

# briefing notes road safety issues

## **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 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 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 Hutt City is compared to similar local 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 Hutt City for 2008.

Major road safety issues
Hutt City
Loss of control
Crossing/turning
Vulnerable road users: pedestrians & cyclists
Rear-end/obstruction
Speed
National issues
Speed
Alcohol
Failure to give way
Restraints

2008 road trauma				
Casualties	Hutt City			
Deaths	4			
Serious casualties	42			
Minor casualties	285			
Total casualties	331			
Crashes	Hutt City			
Fatal crashes	3			
Serious injury crashes	40			
Minor injury crashes	220			
Non-injury crashes	735			

## Overview 2008

In 2008 in Hutt City there were 263 injury crashes and 735 non-injury crashes reported by the New Zealand Police. Nineteen 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		
Total	4	42	285	331		
Local roads vs state highways						
Local roads	4	33	229	266		
State highways	0	9	56	65		
Rural vs urban roads						
Rural <sup>1</sup>	2	16	68	86		
Urban	2	26	217	245		

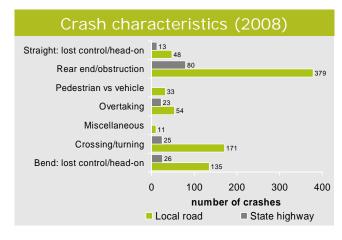
Note: 1/ Rural - area with a speed limit of 80km/h or more

The latest ten year trend shows a steady increase in the total number of fatal and serious injury crashes from 2000 till 2007, however it fell in 2008 to a record low. The latest five year trend in fatal crashes shows a decrease.

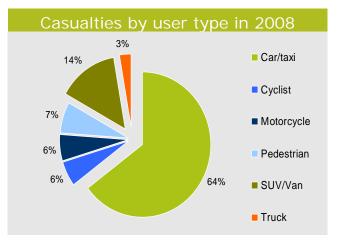
## Fatal and serious injury crash trends



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



The highest number of casualties in 2008 were drivers and passengers of cars. Meanwhile vulnerable road users (pedestrians/cyclists/motorcyclists) constituted 19 percent of all casualties.



Further information about all crashes in 2008 on:

#### Local roads

- Worst months: August & October (10 percent each)
- Worst day of week: Thursday (17 percent)
- Wet road crashes: 26 percent
- Night time crashes: 29 percent
- Alcohol over limit (injury crashes): 13 percent
- Too fast for conditions (injury crashes): 11 percent
- Crashes at intersection: 46 percent
- Road factors: 5 percent
- At fault or part fault male driver (injury crashes): 66 percent
- At fault driver held full NZ licence (injury crashes): 56 percent

#### State highways

- Worst month: August (13 percent)
- Worst day of week: Tuesday (17 percent)
- Wet road crashes: 35 percent
- Night time crashes: 27 percent
- Alcohol over limit (injury crashes): 6 percent
- Too fast for conditions (injury crashes): 24 percent
- Crashes at intersection: 39 percent
- Road factors: 21 percent
- At fault or part fault male driver: 70 percent
- At fault driver held full NZ licence (injury crashes): 72 percent

## Social cost of crashes

Local roads \$ 62.73M State highways 15.01M **Total** \$ 77.73M

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) 27 percent of all crashes in Hutt City occurred due to loss of control. These crashes resulted in 10 deaths, 93 serious injuries and 326 minor injuries. There were a further 831 non-injury crashes reported.

The latest five year trends show the total number of loss of control injury crashes to be increasing with the highest number recorded in 2007.

#### Loss of control injury crash trends 100 number of crashes 80 60 40 20 0 2004 2005 2006 2007 2008 4 1 1 1 Fatal 1 Serious 12 12 13 21 17 43 25 42 63 51 Minor 38 56 85 ->- TOTAI

Most (71%) loss of control crashes occurred at bends. These involved a driver losing control of their vehicle, then commonly running off the road or colliding with another vehicle (30 percent).

The following table shows a breakdown of the general environ of all loss of control crashes (1138 crashes).

Loss of	Local	Local	SH	SH
control	urban	rural	urban	rural
At bends	50%	13%	2%	6%
Straight road	20%	2%	1%	6%

After drivers lose control, their vehicles often crash into roadside hazards such as ditches, banks, poles or trees. Hitting these objects can result in a relatively minor event turning into something far more serious.

Eighty percent of all crashes struck roadside objects. The three most common roadside hazards struck in the city were *post or pole, fences and guard rails* (15 percent each) for a total of 1209 reported objects struck.

The following table shows the main characteristics of loss of control crashes. Most (70 percent) were single vehicle crashes. Poor handling was a factor in two-fifths of these injury crashes and similarly, speed too fast for conditions also. Half were at night and two-fifths occurred in the wet. Alcohol was a factor in a quarter of loss of control injury crashes.

Loss of control crashes				
Crash characteristics	Percentage of crashes			
Single vehicle	70%			
Alcohol (injury crashes)	27%			
Too fast for the conditions (injury crashes)	38%			
Road factors	14%			
Poor handling (injury crashes)	40%			
Rural road	28%			
Wet road	37%			
Night time	47%			

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

#### **Local roads**

- 9 deaths, 80 serious injuries and 285 minor injuries
- Worst month: December (101 crashes)
- Worst day of week: Saturday (179 crashes)
- Wet road crashes: 33 percent
- Night time crashes: 47 percent
- Crashes at intersection: 34 percent
- Road factors: 12 percent
- Alcohol over limit (injury crashes): 28 percent
- Most common injury crash factors: poor handling (43 percent) followed by too fast (39 percent)
- At fault male driver (injury crashes): 72 percent
- At fault driver held full NZ licence (injury crashes): 38 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old

- 1 death, 13 serious injuries and 41 minor injuries
- Worst month: April (19 crashes)
- Worst day of week: Sunday (34 crashes)
- Wet road crashes: 57 percent
- Night time crashes: 44 percent
- Crashes at intersection: 19 percent
- Road factors: 29 percent
- Alcohol over limit (injury crashes): 22 percent
- Most common injury crash factors: Too fast (36 percent) followed by poor handling (27 percent)
- At fault male driver (injury crashes): 74 percent
- At fault driver held full NZ licence (injury crashes): 44 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old

## Crossing/turning

During the most recent five year period (2004-2008) crashes involving a crossing or turning movement are the second most common crash type in Hutt City, accounting for 22 percent of all injury crashes. These crashes resulted in 6 deaths, 29 serious injuries and 258 minor injuries.

The latest five year trends show the total number of injury crashes to be increasing with the highest number recorded in 2008.

## Crossing/turning injury crash trends



Failing to give way or stop was recorded as a factor in a quarter of all injury crashes in Hutt City during the last five year period 2004-2008, while the same factor was recorded in 94 percent of crossing/turning injury crashes for is period.

Sixty-eight percent of at fault drivers held a full NZ drivers' licence in crossing/turning type injury crashes.

During the last five year period 2004-2008, there were 703 crossing/turning crashes at intersections. The table below shows the location of intersections with a high number of crossing/turning crashes.

Intersection name	Total crashes 2004 – 2008	Injury crashe s 2004- 2008	Total crashes in 2008
Tiata Dr/Fairway Dr	14	8	4
Randwick Road/ Whites Line East	22	6	7
Cornwall St/Waterloo Rd	17	5	5
High St/Daysh St	15	5	3
Fitzherbert Rd/Parkway	10	5	4
Cambridge Terrace/ Guthrie St	8	5	1
Hutt Road/ Udy Street	6	5	1
Hutt Road/ Koro Crescent	23	4	5

The table below shows the number of crossing/turning crashes, 2004-2008, by junction type and rural/urban split.

Junction Type	Rural	Urban
T-junction	51	294
Driveways	0	134
Crossroad	23	207
Y-junction	2	12
Roundabout	1	94
Multi-Junction	0	3

The most common scenario for all crossing/turning crashes is a vehicle turning right across oncoming traffic being hit by an oncoming vehicle (33 percent), followed by a vehicle turning right from a side road or a driveway being hit from the right by a vehicle travelling straight through (30 percent).

Further information about all crossing/turning related crashes in Hutt City 2004-2008 on:

#### Local roads

- 2 deaths, 22 serious injuries and 229 minor injuries
- Worst months: October (77 crashes)
- Worst days of week: Wednesday and Friday (125 crashes each)
- Wet road crashes: 23 percent
- Night time crashes: 20 percent
- Alcohol over limit (injury crashes): 3 percent
- Most common injury crash factors: failed to give way/stop (94 percent) followed by poor observation (65 percent)
- Road factors: 6 percent
- At fault male driver (injury crashes): 61 percent
- At fault driver held full NZ licence (injury crashes): 66 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old followed by 30-39 years old

- 4 deaths, 7 serious injuries and 29 minor injuries
- Worst months: August (12 crashes)
- Worst days of week: Tuesday and Wednesday (13 crashes)
- Wet road crashes: 33 percent
- Night time crashes: 45 percent
- Alcohol over limit (injury crashes): 14 percent
- Most common injury crash factors: failed to give way/stop (93 percent) followed by poor observation (25 percent)
- Road factors: 8 percent
- At fault male driver (injury crashes): 77 percent
- At fault driver held full NZ licence (injury crashes): 73 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old

## 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.

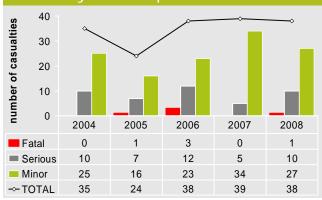
In Hutt City vulnerable road users account for 27 percent of all road users injured over the last five years (2004-2008), 32 percent of all deaths and 41 percent of all serious injuries in the city for this period.

## **Pedestrians**

Injury crashes involving pedestrians in Hutt City accounted for 16 percent of all injury crashes during the last five year period. These pedestrian crashes resulted in 5 deaths, 44 serious injuries and 125 minor injuries. In terms of casualties pedestrians made up 20 percent of all deaths and 22 percent of all serious injuries 2004-2008.

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

## Casualty trends: pedestrian crashes



Half of the injured pedestrians were under 20 years of age. This is higher than in similar authorities and the all NZ average for the same age group. Seventeen percent injured during this five-year period were over 65 years of age.

Age: pedestrians injured 2004-2008



All pedestrian crashes occurred on urban local roads, over a third at intersections (36 percent). Seventy percent took place during the hours of daylight.

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

- 42 percent involved pedestrians crossing roads heedless of traffic
- 22 percent show a driver failed to give way to a pedestrian on a crossing
- 13 percent did not see or look for other party until too late
- 10 percent involved pedestrians stepping out from behind parked cars
- 10 percent involved an unsupervised child
- 8 percent involved pedestrians who were visibly intoxicated

Nearly a quarter (24 percent) of pedestrian injury crashes record that the driver failed to give way to a pedestrian using a crossing point on the roadway, either at a zebra crossing or when turning at traffic lights.

High pedestrian crash locations or routes (on the basis of injury crashes) in Hutt City for the period 2004-2008 are shown below:

## High pedestrian accident locations

Lower Hutt City Central: Queens Drive and Waterloo Road, Waikato St

High Street route, Randwick Road route

Petone: Cuba Street route

Intersections generally in Naenae, Wainuiomata and Stokes Valley suburbs

Further information regarding crashes involving pedestrians in Hutt City 2004-2008 on:

#### **Local roads**

- 5 deaths, 44 serious injuries and 125 minor injuries
- Worst month: May (20 crashes)
- Worst day of week: Thursday (32 crashes)
- Wet road crashes: 12 percent
- Night time crashes: 21 percent
- Alcohol over limit (injury crashes): 10 percent
- Crashes at intersection: 37 percent
- Pedestrian factors contributing to crashes: 66 percent

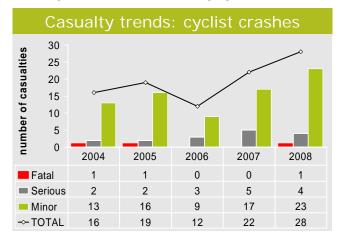
#### **State highways**

 There were no pedestrian crashes reported on state highways in Hutt City

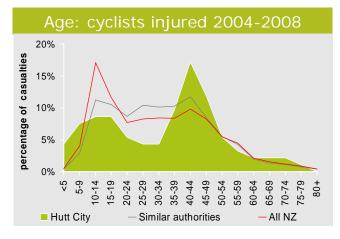
## **Cyclists**

Injury crashes involving cyclists in Hutt City accounted for 9 percent of all injury crashes during the last 5 year period, resulting in 3 deaths, 16 serious injuries and 78 minor injuries. There were a further 12 non-injury crashes reported.

The latest five year trends show an increase in the in the total number of cyclist injury crashes, particularly the number of minor injury crashes.



Injured cyclists are not spread evenly across all age groups. In Hutt City, 2004-2008, 30 percent were in the age group 40-49 years. This is significantly higher than in similar authorities and the all NZ average for the same age group. Meanwhile cyclists aged 10 to 34 years account for only 31 percent of those injured which is significantly lower than similar authorities and the all NZ average for the same age group.



The scenarios for crashes involving cyclists were many and varied. The most common scenarios for cyclist injury crashes in Hutt City 2004-2008 were:

- a vehicle or cyclist turning right across an oncoming vehicle: 18 percent
- a vehicle or cyclist turning right from a side road or driveway across a vehicle travelling straight through: 15 percent
- collision between vehicles and cyclists travelling straight through at crossroads: 9 percent

Ninety-four percent of cyclist crashes occurred on local roads in urban areas. More than half of the cycling crashes occurred at intersections (63 percent) and most during the daylight hours (80 percent).

Sixty percent of at fault drivers in these crashes were male. Sixty-one percent of all at fault drivers were in the 30-59 years age group. While most at fault drivers held a full NZ drivers' licence (72 percent). Fifteen percent of at fault drivers held a learner or restricted licence.

The high cyclist crash locations/routes for the period 2004-2008 in the Hutt City are shown below:

Location / route	Number of Cyclist injury crashes
Hutt Road	9
SH2 route from Petone interchange to Melling Link	7
High St	7
Naenae Rd	4
The Esplanade	4

Further information regarding crashes involving cyclists in Hutt City 2004-2008 on:

#### **Local roads**

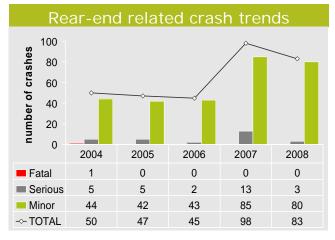
- 2 deaths, 13 serious injuries and 74 minor iniuries
- Worst months: June and August (12 crashes
- Worst day of week: Thursday (23 crashes)
- Most common injury crash factors: poor observation (62 percent) followed by failed to give way/stop (57 percent)
- Wet road crashes: 19 percent
- Night time crashes: 20 percent
- Alcohol over limit (injury crashes): 4 percent
- Crashes at intersection: 65 percent
- Male cyclist injured: 78 percent

- 1 death, 3 serious injuries and 4 minor injuries
- Worst month: July (3 crashes)
- Worst day of week: Tuesday (3 crashes)
- Most common injury crash factors: poor observation (50 percent) followed by failed to give way/stop and poor handling (25 percent each)
- Wet road crashes: 13 percent
- Night time crashes: 26 percent
- Alcohol over limit (injury crashes): nil
- Crashes at intersection: 50 percent
- Male cyclist injured: 88 percent

## Rear-end/obstruction

During the most recent five year period (2004-2008) rear-end and/or obstruction on the roadway type crashes were the most common crash type in Hutt City representing 42 percent of all crashes. These crashes resulted in 1 death, 29 serious injuries and 365 minor injuries. There were 323 injury and 1487 non-injury rear-end/obstruction crashes reported in the city.

The latest five year trends show that the total number of injury crashes has significantly increased over this period. Thirteen serious injury crashes recorded in 2007 is notable.



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

- collision with the end of a queue of traffic: 28 percent
- collision with a parked vehicle on the roadside: 12 percent
- collision with a U-turning vehicle: 11 percent
- collision with a vehicle ahead slowing or stopped for a pedestrian, cross traffic or signals: 10 percent
- collision with a right turning vehicle from behind by a vehicle that is not turning: 6 percent
- collision with another vehicle while stopping/ starting from a parallel kerbside parking: 3 per-
- collision with the vehicle travelling along the roadway by another vehicle entering or leaving a driveway in reverse and: 3 percent

Driver factors play a significant part in crashes of this type. Sixty-three percent of all rear-end injury crashes involved poor observation. Failing to notice a car slowing was a factor in 31 percent of all injury crashes and following too closely for 13 percent of these crashes.

Rear-end/obstruction type crashes are more commonly a route rather than a site specific problem and were distributed along the routes associated with the main traffic flow around the city.

## Rear-end/obstruction injury crash locations/routes

SH2: Normandale Road to Fairway Drive especially in Melling Link traffic lights

High Street /Cambridge Terrace

The Esplanade

Victoria and Cuba Street

Randwick Road

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

#### Local roads

- 23 serious injuries and 260 minor injuries
- Worst month: October (143 crashes)
- Worst day of week: Thursday (266 crashes)
- Wet road crashes: 18 percent
- Night time crashes: 21 percent
- Crashes at intersection: 3 percent
- Road factors: 3 percent
- Alcohol over limit (injury crashes): 9 percent
- Most common injury crash factors: poor observation (66 percent) followed by incorrect lane position (25 percent)
- At fault male driver (injury crashes): 60 percent
- At fault driver held full NZ licence (injury crashes): 62 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old followed by 25-49 years old

- 1 death, 6 serious injuries and 105 minor injuries
- Worst month: June (47 crashes)
- Worst day of week: Wednesday (76 crashes)
- Wet road crashes: 36 percent
- Night time crashes: 24 percent
- Crashes at intersection: 38 percent
- Road factors: 13 percent
- Alcohol over limit (injury crashes): 5 percent
- Most common injury crash factors: poor observation (56 percent) followed by incorrect lane position (41 percent)
- At fault male driver (injury crashes): 68 percent
- At fault driver held full NZ licence (injury crashes): 75 percent
- Most common at fault drivers' age group (injury crashes): 15-24 years old followed by 25-39 years old

## Speed

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

In Hutt City, speed too fast for conditions was a factor in 14 percent of all injury crashes in 2008 which is slightly higher than the average for similar authorities, 13 percent.

During the last five year period (2004-2008) in Hutt City, speed too fast was a factor in 16 percent of all injury crashes resulting in 9 deaths, 62 serious injuries and 198 minor injuries. There were also 470 non-injury crashes reported.

The latest five year trends show a slight increase in the total number of speed-related injury crashes.

#### Speed related injury crash trends 50 number of crashes 40 30 20 10 0 2008 2004 2005 2006 2007 3 1 Fatal 1 1 8 5 12 10 11 Serious 21 23 32 24 22 Minor 27 ->- TOTAL 33 36 43 36

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

Speed related crashes					
2004 2005 2006 2007 2008					
Urban	83	68	90	110	82
Rural	37	42	42	50	41
Total 120 110 132 160 123					

Eighty percent of the speed related crashes occurred on local roads and two thirds (65 percent) of them took place in urban areas.

Fifty-three percent of the at fault drivers in the city held either a learner or restricted licence or were never licensed or disqualified.

Seventy-nine percent of at fault drivers in speed related crashes were male and 66 percent of them were less than 29 years old.

Age and gender of at fault drivers				
Age (years)	Male	Female	Total	
15 - 19	51	11	62	
20 - 24	31	8	39	
25 - 29	20	2	22	
30 - 39	20	12	32	
40 - 49	13	5	18	
50 - 59	9	1	10	
60 - 69	2	0	2	
70+	0	0	0	
Total	146	39	185	

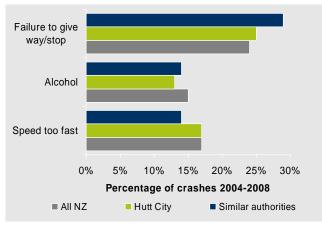
Further information about speed-related crashes in Hutt City 2004-2008 on:

#### **Local roads**

- 8 deaths, 54 serious injuries and 153 minor injuries
- Worst month: December (56 crashes)
- Worst day of week: Saturday (93 crashes)
- Wet road crashes: 34 percent
- Night time crashes 49 percent
- Crashes at intersection: 36 percent
- Road factors: 11 percent
- Alcohol over limit (injury crashes): 27 percent
- Most common injury crash factor: loss of control at bends (67 percent)
- At fault male driver (injury crashes): 80 percent
- At fault driver held full NZ licence (injury crashes): 35 percent
- Most common at fault drivers' age group (injury crashes): 15-29 years old

- 1 death, 8 serious injuries and 45 minor injuries
- Worst month: January (17 crashes)
- Worst day of week: Friday (24 crashes)
- Wet road crashes: 56 percent
- Night time crashes: 37 percent
- Crashes at intersection: 31 percent
- Road factors: 21 percent
- Alcohol over limit (injury crashes): 22 percent
- Most common injury crash factor: rear end/ obstruction (43 percent)
- At fault male driver (injury crashes): 74 percent
- At fault driver held full NZ licence (injury crashes): 63 percent
- Most common at fault drivers' age group (injury crashes): 15-19 years old followed by 30-39 years old

## National issues



## **Speed**

In Hutt City, speed too fast was recorded in 17 percent of injury crashes in the last five years resulting in 9 deaths and 260 other injuries. Speed as a factor in injury crashes remains steady.

Fifty-nine percent of speed related injury crashes were lost control/head-on at bend followed by rear end/obstruction type crash movements. Alcohol and poor handling are the driver factors most often associated with speed. Male drivers aged under 40 years old were the group most involved in speed related crashes.

#### Alcohol

In Hutt City, alcohol was recorded in 13 percent of injury crashes in the city in the last five years resulting in 13 deaths and 194 other injures. The number of injury crashes involving alcohol shows an increasing trend until 2007 but has slightly reduced in 2008.

Seventy-seven percent of alcohol related injury crashes were in urban areas. Fifty-eight percent of these crashes were lost control/head-on crash movement types. Travelling too fast and poor handling are factors often associated with alcohol.

## Failure to give way

In Hutt City, failure to give way or stop was reported in 25 percent of all reported injury crashes for the last five years resulting in 6 deaths and 331 other injuries. Most (81 percent) of these were during crossing/turning manoeuvres and often associated with failure to look for other parties. Seventy-seven percent of at fault drivers in these crashes were males and all age groups are represented.

#### Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2008 survey results restraint use rate in Hutt City for front seat and rear seat are 95 and 91 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/

## Contacts

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