



briefing notes – road safety issues

Hamilton 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 the Hamilton City area.

This report is the eighth road safety report for the Hamilton City area. The data in this report applies to local roads and State Highways in the Hamilton City area.

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 for any local body 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 the Hamilton City area 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 district for 2006.

We encourage local authorities to use the Ministry of Transport's Crash Analysis System (CAS) to further investigate the highlighted issues.

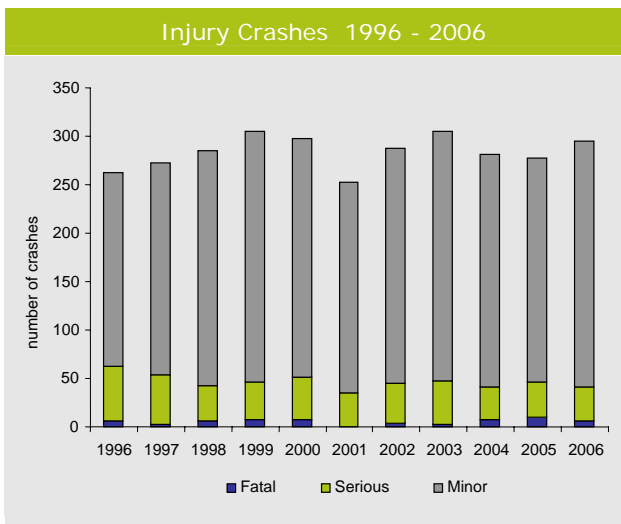
Major Road Safety Issues		2006 road trauma	
Hamilton City		Casualties	
Intersections		Deaths	7
Alcohol		Serious casualties	38
Urban Speed		Minor casualties	309
Vulnerable Road Users			
Nationally		Crashes	
Speed		Fatal crashes	6
Alcohol		Serious injury crashes	35
Failure to give way		Minor injury crashes	255
Restraints		Non-injury crashes	1213

Overview of 2006

In 2006 on local roads in Hamilton City there were 240 injury crashes and 952 non-injury crashes, in addition there were 56 injury crashes and 250 non-injury crashes on State Highways, as reported by the New Zealand Police.

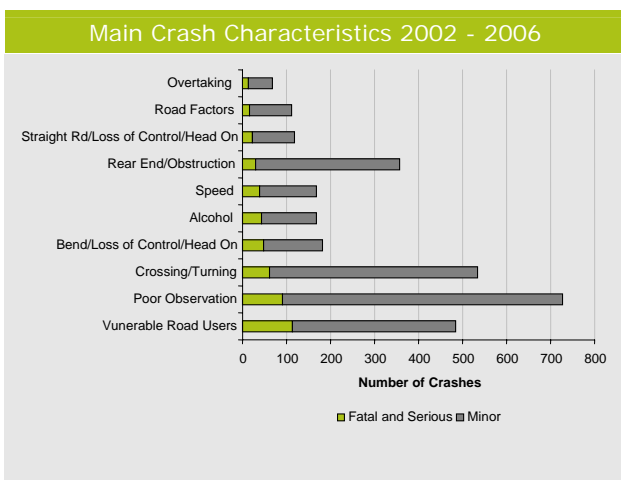
The table below shows the number of injuries resulting from 2006 crashes by rural or urban areas for both local and Transit roads (rural is defined as an area with a speed limit of 80km/h or more).

	Fatalities	Serious injuries	Minor injuries	Total
Rural	2	6	26	34
Urban	5	32	283	320
Total	7	38	309	354



Fatalities in the district have been fluctuating over the last 10 years.

Serious injuries on the other hand fell between 1996 and 1999 but now seem to be steady.



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

- Worst months March & May (134), best December (74)
- Worst day Friday (221), best Sunday (109)
- Wet road 23 percent
- Night time 23 percent
- Intersection 62 percent
- 72 percent of at fault drivers are male (injury crashes)
- 52 percent of at fault drivers in injury crashes have a full NZ licence

Further information about 2006 injury and non injury crashes on Transit roads

- Worst month June (32), best February (14)
- Worst day Friday (52), best Sunday (26)
- Wet road 25 percent
- Night time 23 percent
- Intersection 62 percent
- 48 percent of at fault drivers are male (injury crashes)
- 67 percent of at fault drivers in injury crashes have a full NZ licence

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 Hamilton City with only 55 percent of at fault drivers in injury crashes being the holder of a full driving licence.

Driver licence status (injury crashes, at fault drivers all Hamilton City roads)	Percentage of total at fault drivers (NZ value in brackets)
Full	55.0 (58.4) %
Learner	10.3 (9.5) %
Restricted	19.4 (17.6) %
Never Licenced	1.2 (2.2) %
Disqualified	1.2 (1.7) %
Overseas	3.7 (4.2) %
Expired	0.8 (0.5) %
Other / unknown	8.3 (5.6) %

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, 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 Hamilton City, excessive speed was a factor in 13 percent of injury crashes in 2006.

Speed related injury crashes	2002	2003	2004	2005	2006
Urban	29	34	28	22	33
Rural	4	6	6	2	4
Total	33	40	34	24	37

There were 168 speed-related injury crashes reported in the last five years.

Males are also highly represented as at fault drivers in speed related crashes, accounting for 77 percent of drivers

Drivers at fault or part fault in speed related injury crashes (2002-2006) *	Male	Female	Total
15- 19 years	49	17	66
20 - 24	34	6	40
25 - 29	20	4	24
30 - 39	10	6	16
40 - 49	10	4	14
50 - 59	2	2	4
60 - 69	1	0	1
70+	2	0	2
Total	128	39	167

* (note ranges are not equal)

The following table illustrates the licence status of at fault drivers in speed related crashes in Hamilton City and all New Zealand (2006).

Driver licence status, speed related injury crashes, at fault drivers in Hamilton City	Percentage of total at fault drivers in speed related crashes (NZ value in brackets)
Full	36.4 (43.0) percent
Learner	12.1 (15.3) percent
Restricted	27.3 (22.5) percent
Never Licenced	0 (4.5) percent
Disqualified	3.0 (4.1) percent
Overseas	3.0 (3.7) percent
Expired	0 (0.5) percent
Other / unknown	18.2 (6.2) percent

Further facts about speed related crashes in Hamilton City (divided into local roads and Transit roads) (2002 -2006)

Local roads

- 9 deaths, 27 serious injuries 155 minor injuries
- Male drivers 76 percent
- Most common crash type, Bend – (lost control/head on)
- 58 percent at midblock
- 34 percent wet road
- 60 percent night time
- Worst month June, best October
- Worst day of week Sunday, best Tuesday

Transit roads

- 5 deaths, 9 serious injuries, 34 minor injuries
- Male 82 percent
- Most common crash type, Bend – (lost control/head on)
- 52 percent at intersections
- 52 percent wet road
- 55 percent night time
- Worst month December, best January, March October
- Worst day Saturday, best Monday

Intersections

Crashes at intersections are the most common crash type in urban areas of Hamilton City

During the five year period 2002 to 2006 there were 787 injury crashes at intersections and 3092 non-injury crashes. In these 13 people died, 107 received serious injuries and 873 received minor injuries.

Intersection crashes	2002	2003	2004	2005	2006
Injury crash	173	157	163	151	143
Non-injury crash	576	540	563	738	675
Total	749	697	726	889	818

The table below shows the locations of the five intersections with the highest number of crashes in Hamilton City between 2002 and 2006.

Intersection name	Total crashes 2002 - 2006	Injury crashes 2002 - 2006	Total crashes in 2006
Boundary & Brooklyn Roads	57	10	10
SH 1 / SH 3	54	11	10
Victoria Street & Boundary Road	53	18	12
Cobham Drive & Grey Street	52	13	5
Victoria & Bryce Streets	46	7	6

Crashes at Tee junctions in urban areas are the most common type of intersection crash reported, followed by crashes at Cross (X) urban junctions.

Junction type	Rural	Urban
Roundabout	68	617
Tee	140	1578
Cross (X)	29	1210
Y	4	37
Other (includes driveways)	8	183

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 well represented in these crashes as illustrated in the table below showing licence class of at fault drivers.

Driver licence status, intersection related injury crashes, at fault drivers Hamilton City	Percentage of total at fault drivers in intersection related crashes (NZ value in brackets)
Full	55.4 (60.9) %
Learner	11.1 (9.4) %
Restricted	19.3 (14.8) %
Never Licenced	1.6 (2.5) %
Disqualified	1.1 (1.6) %
Overseas	3.7 (3.7) %
Expired	1.2 (0.8) %
Other / unknown	6.6 (6.3) %

Further facts about intersection related crashes in Hamilton City 2002 to 2006 (divided into local roads and Transit roads):

Local roads

- 11 deaths, 82 serious injuries, 664 minor injuries
- 62 percent of at fault drivers are male
- Most common crash type - crossing/turning
- 6 percent alcohol over limit
- 97 percent urban
- 27 percent wet roads
- 35 percent night time
- Worst month May, best September
- Worst day of week Thursday, best Monday

Transit roads

- 2 deaths, 25 serious injuries, 209 minor injuries
- 54 percent of at fault drivers are male
- Most common crash type - crossing/turning
- 4 percent alcohol over limit
- 74 percent urban
- 25 percent wet roads
- 33 percent night time
- Worst month May, best October
- Worst day of week Friday, best Thursday

Drink-driving

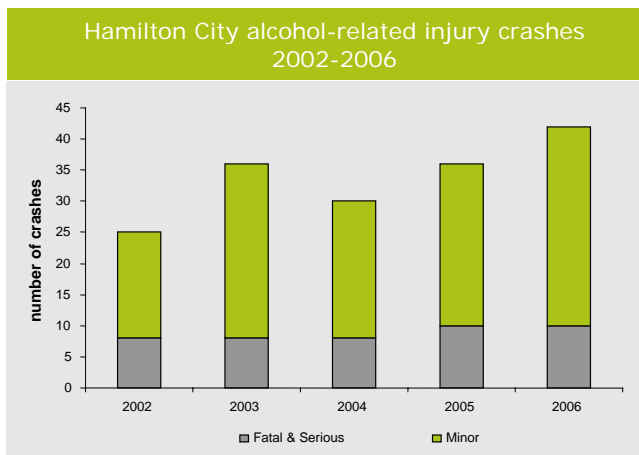
Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

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 the Hamilton City, alcohol was a factor in 14 percent of injury crashes in 2006, an increase from 2005, and in line with the national trend.

There were 168 alcohol-related injury crashes reported in the last five years.



Key locations

The following provides a breakdown of the key locations in Hamilton City at which drink-driving crashes occurred during the 2002 to 2006 period.

Hamilton City
Victoria Street/Marlborough Place intersection
SH 1/Kahikatea Drive Extension intersection
Victoria Street at Garden Place
Victoria Street/Collingwood Street intersection

The following table illustrates the licence status of at fault drivers in alcohol related crashes in Hamilton City and all New Zealand (2006).

Driver licence status, alcohol related injury crashes, at fault drivers in Hamilton City	Percentage of total at fault drivers in alcohol related crashes (NZ value in brackets)
Full	44.4 (41.6) percent
Learner	13.8 (15.8) percent
Restricted	22.2 (20.8) percent
Never Licenced	2.8 (4.6) percent
Disqualified	2.8 (6.2) percent
Overseas	0 (1.0) percent
Expired	0 (1.4) percent
Other / unknown	13.8 (8.2) percent

Further facts about alcohol related crashes in Hamilton City (divided into local roads and Transit roads) (2002 -2006)

Local roads

- 8 deaths, 28 serious injuries, 162 minor injuries
- Male driver 75 percent
- Most common crash type, Bend – (lost control/head on)
- 46 percent at intersections
- 96 percent urban
- 24 percent wet road
- 84 percent night time
- Worst month April, best November
- Worst day of week Sunday, best Monday

Transit roads

- 7 deaths, 12 serious injuries, 27 minor injuries
- Male drivers 77 percent
- Most common crash type, Straight – (lost control/head on)
- 35 percent at intersections
- 65 percent urban
- 39 percent wet road
- 84 percent night time
- Worst month May, best July
- Worst day of week Saturday, 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.

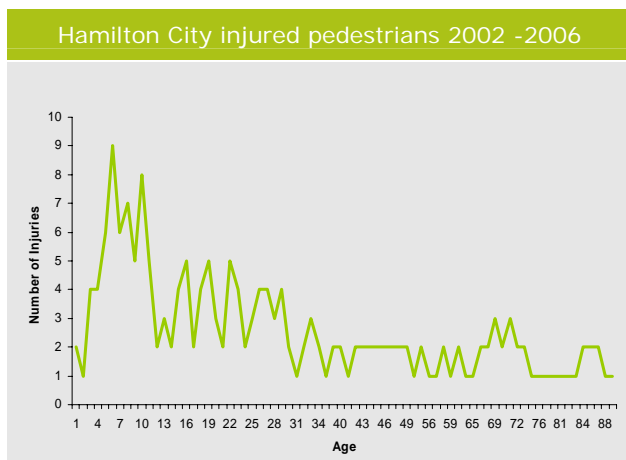
Pedestrians

Although pedestrian injuries do not feature highly in the total road injury picture in Hamilton City, representing only 10 percent of all injuries, they make up 30 percent of all fatalities.

Pedestrian injuries	2002	2003	2004	2005	2006
Fatal	1	3	-	5	1
Serious	8	13	7	10	6
Minor	25	32	31	33	29
Total	34	48	38	48	36

Most (45 percent) pedestrian crashes occur on urban roads away from intersections and during daylight hours.

There is a very strong bias toward the afternoon.



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.

The recent decision by Police to enforce a lower speed tolerance around schools is a strong step in creating a safer lower speed environment for young pedestrians.

Pedestrian crashes are concentrated on arterial and collector roads. The top five locations (on the basis of fatal and serious injuries) are shown in the table below.

Location	Number of pedestrian injury crashes
Victoria Street – between Hood & Marlborough Streets	7
Victoria Street – London Street intersection	7
Bryce Street – between Anglesea & Victoria Street	5
Hukanui Road – 30m north of Kensington Place	3
Bryce Street – Victoria Street intersection	2

Further information regarding 2002 -2006 pedestrian injury crashes:

Local roads

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (66 percent).
- Worst month April (19) best January & December (5)
- Worst day of week Thursday (34) best Monday (14)
- Number of at fault drivers 58

Transit roads

- The most common crash type was for a pedestrian crossing the road being hit by a driver approaching from their right (55 percent).
- Worst month April (5) best January (0)
- Worst day of week Friday (6) best Saturday & Sunday (1)
- Number of at fault drivers 7

Cyclists

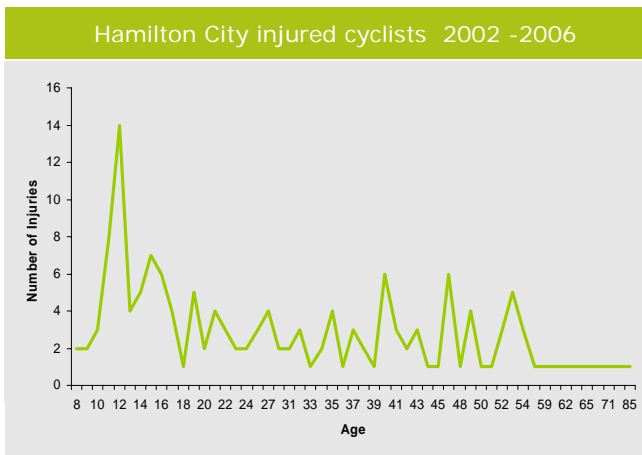
Although cyclist injuries do not feature highly in the total road injury picture in Hamilton City, they represent 11 percent of all injuries.

Cyclist injuries	2002	2003	2004	2005	2006
Fatal	1	-	-	1	-
Serious	3	4	6	4	5
Minor	29	24	27	22	35
Total	33	28	33	27	40

Most (40 percent) cycling crashes occur on urban roads at intersections and during daylight hours.

Last year (2006) more cycles than cars were imported into New Zealand. It is certainly noticeable in many areas across the country that there are many more cyclists using the roads than in past years.

Cyclist injuries are not spread evenly across all age distributions as shown in the chart below.



Further information regarding 2002 to 2006 cycling crashes:

Local roads

- The most common crash type was a crossing or turning movement. The second was rear end.
- 50 percent at intersections
- 18 percent at night
- Worst month June (18) best December (3)
- Worst day of the week Thursday (29) best Saturday (7)
- Number of crashes involving riding on the footpath 4
- 59 percent of cyclists injured were male

Transit roads

- The most common crash type was a crossing or turning movement. The second was rear end.
- 84 percent at intersections
- 15 percent at night
- Worst month February (4) best September (0)
- Worst day of the week Monday (6) best Sunday (2)
- 71 percent of cyclists injured were male

Partnerships

Land Transport NZ works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers.

Some of the key road safety partners in the Hamilton City include:

New Zealand Police

Waikato District Road Policing Manager
Inspector Leo Tooman
PO Box 3078
Hamilton
Phone 07 850 7063

Road Safety Co-ordinator

Hamilton City Council
Jacqueline Beaton
Private Bag 3010
Hamilton
Phone 07 838 6758

Local Authority Engineer

Hamilton City Council
Roger Ward
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Accident Compensation Corporation

Waikato Area
ACC Injury Prevention Consultant
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