



briefing notes - road safety issues

Hamilton City

New Zealand Transport Agency has prepared this road safety issues report. It is based on reported crash data and trends for the 2004–2008 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 Hamilton City.

This report is the tenth road safety report for Hamilton City. All the material unless otherwise stated in this report applies to both local roads and state highways.

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 Hamilton 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.

We encourage Hamilton City Council to use its free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data in this report is from CAS.

Major road safety issues *

Hamilton City

Alcohol

Intersections

Young Drivers

Rear End Crashes

Nationally

Speed

Alcohol

Failure to give way

Restraints

2008 road trauma

Casualties

Hamilton City

Deaths

1

Serious casualties

58

Minor casualties

407

Crashes

Hamilton City

Fatal crashes

1

Serious injury crashes

55

Minor injury crashes

309

Non-injury crashes

882

* Issues are not in any specific order of importance

Overview

In 2008 on local roads in Hamilton City there were 289 injury crashes and 692 non-injury crashes. In addition there were 76 injury crashes and 190 non-injury crashes on state highways both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 365 injury crashes on local roads and state highways

Casualties by local roads / state highways 2008

	Fatalities	Serious injuries	Minor injuries	Total
Local Roads	1	48	318	367
State Highways	-	10	89	99
Total	1	58	407	466

Crash trends in Hamilton City

Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Injury Crashes
1999	7	39	258	304
2000	4	44	247	295
2001	-	34	218	252
2002	3	41	242	286
2003	8	45	257	310
2004	3	33	237	273
2005	10	36	231	277
2006	6	35	255	296
2007	6	44	317	367
2008	1	55	309	365

Local road crashes

Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	22	14
Too fast	18	14
At bends	19	14
At intersections	51	53
Pedestrians	22	14
Cyclists	14	11
Motorcyclists	17	11
Road factors	6	8
Night time	38	33

Further information about 2004 to 2008 injury and non-injury crashes on **local roads** in Hamilton City

- Worst month May, best January
- Worst day Friday, best Sunday
- 26 percent on wet roads
- 34 percent at night
- 56 percent at intersections
- 2038 roadside objects struck
- Social cost of crashes in 2008 \$68m

Further information about 2004 to 2008 injury and non-injury crashes on **state highways** in Hamilton City:

- Worst month June, best September
- Worst day Tuesday, best Sunday
- 25 percent on wet roads
- 29 percent at night
- 63 percent at intersections
- 359 roadside objects struck
- Social cost of crashes in 2008 \$16m

Intersections

During the five year period 2004 to 2008 within Hamilton City there was a total of 3968 crashes at intersections, 848 of these were injury crashes and 3120 non-injury.

In these crashes 10 people were killed, 116 received serious injuries and 953 received minor injuries.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury crash	161	151	147	198	191
Non-injury crash	563	738	682	632	505
Total	724	889	829	830	696

Locations with the most injury crashes 2004 to 2008		
Intersection name (Within a radius of 50m)	Injury crashes 2004 - 2008	total Injury crashes 2008
Mill Street / Victoria Street	17	3
Kahikatea Drive / Greenwood Street	13	2
Peachgrove Road / Te Aroha Street	12	3
Normandy Avenue / Bader Street	11	0
Bridge Street / Victoria Street	11	6

Junction control Injury and non-injury crashes				
Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	952	646	2011	343

The most common crash type at intersections is when a driver turns right and is hit by a vehicle approaching from the right.

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

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

Junction type Injury and Non-injury crashes		
Junction Type	Open	Urban
Roundabout	90	655
Tee	138	1622
Cross (X)	14	1266
Y	3	29
Other (includes driveways)	8	143

Further information about the 663 injury crashes at intersections on **local roads** in Hamilton City 2004 to 2008:

- 8 deaths, 91 serious injuries and 735 minor injuries
- 27 percent wet roads
- 34 percent night time
- Worst month May, best October
- Worst day of week Thursday, best Sunday
- Worst three hour time period 3pm to 6pm

Further information about the 185 injury crashes at intersections on **state highways** in Hamilton City 2004 to 2008:

- 2 deaths, 25 serious injuries and 218 minor injuries
- 21 percent wet roads
- 37 percent night time
- Worst month May, best October
- Worst day of week Friday, best Sunday
- Worst three hour time period 3pm to 6pm

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 a sober driver 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 2008, alcohol-affected drivers contributed to 34 percent of all fatal crashes (the same as 2007) and 15 percent of all injury crashes (the same as 2007).

In Hamilton City alcohol was a factor in 13 percent of injury crashes in 2008.

Number of alcohol related injury crashes

Crash year	Open road	Urban road	Total
2004	4	26	30
2005	4	32	36
2006	4	38	42
2007	8	43	51
2008	7	42	49
Total	27	181	208

(Open road is classified as any area with a speed limit of 80km/hr or more)

From the beginning of 2007 New Zealand Transport Agency (formally Land Transport NZ) has been adding driver factor codes to all non-injury crashes for Hamilton City.

This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before.

In 2008 there were 100 non-injury alcohol related crashes reported by the Police in Hamilton City.

Alcohol related crashes by location

Road (road lengths may differ)	Crash social costs 2004-2008
Bridge St / Victoria St intersection	\$856,264
Victoria St / Marlborough Place intersection	\$4,148,732
Tristram St / Pembroke St intersection	\$675,095
Te Rapa Rd / Sunshine Ave intersection	\$254,164
Victoria St / Collingwood St intersection	\$179,464

Further information about the 172 alcohol related injury crashes in Hamilton City on **local roads** 2004 to 2008:

- 10 deaths, 42 serious injuries and 198 minor injuries
- 76 percent of at fault drivers were male
- Most common crash type 'Lost control turning right'
- 40 percent at intersections
- 94 percent urban
- 26 percent wet road
- 86 percent night time
- Worst three hour time period midnight to 3am
- Worst months June & September (equal) best March
- Worst day of week Sunday, best Monday

Further information about the 36 alcohol related injury crashes in Hamilton City on **state highways** 2004 to 2008:

- 6 deaths, 11 serious injuries and 34 minor injuries
- 71 percent of at fault drivers were male
- Most common crash type 'Lost control on left hand bend'
- 36 percent at intersections
- 56 percent urban
- 31 percent wet road
- 83 percent night time
- Worst three hour time period 3am to 6am
- Worst month April, best January & July (equal)
- Worst day of week Thursday, best Monday & Tuesday (equal)

Rear End Crashes

Between 2004 and 2008, 24 percent of all injury crashes in Hamilton City involved rear end collisions. These crashes resulted in 3 fatalities, 31 serious injuries and 448 minor injuries.

There were also 2169 non-injury rear end crashes which have fluctuated over the last 5 years.

Rear End collisions 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	-	3	51	54
2004	1	6	67	74
2005	1	5	66	72
2006	1	7	72	80
2007	-	8	95	103
Total	3	29	351	383

Most rear end crashes involve a driver failing to see a car slowing with 20 percent of all injury rear end crashes including this factor. 12 percent involve a driver following to closely.

Locations with the most injury rear end crashes 2004 to 2008	
Location name (Within a radius of 100m)	Total Injury crashes
Victoria St / Ward St intersection	6
Victoria St / Bridge St intersection	6
SH1 (Lorne St) / Normandy Ave intersection	6
SH1 / The Base Parade intersection	6
Grey St—30m north of Cook St	5

Age and gender of at fault drivers (note—age ranges are not equal)

Ages of drivers at fault in injury crashes (2004 to 2008)	Male	Female	Total
15- 19	49	36	85
20 - 24	43	35	78
25 - 29	23	20	43
30 - 39	29	28	57
40 - 49	31	15	46
50 - 59	14	8	22
60 - 69	13	3	16
70+	8	9	17
Total	210	154	364

Further information about rear end injury crashes on **local roads** and **state highways** in Hamilton City 2004 to 2008:

- 2 deaths, 25 serious injuries and 351 minor injuries on **local roads**
- 1 death, 6 serious injuries and 97 minor injuries on **state highways**
- 7 percent involved alcohol
- 10 percent involved 'too fast for the conditions'
- 21 percent at night
- 21 percent in the wet
- 52 percent of drivers with a 'full' licence
- 58 percent of at fault drivers were male
- Most common cause of crashes, 'failed to see vehicle slowing'
- Worst month May, best January
- Worst day of week Thursday, best Sunday & Monday
- Worst three hour time period 3pm to 6pm

Young drivers

Young drivers are those aged less than 25 years.

This analysis is based on injury crashes only as driver age is not recorded in non-injury crashes.

In Hamilton City between 2004 and 2008 44 percent of injury crashes involved young drivers. These crashes resulted in 21 fatalities, 99 serious injuries and 899 minor injuries. Three of the eight fatalities were from a single fatal crash in 2005.

The total number of injury crashes involving young drivers reduced in 2008 from the high of 207 in 2007. There is no obvious trend in the annual number of crashes involving young drivers, however numbers have increased each year between 2004 and 2007.

Injury crashes involving young drivers

	Fatal	Serious	Minor	Total
2004	2	9	108	119
2005	6	12	118	136
2006	6	17	119	142
2007	3	24	180	207
2008	1	18	147	166
Total	18	80	672	770

Just under half of the young drivers in these crashes had a learner or restricted licence. Nearly two thirds of them were males and 47 percent of young drivers involved in crashes were 15-19 year olds.

Over 80 percent of all the young drivers involved in crashes in Hamilton City were local residents.

Young drivers in injury crashes

Licence type	Female	Male	Total
Full	102	197	299
Learner	43	79	122
Restricted	113	126	239
Overseas	10	14	24
Never licensed	7	16	23
Disqualified	2	10	12
Other (unknown, wrong class)	20	33	53
Total	297	475	772

Injury crashes involving young drivers

Crash type or contributory cause	Urban roads % of injury crashes
Alcohol	15
Speed	18
Failed to stop/Give way	39
Poor handling	10
Poor observation	52
Lost control - straight	9
Lost control - bend	16
Rear end / obstruction	25
Crossing / turning	6

Further information about the 626 injury crashes involving young drivers on **local roads** in Hamilton City 2004 to 2008:

- 22 percent were single vehicle crashes
- 53 percent at intersections
- 39 percent at night
- 27 percent in the wet
- Worst month May, best January
- Worst day of week Friday, best Tuesday

Further information about the 144 injury crashes involving young drivers on **state highways** in Hamilton City 2004 to 2008:

- 16 percent were single vehicle crashes
- 66 percent at intersections
- 39 percent at night
- 26 percent in the wet
- Worst month July, best January
- Worst day of week Wednesday, best Monday

Motorcyclists

Nationally motorcycling fatalities dropped from 20 percent of all fatalities in 1988, to just six percent in 2003. Since then there has been an increase in motorcycle registrations and this has reversed the downward trend. In 2008 motorcyclists accounted for 14 percent of road fatalities in New Zealand. In early 2009 this had risen to over 20 percent.

Motorcyclist injuries feature relatively high in the overall crash statistics in Hamilton City. While representing only 10 percent of all injuries they however make up 15 percent of fatal and serious injuries. Between 2004 and 2008 injuries as a result of motorcycle crashes have more than doubled.

Motorcyclist injuries					
	2004	2005	2006	2007	2008
Fatal	1	-	1	1	-
Serious	4	8	5	7	13
Minor	19	23	29	39	44
Total	24	31	35	47	57

The most common type of motorcycle crash is when a vehicle fails to give way and the motorcyclist hits the vehicle.

Locations with most cyclist crashes	
Location	Number of motorcycle crashes
Normandy Ave / Bader St intersection	3
Anglesea St / London St intersection	3
SH 1 north / Church Rd intersection	3
Killarney Rd / Queens Ave intersection	2

Ages of motorcycle casualties

Ages	Male	Female	Total
5 to 9	-	-	-
10 to 14	-	-	-
15 to 19	47	8	55
20 to 24	25	7	32
25 to 29	17	3	20
30 to 34	16	4	20
35 to 39	12	4	16
40 to 44	10	4	14
45 to 49	8	2	10
50 to 54	6	3	9
55 to 59	5	2	7
60 to 64	2	-	2
65 to 69	2	-	2
70 to 74	2	-	2
75 and over	-	-	-
Unknown	3	2	5

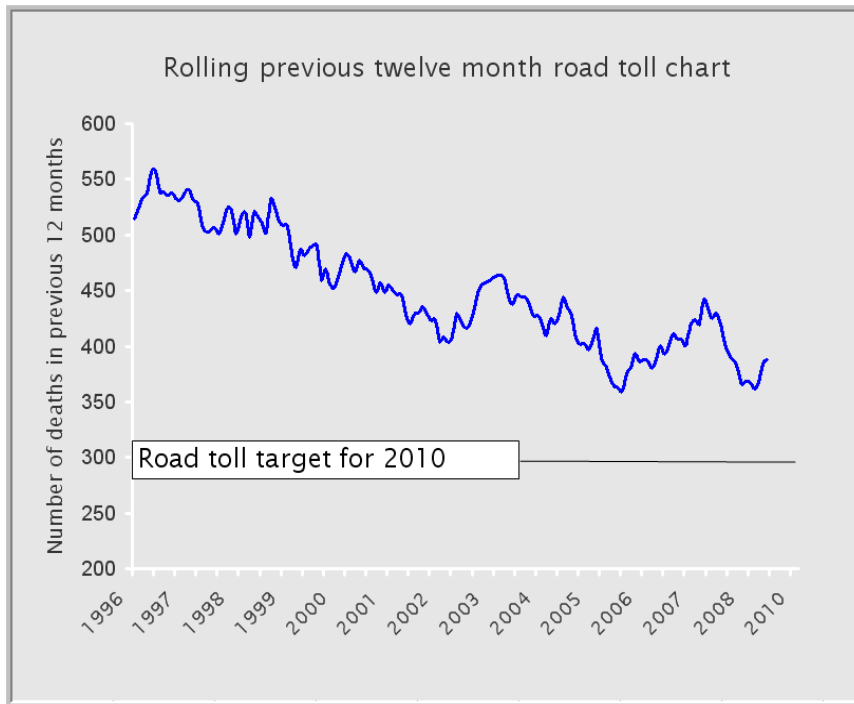
Further information about the 137 injury motorcyclist crashes on **local roads** in Hamilton City 2004 to 2008:

- 31 motorcyclists received serious injuries and 115 minor injuries
- 18 percent were in the wet
- 26 percent at night
- Worst month May, best June
- Worst day of week Friday, best Wednesday

Further information about the 45 injury motorcyclist crashes on **state highways** in Hamilton City 2004 to 2008:

- 3 motorcyclists died, 6 received serious injuries and 39 minor injuries
- 16 percent were in the wet
- 33 percent at night
- Worst month December, best October & November (equal)
- Worst day of the week Wednesday, best Saturday

The next ten years—moving beyond Road Safety 2010



In August this year the Ministry of Transport will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

Information will be published on their web site and we would encourage any person or group with an interest in road safety to watch the site carefully for developments. Follow this link :

<http://www.transport.govt.nz/ourwork/Land/landsafety/SaferJourneys-RoadSafetyStrategyto2020/>

The chart on the left illustrates the progress made during the life of the Road Safety 2010 strategy and although progress has been made it would seem highly unlikely that the target of 300 or fewer fatalities will be met.

Restraints

The Ministry of Transport (MoT) conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level.

See the MoT website : <http://www.transport.govt.nz/research/safetybeltstatistics/>

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