

# briefing notes road safety issues

## Napier City

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 Napier City.

This report is the eighth road safety report for Napier City. 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 road 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 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 Napier City 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 Napier City for 2006.

Major road safety issues	2006 road trauma	
Napier City	Casualties	
Intersections	Deaths	6
Pedestrians	Serious casualties	39
Cyclists	Minor casualties	125
Motorcyclists		

Nationally	Crashes	
Speed	Fatal crashes	6
Alcohol	Serious injury crashes	32
Failure to give way	Minor injury crashes	98
Restraints	Non injury crashes	479

## Overview of crashes in 2006

In 2006 on local roads in Napier City there were 93 injury crashes and 380 non-injury crashes. In addition there were 43 injury crashes and 99 non-injury crashes on State Highways, as reported by the New Zealand Police.

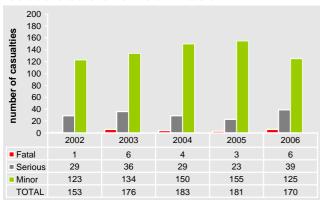
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

	Casualties in 2006			
	Fatalities	Serious injuries	Minor injuries	Total
Rural	5	15	28	48
Urban	1	24	97	122
Total	6	39	125	170

It should be noted that 2 out of 6 fatalities in 2006 were pedestrians.

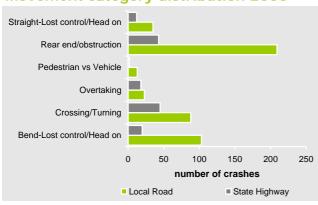
Although total number of casualties in 2006 is the second lowest in the last 5 years, number of fatalities as well as serious injuries were the highest in the five year period.

#### Casualties trend 2002-2006



The following chart shows the distribution of the injury and non-injury crashes on local roads and state highways in year 2006 by movement category.

#### Movement category distribution 2006



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

#### Local roads

- Worst month December (13 percent), best month February (5 percent)
- Worst day Thursday (17 percent), best day Tuesday (12 percent)
- Wet road 16 percent
- Night time 33 percent
- Mid-block 59 percent
- Social cost of crashes \$27m
- At fault male driver (injury crashes) 60 percent
- Full NZ licence (injury crashes) 49 percent of the at fault drivers

#### State highways

- Worst month October (11 percent), best month February and September (6 percent)
- Worst day Thursday (16 percent), best day Sunday (11 percent)
- Wet road 19 percent
- Night time 31 percent
- Mid-block 37 percent
- Social cost of crashes \$29m
- At fault male driver (injury crashes) 73 percent
- Full NZ licence (injury crashes) 51 percent of the at fault drivers

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 drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

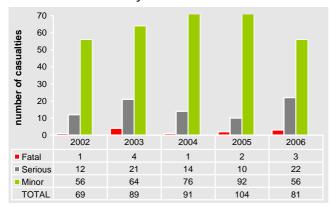
In Napier City with 34 percent of the at fault drivers in injury crashes in 2006 are either never licensed or holders of learner or restricted driving licences.

License status	Injury crashes percentage of at fault drivers		
	Napier City	New Zealand	
Full	49.6	58.4	
Learner	15.5	9.5	
Restricted	18.6	17.6	
Never licensed	5.4	2.2	
Disqualified	0	1.7	
Overseas	3.1	4.2	
Expired	0.8	0.5	
Other/unknown	7.0	5.6	

## **Intersections**

In Napier City, crashes due to crossing/turning movements are the second most common crash type with most of them occurring at the intersections.

In the five year period 2002 to 2006 there were 10 fatal, 63 serious injury, 259 minor injury and 1070 non-injury crashes at intersections. The crashes resulted in 11 deaths, 79 received serious injuries and 344 received minor injuries.



The table below shows intersections with high numbers of crashes between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
SH 50 /Meanee Rd	23	6	5
SH 2 /Meanee Quay	20	7	6
Prebenson Dr / Severn St	15	7	4
SH 2 /Kennedy Rd	18	4	6
SH 2 /Latham St	19	3	6

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

Junction Type	Rural	Urban
Т	52	648
Driveways	1	49
Cross (X)	42	388
Υ	1	13
Roundabout	5	189
Multi Rd Join	0	11
Unknown	0	3

The main causes contributing to crashes described in Police reports were:

- vehicles failed to give way at give way signs
- did not see/look where required
- driver failed to give way when turning to non turning traffic

Intersections present most drivers with one of their biggest driving challenges and as a result less experienced drivers are well represented 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	
	Napier City	New Zealand
Full	56.9	60.9
Learner	13.8	9.4
Restricted	13.8	14.8
Never licensed	3.8	2.5
Disqualified	0.3	0
Overseas	2.2	3.7
Expired	0.6	0
Other/ Unknown	8.5	6.3

Further facts about crashes at intersections in Napier City (2002 to 2006)

#### Local roads

- 2 deaths, 40 serious injuries and 244 minor injuries
- Male driver at fault 52 percent in injury crashes
- Most common crash factor failure to give way
- 12 percent alcohol over limit in injury crashes
- 19 percent on wet roads
- Worst months May and June (10 percent each)
- Worst day of week Friday (18 percent)

#### State highways

- 9 deaths, 39 serious injuries, 100 minor injuries
- Male driver at fault 68 percent in injury crashes
- Most common crash factor failure to give way
- 6 percent alcohol over limit in injury crashes
- 44 percent on wet roads
- Worst month October (10 percent)
- Worst day of week Wednesday (21 percent )

#### **Recommended actions**

#### Engineering

- Continue with crash reduction studies to investigate and carry out remedial work at both local road and state highway intersections
- Ensure adequate sight distance is available at intersections and appropriate controls are installed
- Carry out existing road safety audits of intersections including signalised intersections

## Education

- Focus on road-user behaviour at intersections, incl. traffic signals, roundabouts and driveways
- Continue with targeted campaigns and advertising promotions

#### **Enforcement**

- Increase enforcement of compliance with Give Way, Stop and signal controls at intersections
- Conduct enforcement campaigns, in conjunction with community programmes targeting intersections
- Support risk targeted patrol planning to identified black spots in the city

## Vulnerable road users

#### (pedestrian, cyclist and motorcyclist)

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.

Getting there - on foot, by cycle aims to improve environments for walking and cycling, improve safety for pedestrians and cyclists, and increase the choice of walking and cycling for day-to-day transport.

As a result Land Transport NZ expects local bodies to take a proactive approach to this subject. This should include the development of a walking and cycling strategy and making appropriate funding applications to progress that strategy.

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.

## **Pedestrians**

Pedestrian casualties feature highly in the total road injury picture in Napier City, representing 13 percent of all injuries, they also make up 22 percent of all fatalities in the last five year period.

In 2006, the number of pedestrian casualties, both fatalities and serious injuries were one of the highest in the last five year period. Pedestrian deaths constitute one third of all fatalities in 2006.

#### Casualties trend 2002 -2006



Most of the pedestrian crashes occurred on urban local roads, out of which 62 percent occurred in mid-block. Thirty-one percent of these crashes occurred during the hours of darkness.

Napier City is experiencing a problem with a significant number of pedestrian crashes involving young people crossing the road. Approximately 30 percent of pedestrians injured during this five year period were between 5 and 14 years of age.

#### Pedestrian injuries by age 2002 -2006



Following are the non driver crash factors involved in pedestrian crashes:

- 41 percent involved pedestrian crossing roads (walking/running) heedless of traffic
- 11 percent of pedestrians were intoxicated
- 13 percent of pedestrians were unsupervised children or ones who had escaped from supervision

Pedestrian crashes are concentrated on arterial and collector roads. The routes with a high number of injuries crashes are shown in the table below.

Route	Number of pedes- trian injury crashes
Dickens St	7
Hastings St	7
Kennedy Road	5
Tennyson St	4
Carlyle St	4
SH 2	4

Further information regarding 2002 -2006 pedestrian injury crashes:

#### Local roads and state highways

- 2 deaths, 15 serious injuries and 42 minor injuries
- Worst months April, May and October (11 percent each)
- Worst day of week Friday (21 percent), best day Monday (6 percent)
- Number of at fault drivers 28 in 5 years

#### **Recommended actions**

#### Education

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

#### Engineering

 Improve pedestrian facilities, particularly on routes where pedestrians are more frequently injured.

## Cyclists

Cyclists feature highly in the total road injury picture in Napier City. They represent 18 percent of all injuries in the last five years.

#### Casualties trend 2002 -2006

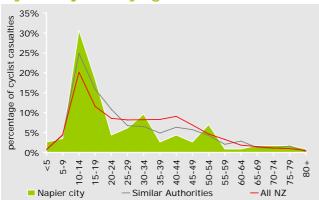


Most (96 percent) cycling crashes occurred on urban roads, 63 percent at intersections and 84 percent during daylight hours.

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.

Cyclist injuries are not spread evenly across all age distributions as shown in the chart below. Significant number of injured cyclist were between 10 and 14 years of age.

#### Cyclist injuries by age 2002 -2006



Further information regarding 2002 to 2006 cycling crashes:

#### Local roads

- 9 serious and 90 minor injuries
- The most common crash type was a crossing or turning movement. The second was rear end or obstruction types
- 58 percent at intersections

- 16 percent at night
- Worst month March (19 percent), best month February (3 percent)
- Worst day of the week Friday (19 percent), best day Saturday (11 percent)
- 53 percentage of cyclists injured were male

#### State highways

- 3 serious and 20 minor injuries
- The most common crash type was a crossing or turning movement The second was rear end or obstruction types
- 81 percent at intersections
- 11 percent at night
- Worst month February, August and December (15 percent each)
- Worst day of the week Friday (22 percent)
- 79 percent of cyclists injured were male

## **Recommended actions**

#### Education

- Continue to support safe cycling programmes in schools
- Focus on improving driver awareness of cyclists especially at intersections and driveways
- Implement activities including National Bike Week and back to school promotions
- Working closely with local cycling clubs

#### **Enforcement**

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

#### Engineering

- Implement the recommendations of Napier's Cycling Strategy
- Establish dedicated cycle lanes with formal road marking and cycle ways in the city commencing with routes with high cycle crash rates eg. Kennedy Road, Taradale Road

## Motorcyclists

Motorcyclists in Napier City make up 9 percent of all injuries and make up 10 percent of all fatalities. Total number of serious injuries were highest in 2006 in comparison to any single year in the last five year period.

#### Casualties trend 2002 -2006



Nationally motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just 6 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 percent of road fatalities in New Zealand.

Most (88 percent) motorcycling crashes happened on urban roads. Almost half of the motorcycling crashes happened at intersections.

Almost 30 percent of motorcycle casualties were in 15-19 age group, the majority of which were males.

#### Motorcyclist injuries by age 2002 -2006



Further information regarding 2002 to 2006 motorcycling crashes:

#### Local roads

- 1 death, 7 serious and 43 minor injuries
- The most common crash type was a crossing or turning movement (37 percent). The second was rear end/obstruction (32 percent)

- 45 percent were at intersections
- 25 percent at night
- 11 percent on the wet roads
- Worst month December (15 percent)
- Worst days of week Friday and Sunday (17 percent each)
- 58 percent of motorcyclists injured were male

#### State highways

- 1 death, 3 serious and 12 minor injuries
- The most common crash type was crossing/ turning (33 percent) followed by bend –lost control/head on & rear end/obstruction (28 percent)
- 55 percent at intersections
- 17 percent at night
- 11 percent in the wet
- Worst month February (22 percent)
- Worst days of the week Thursday (22 percent)
- 73 percent of motorcyclists injured were male

Thirty-three percent of crashes involved 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

- Focusing on improving driver awareness of motorcyclists especially at intersections
- Develop safe riding courses for motorcyclists
- Continue to involve motorcycle clubs (eg. Ulysses) in raising motorcyclist and other road user awareness of concerns with the safety relating to motorcyclists

#### **Enforcement**

- Co-ordinate enforcement campaigns, programmes 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 particularly on local rural roads and state highways

## **National** issues

## **Speed**

Speed *too fast* was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Napier city this factor was recorded in 13 percent of injury crashes resulting in 8 deaths, 37 serious and 90 minor injuries. There were also 266 non-injury speed-related crashes reported. Speed as a factor in crashes is not reducing in Napier City.

Sixty-six percent of speed-related injury crashes were at bend due to lost control/head on.

Male drivers aged less than 19 years were involved in almost half of the speed-related crashes.

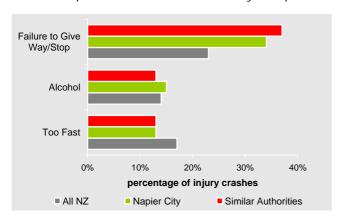
#### **Alcohol**

Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Napier city this factor was involved in 15 percent of injury crashes resulting in 5 deaths, 39 serious and 93 minor injuries. Alcohol as a factor in crashes is not reducing in Napier City.

Forty-seven percent of alcohol-related injury crashes were bend-lost control/head on and 34 percent were associated with speed.

## 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 Napier City this was involved 26 percent of all reported injury crashes for the last five years resulting in 4 deaths, 50 serious injuries and 252 minor injuries. There were also 541 non-injury crashes reported with this factor. Ninety-one percent



of the crashes were in urban areas of the district.

#### **Restraints**

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional 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/

## **Contacts**

#### **Land Transport New Zealand**

#### Napier Regional Office

Level 3 Dunvegan House 215 Hastings Street PO Box 972, Napier 4140 Telephone 06 974 5520

www.landtransport.govt.nz

#### Partnerships Manager Central

Ian Hunter (04 931 8904)

#### Performance Information Manager Central

Nabin Pradhan (04 931 8928)

#### **Manager Programmes**

Denise Elers (06 974 5526)

#### Senior Area Engineer

Colin Goble (06 974 5522)

#### **Napier City Council**

Jon Schwass Private Bag 6019 Napier Telephone 06 835 7579

relephone od odd 7077

#### **Transit New Zealand**

## Area Engineer Safety

Ken Holst P O Box 740, Napier Telephone 06 831 0700

#### **Regional Road Safety Coordinator**

Sally Phelps

RoadSafe Hawkes Bay C/- HB Regional Council P O Box 7295, Taradale Napier

Telephone 06 845 9252

#### **New Zealand Police**

Andy Sloane Senior Sergeant Traffic PO Box 245, Napier Telephone 06 831 0700