

# *briefing notes road safety issues*

## *Upper Hutt City*

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

This report is the tenth road safety report for Upper Hutt City. Most of the information, unless otherwise stated in this report, applies to both local roads and state highways.

The intent of the report is to highlight the key road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries in the city. More detailed information may be obtained from either Upper Hutt City Council (local roads) or NZ Transport Agency. Please refer to the last page for contact details.

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

We have also included a brief overview of crashes in Upper Hutt City for 2008.

Major road safety issues		2008 road trauma	
Upper Hutt City		Casualties	Upper Hutt City
Loss of control		Deaths	3
Speed		Serious injuries	21
Rear-end/obstruction		Minor injuries	77
		Total casualties	101
National issues		Crashes	Upper Hutt City
Speed		Fatal crashes	3
Alcohol		Serious injury crashes	21
Failure to give way		Minor injury crashes	62
Restraints		Non-injury crashes	228

## Overview 2008

In 2008 in Upper Hutt City there were 86 injury crashes and 228 non-injury crashes reported by the New Zealand Police. Thirty-eight percent of the total injury crashes in the city were on state highways. The table below shows the number of injuries resulting from these crashes in the city.

### Casualties by injury type in 2008

	Fatalities	Serious injuries	Minor injuries	Total
<b>Total</b>	<b>3</b>	<b>21</b>	<b>77</b>	<b>101</b>

### Local roads vs state highways

Local roads	2	13	42	57
State highways	1	8	35	44

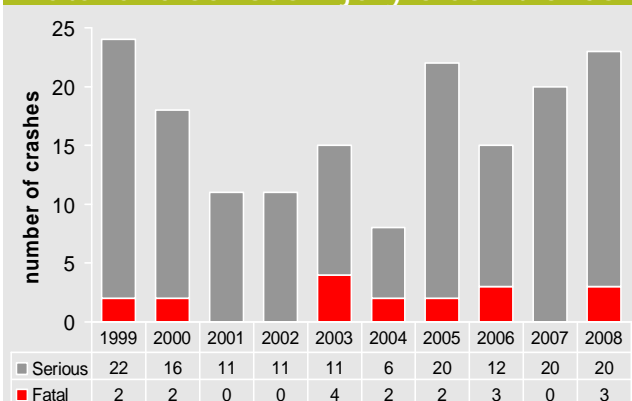
### Rural vs urban roads

Rural <sup>1</sup>	0	9	42	51
Urban	3	12	35	50

Note: 1. Rural - area with a speed limit of 80km/h or more

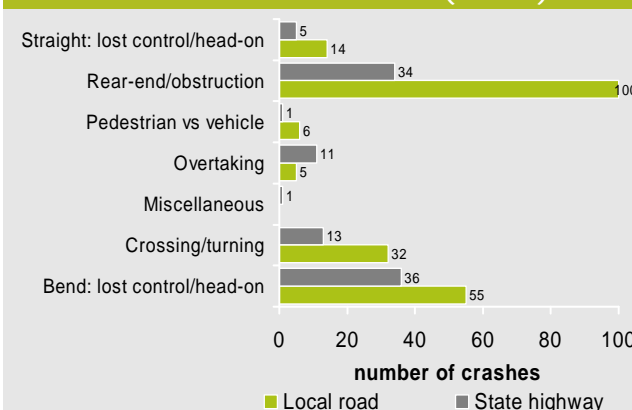
The latest five year trend shows a significant increase in the total number of fatal and serious injury crashes. The total number of these crashes in 2008 was the highest since 2000.

### Fatal and serious injury crash trends



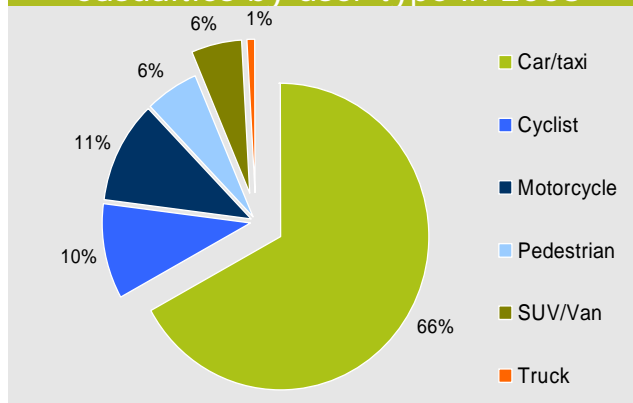
The main type of crash (of all crashes in the city, both injury and non-injury combined) in 2008 was *rear-end/obstruction*, primarily on local roads, followed by *lost control/head-on at bend* and *crossing/turning* crash movement types.

### Crash characteristics (2008)



Two thirds of casualties in 2008 were drivers and passengers of cars. Meanwhile, vulnerable road users (pedestrians/cyclists/motorcyclists) constituted over a quarter (27 percent) of all casualties.

### Casualties by user type in 2008



Further information about injury and non-injury crashes in Upper Hutt City in 2008 on:

#### Local roads

- Worst month: June (13 percent)
- Worst day of week: Thursday (18 percent)
- Wet road crashes: 26 percent
- Night time crashes: 27 percent
- Alcohol over limit (injury crashes): 6 percent
- Too fast for conditions (injury crashes): 23 percent
- Crashes at intersection: 37 percent
- Road factors: 7 percent
- At fault male driver (injury crashes): 67 percent
- At fault driver held full NZ licence (injury crashes): 69 percent

#### State highways

- Worst months: November and December (11 percent each)
- Worst day of week: Friday (25 percent)
- Wet road crashes: 37 percent
- Night time crashes: 33 percent
- Alcohol over limit (injury crashes): 15 percent
- Too fast for conditions (injury crashes): 21 percent
- Crashes at intersection: 33 percent
- Road factors: 17 percent
- At fault male driver (injury crashes): 66 percent
- At fault driver held full NZ licence (injury crashes): 57 percent

### Social cost of crashes

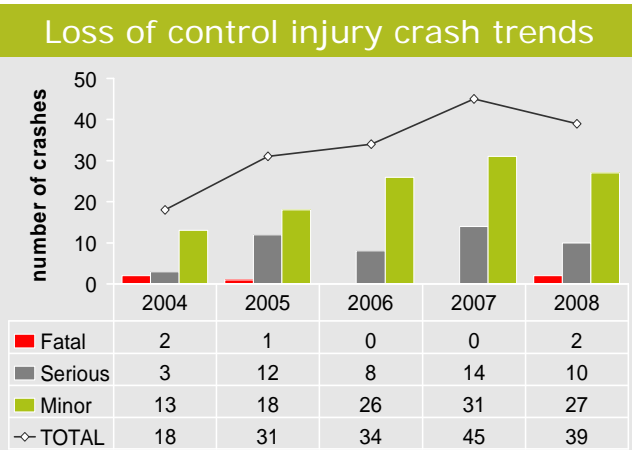
Local roads	\$14.09M
State highways	\$23.80M
<b>Total</b>	<b>\$37.89M</b>

NOTE: The estimated social cost includes loss of life or life quality, loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage.

## Loss of control

During the most recent five year period (2004-2008) in Upper Hutt City, 46 percent of all injury crashes occurred due to loss of control. These crashes resulted in 6 deaths, 57 serious injuries and 162 minor injuries. There were a further 379 non-injury crashes reported involving loss of control.

The latest five year trends show an increase in loss of control injury crashes, even though there is some annual fluctuation within the classifications of injury.



Most loss of control crashes occurred at bends (80 percent). These involved a driver losing control of their vehicle, then commonly running off the road or 29 percent of these colliding with another.

The following table shows a breakdown of the general environ of all loss of control crashes (546 crashes) in Upper Hutt City 2004-2008.

Loss of control	Local urban	Local rural	SH urban	SH rural
At bends	31%	18%	2%	29%
Straight road	12%	2%	1%	5%

The main characteristics of loss of control crashes are shown in the following table (note that crashes often are a combination of these factors):

Loss of control crashes	
Crash characteristics	Percentage of crashes
Single vehicle	71%
Alcohol (injury crashes)	16%
Too fast for the conditions (injury crashes)	40%
Road factors	16%
Poor handling (injury crashes)	38%
Rural road	54%
Wet road	39%
Night time	48%

After drivers lose control of their vehicles they often crash into roadside hazards. The three most common roadside hazards struck in the city were *fences* (24 percent), *banks* (14 percent) and *trees* (12 percent). In total 597 reported objects were struck. Hitting these objects can result in more serious injury than would otherwise be sustained.

Further information about all crashes due to loss of controls in Upper Hutt City 2004-2008 on:

### Local roads

- 3 deaths, 30 serious injuries and 87 minor injuries
- Worst month: December (41 crashes)
- Worst day of week: Saturday (75 crashes)
- Wet road crashes: 34 percent
- Night time crashes: 53 percent
- Crashes at intersection: 32 percent
- Road factors: 9 percent
- Alcohol over limit (injury crashes): 21 percent
- Most common injury crash factors: too fast (47 percent) followed by poor handling (37 percent)
- At fault male driver (injury crashes): 48 percent
- At fault driver held full NZ licence (injury crashes): 48 percent
- Most common at fault drivers' age group (injury crashes): 15 to 24 years old

### State highways

- 3 deaths, 27 serious injuries and 75 minor injuries
- Worst month: October (21 crashes)
- Worst day of week: Saturday (42 crashes)
- Wet road crashes: 46 percent
- Night time crashes: 39 percent
- Crashes at intersection: 13 percent
- Road factors: 29 percent
- Alcohol over limit (injury crashes): 10 percent
- Most common injury crash factors: poor handling (40 percent) followed by too fast (32 percent)
- At fault male driver (injury crashes): 69 percent
- At fault driver held full NZ licence (injury crashes): 47 percent
- Most common at fault drivers' age group (injury crashes): 15 to 24 years old followed by 40 to 59 years old

## Speed

Nationally, speed is one of the major contributing factors to road crashes. In 2008, travelling too fast for conditions contributed to 34 percent of all fatal crashes (113 crashes) and 17 percent of all injury crashes (1935 crashes) in New Zealand.

In Upper Hutt City, travelling too fast for conditions was a factor in 22 percent of all injury crashes in 2008, unchanged from the five year average.

In the last five years there were 79 speed-related injury crashes resulting in 2 deaths, 26 serious injuries and 84 minor injuries. There were also 207 non-injury crashes reported in this period with travelling too fast for conditions as a factor.

The latest five year trends show, even though there is some annual fluctuation between the classifications of injury, an increase in speed-related injury crashes.

### Speed-related injury crash trends



Forty-five percent of the speed-related crashes occurred on local roads in urban areas.

The following table shows a breakdown of the speed limit environ of all speed-related crashes in Upper Hutt City 2004-2008. Rural roads are any roads with a speed limit of 80km/h or more.

### Speed-related crashes

Speed related crashes	2004	2005	2006	2007	2008
Urban	22	29	29	31	29
Rural	28	25	30	36	27
<b>Total</b>	<b>50</b>	<b>54</b>	<b>59</b>	<b>67</b>	<b>56</b>

Sixty-five percent of all speed-related crashes during the last five years have occurred on local roads and 53 percent on the state highway in Upper Hutt City.

Fifty-eight percent of the at fault drivers over this period held either learner or restricted license or were never licensed or disqualified.

The following table shows the age and gender of at fault drivers in speed-related crashes. Males represented 75 percent of at fault drivers in these crashes and seventy-seven percent of them were less than 29 years old.

### Age and gender of at fault drivers

Age (years)	Male	Female	Total
15 - 19	21	6	27
20 - 24	19	6	25
25 - 29	12	1	13
30 - 39	5	2	7
40 - 49	3	1	4
50 - 59	2	5	7
60+	1	0	1
<b>Total</b>	<b>63</b>	<b>21</b>	<b>84</b>

Further information about speed-related crashes in Upper Hutt City 2004-2008 on:

#### Local roads

- 2 deaths, 15 serious injuries and 45 minor injuries
- Worst month: June (24 crashes)
- Worst day of week: Sunday (39 crashes)
- Wet road crashes: 32 percent
- Night time crashes 52 percent
- Road factors: 9 percent
- Alcohol over limit (injury crashes): 31 percent
- Most common injury crash factor: loss of control at bends (79 percent)
- At fault male driver (injury crashes): 75 percent
- At fault driver held full NZ licence (injury crashes): 31 percent
- Most common at fault drivers' age group (injury crashes): 15 to 29 years old

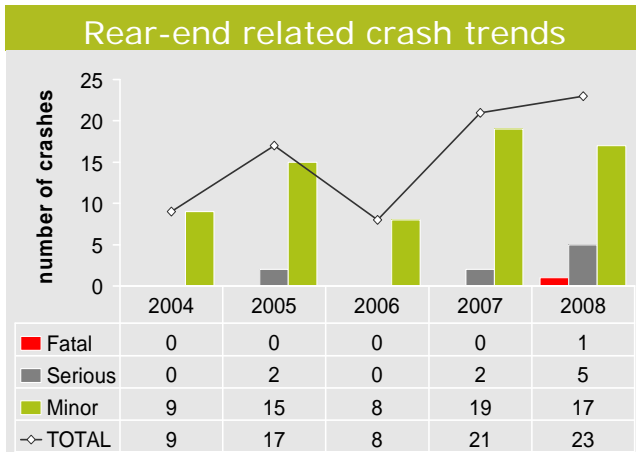
#### State highways

- 11 serious injuries and 39 minor injuries
- Worst months: March and August (11 crashes each)
- Worst day of week: Friday (23 crashes)
- Wet road crashes: 53 percent
- Night time crashes: 43 percent
- Road factors: 28 percent
- Alcohol over limit (injury crashes): 10 percent
- Most common injury crash factor: loss of control at bends (69 percent)
- At fault male driver (injury crashes): 76 percent
- At fault driver held full NZ licence (injury crashes): 42 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old

## Rear-end/obstruction

During the most recent five year period (2004-2008) 36 percent of all crashes in Upper Hutt City were rear-end and/or obstruction on the roadway crashes. There were 78 injury and 362 non-injury rear-end/obstruction crashes. These crashes resulted in 1 death, 9 serious injuries and 89 minor injuries.

The latest five year trends show that not only is the total number of injury crashes increasing, but also the severity of injuries is increasing.



The main crash scenarios for injury crashes of this type in Upper Hutt City 2004-2008 were:

- collision with the end of a queue of traffic: 26 percent
- collision with a U-turning vehicle: 14 percent
- collision with a parked vehicle: 10 percent
- collision when the lead vehicle slows or stops for a pedestrian on a pedestrian crossing or the roadway: 8 percent
- collision with the open door of a parked vehicle: 6 percent
- collision with a slower vehicle ahead: 6 percent
- collision with a vehicle slowing or stopped ahead for cross traffic or at traffic signals: 6 percent
- collision with a vehicle waiting on the roadway to make a right turn: 4 percent

Driver factors play a significant part in crashes of this type. The number of crashes involving poor observation, which includes drivers failing to notice other traffic in front slowing, has increased in recent years (69 percent of rear-end/obstruction injury crashes). Unsafe following distances is also commonly recorded as a contributing factor in injury crashes (19 percent, 2004-2008).

Rear-end and obstruction crashes are more commonly a route rather than a site specific problem, associated with the main traffic flows and were distributed mostly along SH 2 as shown in the following table.

Location / route	Number of rear-end/obstruction injury crashes 2004-2008
SH 2 - Rimutaka Summit to Te Marua	48
SH 2 - south of Te Marua	24
Akatarawa Road	12
Wallaceville Road	9
Fergusson Drive	7

Further information about all rear-end crashes in Upper Hutt City 2004-2008 on:

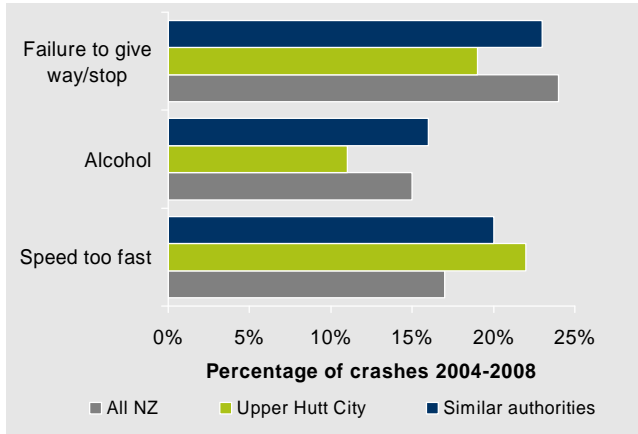
### Local roads

- 1 death, 6 serious injuries and 47 minor injuries
- Worst month: August (46 crashes)
- Worst day of week: Thursday (75 crashes)
- Wet road crashes: 18 percent
- Night time crashes: 21 percent
- Crashes at intersection: 30 percent
- Road factors: 3 percent
- Alcohol over limit (injury crashes): 6 percent
- Most common injury crash factors: poor observation (81 percent) followed by incorrect lane position (21 percent)
- At fault male driver (injury crashes): 50 percent
- At fault driver held full NZ licence (injury crashes): 64 percent
- Most common at fault drivers' age group (injury crashes): 15 to 19 years old followed by over 50 years old

### State highways

- 3 serious injuries and 42 minor injuries
- Worst month: March (16 crashes)
- Worst day of week: Friday (26 crashes)
- Wet road crashes: 33 percent
- Night time crashes: 29 percent
- Crashes at intersection: 32 percent
- Road factors: 11 percent
- Alcohol over limit (injury crashes): 6 percent
- Most common injury crash factors: poor observation (52 percent) followed by incorrect lane position (45 percent)
- At fault male driver (injury crashes): 66 percent
- At fault driver held full NZ licence (injury crashes): 71 percent
- Most common at fault drivers' age group (injury crashes): 25 to 29 years old followed by 15 to 19 years old

## National issues



### Speed

In Upper Hutt City, speed too fast was recorded in 22 percent of injury crashes in the last five years resulting in 2 deaths and 110 injures. Speed as a factor in crashes is becoming more common.

Eighty-one percent of speed-related crashes involved *lost control/head-on at bend*. *Alcohol* and *poor handling* were the driver factors most often associated with speed crashes. Almost half (48 percent) of at fault drivers in these crashes were male drivers aged under 25 years of age.

### Alcohol

In Upper Hutt City, alcohol was involved in 11 percent of injury crashes in the last five years, resulting in 3 deaths and 53 other injuries. The number of injury crashes involving alcohol is remaining steady.

Seventy percent of alcohol-related crashes were in urban areas. Seventy percent of these crashes involved *lost control/head-on* crash types. *Traveling too fast for the conditions* and *poor observation* were the factors often associated with alcohol-related crashes. Most of the at fault drivers were male (81 percent).

### Failure to give way

In Upper Hutt City, *failure to give way or stop* was factor in 19 percent of all injury crashes during the last five years, resulting in 2 deaths and 78 other injuries. Most (91 percent) of these involved *crossing/turning* manoeuvres and were often associated with *failure to look* for other parties. Fifty-five percent of at fault drivers in these crashes were male.

### Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2008 survey results restraint use rate in Upper Hutt City for front seat and rear seat are 95 and 92 percent respectively (while corresponding national rates are 95 and 87 percent). The results are obtainable from the Ministry of Transport website.

<http://www.transport.govt.nz/research/safetybeltstatistics/>

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