



briefing notes - road safety issues

Manukau City

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2002–2006 period.

The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in Manukau City.

This report is the eighth road safety issues report for Manukau City and all the material unless otherwise stated in this report applies only to local Manukau City roads.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues would change radically from report to report.

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

We have included a brief overview of crashes in the city for 2002 to 2006.

We encourage Manukau City to use their free access to the Ministry of Transport's Crash Analysis System to delve deeper into the highlighted issues.

Major road safety issues

Manukau City

Intersections

Alcohol

Speed

Pedestrians

Nationally

Speed

Alcohol

Failure to give way

Restraints

2006 road trauma

Casualties

Manukau City

Deaths

11

Serious casualties

126

Minor casualties

673

Crashes

Manukau City

Fatal crashes

11

Serious injury crashes

105

Minor injury crashes

487

Non-injury crashes

1973

Overview

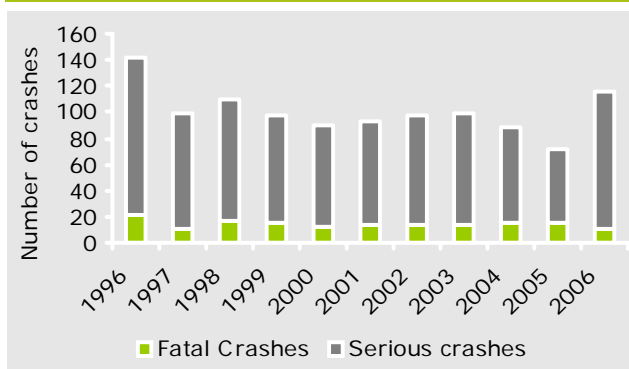
In 2006 on local roads in Manukau City there were 603 injury crashes and 1973 non-injury crashes. In addition there were 106 injury crashes and 321 non-injury crashes on Transit New Zealand (Transit NZ) roads both as reported by the New Zealand Police.

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

Casualties by injury type 2006				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	13	80	96
Urban	8	110	588	706
Total	11	123	668	802

Fatal and serious crashes in the city have been relatively steady over the last nine years. In 2006 there was a large rise in the number of serious crashes reported, as there was not a corresponding rise in fatal crashes this may have been due to improvements in Police reporting and if not this is a serious concern.

Fatal and serious crash trends



Local road fatal and serious crashes

Crash type or contributory cause 2002 to 2006	Percentage fatal or serious crashes of this type or contributory cause
Intersection	37%
Alcohol	29%
Too fast	24%
Pedestrian	20%
Bends	26%
Dark	42%

Further information about 2002 to 2006 injury and non-injury crashes on local roads:

- Worst month October, best January
- Worst day Friday, best Monday
- 25 percent on wet roads
- 34 percent at night
- 53 percent at intersections
- Social cost of crashes in 2006 \$165m
- 48 percent of at fault drivers held a full NZ licence (injury crashes)

Further information about 2002 to 2006 injury and non injury crashes on Transit NZ roads (mainly motorways):

- Worst month May, best January
- Worst day Friday, best Wednesday
- 30 percent wet road
- 34 percent night time
- 38 percent at intersections
- Social cost of crashes in 2006 \$37m
- 56 percent of at fault drivers held a full NZ licence (injury crashes)

It has been observed nationally that there is a growing group of drivers who have not been exiting the graduated licence system and who are choosing to stay on restricted licences. This is making it increasingly difficult to distinguish drivers who are truly inexperienced from those that should have moved to a full licence. As a consequence it is more difficult to target educational material.

This is certainly true in Manukau City with as few as 48 percent of at fault drivers in injury crashes being the holder of a full driving licence.

Driver licence status Manukau City 2006 Local roads	Percentage of total 'at fault' drivers (New Zealand 2006 value in brackets)
Full	48.0 (58.4) %
Learner	15.6 (9.5) %
Restricted	16.7 (17.6) %
Never licenced	5.7 (2.2) %
Disqualified	1.8 (1.7) %
Overseas	2.9 (4.2) %
Expired	0.9 (0.5) %
Other / unknown	7.9 (5.6) %

Intersections

Crashes at intersections are the most common crash type in urban Manukau City.

During the five year period 2002 to 2006 there were 1228 injury crashes at intersections and 5286 non-injury crashes. In these 13 people died, 197 received serious injuries and 1436 received minor injuries.

Crashes at Intersections					
	2002	2003	2004	2005	2006
Injury crash	257	254	217	201	299
Non-injury crash	1166	1189	970	884	1077
Total	1423	1443	1187	1085	1376

Locations with the most crashes			
Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total 2006
Ti Rakau Drive / Te Irirangi Drive	94	12	20
Pakuranga Highway / Ti Rakau Drive	72	11	20
Ti Rakau Drive / Pakuranga Road	71	6	16
East Tamaki Road / Bairds Road	63	6	17

Junction type Injury and Non-injury crashes		
Junction Type	Rural	Urban
Roundabout	4	512
Tee	96	3882
Cross (X)	92	1346
Y	9	121
Other (includes driveways)	8	420

The most common crash is one when in a driver turns right across the path of a vehicle coming straight towards them. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the right (commonly at tee junctions).

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

- Failure to stop and give way
- Not checking properly
- General errors of judgement

Intersections present most drivers with one of their biggest driving challenges and as a result less experienced drivers are highly represented in these crashes as illustrated in the table below showing the licence class of at fault drivers.

Driver licence status 2006	
Driver Licence status, intersection related injury crashes, at fault drivers in Manukau City	Percentage of total at fault drivers in intersection related crashes (New Zealand value in brackets)
Full	50.0 (60.9) %
Learner	14.8 (9.4) %
Restricted	16.5 (14.8) %
Never licenced	5.5 (2.5) %
Disqualified	1.3 (1.6) %
Overseas	3.4 (3.7) %
Expired	0.7 (0.8) %
Other / unknown	7.8 (6.3) %

Further information about injury crashes at intersections 2002 to 2006 on local roads in Manukau City:

- 13 deaths, 197 serious injuries
- 17 percent involved alcohol
- 24 percent wet roads
- 36 percent night time
- Worst month October, best February
- Worst day of week Friday, best Monday

Further information about injury crashes at intersections 2002 to 2006 on Transit NZ roads in Manukau City (mainly Motorways):

- 5 deaths, 33 serious injuries
- 19 percent involved alcohol
- 27 percent wet roads
- 44 percent night time
- Worst month May, best June
- Worst day of week Friday, best Monday

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.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than sober drivers in the same crash and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2006, alcohol-affected drivers contributed to 31 percent of all fatal crashes and 15 percent of all injury crashes.

In Manukau City, alcohol was a factor in 23 percent of injury crashes in 2006.

There were 490 alcohol-related injury crashes reported in the last five years.

Alcohol crashes (injury crashes)			
Crash year	Open road	Urban road	Total
2002	8	81	89
2003	7	65	72
2004	9	83	92
2005	14	82	96
2006	10	131	141
Total	48	442	490

There was big rise in the reporting of alcohol related crashes in 2006 which parallels the lift in the reporting of serious crashes. The geographical distribution of this change is illustrated in the table below.

Alcohol injury crashes					
Manukau City Police sub-area	2002	2003	2004	2005	2006
Central	28	26	26	20	36
East	25	23	31	43	50
South	4	3	5	3	4
West	32	20	30	30	51

The locations of alcohol related injury crashes between 2002 and 2006 are shown on the following page.

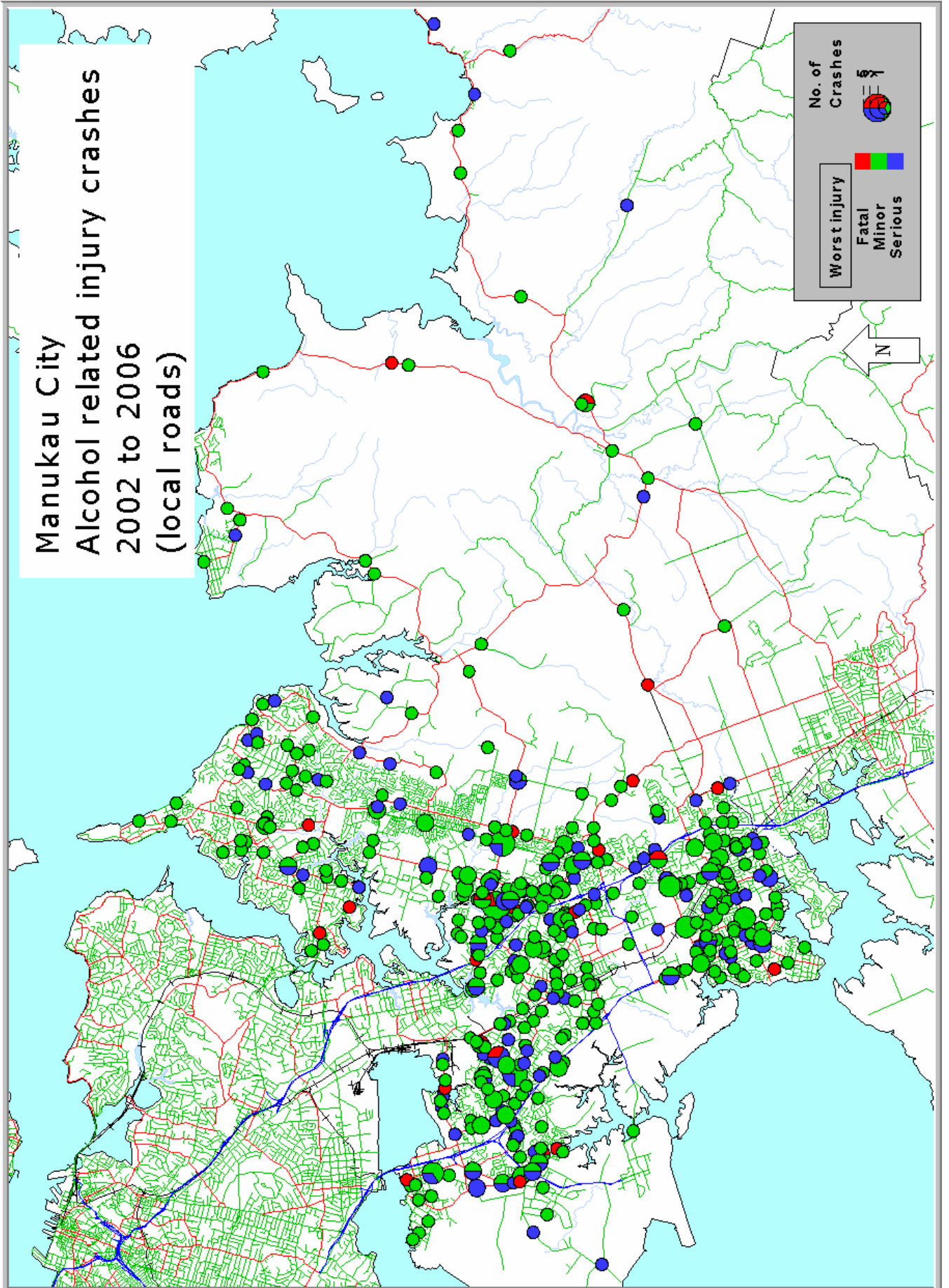
Driver licence status	
Driver Licence status, alcohol related injury crashes, at fault drivers in Manukau City 2006	Percentage of total at fault drivers in alcohol related crashes (New Zealand value in brackets)
Full	33.1 (41.6) %
Learner	25.1 (15.8) %
Restricted	18.7 (20.8) %
Never Licenced	9.3 (4.6) %
Disqualified	3.6 (6.2) %
Overseas	0 (1.0) %
Expired	4.3 (1.4) %
Other / unknown	5.7 (8.2) %

Further information about alcohol related injury crashes in Manukau City on local roads (2002 to 2006):

- 29 deaths, 142 serious injuries and 518 minor injuries
- 83 percent of at fault drivers were male
- Most common crash type “loss of control on bend”
- 42 percent at intersections
- 90 percent urban
- 27 percent wet road
- 75 percent night time
- Worst month November, best January
- Worst day of week Saturday, best Monday

Further information about alcohol related injury crashes in Manukau City on Transit NZ (mainly motorway) roads (2002 to 2006):

- 6 deaths, 30 serious injuries and 112 minor injuries
- 80 percent of at fault drivers were male
- Most common crash type “loss of control on straight”
- 40 percent at intersections
- 31 percent urban
- 27 percent wet road
- 77 percent night time
- Worst month June, best May
- Worst day of week Sunday, best Wednesday



Speed

Nationally, speed is one of the major contributing factors to road crashes. For the 12 months to the end of December 2006, excessive speed contributed to around 31 percent of fatal crashes and 16 percent of injury crashes.

During 2006, nationally there were 1,839 injury crashes where the driver was travelling too fast for conditions.

Reducing speeds to appropriate levels is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to hazardous situations and it also leads to more serious injuries. Research has shown that a one km/h reduction in mean speeds can produce up to a three percent reduction in injury crashes.

In Manukau City, excessive speed was a factor in 18 percent of all injury crashes in 2006.

Speed related injury crashes

Speed related injury crashes	2002	2003	2004	2005	2006
Urban	69	78	63	71	94
Rural	10	15	17	25	16
Total	79	93	80	96	110

There were 458 speed-related injury crashes reported in the last five years. Males are highly represented in speed related crashes accounting for 78 percent of at fault drivers.

Age and sex of at fault drivers

Drivers at fault in speed related injury crashes (2002 - 2006)	Male	Female	Total
15- 19 years	117	31	148
20 - 24	92	14	106
25 - 29	53	6	59
30 - 39	53	13	66
40 - 49	20	1	21
50 - 59	6	5	11
60 - 69	5	2	7
70+	1	1	2
Total	347	73	420

Driver licence status

Driver Licence status, speed related injury crashes, at fault drivers Manukau City 2006	Percentage of total at fault drivers in speed related crashes (New Zealand 2006 value in brackets)
Full	28.9 (43.0) %
Learner	30.8 (15.3) %
Restricted	17.7 (22.5) %
Never Licenced	11.7 (4.5) %
Disqualified	4.6 (4.1) %
Overseas	0.9 (3.7) %
Expired	0.9 (0.5) %
Other / unknown	4.6 (6.2) %

Further facts about speed related injury crashes in Manukau City on local roads (2002 to 2006):

- 40 deaths, 113 serious injuries 515 minor injuries
- 82 percent of at fault drivers were male
- Most common crash type "lost control on bend"
- 37 percent also include alcohol as a contributory factor
- 34 percent wet road
- 55 percent night time
- Worst month October
- Worst day of week Saturday, best Monday

Further facts about speed related injury crashes in Manukau City on Transit NZ (mainly motorway) roads (2002 to 2006):

- 4 deaths, 19 serious injuries 96 minor injuries
- 80 percent of at fault drivers were male
- Most common crash type "lost control on bend"
- 34 percent also include alcohol as a contributory factor
- 31 percent wet road
- 63 percent night time
- Worst month June, best May
- Worst day Sunday, best Tuesday

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.

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport.

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

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

It is vitally important to recognise that promotion alone of cycling and walking is not going to be effective at increasing their mode share unless they can be made safer.

Pedestrians

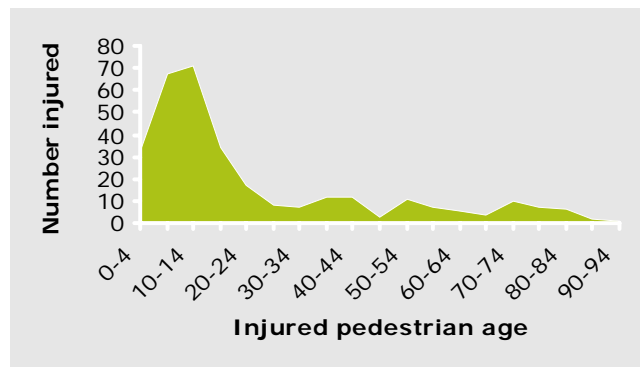
Although pedestrian injuries do not feature highly in the total road injury picture in Manukau City, representing only 13 percent of all injury crashes, they do make up 26 percent of all fatalities. Most pedestrian crashes occur on urban roads away from intersections and during daylight hours.

Pedestrian injuries 2002 to 2006					
Pedestrian injuries	2002	2003	2004	2005	2006
Fatal	3	4	4	4	3
Serious	15	23	15	13	22
Minor	55	59	44	40	50
Total	73	86	63	57	75

Young people are the most commonly injured in pedestrian crashes. This may be because they walk more than other age groups. However many of them may not be mature enough to make the correct road crossing decisions. For example young children have difficulty in judging the speed and distance of approaching vehicles. They are also easily distracted and unable to focus on multiple events at a time, so when they want to cross a road their attention can be easily distracted by say, a friend shouting out from across the street, a dog coming towards them or a noisy car passing by.

Road designers and motorists alike need to understand that children do not think like “mini adults” when they are walking and playing near the road. The road environment needs to be made as safe as possible to mitigate against the unpredictable actions that children take.

Ages of injured pedestrians



The recent decision by Police to enforce a lower speed tolerance around schools was designed to create a safer lower speed environment for young pedestrians.

Pedestrian crashes are mainly concentrated on arterial and collector roads.

Fatal and serious pedestrian crashes are concentrated mainly in the southern, central and western part of the city.

Further information about 2002 to 2006 pedestrian injury crashes in Manukau City:

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (158 crashes)
- The second most common crash type was for a pedestrian crossing the road and being hit by a driver approaching for the left (101 crashes)
- Worst month June, best September
- Worst day of week Wednesday, best Sunday
- Number of at fault drivers 88
- Most common pedestrian issue, running across road with out checking adequately
- 21 pedestrians were intoxicated

National issues

This section contains some brief information on the key national road safety issues as measured in Manukau City. They may have been covered elsewhere in this document or not be a specific issue.

Speed

“Too fast” was recorded in 18 percent of injury crashes in the city in the last five years resulting in 40 deaths and 628 injuries.

Speed as a factor in crashes is not reducing in the city.

Fifty-eight percent of speed-related crashes were “loss of control at a bend” crashes.

Alcohol and poor handling were the other driver factors often associated with speed.

At fault male drivers aged 15 to 19 were the most highly represented of the five year age bands in speed related crashes.

Alcohol

Alcohol was involved in 19 percent of injury crashes in the city in the last five years resulting in 29 deaths and 660 other injuries. The number of injury crashes involving alcohol is not decreasing.

Ninety-one percent of alcohol crashes were in urban areas of the city.

Speed and poor handling were the other factors often associated with alcohol.

Failure to give way

Failure to give way or stop was reported in 31 percent of all reported injury crashes for the last five years, resulting in nine deaths and 1068 other injuries.

Sixty-one percent of at fault drivers were male.

Restraints

The Ministry of Transport conducts surveys of restraint use. The results of these surveys are at a regional level, and may not be fully appropriate to a Local Authority. The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/belts-index/>

Contacts

Land Transport New Zealand

Partnership Manager (Northern)
Peter Kippenberger

Manager Performance Information (Northern)
Chris Hewitt

Manager Programmes (ARTA)
Geoffrey Mansell

Private Bag 106 602
Auckland

Phone 09 969 9800

www.landtransport.govt.nz

Road Safety Co-ordinators

Road Safety Co-ordinators
Carol Baker
Cat Marvin
Marie Turner

Manukau City Council
Private Bag 76 917
Manukau City

Phone 09 262 8900

New Zealand Police

Inspector C A (Sandy) Newsome
Road Policing Manager
Counties Manukau Police District
Manukau Police Station
42 Wiri Station Road
P. Bag 76920
Manukau City.

DDI: 09 295 0200

Local Authority

Bruce Conaghan
City Traffic Engineer

Manukau City Council
Private Bag 76 917
Manukau City

Phone 09 262 8900