

briefing notes road safety issues

Napier City

This report details aspects of Napier City's traffic crash data. We begin by looking at how the city 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 Napier City 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 Napier City is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

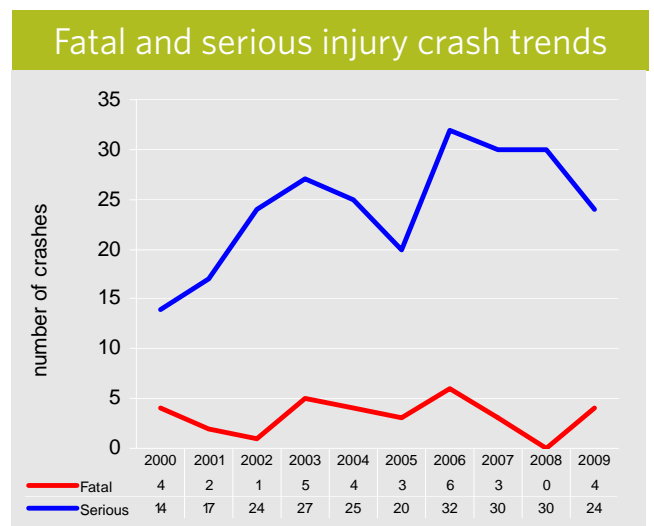
2009 road trauma	
Casualties	Napier City
Death	5
Serious injury	31
Minor injury	196
Total casualties	232

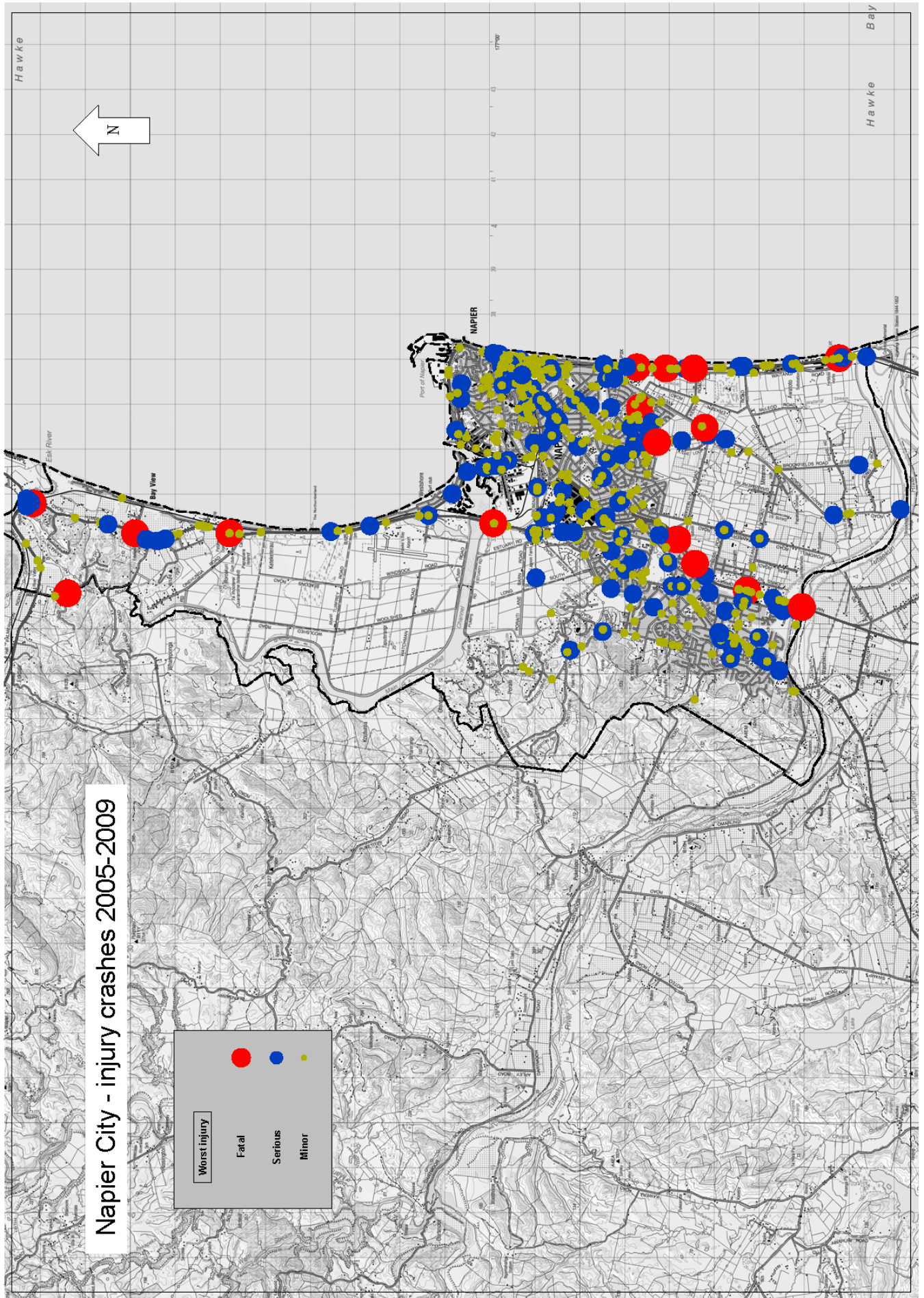
Crashes	Napier City
Fatal crashes	4
Serious injury crashes	24
Minor injury crashes	155
Total injury crashes	183
Non-injury crashes	407 reported

2009 - social cost of crashes	
Local roads	\$ 30.12M
State highways	\$ 23.60M
Total	\$ 53.72M

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
Napier City
Alcohol - incl. alcohol & speed
Young drivers
Intersections
Vulnerable road users; pedestrians 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

Napier City

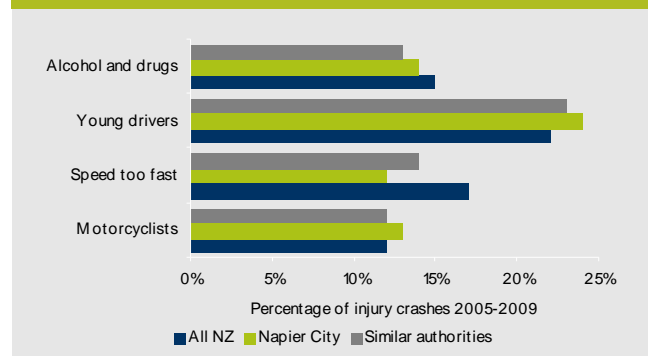
Presented below is a brief look at Napier City’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Napier City are 99 and 93 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 Napier City, alcohol was recorded in 14 percent of injury crashes in the last five years, resulting in 4 deaths, 33 serious injuries and 98 minor injures. Alcohol related crashes were proportionally higher when compared to similar authorities.

Young drivers

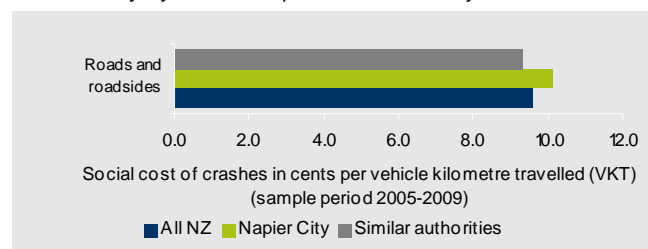
In Napier City, young drivers aged 15-19 years were involved in 24 percent of all injury crashes during the last five year period, resulting in 3 deaths, 37 serious injuries and 220 minor injuries. This was proportionally higher than in similar authorities and the trend is upwards in the city.

Speed too fast

Speed too fast was recorded in 12 percent of injury crashes in Napier City in the last five years, resulting in 3 deaths, 21 serious injuries and 95 minor injuries. Speed as a factor in crashes was proportionally lower than in similar authorities.

Motorcyclists

In Napier City, motorcyclists were involved in 13 percent of all injury crashes during the last five year period, resulting in 1 death, 28 serious injuries and 76 minor injuries. Injury crashes involving motorcyclists were proportionally higher than in similar authorities and the injury trend is upwards in the city.



Roads and roadsides

In Napier City, there were on average 37 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes was 9 percent higher than the similar authority average (see the graph above).

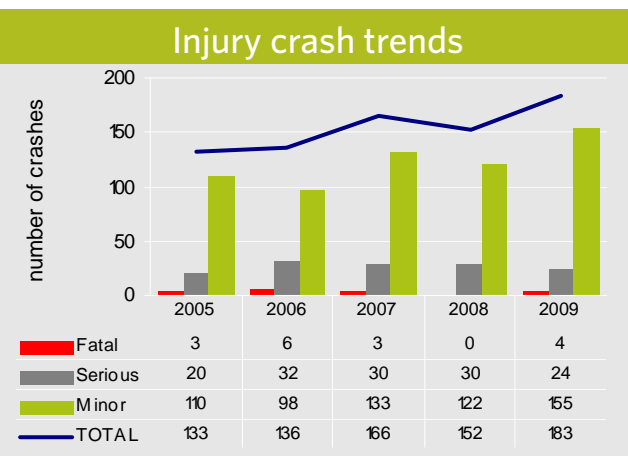
Overview 2009

In 2009 in Napier City, 183 injury crashes resulting in 232 casualties and 407 non-injury crashes were reported by the New Zealand Police. Twenty-seven 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.

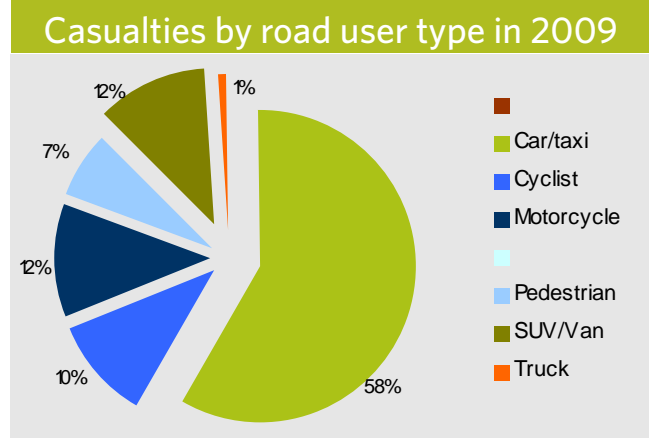
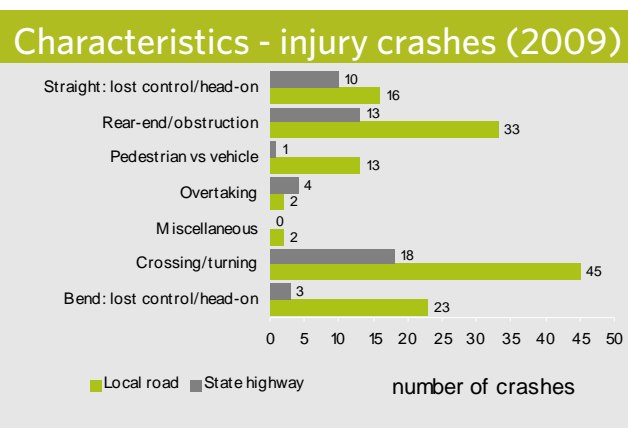
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	5	31	197	233
Local roads vs state highways				
Local roads	1	17	142	160
State highways	4	14	55	73
Rural vs urban roads				
Rural ¹	4	12	30	46
Urban	1	19	167	187

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

The latest five year data shows an upward trend in the total number of injury crashes, although in the last four years there is a downward trend in the number of serious injury crashes.



In 2009 a third of the injury crashes involved a crossing or turning movement, just over a quarter involved a driver losing control of their vehicle and a quarter involved a rear-end collision.



Three-fifths of all casualties were drivers and passengers of cars, an eighth of sports utility vehicles or vans and three-tenths were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Napier City, young drivers aged 15 to 19 years inclusive were at fault drivers in 21 percent of injury crashes and older drivers, 70 years of age and over, in 14 percent.

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

Local roads

- Total number of injury crashes: 134
- Worst month: May (13 percent)
- Worst day of week: Friday (26 percent)
- Wet road crashes: 19 percent
- Night time crashes: 27 percent
- Alcohol over limit: 15 percent
- Failed to give way/stop: 34 percent
- Too fast for conditions: 12 percent
- Pedestrian factors : 5 percent
- Crashes at intersection: 60 percent
- Road factors: 7 percent
- At fault male driver: 53 percent
- At fault driver held full NZ licence: 60 percent

State highways

- Total number of injury crashes: 49
- Worst months: January and August (14 percent each)
- Worst day of week: Saturday (23 percent)
- Wet road crashes: 18 percent
- Night time crashes: 28 percent
- Alcohol over limit: 8 percent
- Too fast for conditions: 8 percent
- Failed to give way/stop: 33 percent
- Fatigue: 2 percent
- Crashes at intersection: 55 percent
- Road factors: 12 percent
- At fault male driver: 44 percent
- At fault driver held full NZ licence: 66 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.

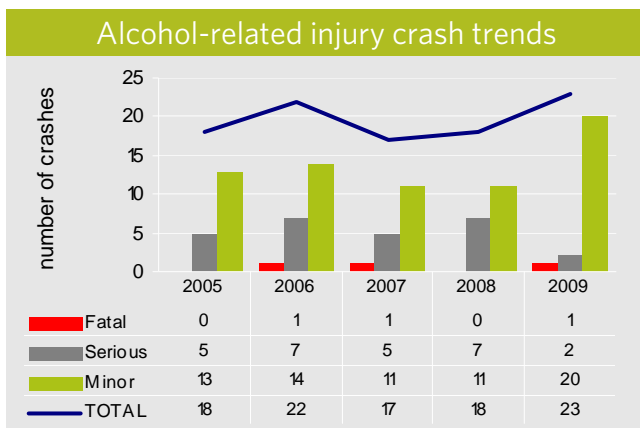
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

Napier City

During the last five year period (2005-2009) 14 percent of all injury crashes in Napier City were alcohol related. This is higher than the five year average for similar authorities (13 percent). In 2009 alcohol was a factor in 14 percent of injury crashes in Napier City.

There were 98 alcohol-related injury and 260 non-injury crashes reported during the last five years. These crashes have resulted in 4 deaths, 34 serious and 100 minor injuries.

The latest five year data shows a slight upward trend in the total number of injury crashes, while the trend in serious injury crashes is downwards.



Most (88 percent) of the alcohol-related crashes occurred in urban areas. Forty-seven percent of these crashes involved *loss of control at bend* types of crash movement. Thirty-nine percent of the crashes occurred at intersections.

Eighty-two percent of the crashes occurred during the hours of darkness. Sixty-one percent of these crashes occurred at the weekend (6 pm Friday to 6 am Monday).

Just over half (52 percent) of the at fault drivers involved in these crashes (2005-2009) held either a learner or a restricted licence. A further 18 percent were disqualified or had never held a drivers' licence. A fifth (21 percent) of the at fault drivers were male drivers holding a full licence.

Alcohol and speed

Speed was a factor in 40 percent of the 98 alcohol related injury crashes in the city 2005-2009, resulting in 1 death, 10 serious injuries and 48 minor injuries. Speed itself has been a factor in 12 percent of all injury crashes in the city in the last five years.

Eighty-four percent of the crashes where alcohol and speed were both contributing factors occurred within urban speed limits, mostly on local roads (73 percent) and in dark conditions (83 percent). Three quarters of these were loss of control at bend type crashes. Half of the at fault drivers in these injury crashes were males under 30 years of age (51 percent).

Further information about alcohol related crashes in Napier City 2005-2009 on:

Local roads

- 2 deaths, 22 serious injuries and 74 minor injuries
- Worst day of week: Saturday (74 crashes)
- Night time: 81 percent
- Intersection: 37 percent
- Excessive speed: 42 percent
- Most common injury crash factor: poor handling (23 percent) followed by poor observation (18 percent)
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 26 percent
- 54 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 24 years old (57 percent)

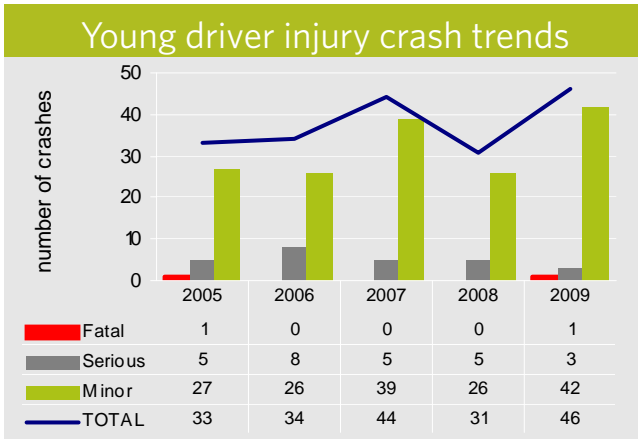
State highways

- 2 deaths, 12 serious injuries and 26 minor injuries
- Worst day of week: Saturday (22 crashes)
- Night time: 85 percent
- Intersection: 46 percent
- Excessive speed: 47 percent
- Most common injury crash factor: poor handling (21 percent) followed by poor observation (16 percent)
- At fault male driver (injury crashes): 84 percent
- At fault driver held full NZ licence (injury crashes): 32 percent
- 53 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common at fault drivers' age range (injury crashes): males 15 to 19 years old (37 percent) and males 30-39 years old (32 percent)

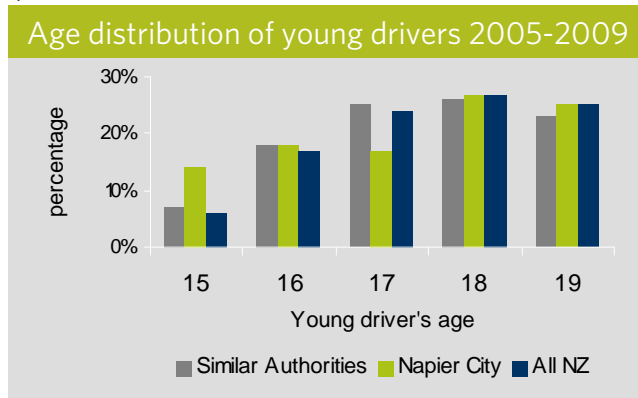
Young drivers

During the most recent five year period (2005-2009) in Napier City, 24 percent of all injury crashes involved young drivers, aged 15-19 years. These crashes resulted in 3 deaths, 37 serious injuries and 220 minor injuries.

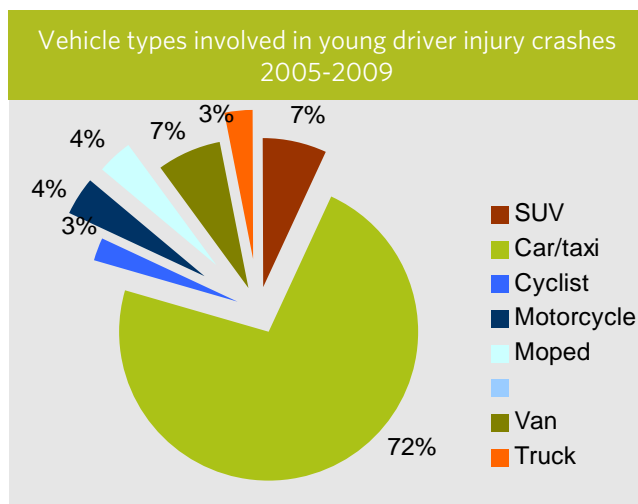
The latest five year data shows an upward trend in the total number of these crashes.



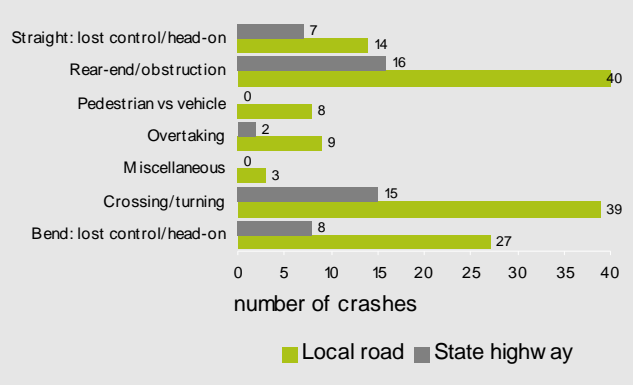
The age distribution of young drivers involved in injury crashes is shown below. Seventy-nine percent of these injury crashes show young drivers were at fault or part-fault.



The types of vehicles involved in injury crashes involving young drivers are shown below.



Characteristics of young driver injury crashes



The chart above shows the general characteristics of injury crashes involving young drivers. The most common general crash movement involves a driver losing control of their vehicle (30 percent):

- loss of control at bends: 9 percent
- loss of control on a straight road: 16 percent
- loss of control head-on collision: 2 percent
- loss of control overtaking: 2 percent

Further information about injury crashes involving young drivers in Napier City 2005-2009 on:

Local roads

- 24 serious injuries and 158 minor injuries
- Worst month: May (18 crashes)
- Worst day of week: Wednesday (24 crashes)
- Wet road crashes: 21 percent
- Night time crashes: 32 percent
- Alcohol over limit: 16 percent
- Speed too fast: 19 percent
- Most common injury crash factors: poor observation (42 percent) followed by failed to give way / stop (27 percent)
- At fault driver held learner NZ licence: 22 percent
- At fault driver held restricted NZ licence: 35 percent

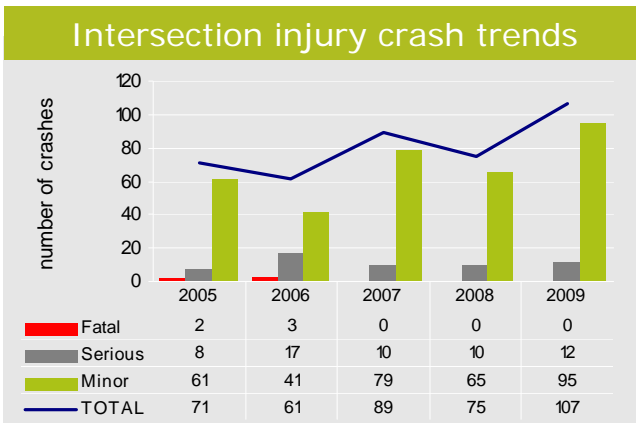
State highways

- 3 deaths, 13 serious injuries and 62 minor injuries
- Worst month: February (9 crashes)
- Worst day of week: Saturday (11 crashes)
- Wet road crashes: 27 percent
- Night time crashes: 38 percent
- Alcohol over limit: 13 percent
- Speed too fast: 19 percent
- Most common injury crash factors: poor observation (48 percent) followed by failed to give way / stop (31 percent)
- At fault driver held learner NZ licence: 12 percent
- At fault driver held restricted NZ licence: 33 percent

Intersections

During the most recent five year period (2005-2009) 52 percent of all injury crashes in Napier City occurred at intersections. These crashes resulted in 5 deaths, 66 serious injuries and 446 minor injuries. There were a further 1117 non-injury crashes reported.

The latest five year data shows an upward trend in the total number of injury crashes at intersections. The trends show serious injury numbers to be reasonably steady.



Most of these crashes occurred at urban intersections (93 percent). Thirty percent of intersection crashes occurred on state highways, accounting for all fatalities and 36 percent of the serious injuries in these at intersection crashes in the last five years.

	Local urban	Local rural	SH urban	SH rural
Intersection crashes	68%	2%	24%	6%

The table below shows the locations of intersections with a high number of crashes in Napier City 2005-2009.

Intersection name	Total crashes 2005 - 2009	Injury crashes 2005 - 2009	Total crashes in 2009
Kennedy Road / Kennedy Off NBD	20	13	3
SH 2 / Watchman Road	25	11	6
Meeanee Road / Guppy Road	15	6	5
Prebensen Drive / Severn Street	15	6	4
SH 2 / West Quay	14	6	5
Dickens St / Tennyson St	12	6	2
SH 2 / Latham Street	34	5	10

Junction type	Rural	Urban
T-junction	41	681
Crossroad	46	407
Roundabout	26	240
Driveway	1	54
Y-junction	1	15
Multi road junction	0	8

Crashes at T-junctions in urban areas were the most common types of intersection crashes, during 2005-2009; followed by crashes at crossroads and thirdly at crashes at roundabouts.

Further information about all crashes at intersections in Napier City 2005-2009 on:

Local roads

- 42 serious injuries and 327 minor injuries
- Worst month: June (106 crashes)
- Worst day of week: Friday (187 crashes)
- Wet road crashes: 20 percent
- Night time: 29 percent
- Alcohol over limit (Injury crashes): 12 percent
- Most common injury crash factor: failed to give way/stop (54 percent) and observation (54 percent)
- Road factors: 6 percent
- At fault male driver (injury crashes): 54 percent
- At fault driver held full NZ licence (injury crashes): 56 percent
- 36 percent of drivers at fault (injury crashes) were either on restricted, learner or not licensed
- Most common at fault driver's age group (injury crashes): 15-19 years (24 percent)

State highways

- 5 deaths, 24 serious injuries and 119 minor injuries
- Worst month: May (48 crashes)
- Worst day of week: Friday (78 crashes)
- Wet road crashes: 17 percent
- Night time: 23 percent
- Alcohol over limit: 5 percent
- Most common injury crash factor: failed to give way/stop (62 percent) and poor observation (62 percent)
- Road factors: 4 percent
- At fault male driver (injury crashes): 63 percent
- At fault driver held full NZ licence (injury crashes): 63 percent
- 25 percent of drivers at fault (injury crashes) were either on restricted or learner license
- Most common at fault driver's age group (injury crashes): 20-24 years (21 percent)

Vulnerable road users

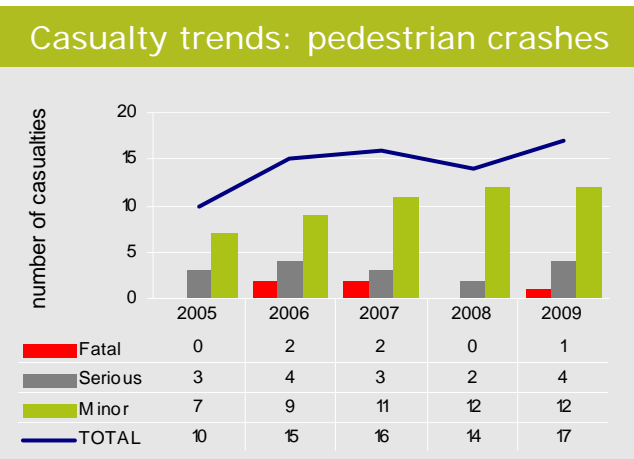
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore more susceptible to severe injuries. These are described as pedestrians, cyclists and motorcyclists.

In Napier City, vulnerable road users were involved in thirty-five percent of all injury crashes in 2005-2009, accounting for 28 percent of all casualties, 35 percent of all deaths and 35 percent of all serious injuries over the five year period.

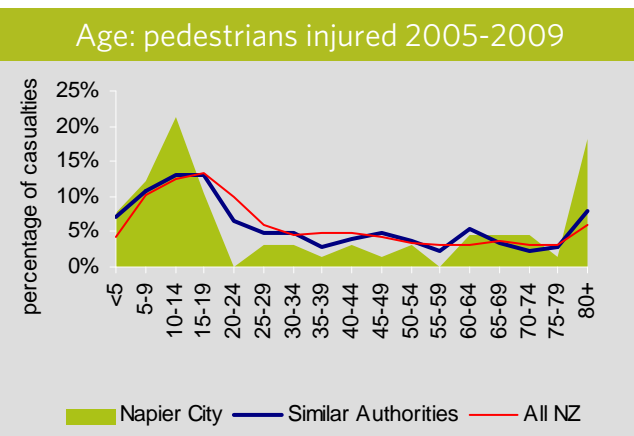
Pedestrians

Injury crashes involving pedestrians in Napier City accounted for 9 percent of all injury crashes during the last five year period. These pedestrian crashes resulted in 5 deaths, 16 serious injuries and 51 minor injuries.

The latest five year data shows an upward trend in the total number of casualties in crashes involving pedestrians.



Young people are the most commonly injured pedestrians in these crashes. Just over half (52 percent) of pedestrians injured during the last five year period in Napier City were under 20 years of age. Nearly a quarter (23 percent) of pedestrians injured were in the age group 5-14 years.



High pedestrian accident locations

Main traffic routes in to the city centre generally
Marine Parade area around Seaview Terrace
Te Awa area around Ellison St, McGarth St & SH2
Maraenui area generally
Taradale town centre

The worst locations or routes for pedestrian accidents in Napier City 2005-2009 are shown above.

Following were the most commonly reported pedestrian factors contributing to these pedestrian crashes:

- 7 percent of pedestrians injured were visibly intoxicated
- 15 percent of those injured were unsupervised children or that had escaped from supervision
- 43 percent were persons crossing the road heedless of traffic

Eight percent of pedestrian crashes record that a driver failed to give way to a pedestrian using a crossing point on the roadway, either at a zebra crossing or when turning at traffic lights.

Most of the pedestrian accidents occurred on urban local roads (89 percent) and nearly a third (30 percent) occurred at intersections. More than a quarter (28 percent) of these accidents occurred during the hours of darkness.

Further information regarding pedestrian injury crashes in Napier City 2005-2009 on:

Local roads

- 1 death, 16 serious injuries and 47 minor injuries
- Worst month: March (12 crashes)
- Worst day of week: Friday (16 crashes)
- Wet road crashes: 12 percent
- Night time crashes: 26 percent
- Alcohol over limit (injury crashes): 11 percent
- Crashes at intersection: 30 percent
- Pedestrian factors contributed to crashes: 65 percent

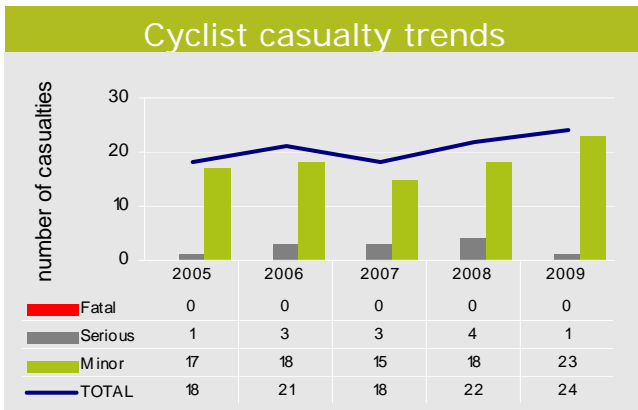
State highways

- 4 deaths and 4 minor injuries
- Worst month: September(3 crashes)
- Worst day of week: Friday(3 crashes)
- Wet road crashes: 25 percent
- Night time crashes: 50 percent
- Alcohol over limit (injury crashes): 14 percent
- Crashes at intersection: 25 percent
- Pedestrian factors contributed to crashes: 86 percent

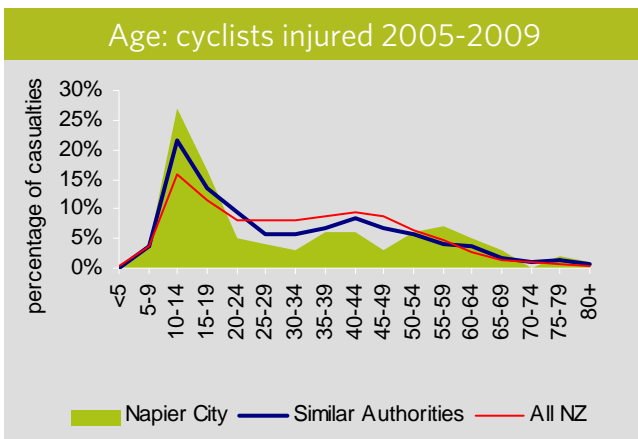
Cyclists

Injury crashes involving cyclists in the Napier City accounted for 13 percent of all injury crashes during the last 5 year period, resulting in 12 serious injuries and 91 minor injuries.

The latest five year data shows an upward trend in the total number of casualties in cyclist involved crashes. Most cyclist involved crashes 2005-2009 (88 percent) resulted in minor injuries.



In Napier City 2005-2009 we find that 43 percent of all the injured cyclists were young persons in the group 10-19 years. This is proportionally slightly higher than the national and similar authorities averages for this same age group. There is also a higher proportion of 55-64 year old cyclists involved in injury crashes when compared the comparative averages.



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

- a vehicle or cyclist turning right from a side road or driveway across a vehicle travelling straight through: 21 percent
- at a crossroad both vehicles and cyclists travelling straight through collide: 13 percent
- a vehicle or cyclist turning right across an oncoming vehicle: 9 percent

High cyclist injury locations

Kennedy Road route
SH50 / SH2B / Taradale Road intersection
Kennedy Road / Wycliffe intersection
Local state highway routes generally
SH 2 route north of Hyderabad Road
Main routes around Taradale

The worst accident locations or routes for cyclist crashes in Napier City 2005-2009 are shown above.

Nearly all cycling crashes occurred on urban roads (95 percent), during the daylight hours (88 percent) and over two-thirds were at intersections (68 percent).

Half of all at fault drivers in these cyclist involved crashes mature drives; females in the group 30-50 years and males in the group 40-60 years. Just over two-thirds of at fault drivers held a full NZ licence (68 percent)

At fault drivers in these crashes were mostly male (56 percent).

Further information about cyclist injury crashes in Napier City 2005-2009 on:

Local roads

- 9 serious injuries and 62 minor injuries
- Worst month: May (14 crashes)
- Worst day of week: Thursday (20 crashes)
- Most common injury crash factors: poor observation (66 percent) and failure to give way/stop (54 percent)
- Wet road crashes: 3 percent
- Night time crashes: 11 percent
- Alcohol over limit (injury crashes): 1 percent
- Crashes at intersection: 64 percent
- Male cyclist injured: 83 percent

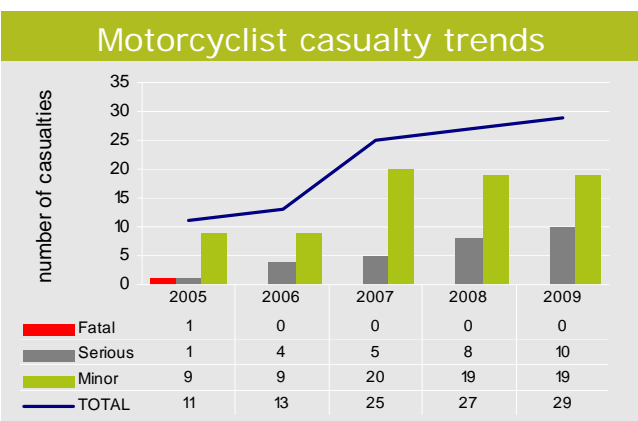
State highways

- 3 serious injuries and 29 minor injuries
- Worst month: January (7 crashes)
- Worst days of week: Thursday (8 crashes)
- Most common injury crash factors: poor observation (68 percent) and failure to give way/stop (68 percent)
- Wet road crashes: 9 percent
- Night time crashes: 17 percent
- Alcohol over limit (injury crashes): nil
- Too fast for conditions (injury crashes): 6 percent
- Crashes at intersection: 54 percent
- Male cyclist injured: 76 percent

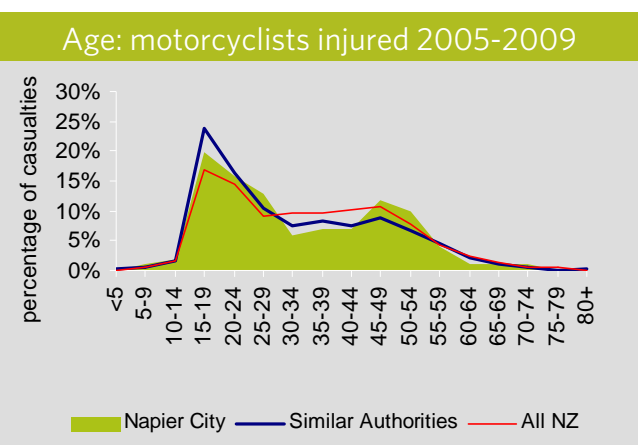
Motorcyclist

Injury crashes involving motorcyclists represented 13 percent of all injury crashes in Napier City during the last five year period, resulting in 1 death, 28 serious injuries and 76 minor injuries.

The latest five year data shows an upward trend in the total number of casualties in motorcycle involved crashes. There is a levelling trend in minor injury numbers while serious injury trend is steadily upwards.



The age distribution of injured motorcyclists is shown below. Half of all the injured motorcyclists were young riders in the group 15-29 years (49%). Nearly a quarter were in the age group 45-54 years (22 percent).



The scenarios for crashes involving motorcyclists were many and varied. The most common scenarios in Napier City 2005-2009 were:

- loss of control: 26 percent
- at a crossroad both vehicles travelling straight through collide: 11 percent
- a vehicle turning right across an oncoming vehicle: 11 percent
- a vehicle turning right from a side road or driveway across a vehicle travelling straight through: 10 percent

High motorcyclist crash locations

- Central Napier city intersections generally
- Main routes around Tamatea
- SH 2 route, Hyderabad roundabout & north
- SH 50 & Local state highway routes generally
- SH 50 / SH 2B / Taradale Road intersection

The worst accident locations or routes for motorcyclist crashes in Napier City 2005-2009 are shown above:

Nearly all crashes involving motorcyclists occurred on urban roads (95 percent), over half (56 percent) were at intersections and seventy-nine percent of the crashes occurred during daylight hours.

Further information about motorcyclist injury crashes in Napier City 2005-2009 on:

Local roads

- 1 death, 22 serious injuries and 62 minor injuries
- Worst months: March and October (12 crashes each)
- Worst day of week: Wednesday (19 crashes)
- Most common injury crash factors: poor observation (51 percent) and failed to give way/stop (43 percent)
- Wet road crashes: 13 percent
- Night time crashes: 21 percent
- Alcohol over limit (injury crashes): 6 percent
- Crashes at intersection: 52 percent
- Male motorcyclist injured: 87 percent

State highways

- 6 serious injuries and 14 minor injuries
- Worst months: February and May (5 crashes each)
- Worst day of week: Wednesday (6 crashes)
- Most common injury crash factors: poor observation (42 percent) followed by failure to give way/stop (26 percent)
- Wet road crashes: 12 percent
- Night time crashes: 23 percent
- Alcohol over limit (injury crashes): 5 percent
- Crashes at intersection: 70 percent
- Male motorcyclist injured: 82 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 Napier City 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

Napier Regional Office

Dunvegan House, L3
215 Hastings Street
PO Box 972
Napier 4140

Tel 06 974 5520

Fax 06 974 5529

<http://www.nzta.govt.nz>

Performance Information / Senior Engineer CAS

James King (04 931 8917)

Senior Engineer

Colin Goble (06 974 5522)

Napier City Council

Henry Enslin (06 9835 7579) Traffic Engineer

RoadSafe Hawke's Bay

Linda Anderson (06 835 2633)

New Zealand Police

Road Policing Manager
Eastern DHQ-NA
PO Box 245, Napier
Tel 06 831 070