

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 2003–2007 period.

This report is the ninth road safety report for Napier city. Most of the information, unless otherwise stated in this report, applies to both local roads and state highways.

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

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

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

Major road safety issues		2007 road trauma	
Napier City		Casualties	Napier City
Intersections		Deaths	3
Pedestrians, Cyclists, Motorcyclists		Serious casualties	36
Speed		Minor casualties	179
Alcohol			
Nationally		Crashes	Napier City
Speed		Fatal crashes	3
Alcohol		Serious injury crashes	30
Failure to give way		Minor injury crashes	133
Restraints		Non injury crashes	538

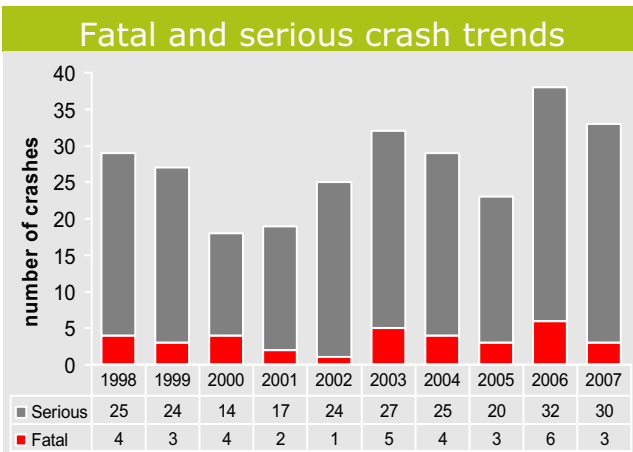
Overview 2007

In 2007 in Napier City there were 166 injury crashes and 538 non-injury crashes reported by the New Zealand Police. Twenty five percent of the total injury crashes in the city were on state highways. The table below shows the number of injuries resulting from these crashes in the city.

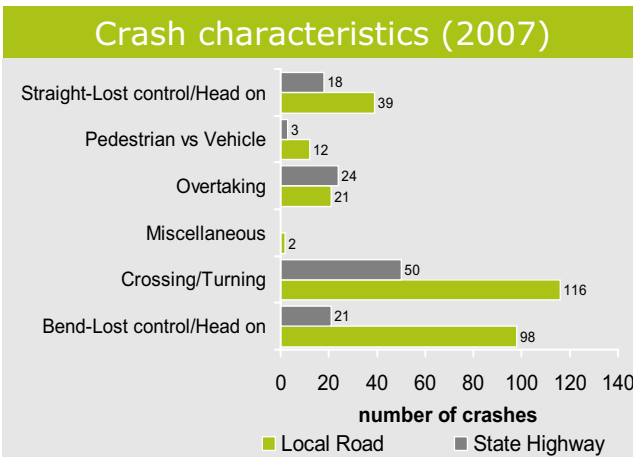
Casualties by injury type in 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Total	3	36	179	218
Local roads Vs State highways				
Local Roads	1	27	128	156
State Highway	2	9	51	62
Rural Vs Urban roads				
Rural ¹	3	12	28	43
Urban	0	24	151	175

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

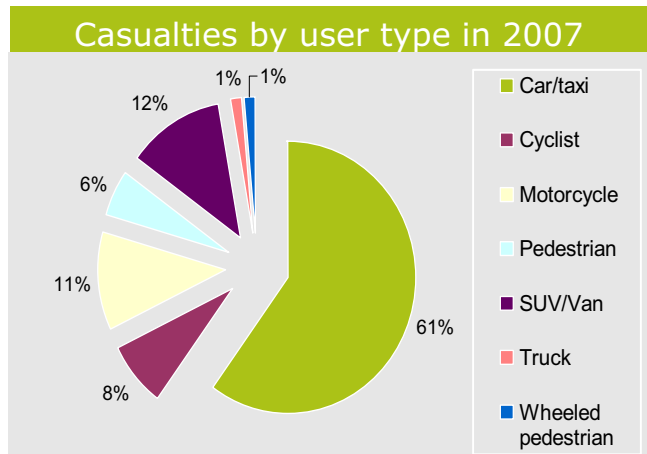
There has been an increasing trend in number of serious and fatal crashes since 2000.



In 2007 *Crossing/turning* and *Bend – lost control/head-on* were predominant crash types in the city.



The highest number of casualties in 2007 were drivers and passengers of car followed by those of SUV/van motorcyclists, cyclists and pedestrians.



Further information about all crashes in 2007 on:

Local roads

- Worst day of week: *Thursday* (17 percent)
- Night time: 30 percent
- Alcohol over limit: 15 percent
- Too fast for conditions: 15 percent
- Intersection: 43 percent
- Road factors: 6 percent
- At fault or part fault male driver: 60 percent
- 35 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed

State highways

- Worst day of week: *Friday* (20 percent)
- Night time: 21 percent
- Alcohol over limit: 5 percent
- Too fast for conditions: 14 percent
- Intersection: 67 percent
- Road factors: 5 percent
- At fault or part fault male driver: 55 percent
- 24 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed

Social cost of crashes

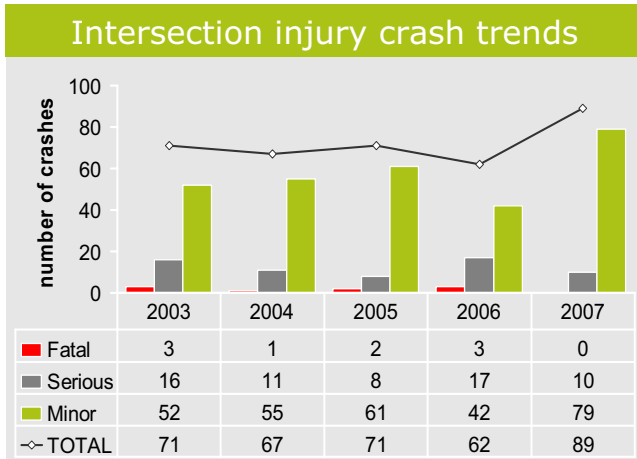
Local roads	\$ 32.08M
State highways	\$ 17.34M
Total	\$ 49.42M

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

Intersections

During the five year period 2003 to 2007, 49 per cent of all crashes in Napier city occurred at intersections. These crashes resulted in 10 deaths, 77 serious injuries and 394 minor injuries. There were further 1152 non-injury crashes reported.

The number of fatal and serious injury crashes have been fluctuating in the last five years. Significant increase is observed in 2007 in comparison to 2006.



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

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
Kennedy Rd / Riverbend Rd	21	8	1
Prebensen Dr / Severn St	12	6	4
Wycliffe St / Riverbend St	8	5	1
Carlyle St / Faraday St	6	4	2
Church Rd / Puketapu Rd	6	4	0
Kennedy Rd / Bill Hercocock St	9	4	4

T (tee) junctions and cross roads in urban areas are the most common type of the reported intersection crashes, followed by roundabouts.

Junction type	Rural	Urban
T (tee)	52	692
Driveways	1	51
X (cross)	42	411
Y	1	16
Roundabout	11	224
Multi-road Join	0	9

Further information about all crashes at intersections in the city for the period 2003 to 2007 on:

Local roads

- 2 deaths, 41 serious injuries and 277 minor injuries
- Worst day of week: *Friday (18 percent)*
- Night time: *28 percent*
- With alcohol over limit: *12 percent*
- Most common injury crash factor: *failed to give-way/stop (54 percent)* followed by *poor observation (51 percent)*
- Road factors: *7 percent*
- At fault male driver (injury crashes): *52 percent*
- 37 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common age range (injury crashes): *distributed to drivers of all ages*

State highways

- 8 deaths, 36 serious injuries and 117 minor injuries
- Worst day of week: *Wednesday and Friday (19 percent each)*
- Night time: *22 percent*
- With alcohol over limit: *4 percent*
- Most common injury crash factor: *failed to give-way/stop (67 percent)* followed by *poor observation (53 percent)*
- Road factors: *4 percent*
- At fault male driver (injury crashes): *61 percent*
- 27 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common age group (injury crashes): *distributed to drivers of all ages*

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 road safety audits of intersections including signalised intersections

Education

- Focus on road-user behaviour at intersections: including 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 to identified black spots in the city

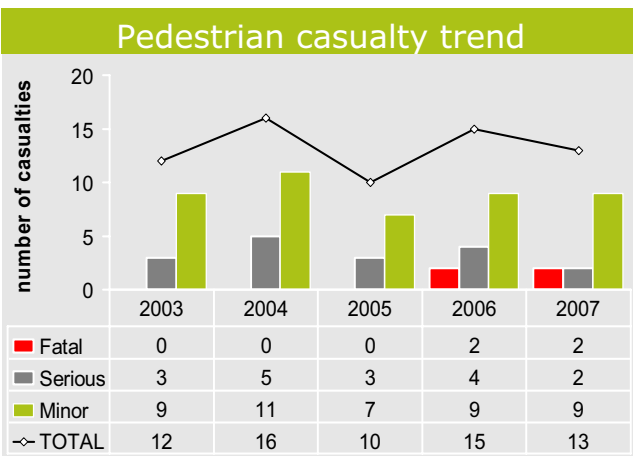
Vulnerable road users

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.

Pedestrians

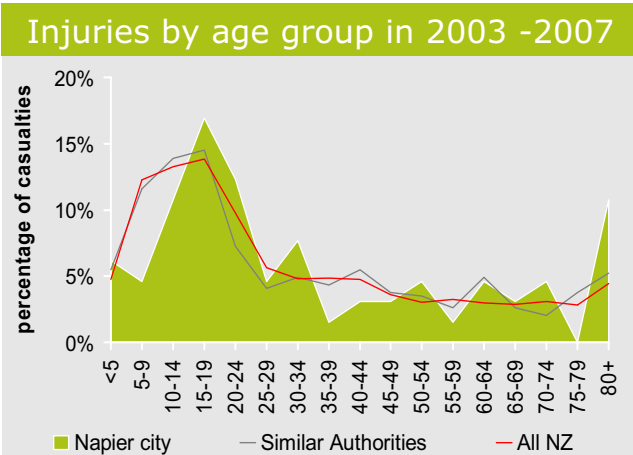
Pedestrian casualties feature highly in the total road injury picture in Napier City, representing 7 percent of all injuries, they also make up 18 percent of all fatalities in the last five year period.

The number of pedestrians injured has been fluctuating in last five years. with 2 pedestrian fatalities in both 2006 and 2007.



Most of the pedestrian accidents occurred on urban local roads (88 percent). Thirty-two percent occurred at intersections. Thirty three percent of these crashes occurred during the hours of darkness.

Napier City is experiencing a problem with a significant number of pedestrian accidents involving young people crossing the road. Approximately 40 percent of pedestrians injured during this five year period were between 10 and 24 years of age.



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

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

Pedestrian accidents are concentrated on arterial and collector roads. The worst locations or routes for pedestrian accidents are listed below:

High pedestrian accident locations
Central city - Tennyson St / Hastings Street area
Dickens Street route
Kennedy Road route
Craven Street roundabouts
Maraenui area generally
Taradale centre

Further information regarding 2003 -2007 pedestrian injury crashes in the city on:

Local roads

- 17 serious injuries and 40 minor injuries
- Most common accident: *pedestrian crossing the road being hit by a driver approaching from their right (33 percent).*
- Wet road: 10 percent
- Night time: 31 percent
- With alcohol over limit: 16 percent
- At intersection: 31 percent
- Worst day of week: *Friday and Saturday (15 crashes each)*

State highways

- 4 deaths, no serious injury and 3 minor injuries
- Most common accident: *pedestrian crossing the road being hit by a driver approaching from their left (33 percent).*
- Wet road: 17 percent
- Night time: 67 percent
- With alcohol over limit: 17 percent
- At intersection: 50 percent
- Worst day of week: *Friday (2 crashes)*

Recommended actions

Education

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

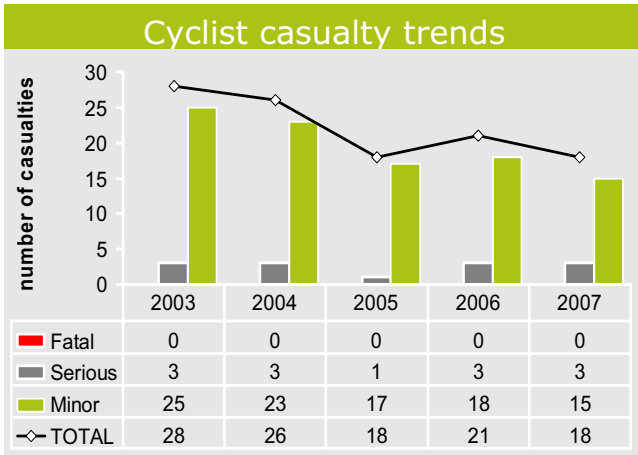
Engineering

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

Cyclists

Cyclists feature highly in the road injuries picture in Napier City. They represent 12 percent of all injuries in the last five years.

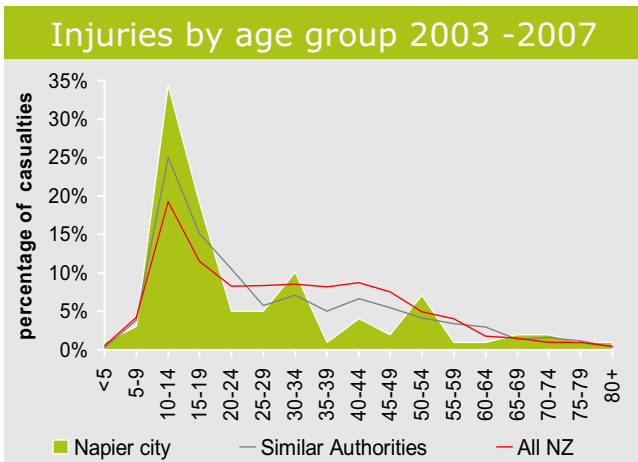
The number of cyclists injured is gradually decreasing in the last five years.



Most (96 percent) cycling crashes occurred on urban roads. Fifty eight percent occurred at intersections and 85 percent during daylight hours.

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

Cyclist injuries are not spread evenly across all ages. Refer to the chart below. Significant number of cyclists injured were between 10 and 14 years of age.



The worst locations for cyclist injury crashes are listed following:

High cyclist injury locations

- Gloucester Street / Kennedy Road route
- SH50 / SH2B / Taradale Road intersection
- Kennedy Road / Wycliffe intersection
- Local state highway routes generally
- Napier city centre / Hastings Street area
- Riverbend Road route

Further information regarding 2003 to 2007 cycling crashes:

Local roads

- 8 serious injuries and 72 minor injuries
- Most common crash: *crossing or turning movement (51 percent)* followed by *rear end or obstruction types (32 percent)*
- Night time: 17 percent
- At Intersection: 53 percent
- Worst day of week: *Tuesday, Thursday, Friday (17 crashes)*

State highways

- 5 serious injuries and 21 minor injuries
- Most common crash: *crossing or turning movement(65 percent)* followed by *rear end or obstruction types and overtaking(13 percent each)*
- Wet road: 10 percent
- Night time: 10 percent
- Worst day of week: *Friday (8 crashes)*

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

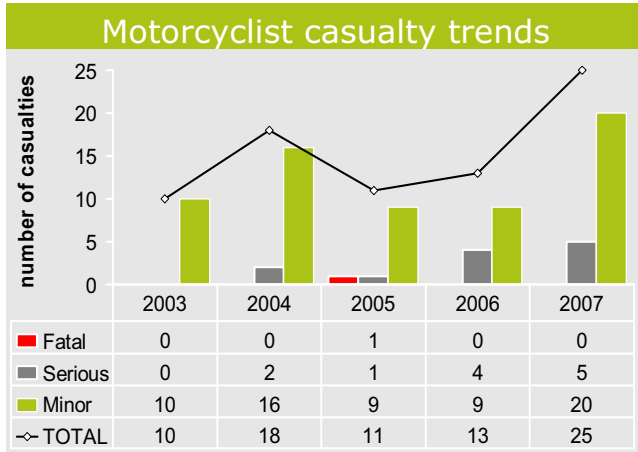
- Carry out enforcement campaigns targeting safety, working in conjunction with community programmes
- Increase enforcement of road-user compliance with Give Way, Stop and signal controls at intersections

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

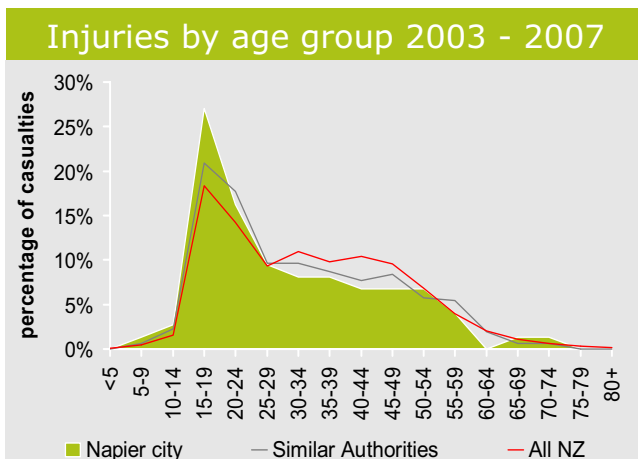
Motorcyclists make up 6 percent of all injuries in the Napier city and make up 5 percent of all fatalities in the last five year period. Total number of injuries were highest in 2007 in comparison to the last five year period.



Nationally there has been a significant increase in motorcycle registrations and the number of motorcyclists injured is increasing.

Most (90 percent) motorcycling crashes in Napier City happened on urban roads. Almost half of the motorcycling crashes happened at intersections.

More than 25 percent of motorcycle casualties were in 15-19 age group, the majority of which were males.



The worst locations for motorcyclist crashes are listed below:

High motorcyclist crash locations

Kennedy Road / Douglas McLean Ave intersection

Central Napier city intersections generally

Gloucester Road route

SH50 & Local state highway routes generally

SH50 / SH2 / Taradale Road intersection

Further information regarding 2003 to 2007 motorcycling crashes in the city:

Local roads

- 1 death, 10 serious injuries and 46 minor injuries
- Most common crash: *Rear end obstruction crashes (36%)* followed by *pedestrian crossing the road being hit by a driver approaching from their right (31 percent)*.
- Wet road: 10 percent
- Night time: 17 percent
- With alcohol over limit: 5 percent
- At intersection: 45 percent
- Worst month: *July (12 crashes)*,
- Worst day of week: *December (8 crashes)*

State highways

- 2 serious injuries and 13 minor injuries
- Most common crash: *pedestrian crossing the road being hit by a driver approaching from their right (27 percent)*.
- Wet road: *None*
- Night time: 18 percent
- With alcohol over limit: 13 percent
- At intersection: 64 percent
- Worst month: *October (3 crashes)*,
- Worst day of week: *Thursday (3 crashes)*

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

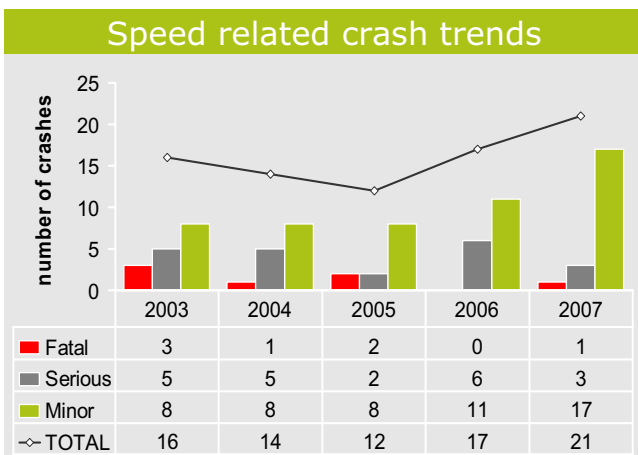
Engineering

- Ensure adequate visibility is provided and maintained at intersections
- Ensure pavement skid resistance quality is maintained particularly on local rural roads and state highways

Speed

Nationally, speed is one of the major contributing factors to road crashes. In 2007, excessive speed contributed to 33 percent of fatal crashes and 18 percent (2101 numbers) of injury crashes in New Zealand.

In Napier City, excessive speed was a factor in 13 percent of all injury crashes in 2007. There were 80 speed-related injury crashes and 280 non-injury crashes reported in the last five years. Although total number of injury crashes are growing, total fatal and serious injury crashes are relatively steady.



Most (86 percent) of the speed related crashes occurred in urban area.

Speed related injury crashes

	2003	2004	2005	2006	2007
Urban	53	51	62	64	78
Rural	11	9	12	9	11

Males represented 83 percent of at fault drivers in speed related crashes. The license status (learner or restricted or never licensed) of many of the drivers at-fault is matter of concern.

Age and sex of at fault drivers

Drivers at fault in speed related injury crashes (2003- 2007)	Male	Female	Total
15 - 19 years	31	2	33
20 - 24	16	6	22
25 - 29	3	2	5
30 - 39	8	2	10
40 - 49	2	0	2
50 - 59	1	1	2
60 - 69	1	0	1
70+	0	0	0
Total	62	13	75

Further information about speed related crashes in the city between 2003 and 2007 on:

Local roads

- 5 deaths, 29 serious injuries and 58 minor injuries
- Worst day of week: *Saturday (24 percent)*
- Wet road: *31 percent*
- Night time: *55 percent*
- With alcohol over limit: *43 percent*
- Most common crash: *Bend—loss of control (74 percent)*
- At fault male driver (injury crashes): *82 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 24 years old*

State highways

- 3 deaths, 4 serious injuries and 25 minor injuries
- Worst day of week: *Saturday (22 percent)*
- Wet road: *36 percent*
- Night time: *67 percent*
- With alcohol over limit: *33 percent*
- Most common crash: *Bend—loss of control (62 percent)*
- At fault male driver (injury crashes): *86 percent*
- Most common at fault drivers' age group (injury crashes): *15 to 19 years old*

Recommended actions

Engineering

- Continue to review and upgrade curve warning signs, markings and delineation on local rural roads, to the appropriate standards
- Identify locations where speed is a common contributing factor to crashes and investigate sites and road sections
- Maintain the roadside clear of hazards and provide side protection where appropriate
- Widen the road carriageway and seal shoulders to provide additional vehicle wander and recovery space
- Closely monitor and maintain pavement surface with good standards for skid resistance
- Improve road geometry where feasible and cost effective

Education

- Focus on raising awareness of the consequences of travelling too fast for road and weather conditions
- Raise public awareness of the risks of speeding

Enforcement

- Continue enforcement focusing on inappropriate speed, particularly in rural areas
- Target enforcement to times and locations of greatest risk

Alcohol

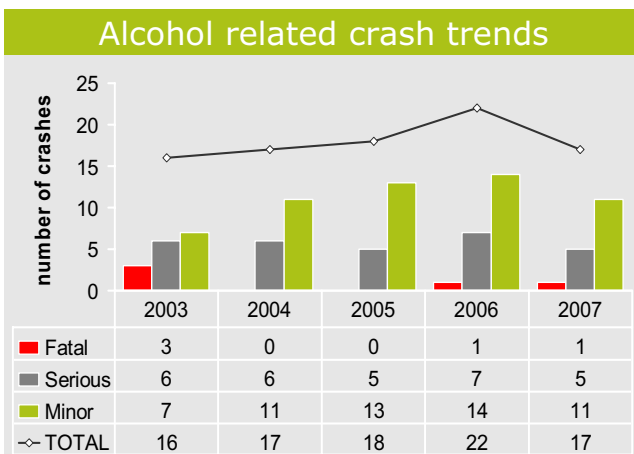
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

People with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers.

During 2007 within New Zealand, alcohol-affected drivers contributed to 34 percent of all fatal crashes and 15 percent of all injury crashes.

In Napier City, alcohol was a factor in 12 percent of all injury crashes in 2007 which is slightly less than the national average.

There were 90 alcohol-related injury and 258 non-injury crashes reported in the last five years. These crashes have resulted in 6 deaths, 34 serious and 78 minor injuries. Slight drop in number of crashes has been observed in 2007 after highest number in 2006.



Further information about alcohol related crashes in the city between 2003 and 2007 on:

Local roads

- 4 deaths, 29 serious injuries and 63 minor injuries
- Worst day of week: *Saturday (30 percent)*
- Night time: *81 percent*
- At Intersection: *38 percent*
- Excessive speed: *36 percent*
- Most common injury crash factor: *poor observation (21 percent)* followed by *poor handling (19 percent)*
- Road factors: *6 percent*
- At fault male driver (injury crashes): *77 percent*

- 55 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common at fault drivers' age range (injury crashes): *15 to 39 years old*

State highways

- 2 deaths, 5 serious injuries and 15 minor injuries
- Worst day of week: *Saturday and Sunday (28 percent each)*
- Night time: *89 percent*
- At Intersection: *46 percent*
- Excessive speed: *42 percent*
- Most common injury crash factor: *poor handling and poor observation (33 percent each)*
- Road factors: *12 percent*
- At fault male driver (injury crashes): *100 percent*
- 55 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common at fault drivers' age range (injury crashes): *15 to 39 years old*

Recommended actions

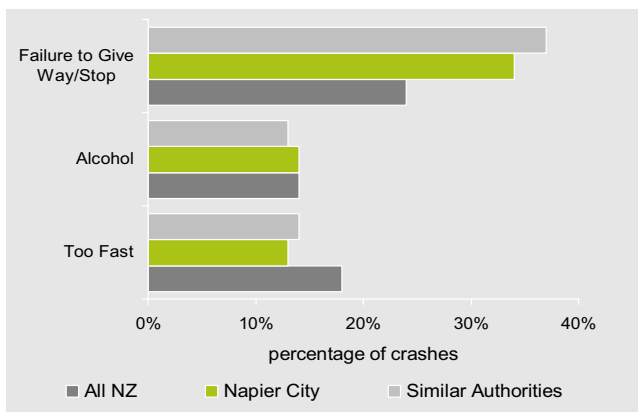
Education

- Promoting safe drinking and driving habits, particularly among male drivers aged 15 to 35
- Consider targeted advertising promotions, involving community and licensee consultation, host responsibility and designated driver schemes
- Work with community groups such as SADD 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 and working in conjunction with community programmes
- Continue to support compulsory breath testing programmes

National issues



Speed

In Napier City, *too fast* was recorded in 13 percent of injury crashes in the last five years, resulting in 9 deaths and 140 injuries. Speed as a factor in crashes is increasing in the city.

Seventy two percent of speed-related crashes involved *Loss of control / heads-on at bends*. *Alcohol* and *poor handling* were the driver factors most often associated with speed crashes. Male drivers aged under 25 years old represent the largest group of at fault drivers in speed related injury crashes.

Alcohol

In Napier City, *alcohol* was involved in 14 percent of injury crashes in the last five years, resulting in 6 deaths and 125 other injuries. The number of injury crashes involving *alcohol* is pretty steady.

Eighty-nine percent of alcohol crashes occurred in urban areas. Seventy percent of these crashes involved *loss of control/head-on* crashes. Travelling *too fast* and *poor observation* were the factors often associated with *alcohol*.

Failure to give way

In Napier City, *Failure to give way or stop* was reported in 34 percent of all reported injury crashes for the last five years resulting in 4 deaths and 52 other injuries. Most (92 percent) of these are *crossing/turning* manoeuvres, often associated with *failure to look for other parties*. Fifty-six percent of at fault drivers in these crashes were males.

Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2007 survey results restraint rate in Napier City for front seat and rear seat are 96 and 92 percent respectively (while corresponding national rates are 95 and 87 percent). 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)

Manager Performance Information Central

Nabin Pradhan (04 931 8928)

Manager Programmes

Denise Elers (06 974 5526)

Senior Engineer

Colin Goble (06 974 5522)

Napier City Council

Jon Schwass
Private Bag 6019
Napier
Telephone 06 835 7579

Transit New Zealand

Area Engineer Safety

Ken Holst
P O Box 740, Napier
Telephone 06 8351 750

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