

briefing notes road safety issues

Manawatu District

This report details aspects of Manawatu 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 Manawatu 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 Manawatu District is compared to similar authorities and those crashes with a high social cost (relating mainly to high numbers of fatal and serious crashes).

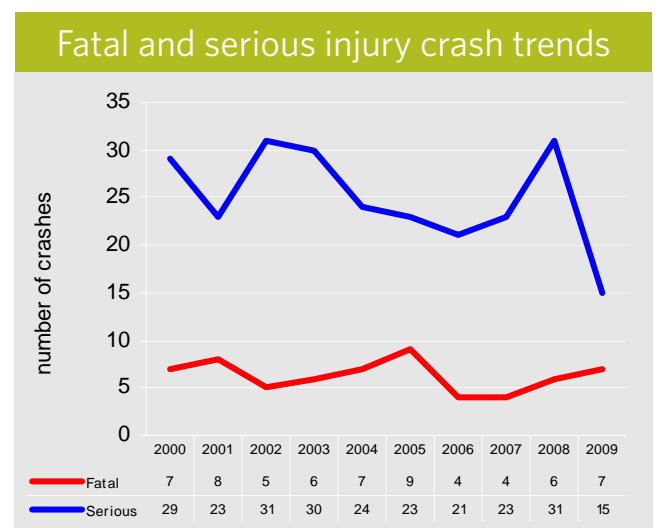
2009 road trauma	
Casualties	Manawatu District
Death	9
Serious injury	18
Minor injury	78
Total casualties	105

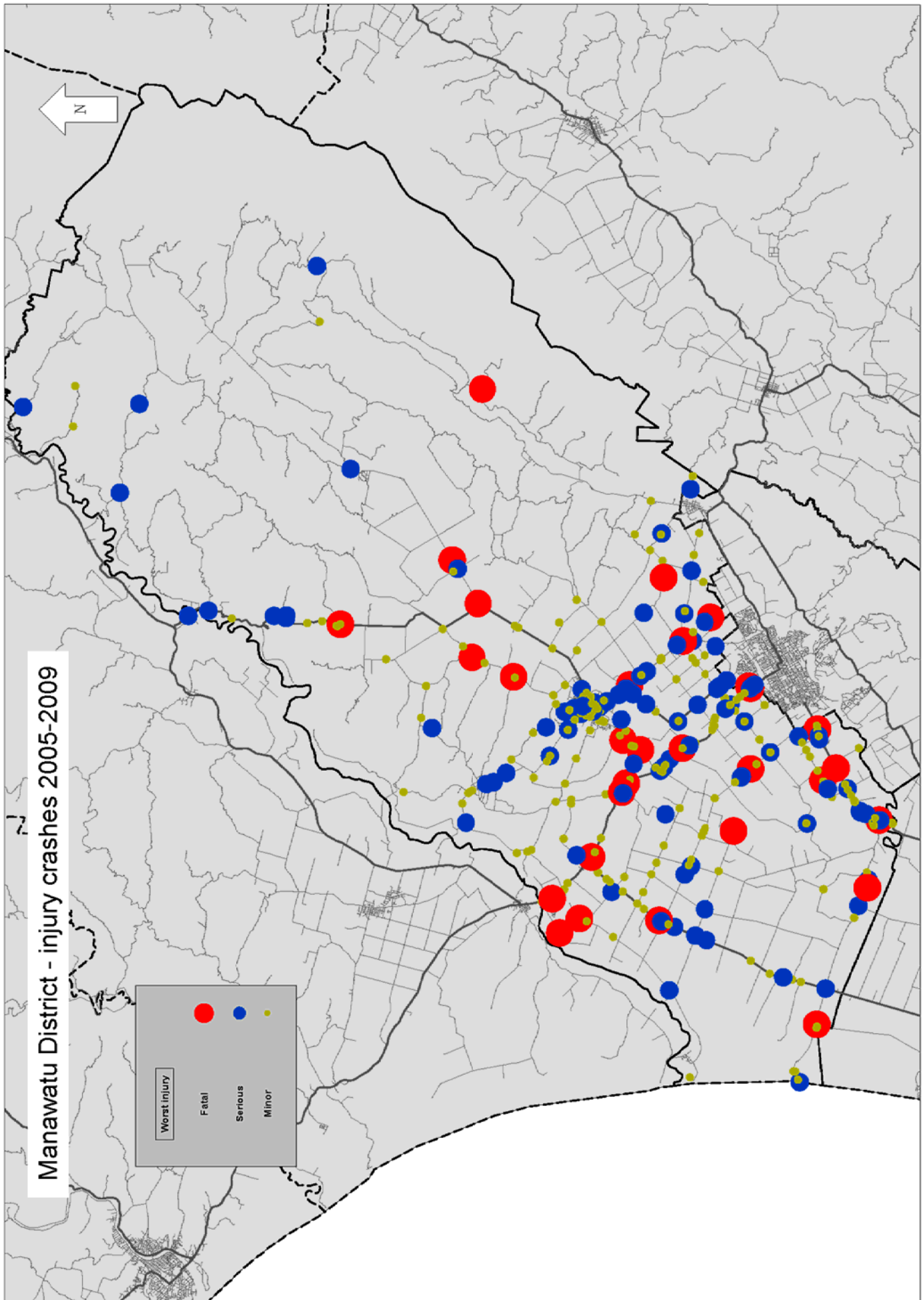
Crashes	Manawatu District
Fatal crashes	7
Serious injury crashes	15
Minor injury crashes	55
Total injury crashes	77
Non-injury crashes	150 reported

2009 - social cost of crashes	
Local roads	\$ 28.12M
State highways	\$ 21.41M
Total	\$ 49.53M

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	
Manawatu District	
Loss of control	
Intersections	
Speed - incl Alcohol	
Vulnerable road users: - pedestrians	
- 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

Manawatu District

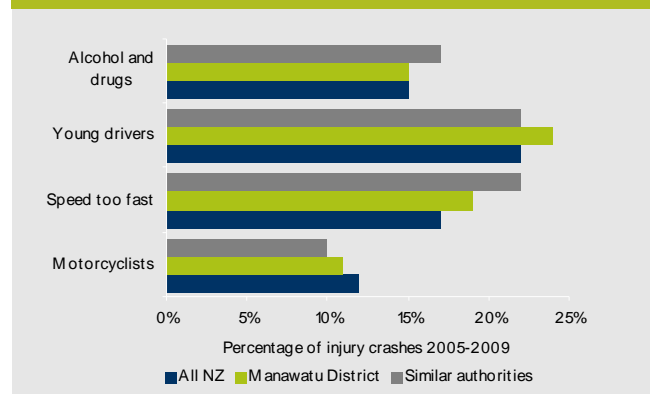
Presented below is a brief look at Manawatu District’s position on Safer Journeys’ areas of high concern compared to similar authorities’ averages and the all-NZ averages (sample period 2005-2009).

Restraints

According to 2009 survey results restraint use rate in Manawatu District for front seat and rear seat are 97 and 92 percent 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 Manawatu District, alcohol was recorded in 15 percent of injury crashes in the last five years, resulting in 36 deaths, 143 serious injuries and 496 minor injuries. Alcohol-related crashes were proportionally lower than in similar authorities, however the numbers are high in the district.

Young drivers

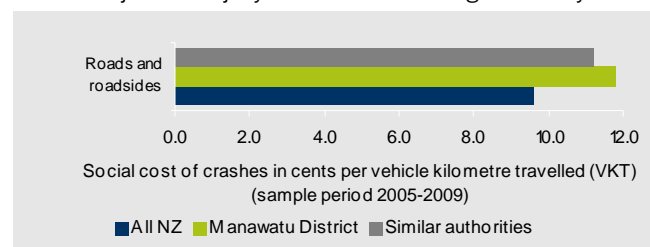
In Manawatu District, young drivers aged 15-19 years were involved in 24 percent of all injury crashes during the last five year period, resulting in 5 deaths, 24 serious injuries and 150 minor injuries. This was proportionally higher than in similar authorities.

Speed too fast

Speed too fast was recorded in 19 percent of injury crashes in Manawatu District in the last five years, resulting in 11 deaths, 31 serious injuries and 90 minor injuries. Speed as a factor in crashes was proportionally lower than in similar authorities.

Motorcyclists

In Manawatu District, motorcyclists were involved in 11 percent of all injury crashes during the last five year period, resulting in 2 deaths, 27 serious injuries and 33 minor injuries. Injury crashes involving motorcyclists



was proportionally higher than in similar authorities.

Roads and roadsides

In Manawatu District, there were on average 22 injury crashes per 100 million VKT over the last five years. The social cost per VKT of these crashes is 5 percent lower than the similar authority average (see the graph above).

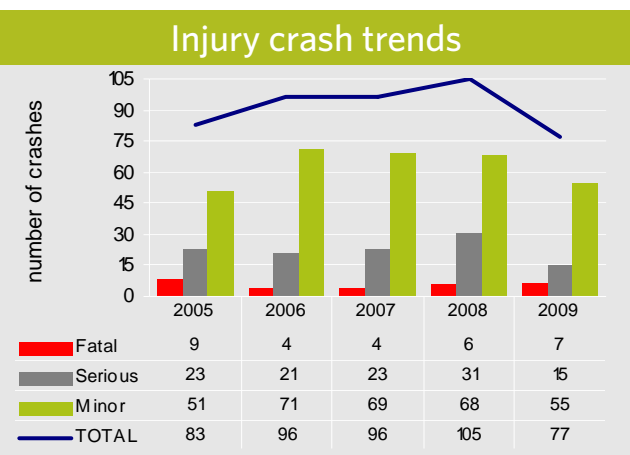
Overview 2009

In 2009 in Manawatu District, 77 injury crashes resulting in 105 casualties and 150 non-injury crashes were reported by the New Zealand Police. Forty-one 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.

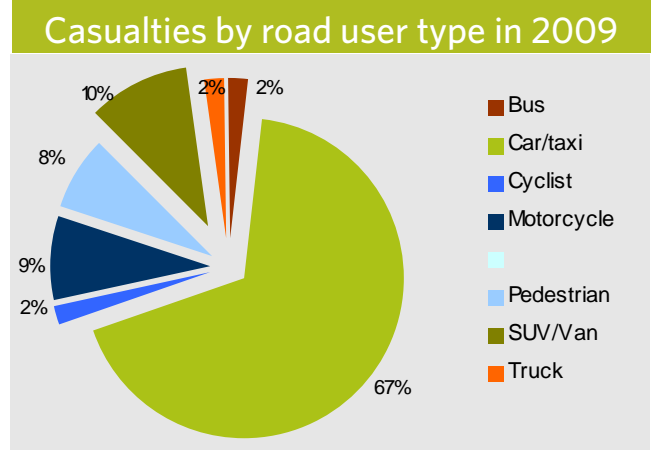
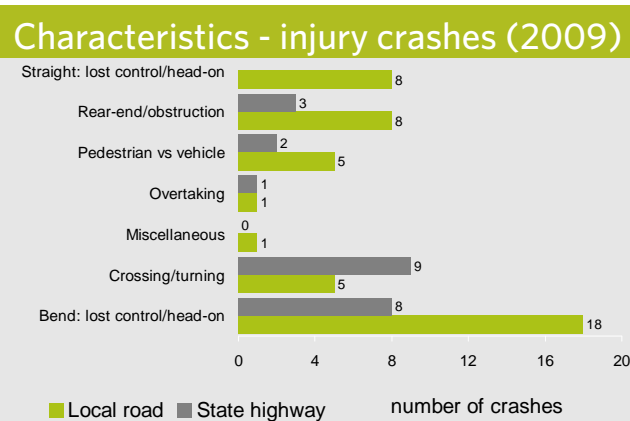
Casualties by injury type in 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Total	9	18	78	105
Local roads vs state highways				
Local roads	5	11	44	60
State highways	4	7	34	45
Rural vs urban roads				
Rural ¹	7	13	58	78
Urban	2	5	20	27

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

The latest five year data shows a downward trend in the total number of injury crashes.



In 2009 over half the injury crashes involved a driver losing control of their vehicle and a fifth involved a crossing or turning movement.



Two-thirds of the casualties were drivers or passengers of cars, a tenth of sports utility vehicles or vans and a fifth were vulnerable road users (pedestrians, cyclists and motorcyclists).

In 2009 in Manawatu District, young drivers aged 15 to 19 years inclusive were at fault drivers in 15 percent of injury crashes and older drivers, 70 years of age and over, in 11 percent.

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

Local roads

- Total number of injury crashes: 46
- Worst month: November (20 percent)
- Worst day of week: Saturday (22 percent)
- Wet road crashes: 26 percent
- Night time crashes: 41 percent
- Alcohol over limit: 24 percent
- Failed to give way/stop: 11 percent
- Too fast for conditions: 30 percent
- Pedestrian factors : 9 percent
- Crashes at intersection: 30 percent
- Road factors: 22 percent
- At fault male driver: 68 percent
- At fault driver held full NZ licence: 50 percent

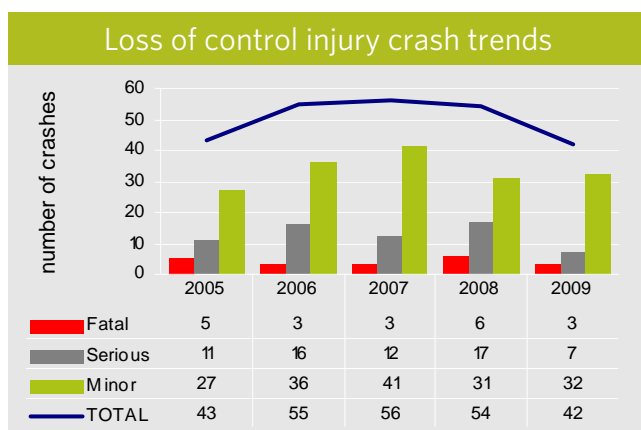
State highways

- Total number of injury crashes: 31
- Worst month: September (19 percent)
- Worst day of week: Saturday (23 percent)
- Wet road crashes: 26 percent
- Night time crashes: 35 percent
- Alcohol over limit: 16 percent
- Too fast for conditions: 3 percent
- Failed to give way/stop: 26 percent
- Fatigue: 13 percent
- Crashes at intersection: 35 percent
- Road factors: 13 percent
- At fault male driver: 69 percent
- At fault driver held full NZ licence: 76 percent

Loss of control

During the last five year period (2005-2009) 55 percent of all injury crashes in Manawatu District occurred due to loss of control. These crashes resulted in 23 deaths, 86 serious injuries and 275 minor injuries. A further 404 non-injury crashes were reported involving loss of control.

The latest five year data shows a level trend the total number of loss of control type injury crashes. The trend in the fatal and serious injury total is downwards.



The majority of loss of control crashes occurred at bends (62 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 (654 crashes) in Manawatu District 2005-2009, split to show urban and rural speed limits.

Number of crashes	Local urban	Local rural	SH urban	SH rural
At bends	8%	38%	2%	14%
Straight road	4%	19%	1%	4%

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

In loss of control crashes the three most common roadside hazards struck were ditches (31 percent) followed by fences (26 percent) and posts or poles (10 percent). In total 714 objects were reported 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 crashes. Alcohol was a contributing factor in a fifth and speed too fast for conditions in a third of loss of control injury crashes. Most loss of control crashes occurred on rural roads, nearly half of these during hours of darkness and a third of all crashes occurred in wet conditions. A fifth of all loss of control crashes in the district 2005-2009 record road factors as contributing to the crash.

Loss of control crashes

Crash characteristics	Percentage of crashes
Single vehicle	83%
Alcohol (injury crashes)	21%
Too fast for the conditions (injury crashes)	31%
Road factors	18%
Poor handling (injury crashes)	42%
Rural road	86%
Wet road	33%
Night time	46%

Further information about all crashes due to loss of controls in Manawatu District 2005-2009 on:

Local roads

- 17 deaths, 53 serious injuries and 173 minor injuries
- Worst month: April (49 crashes)
- Worst day of week: Saturday (77 crashes)
- Wet road crashes: 35 percent
- Night time crashes: 45 percent
- Crashes at intersection: 25 percent
- Road factors: 18 percent
- Alcohol over limit (injury crashes): 19 percent
- Most common injury crash factors: poor handling (44 percent) followed by too fast (35 percent)
- At fault male driver (injury crashes): 64 percent
- At fault driver held learner or restricted licence (injury crashes): 38 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years (54 percent)

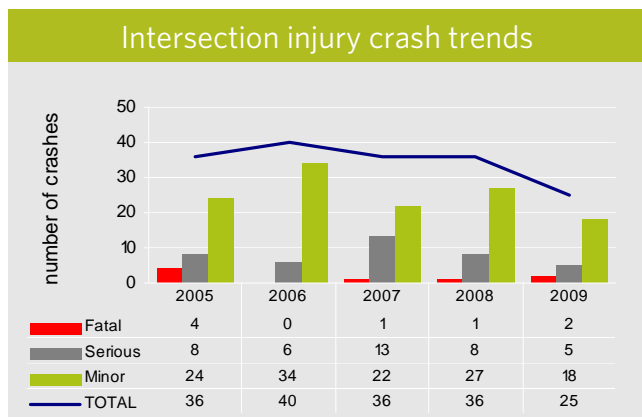
State highways

- 6 deaths, 33 serious injuries and 84 minor injuries
- Worst month: December (22 crashes)
- Worst day of week: Saturday (46 crashes)
- Wet road crashes: 27 percent
- Night time crashes: 50 percent
- Crashes at intersection: 20 percent
- Road factors: 14 percent
- Alcohol over limit (injury crashes): 26 percent
- Most common injury crash factors: poor handling (36 percent) followed by fatigue (34 percent)
- At fault male driver (injury crashes): 61 percent
- At fault driver held restricted licence (injury crashes): 26 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years (61 percent)

Intersections

During the most recent five year period (2005-2009) 38 percent of all injury crashes in Manawatu District occurred at intersections. These crashes resulted in 9 deaths, 50 serious injuries and 199 minor injuries. There were a further 282 non-injury crashes reported.

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



Nearly three-fifths of these crashes occurred at rural intersections (57 percent). Fifty-five percent of these crashes occurred on local roads, accounting for two-thirds of fatalities (67 percent) and over half the serious injuries (54 percent).

	Local urban	Local rural	SH urban	SH rural
Intersection crashes	28%	28%	15%	29%

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

The following table below shows the locations of intersections with the highest number of crashes in the district (2005-2009).

Intersection name	Total crashes 2005 - 2009	Injury crashes 2005-2009	Total crashes in 2009
SH 54 / Derby St	17	10	1
SH 1N / Highway 56	10	6	2
Makino Road / Reid Line West	10	6	1
SH 54 / Kimbolton Road	13	5	2
SH 3 / Flyers Line	10	4	0
SH 3 / Kairanga Bunnythorpe Rd	17	4	0
SH 54/Milson Line	19	4	6
Kairanga Bunnythorpe Rd / Gillespies Line	10	4	1
SH 56 / Reserve Road	6	4	1
Tangimoana Road / Mcdonnell Road	3	3	1

Junction Type	Rural	Urban
T-junction	121	69
Crossroad	113	85
Y-junction	23	6
Roundabout	0	34
Driveway	2	2

Rural crashes at T-junctions and crossroads are the most common types of intersection crashes reported in Manawatu District 2005-2009.

Over half of the intersection injury crashes occurred due to failure to give way (54 percent); half at give way signs (51 percent), a quarter at stop signs (24 percent) and similarly a quarter of these crashes where a driver fails to give way occurred at intersections without traffic control (25 percent).

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

Local roads

- 6 deaths, 27 serious injuries and 111 minor injuries
- Worst months: March and June (28 crashes each)
- Worst day of week: Friday (43 crashes)
- Wet road crashes: 28 percent
- Night time crashes: 31 percent
- Alcohol over limit (injury crashes): 14 percent
- Most common injury crash factors: Failed to give way/stop (47 percent) followed by poor observation (38 percent)
- At fault male driver (injury crashes): 66 percent
- At fault driver held learner or restricted licence (injury crashes): 35 percent
- Most common age group (injury crashes): 15-24 years old (39 percent)

State highways

- 3 deaths, 23 serious injuries and 88 minor injuries
- Worst month: June (24 crashes)
- Worst day of week: Friday (33 crashes)
- Wet road crashes: 22 percent
- Night time crashes: 26 percent
- Alcohol over limit (injury crashes): 12 percent
- Most common injury crash factors: failed to give way/stop (63 percent) followed by poor observation (55 percent)
- At fault male driver (injury crashes): 61 percent
- At fault driver held full NZ licence (injury crashes): 71 percent
- Most common age group (injury crashes): 15-29 years old (48 percent)

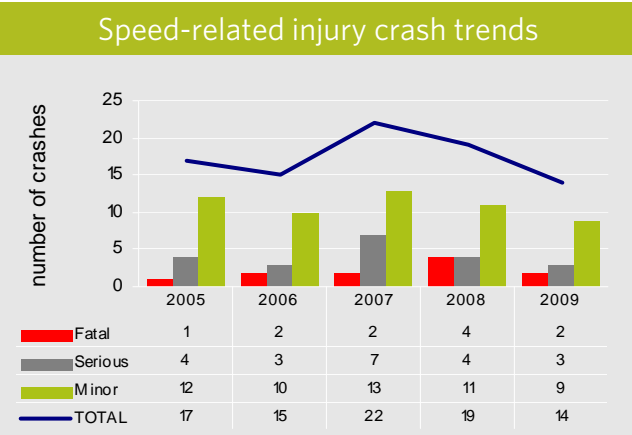
Speed

Speed is a major contributing factor involved in road crashes. In 2009, excessive speed contributed to 31 percent of all fatal crashes and 17 percent of all injury crashes in New Zealand. These crashes resulted in 118 deaths, 553 serious injuries and 2067 minor injuries.

In Manawatu District, speed too fast for conditions was a factor in 18 percent of all injury crashes in 2009, higher than the national average (17 percent) and lower than the average for similar authorities (19 percent).

During the last five year period (2005-2009) there were 87 speed-related injury crashes resulting in 12 deaths, 31 serious injuries and 92 minor injuries. There were also 137 non-injury crashes reported for the same period.

The latest five year data show a slight downward trend in the total number of speed-related injury crashes.



Three-quarters of the speed-related crashes occurred in rural areas (76 percent). Seventy-one percent of the speed-related crashes occurred on local roads accounting for, 83 percent of the fatalities, 10 deaths.

The following table shows a breakdown of the speed limit environment of all speed-related crashes in the district 2005-2009.

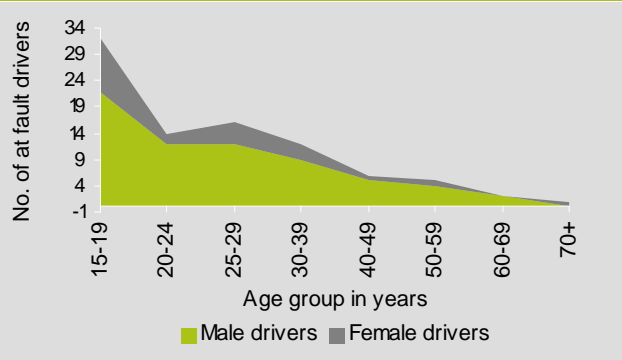
Speed-related crashes					
	2005	2005	2006	2007	2009
Urban	33	31	43	35	29
Rural	9	10	5	13	16
Total	42	41	48	48	45

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

Nearly half of the speed-related crashes occurred on weekends, between Friday 6pm and Monday 6am (45 percent). Just over half of the speed-related crashes occurred during hours of darkness (52 percent).

Just over half of the at fault drivers in speed-related injury crashes were under 25 years of age (52 percent). Nearly half of the at fault drivers on these crashes held a learner licence or a restricted licence (46 percent). Three-quarters of at fault drivers in speed-related injury crashes were male (75 percent).

Age & gender of at fault drivers 2005-2009



Speed and alcohol

Alcohol was a factor in 26 percent of all speed-related injury crashes in the district 2005-2009. Alcohol combined with speed was a contributing factor in 5 percent of all injury crashes in the district for the same period, resulting in 3 deaths, 4 serious injuries and 20 minor injuries. Alcohol itself has been a factor in 16 percent of all injury crashes in the district in the last five years.

Three-quarters of all crashes where driver alcohol and speed were both contributing factors occurred on local roads (73 percent) and mostly during hours of darkness (91 percent). Most of these crashes were loss of control at bend types (71 percent). Three-quarters of at fault drivers in these injury crashes were males under 24 years of age (73 percent).

Further information about speed-related crashes in Manawatu District 2005-2009 on:

Local roads

- 10 deaths, 22 serious injuries and 71 minor injuries
- Worst day of week: Sunday (32 crashes)
- Wet road crashes: 36 percent
- Night time crashes: 52 percent
- Alcohol over limit (injury crashes): 26 percent
- Most common injury crash factor: loss of control at bends (73 percent)
- At fault male driver (injury crashes): 79 percent
- At fault drivers held learner or restricted licence (injury crashes): 49 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years (37 percent)

State highways

- 2 deaths, 9 serious injuries and 21 minor injuries
- Worst day of week: Saturday (16 crashes)
- Wet road crashes: 41 percent
- Night time crashes: 52 percent
- Alcohol over limit (injury crashes): 29 percent
- Most common injury crash factor: loss of control at bends (69 percent)
- At fault male driver (injury crashes): 60 percent
- At fault driver held full NZ licence (injury crashes): 55 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years (80 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 Manawatu District, vulnerable road users were involved in 19 percent of all injury crashes in 2005-2009, accounting for 15 percent of all casualties, 19 percent of all deaths and 27 percent of all serious injuries over the five year period.

Pedestrians

Injury crashes involving pedestrians in Manawatu District accounted for 4 percent of all injury crashes during the last five year period. These pedestrian crashes resulted in 4 deaths, 6 serious injuries and 13 minor injuries. In terms of casualties pedestrians made up 11 percent of all deaths and 4 percent of all serious injuries during 2005-2009.

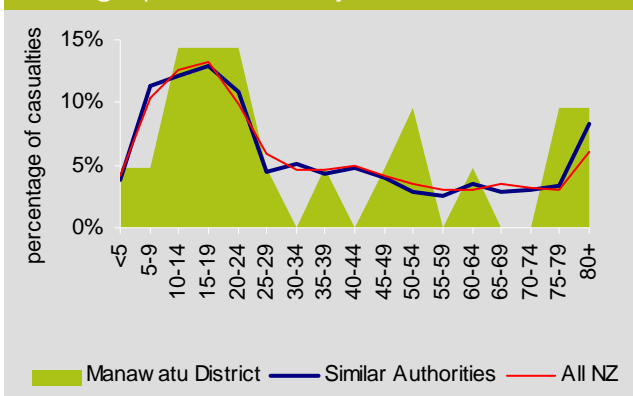
The latest five year data shows an upward trend in the total number of casualties in crashes involving pedestrians.

Casualty trends: pedestrian crashes



Two-fifths of the pedestrian casualties (42 percent) were in the age group, 10-24 years. This age group is proportionally higher when compared to similar authorities and all NZ averages. Twenty percent of the pedestrians injured during the last five year period were aged over 75 years, making another highly represented age group.

Age: pedestrians injured 2005-2009



Location / route	Number of pedestrian Injury crashes
SH 54-route; intersections at Waughs Road, Almadale Road and Denbigh St	3
SH 56-route; intersections at Walkers Road and Highway 56	2
SH 3-route; at Green Road and Hansens Line	2
Reid Line East / Watershed Road	1
SH 1N / Pukenui Road	1
Aorangi St / Grey St	1
North St / Kennedy Avenue	1

The worst pedestrian crash locations 2005-2009 are shown in the table above.

Nearly two-fifths of all pedestrian crashes occurred on urban local roads (38 percent) and a quarter occurred at intersections (24 percent). Most accidents occurred during the hours of daylight (62 percent).

The following were the most commonly reported pedestrian factors involved in these pedestrian crashes:

- 38 percent involved pedestrians crossing roads heedless of traffic
- 19 percent involved pedestrian walking along road, either not keeping to the side of road or not facing oncoming traffic
- 14 percent involved a pedestrian behind a reversing or manoeuvring vehicle
- 10 percent involved pedestrians who were visibly intoxicated

Further information regarding pedestrian injury crashes in Manawatu District 2005-2009 on:

Local roads

- 1 death, 3 serious injuries and 8 minor injuries
- Worst day of week: Tuesday (3 crashes)
- Wet road crashes: 8 percent
- Night time crashes: 25 percent
- Alcohol over limit (injury crashes): 9 percent
- Crashes at intersection: 17 percent
- Pedestrian factors contributing to crashes: 73 percent

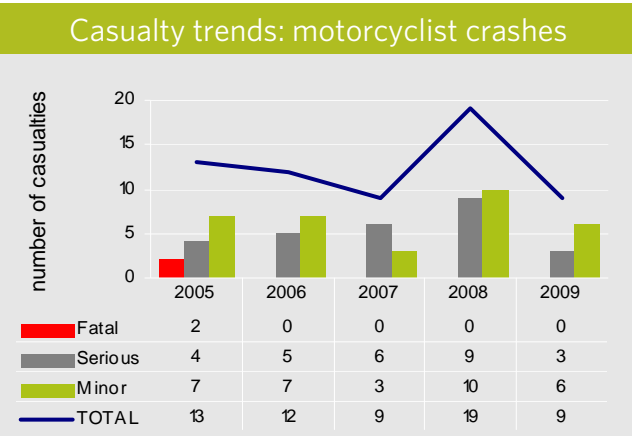
State highways

- 3 deaths, 3 serious injuries and 5 minor injuries
- Worst day of week: Saturday (3 crashes)
- Wet road crashes: nil
- Night time crashes: 56 percent
- Alcohol over limit (injury crashes): 22 percent
- Crashes at intersection: 33 percent
- Pedestrian factors contributing to crashes: 89 percent

Motorcyclists

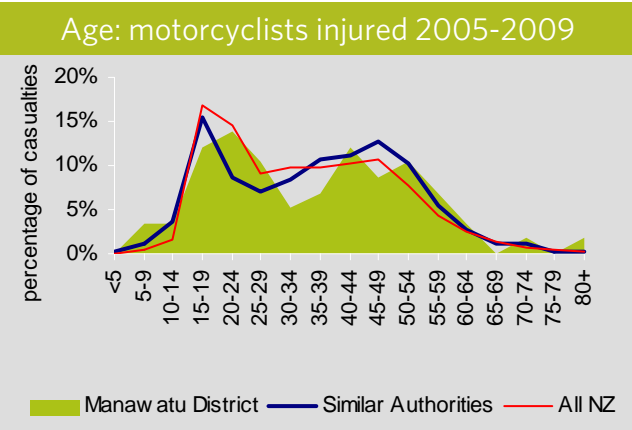
Injury crashes involving motorcyclists represented 11 percent of all injury crashes in Manawatu District during the last five year period, resulting in 2 deaths, 27 serious injuries and 33 minor injuries.

The latest five year data shows a slight downward trend in the total number of casualties in crashes involving motorcyclists over this period.



Over a third of all motorcycling crashes happened on local rural roads (37 percent), 22 crashes in total. Similarly, 37 percent of crashes involving motorcyclists occurred at intersections. Thirty-seven percent were reported as single party motorcycle crashes.

The age distribution of injured motorcyclists is shown in the chart below. A quarter of those motorcyclists injured were in the group aged 15-24 years. Six percent of those injured were aged under 15 years.



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

- loss of control: 30 percent
- a vehicle collides with another vehicle ahead that was turning from the main road: 14%
- at a crossroad both vehicles travelling straight through collide: 12 percent
- a vehicle turning right across an oncoming straight through vehicle: 7 percent

The high crash locations or routes for motorcycle crashes in Manawatu District 2005-2009 are shown in the table above.

Location / route	Number of motorcyclist injury crashes
SH 54 route total includes intersection	16
SH 54 / Waughs Road	3
SH 54 / Campbell Road	2
SH 54 / Derby St	2
SH 3 / Kairanga Bunnythorpe Road	3
North St/ Chamberlain St	2
Mangamako Road / Otara Road	2
Halcombe Road route	3
Mangamako Road route	3
Kimbolton Road route	2
North St route	2

Further information regarding crashes involving motorcyclists in Manawatu District 2005-2009 on:

Local roads

- 2 deaths, 18 serious injuries and 16 minor injuries
- Worst month: February (8 crashes)
- Worst day of week: Sunday (9 crashes)
- Most common injury crash factors: too fast for conditions and failed to give way/stop (32 percent each)
- Wet road crashes: 8 percent
- Night time crashes: 17 percent
- Alcohol over limit (injury crashes): 14 percent
- Crashes at intersection: 31 percent
- Male motorcyclist injured: 93 percent

State highways

- 9 serious injuries and 17 minor injuries
- Worst month: January (5 crashes)
- Worst day of week: Tuesday (6 crashes)
- Most common injury crash factors: poor observation (55 percent) followed by failed to give way/stop (30 percent)
- Wet road crashes: 8 percent
- Night time crashes: 13 percent
- Alcohol over limit (injury crashes): nil
- Too fast for conditions (injury crashes): 5 percent
- Crashes at intersection: 46 percent
- Male motorcyclist injured: 95 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 Manawatu 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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