

briefing notes road safety issues

Tararua District

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

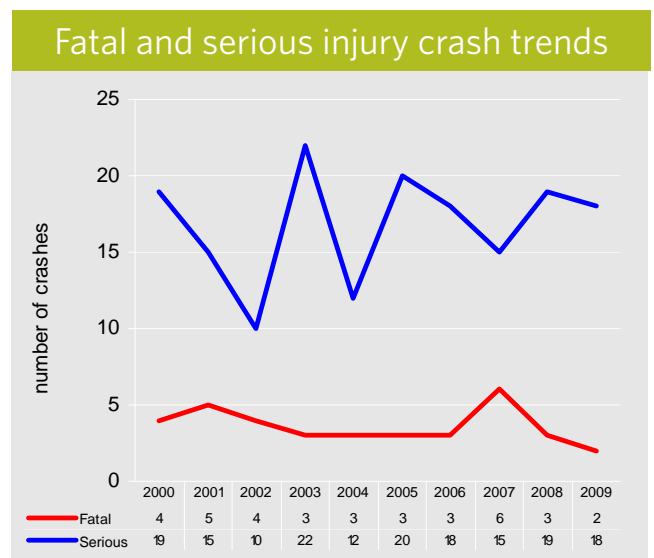
| 2009 road trauma | |
|-------------------------|------------------|
| Casualties | Tararua District |
| Death | 2 |
| Serious injury | 21 |
| Minor injury | 70 |
| Total casualties | 93 |

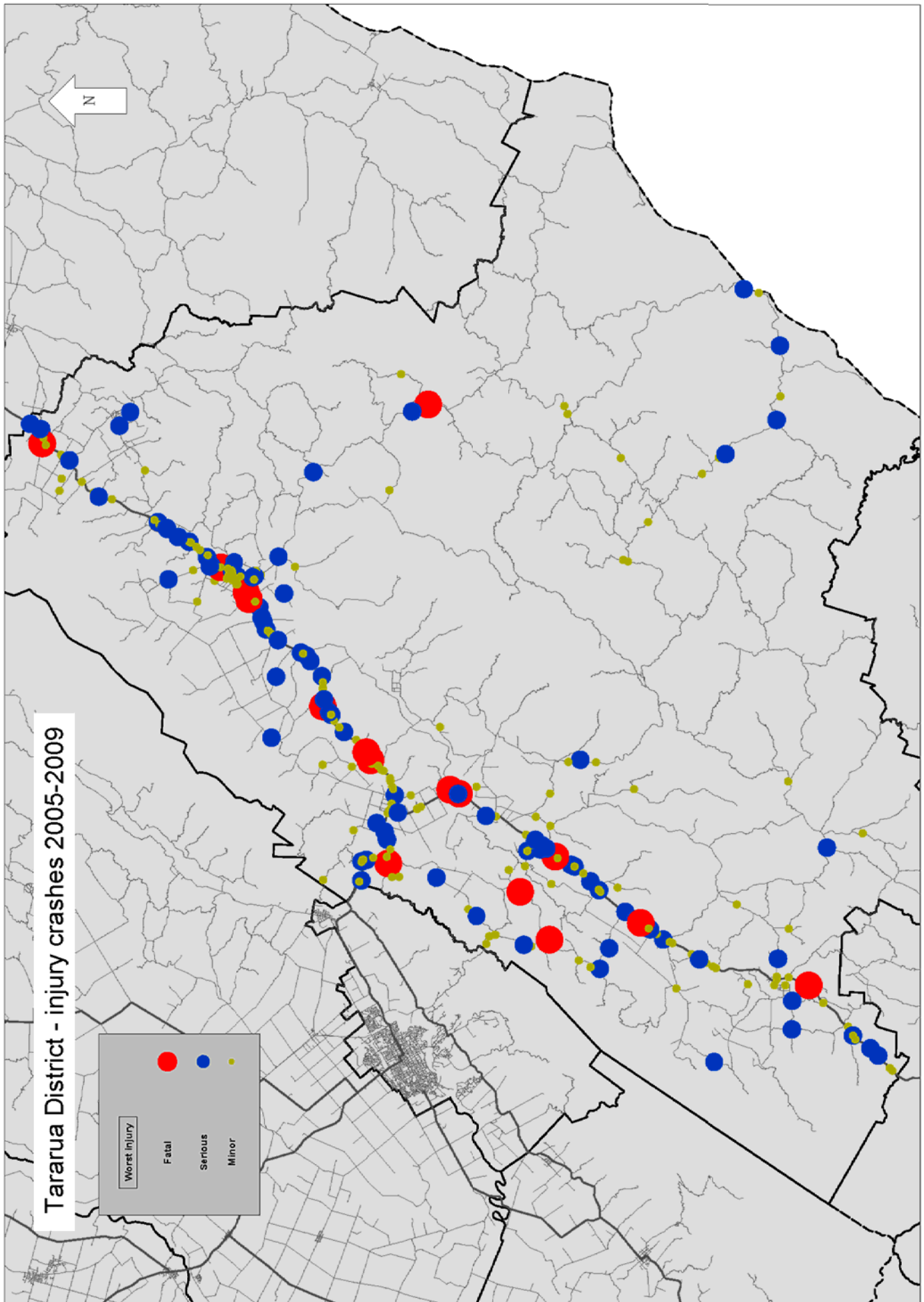
| Crashes | Tararua District |
|-----------------------------|------------------|
| Fatal crashes | 2 |
| Serious injury crashes | 18 |
| Minor injury crashes | 46 |
| Total injury crashes | 66 |
| Non-injury crashes | 110 reported |

| 2009 - social cost of crashes | |
|-------------------------------|------------------|
| Local roads | \$ 8.27M |
| State highways | \$ 20.14M |
| Total | \$ 28.41M |

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 | |
|--------------------------------------|--|
| Tararua District | |
| Loss of control | |
| Alcohol - incl. speed | |
| Young drivers | |
| Intersections | |
| Vulnerable road users: 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

Tararua District

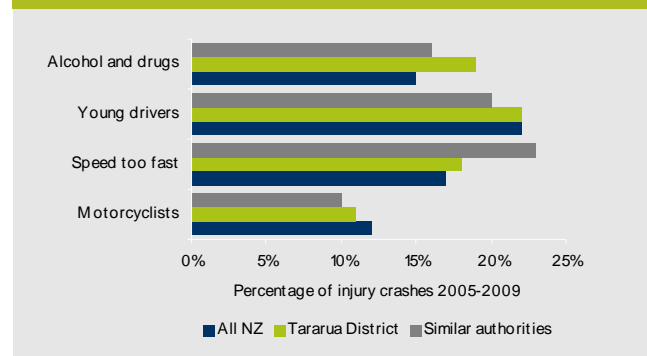
Presented below is a brief look at Tararua District's position on Safer Journeys' areas of high concern compared to similar authorities' averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results, restraint use rate in Tararua District are 95 and 86 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 Tararua District, alcohol was recorded in 19 percent of injury crashes in the last five years, resulting in 6 deaths, 36 serious injuries and 55 minor injuries. Alcohol-related crashes were significantly higher proportionally when compared to similar authorities.

Young drivers

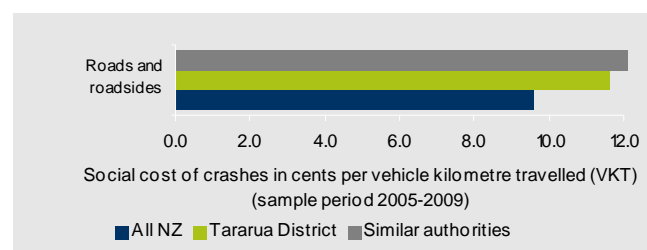
In Tararua District, young drivers aged 15-19 years were involved in 22 percent of all injury crashes during the last five year period, resulting in 4 deaths, 22 serious injuries and 79 minor injuries. This was proportionally higher compared to similar authorities.

Speed too fast

Speed too fast was recorded in 18 percent of injury crashes in Tararua District in the last five years, resulting in 10 deaths, 23 serious injuries and 56 minor injuries. Speed as a factor in crashes was significantly lower proportionally compared to similar authorities.

Motorcyclists

In Tararua District, motorcyclists were involved in 11 percent of all injury crashes during the last five year period, resulting in 2 deaths, 15 serious injuries and 26 minor injuries. Injury crashes involving motorcyclists were higher proportionally compared to similar authorities.



Roads and roadsides

In Tararua District, there were on average 24 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes is 6 percent lower than the similar authority average (see the graph above).

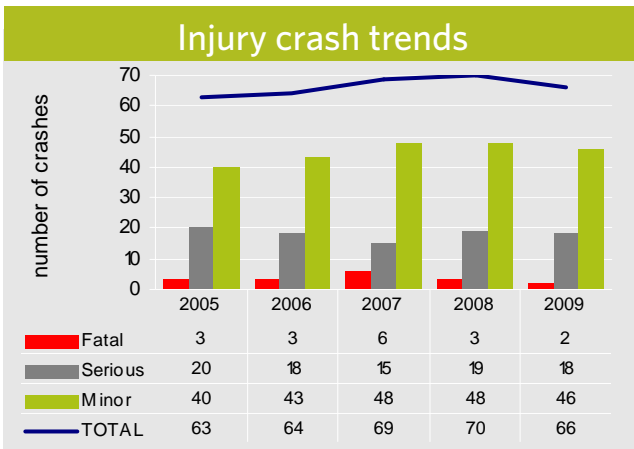
Overview 2009

In 2009 in Tararua District, 66 injury crashes resulting in 93 casualties and 110 non-injury crashes were reported by the New Zealand Police. Fifty-eight 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.

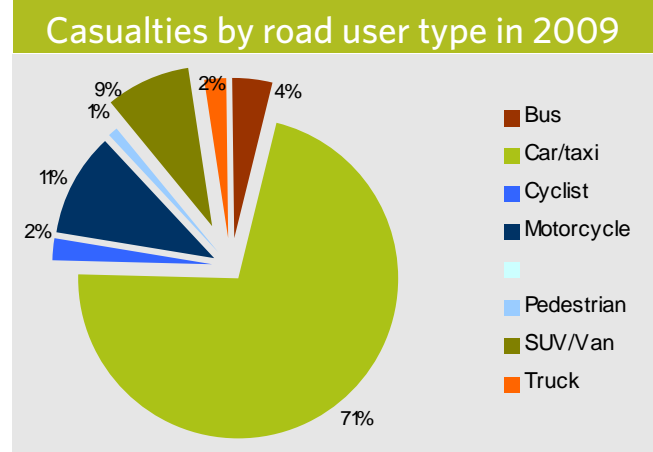
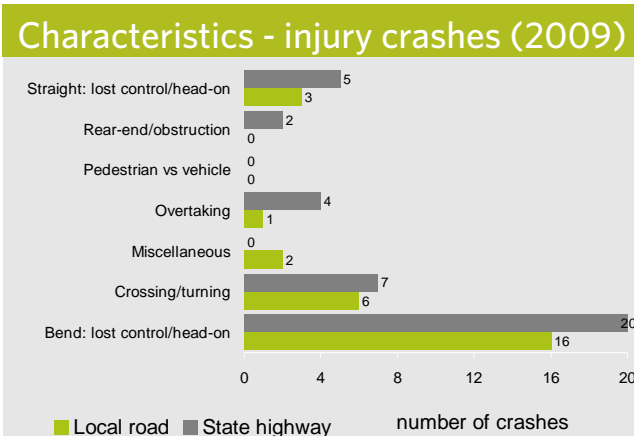
| Casualties by injury type in 2009 | | | | |
|-----------------------------------|------------|------------------|----------------|-------|
| | Fatalities | Serious injuries | Minor injuries | Total |
| Total | 2 | 21 | 70 | 93 |
| Local roads vs state highways | | | | |
| Local roads | 0 | 7 | 33 | 40 |
| State highways | 2 | 14 | 37 | 53 |
| Rural vs urban roads | | | | |
| Rural ¹ | 2 | 18 | 52 | 72 |
| Urban | 0 | 3 | 18 | 21 |

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

The latest five year data shows a level trend in the total number of injury crashes, and also in each category of seriousness of injury.



In 2009 two-thirds of injury crashes involved a driver losing control of their vehicle, and a fifth involved a crossing or turning movement.



Nearly three quarters of the casualties were drivers and passengers of cars, a tenth of sports utility vehicles or vans and one-eighth were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Tararua District, young drivers aged 15 to 19 years inclusive were at fault drivers in 27 percent of injury crashes and older drivers, 70 years of age and over, in 5 percent.

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

Local roads

- Total number of injury crashes: 28
- Worst months: February and March (14 percent)
- Worst day of week: Thursday (32 percent)
- Wet road crashes: 18 percent
- Night time crashes: 32 percent
- Alcohol over limit: 21 percent
- Too fast for conditions: 18 percent
- Failed to give way/stop: 11 percent
- Fatigue : 7 percent
- Crashes at intersection: 29 percent
- Road factors: 14 percent
- At fault male driver: 68 percent
- At fault driver held full NZ licence: 32 percent

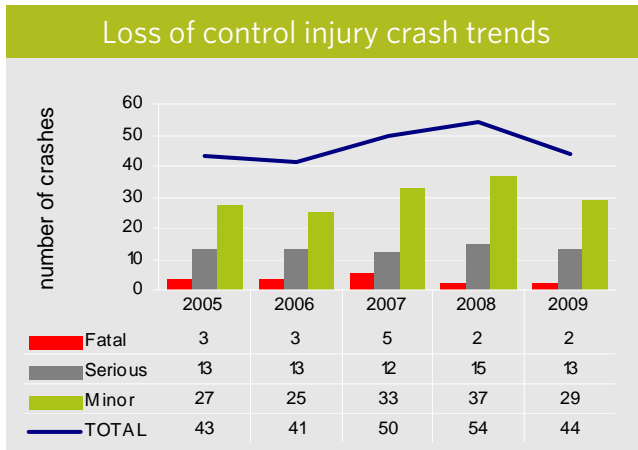
State highways

- Total number of injury crashes: 38
- Worst month: August (18 percent)
- Worst day of week: Saturday (24 percent)
- Wet road crashes: 32 percent
- Night time crashes: 47 percent
- Alcohol over limit: 24 percent
- Too fast for conditions: 16 percent
- Failed to give way/stop: 18 percent
- Fatigue: 13 percent
- Crashes at intersection: 26 percent
- Road factors: 21 percent
- At fault male driver: 63 percent
- At fault driver held full NZ licence: 64 percent .

Loss of control

During the most recent five year period (2005-2009) 70 percent of all crashes in Tararua District occurred due to loss of control. These crashes resulted in 17 deaths, 87 serious injuries and 234 minor injuries. There were a further 353 non-injury crashes reported.

The latest five year data shows a slight upward trend in the total number of loss of control type injury crashes.



Over three-quarters of loss of control crashes occurred at bends (77 percent). These involved a driver losing control of their vehicle then commonly running off the road or perhaps colliding with another vehicle (17 percent).

The following table shows a breakdown of the general environment of all loss of control crashes (578 crashes) in Tararua District 2005-2009, split to show urban and rural speed limits.

| Number of crashes | Local urban | Local rural | SH urban | SH rural |
|-------------------|-------------|-------------|----------|----------|
| At bends | 6% | 29% | 4% | 37% |
| Straight road | 2% | 4% | 2% | 16% |

Note: Rural roads are roads with a speed limit of 80km/hr or more.

The three most common roadside hazards struck in loss of control crashes were fences (30 percent) followed by ditches (17 percent) and banks (12 percent). There were a total 618 objects reported being struck. Hitting these objects can result in more serious injuries than would otherwise be sustained.

The following table shows the main characteristics of loss of control type crashes. Alcohol and speed too fast for conditions each were contributing factors individually in nearly a quarter of injury crashes. Most loss of control crashes were on rural roads, with two-fifths occurring during hours of darkness and just over a third in wet conditions.

| Loss of control crashes | |
|--|-----------------------|
| Crash characteristics | Percentage of crashes |
| Single vehicle | 83% |
| Alcohol (injury crashes) | 23% |
| Too fast for the conditions (injury crashes) | 24% |
| Road factors | 18% |
| Poor handling (injury crashes) | 41% |
| Rural road | 87% |
| Wet road | 35% |
| Night time | 40% |

Further information about all loss of control crashes in Tararua District 2005-2009 on:

Local roads

- 5 deaths, 36 serious injuries and 100 minor injuries
- Worst month: December (34 crashes)
- Worst day of week: Saturday (50 crashes)
- Wet road crashes: 30 percent
- Night time crashes: 40 percent
- Crashes at intersection: 20 percent
- Road factors: 15 percent
- Alcohol over limit (injury crashes): 23 percent
- Most common injury crash factors: poor handling (44 percent) followed too fast by (34 percent)
- At fault male driver (injury crashes): 73 percent
- At fault driver held learner or restricted licence (injury crashes): 31 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (42 percent)

State highways

- 12 deaths, 51 serious injuries and 134 minor injuries
- Worst months: January and December (33 crashes each)
- Worst day of week: Saturday (69 crashes)
- Wet road crashes: 40 percent
- Night time crashes: 40 percent
- Crashes at intersection: 10 percent
- Road factors: 20 percent
- Alcohol over limit (injury crashes): poor handling (39 percent) followed by too fast and fatigue (26 percent each)
- At fault male driver (injury crashes): 63 percent
- At fault driver held learner or restricted licence (injury crashes): 32 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (36 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.

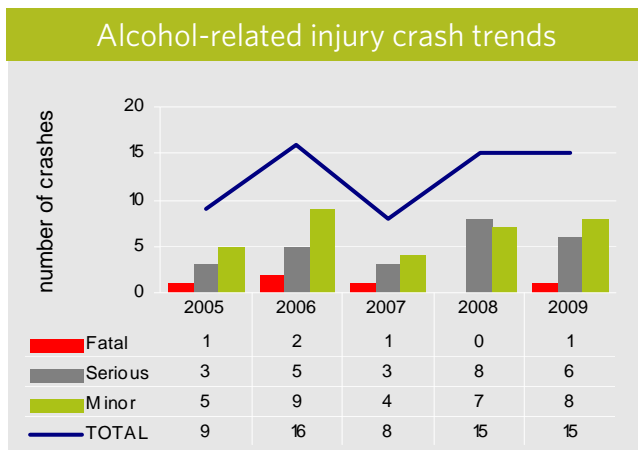
During 2009, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes in New Zealand.

Tararua District

During the most recent five year period (2005-2009) 19 percent of all injury crashes in Tararua District were alcohol-related which is higher than both the latest five year average for similar authorities (16 percent) and the national average (15 percent). Last year 23 percent of all injury crashes in the district recorded alcohol as a contributing factor.

There were 63 injury and 62 non-injury alcohol-related crashes reported in the last five years. These crashes resulted in 6 deaths, 36 serious injuries and 55 minor injuries.

The latest five year data shows an upward trend in the total number of alcohol-related injury crashes.



Two-thirds of all alcohol-related crashes occurred in rural areas (64 percent) and similar proportion of all the crashes involved a loss of control at bend type crash movement (66 percent). Just under a third of all crashes occurred at intersections (31 percent). Half of the alcohol-related crashes (48 percent) occurred on State highways accounting for all fatalities and 58 percent of the serious injuries.

Three-quarters of the all alcohol-related crashes occurred during the hours of darkness (75 percent). Three-fifths of the crashes occurred on weekends, between 6pm Friday and 6am Monday (57 percent).

Thirty-eight percent of the at fault drivers involved in alcohol-related injury crashes held either a learner licence or a restricted licence, a further 26 percent were never licensed or disqualified from driving.

Alcohol and speed

Speed was a factor in 27 percent of the 63 alcohol related injury crashes in the district 2005-2009, resulting in 4 deaths, 10 serious injuries and 14 minor injuries. There were a further 25 non-injury, alcohol and speed combined, crashes reported.

In crashes where both driver alcohol and speed were contributing factors, more than a quarter of the crashes occurred on local roads in urban areas (28 percent) and were mostly during hours of darkness (81 percent). Four-fifths of these crashes were loss of control at bend type movements (81 percent).

Drivers at fault or part fault involved in these crashes were predominantly under 30 years of age (71 percent), a quarter were young drivers in the age group 15-19 years (24 percent). Just over half of the at fault drivers held a learner licence or a restricted licence (53 percent).

Further information about alcohol-related crashes in Tararua District 2005-2009 on:

Local roads

- 15 serious injuries and 25 minor injuries
- Worst month: February (10 crashes)
- Worst day of week: Saturday (18 crashes)
- Wet road crashes: 34 percent
- Night time crashes: 80 percent
- Crashes at intersection: 37 percent
- Most common injury crash factors: too fast (35 percent) followed by poor handling (19 percent)
- Road factors: 5 percent
- At fault male driver (injury crashes): 81 percent
- At fault driver held learner or restricted licence or disqualified or never licensed (injury crashes): 63 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years (44 percent)

State highways

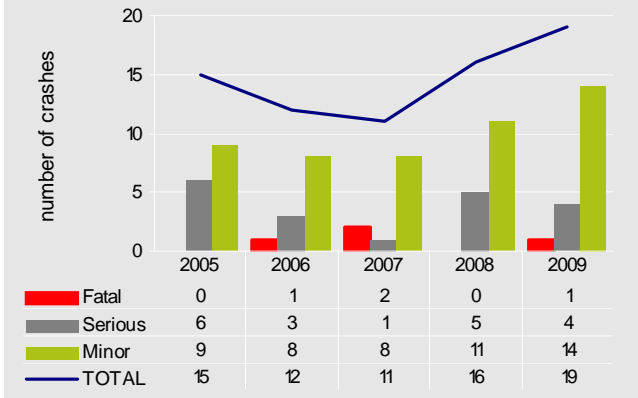
- 6 deaths, 21 serious injuries and 30 minor injuries
- Worst month: February (9 crashes)
- Worst day of week: Saturday (18 crashes)
- Wet road crashes: 32 percent
- Night time crashes: 70 percent
- Crashes at intersection: 23 percent
- Most common injury crash factors: too fast (24 percent) followed by poor handling (19 percent)
- Road factors: nil
- At fault male driver (injury crashes): 73 percent
- At fault driver held restricted licence (injury crashes): 35 percent
- Most common at fault drivers' age group injury crashes): 15-29 years (65 percent)

Young drivers

During the most recent five year period (2005-2009) in Tararua District, 22 percent of all injury crashes involved young drivers, aged 15-19 years. These crashes resulted in 4 deaths, 22 serious injuries and 79 minor injuries.

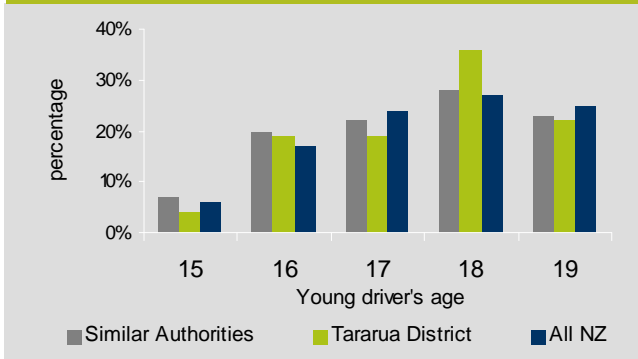
The latest five year data shows an upward trend in the total number of crashes involving young drivers.

Young driver injury crash trends



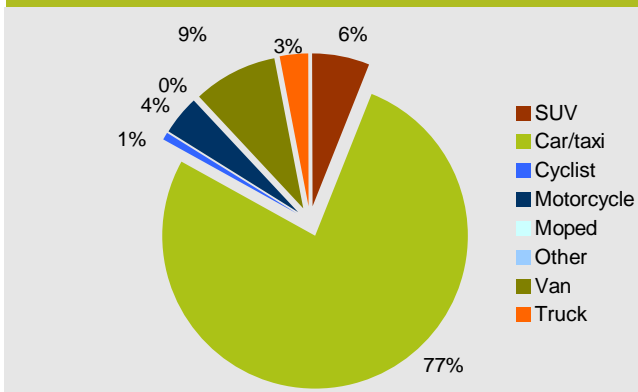
The age distribution of young drivers involved in injury crashes is shown below. Seventy-four percent of these injury crashes show young drivers were at fault or part-fault.

Age distribution of young drivers 2005-2009

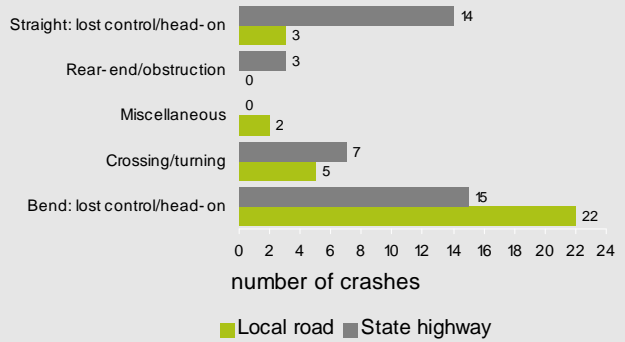


The types of vehicles involved in injury crashes involving young drivers are shown below; over three-quarters were cars. Two-thirds of these crashes were single vehicle crashes.

Vehicle types involved in young driver injury crashes 2005-2009



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 (71 percent):

- loss of control at bends: 44 percent
- loss of control on a straight road: 21 percent
- loss of control head-on collision: 4 percent
- loss of control overtaking: 2 percent

Further information about injury crashes involving young drivers in Tararua District 2005-2009 on:

Local roads

- 2 deaths, 63 serious injuries and 319 minor injuries
- Worst month: July (5 crashes)
- Worst day of week: Sunday (8 crashes)
- Wet road crashes: 26 percent
- Night time crashes: 44 percent
- Alcohol over limit (injury crashes): 21 percent
- Speed too fast (injury crashes): 29 percent
- Most common injury crash factors: poor observation (44 percent) followed by failure to give way/stop (29 percent)
- At fault driver held learner NZ licence (injury crashes): 28 percent
- At fault driver held restricted NZ licence (injury crashes): 32 percent

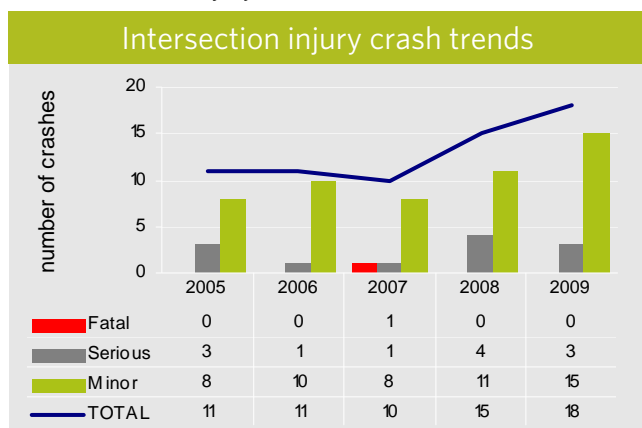
State highways

- 2 deaths, 15 serious injuries and 40 minor injuries
- Worst month: February (8 crashes)
- Worst day of week: Saturday (9 crashes)
- Wet road crashes: 33 percent
- Night time crashes: 38 percent
- Alcohol over limit (injury crashes): 31 percent
- Speed too fast (injury crashes): 10 percent
- Most common injury crash factors: poor handling (33 percent) followed by failure to give way/stop (18 percent)
- At fault driver held learner NZ licence (injury crashes): 8 percent
- At fault driver held restricted NZ licence (injury crashes): 41 percent

Intersections

During the most recent five year period (2005-2009) 20 percent of all crashes in Tararua District occurred at intersections. These crashes resulted in 1 death, 13 serious injuries and 72 minor injuries. There were an additional 178 non-injury crashes reported.

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



Nearly three-quarters of all crashes occurred at urban intersections (73 percent). Just over half of all intersection crashes occurred on state highways (55 percent) accounting for all fatalities.

| | Local urban | Local rural | SH urban | SH rural |
|----------------------|-------------|-------------|----------|----------|
| Intersection crashes | 33% | 12% | 40% | 15% |

Note: Rural roads are roads with a speed limit of 80km/hr or more.

The table below shows the locations of intersections with a high number of crashes in Tararua district (2005-2009).

| Intersection name | Total crashes 2005 - 2009 | Injury crashes 2005-2009 | Total crashes in 2009 |
|---------------------------------|---------------------------|--------------------------|-----------------------|
| SH 2 / Princess St | 9 | 4 | 4 |
| SH 2 / Swinburn St | 4 | 3 | 0 |
| Miller St/ Denmark St | 12 | 2 | 4 |
| SH 2 / Christian St | 10 | 2 | 0 |
| Denmark St / Barraud St | 5 | 2 | 1 |
| London St / Denmark St | 2 | 2 | 0 |
| SH 2 / Makirikiri Road | 1 | 1 | 0 |
| SH 2 / Otawhao Road | 1 | 1 | 0 |
| Umutaoroa Road / Armstrong Road | 1 | 1 | 0 |
| SH 2 / Kaiparoro Road | 2 | 1 | 0 |

| Junction Type | Rural | Urban |
|---------------|-------|-------|
| Crossroad | 7 | 108 |
| T-junction | 52 | 59 |
| Roundabout | 0 | 7 |
| Driveway | 3 | 4 |
| Y-junction | 3 | 0 |

Crashes at crossroads and T-junctions in urban areas are the most common types of intersection crashes in Tararua District 2005-2009, followed by rural T-junctions.

Three-fifths of intersection crashes occurred due to a driver failing to give way; 8 percent at give way signs, 8 percent at stop signs and 33 percent at intersections without any traffic control.

Further information about all intersection crashes in Tararua District 2005-2009 on:

Local roads

- 6 serious injuries and 33 minor injuries
- Worst month: December (16 crashes)
- Worst day of week: Thursday (20 crashes)
- Wet road crashes: 29 percent
- Night time crashes: 32 percent
- Alcohol over limit (injury crashes): 24 percent
- Most common injury crash factors: failed to give way/stop (41 percent) followed by poor observation (38 percent)
- At fault male driver (injury crashes): 48 percent
- At fault driver held learner or restricted licence (injury crashes): 40 percent
- Most common age group (injury crashes): 15-24 years (36 percent)

State highways

- 1 death, 7 serious injuries and 39 minor injuries
- Worst month: April (19 crashes)
- Worst day of week: Friday (25 crashes)
- Wet road crashes: 26 percent
- Night time crashes: 25 percent
- Alcohol over limit (injury crashes): 11 percent
- Most common injury crash factors: poor observation (53 percent) followed by failed to give way/stop (50 percent)
- At fault male driver (injury crashes): 73 percent
- At fault driver held full NZ licence (injury crashes): 68 percent
- Most common age group (injury crashes): 15-24 years (33 percent) and 30-39 years (22 percent)

Vulnerable road users

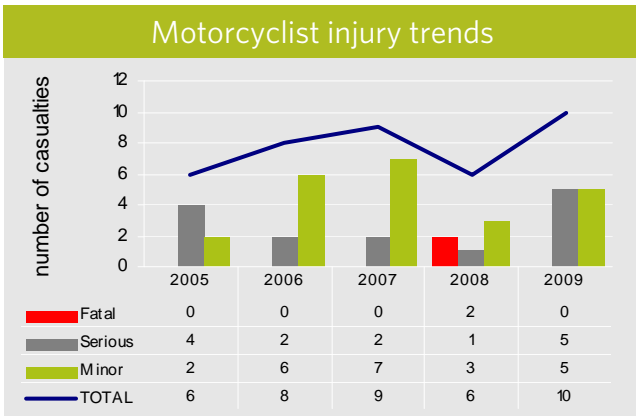
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries. These are defined as pedestrians, motorcyclists and cyclists.

In Tararua District, vulnerable road users were involved in 17 percent of all injury crashes in 2005-2009, accounting for 13 percent of all casualties, 11 percent of all deaths and 18 percent of all serious injuries over the five year period.

Motorcyclists

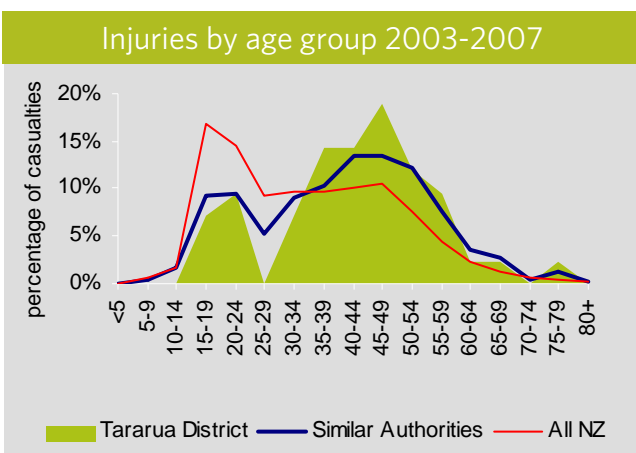
Injury crashes involving motorcyclists represent 12 percent of all injury crashes in Tararua District during the last five year period 2005-2009, resulting in 2 deaths, 15 serious injuries and 26 minor injuries.

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



Over three-quarters of motorcyclist crashes took place on rural roads (78 percent). Fifteen percent of the motorcyclist crashes happened at intersections. Half are reported as singly party motorcycle crashes (49 percent).

The age distribution of injured motorcyclists is shown below. Nearly a half of the injured motorcyclists were riders in the age group 35-49 years (47 percent). This age group is proportionally higher when compared to similar authorities and all NZ averages.



| Location / route | Number of motorcyclist injury crashes |
|--|---------------------------------------|
| SH 2/ Broomfield Road | 2 |
| Makomako Road/ Pahiatua Man-gahao Road | 1 |
| Alfredton Road route | 2 |
| Coast Road route | 2 |
| Tutaekara Road route | 2 |
| SH 2 route between Woodville and Dannevirke | |
| Pahiatua area, the route SH 2 through Tutaekara Road | |

The scenarios for crashes involving motorcyclists were many and varied. The most common scenarios for all crashes involving motorcyclists in Tararua District 2005-2009 were:

- Loss of control: 50 percent
- a straight through vehicle collides with another vehicle ahead that was turning right from the main road: 13 percent
- a vehicle turning right from a side road or driveway across a vehicle travelling straight through: 11 percent
- a motorcyclist collides with a non-vehicular obstruction on the roadway including animals: 7 percent

The high crash locations/routes for motorcycle crashes in the district 2005-2009 are shown in the table above.

Further information about all crashes involving motorcyclists in Tararua District 2005-2009 on:

Local roads

- 1 death, 9 serious injuries and 17 minor injuries
- Worst month: February (6 crashes)
- Worst day of week: Sunday (10 crashes)
- Most common injury crash factors: poor handling (40 percent) and Too fast (20 percent)
- Wet road crashes: 7 percent
- Night time crashes: 10 percent
- Alcohol over limit (injury crashes): 8 percent
- Crashes at intersection: 7 percent
- Male motorcyclist injured: 96 percent

State highways

- 1 death, 6 serious injuries and 9 minor injuries
- Worst month: June (4 crashes)
- Worst days of week: Saturday and Sunday (4 crashes each)
- Most common injury crash factors: Poor observation (43 percent) followed by failure to give way/stop (36 percent)
- Wet road crashes: 18 percent
- Night time crashes: 18 percent
- Alcohol over limit (injury crashes): nil
- Crashes at intersection: 29 percent
- Male motorcyclist injured: 100 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 Tararua District 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.

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