other driver factors most often associated with speed. Male drivers aged under 40 years old were most involved in speed-related crashes.

Alcohol

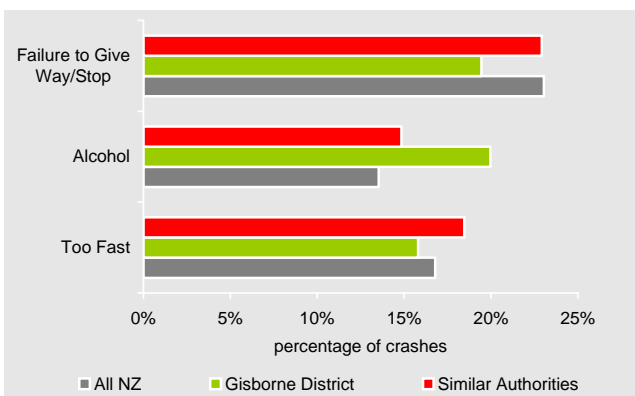
Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Gisborne District this has resulted in 17 deaths, 46 serious injuries 131 minor injuries. The number of injury crashes involving alcohol is increasing.

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

Failure to give way

Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. In Gisborne District this has resulted in 3 deaths, 21 serious injuries and 148 minor injuries.

Ninety percent of these are crossing/turning manoeuvres often associated with failure to look for other parties. For drivers at fault in injury crashes 64



percent are male and all age groups are represented.

Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

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

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