

# *briefing notes road safety issues*

## *Wellington City*

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2003–2007 period.

This report is the ninth road safety report for Wellington 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 Wellington City Council (local roads) or Transit NZ (State highways). Please refer to the last page for contact details.

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

We have also included a brief overview of crashes in Wellington City for 2007.

<b>Major road safety issues</b>		<b>2007 road trauma</b>	
<b>Wellington City</b>		<b>Casualties</b>	<b>Wellington City</b>
Vulnerable road users		Deaths	2
Crossing/turning		Serious casualties	96
Rear end/obstruction		Minor casualties	525
Loss of control			
<b>Nationally</b>		<b>Crashes</b>	<b>Wellington City</b>
Speed		Fatal crashes	2
Alcohol		Serious injury crashes	87
Failure to give way		Minor injury crashes	426
Restraints		Non injury crashes	1699

## Overview 2007

In 2007 in Wellington City there were 515 injury crashes and 1699 non-injury crashes reported by the New Zealand Police. Thirty nine 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 2007

	Fatalities	Serious injuries	Minor injuries	Total
<b>Total</b>	<b>2</b>	<b>96</b>	<b>525</b>	<b>623</b>

### Local roads vs state highways

Local roads	0	69	354	423
State highways	2	27	171	200

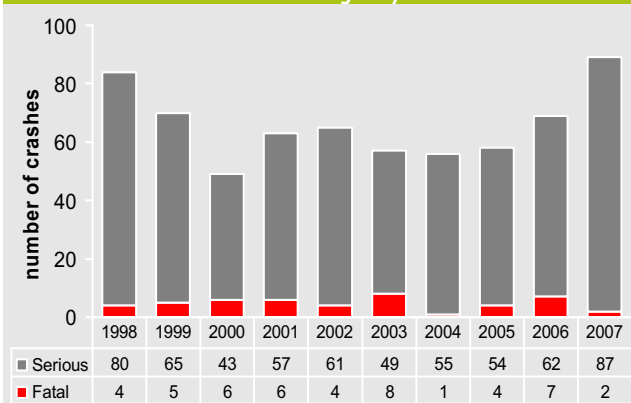
### Rural vs urban roads

Rural <sup>1</sup>	1	15	85	101
Urban	1	81	440	522

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

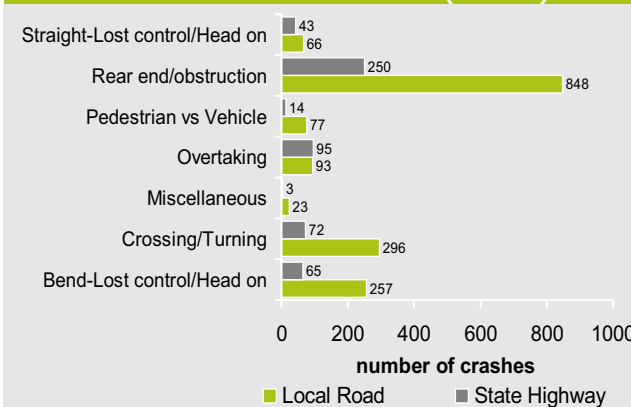
The total number of serious and fatal injury crashes has been continuously rising since 2004. The total number of these crashes in 2007 was the highest of any single year in the last ten years.

### Fatal and serious injury crash trends



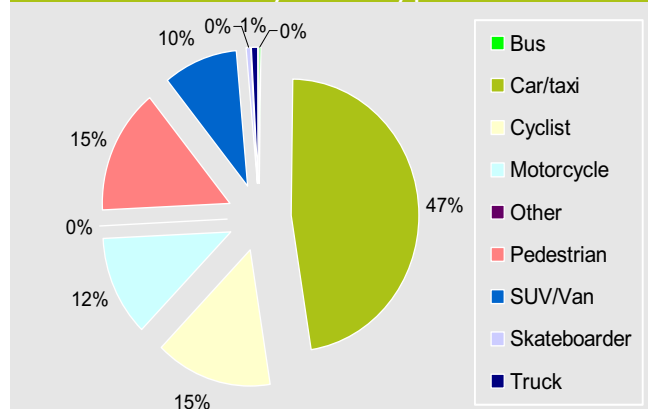
In 2007 rear end/obstruction was the main type of crash in the city followed by crossing/turning and bend – lost control/head-on crash types.

### Crash characteristics (2007)



The highest number of casualties in 2007 were drivers and passengers of cars. Vulnerable road users (i.e. pedestrians, cyclists and motorcyclists) constitute 43 percent of the casualties.

### Casualties by user type in 2007



Further information about all crashes in 2007 on:

#### Local roads

- Worst month: *June (10 percent)*
- Worst day of week: *Friday (16 percent)*
- Wet road crashes: *16 percent*
- Night time crashes: *31 percent*
- Alcohol over limit (injury crashes): *10 percent*
- Too fast for conditions (injury crashes): *13 percent*
- Crashes at intersections: *39 percent*
- Road factors: *5 percent*
- At fault male driver (injury crashes): *74 percent*
- Full NZ licence held by at fault drivers (injury crashes): *67 percent*

#### State highways

- Worst month: *June (11 percent)*
- Worst day of week: *Wednesday (18 percent)*
- Wet road crashes: *28 percent*
- Night time crashes: *34 percent*
- Alcohol over limit (injury crashes): *7 percent*
- Too fast for conditions (injury crashes): *13 percent*
- Crashes at intersections: *38 percent*
- Road factors: *10 percent*
- At fault male driver (injury crashes): *62 percent*
- Full NZ licence held by at fault drivers (injury crashes): *72 percent*

### Social cost of crashes

Local roads \$ 90.21M

State highways \$ 42.83M

**Total \$ 133.01M**

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.

## Vulnerable road users

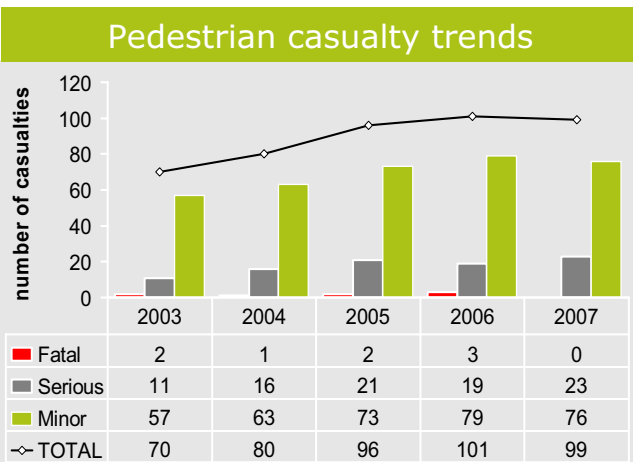
Vulnerable road users are those who have very little physical protection in the event of a crash and are therefore susceptible to severe injuries. These are described as pedestrians, motorcyclists and cyclists. Injuries to vulnerable road users accounted for 43 percent of all casualties in Wellington City in 2007.

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport. It is important to acknowledge that promotion alone of cycling and walking will not in itself be effective at increasing their use unless these modes can be made safer.

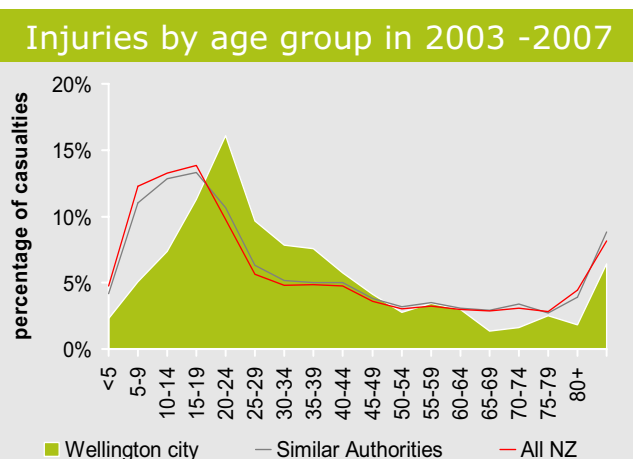
## Pedestrian

Pedestrian injuries feature highly in the total road injury picture in Wellington City, representing 19 percent of all injuries and 41 percent of all fatalities in the last five year period.

The number of pedestrians injured grew steadily from 2003 to 2006 and, since then, has stabilised. Although there were no deaths in 2007, the number of serious injuries in the year was the highest in the last five years.



Most pedestrian accidents occurred on urban roads, in which half of them were at intersections. Only 22 percent of these crashes took place during the hours of darkness.



Wellington City is experiencing a problem with significant numbers of pedestrian accidents involving younger persons crossing the road. Thirty three percent of pedestrians injured during the last five years were between 15 and 29 year of age. Young people under 15 years of age constitute 15 percent of the pedestrians injured in crashes.

The 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.

Following are the most commonly reported pedestrian factors involved in these pedestrian crashes:

- 22 percent involved pedestrian crossing roads heedless of traffic
- 11 percent of pedestrians were intoxicated
- 14 percent involved pedestrians crossing road without following traffic signal.

Pedestrian crashes are concentrated on the arterial and collector roads in Wellington City. The worst five locations are shown in the table below.

Location / route	Number of pedestrians injured
Taranaki St / Courtenay Pl	13
Willis St / Abel Smith St	8
Lambton Quay and Grey St	7
Kent / Major banks St	7
Willis St / Mercer St	7

Further information regarding both drivers and pedestrian in all crashes in the city during 2003 to 2007 on:

### Local roads

- 4 deaths, 83 serious injuries and 315 minor injuries
- Worst month: *March (11 crashes)*,
- Worst day of week: *Friday (76 crashes)*
- Wet road crashes: *17 percent*
- Night time crashes: *27 percent*
- Alcohol over limit (injury crashes): *12 percent*
- Crashes at intersection: *47 percent*
- Pedestrian factors for crashes: *73 percent*

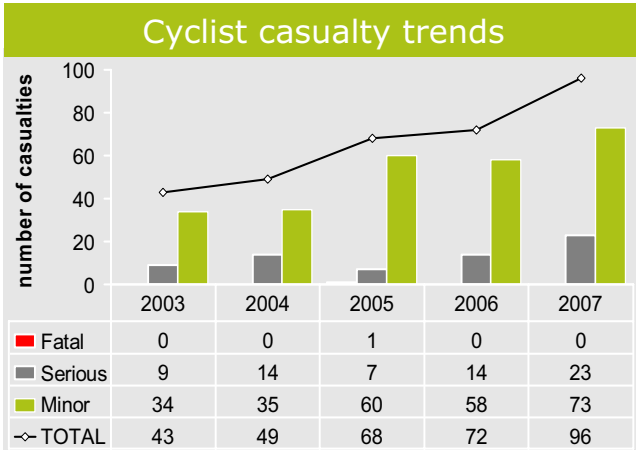
### State highways

- 4 deaths, 7 serious injuries and 33 minor injuries
- Worst month: *March (9 crashes)*,
- Worst day of week: *Saturday (9 crashes)*
- Wet road crashes: *17 percent*
- Night time crashes: *38 percent*
- Alcohol over limit (injury crashes): *21 percent*
- Crashes at intersection: *52 percent*
- Pedestrian factors for crashes: *79 percent*

## Cyclists

Cyclist injury incidents in Wellington City accounted for 13 percent of all injuries in the last five years.

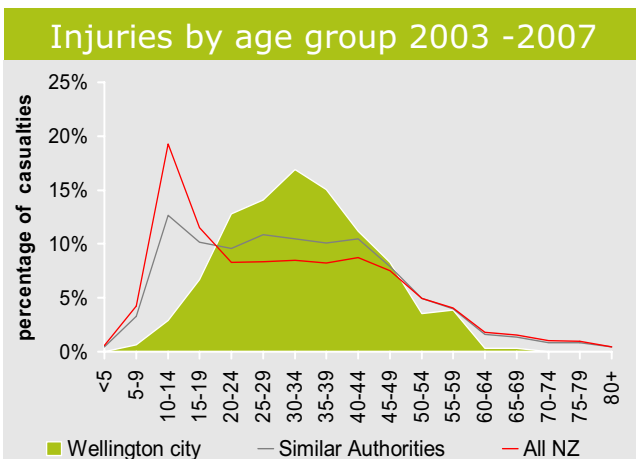
The total number of cyclists injured has been increasing in the last five years. Both the number of serious and minor injury crashes were significantly higher in 2007 than any other year in the last five years.



Almost all (90 percent) cycling crashes occurred on local roads in urban areas. Almost half of the cycling crashes occurred at intersections and mostly during the day time.

In 2007 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. Consequently the number of cyclist casualties have increased.

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



Approximately three-quarters of all the injured cyclist were between 20 and 45 years of age. This pattern is quite different from the national and similar cities' age distributions.

The routes with high cyclist crashes in Wellington city are:

- High cyclist crash locations/routes:**
- Thorndon Quay
  - Hutt Road
  - Adelaide Road
  - Courtenay Place

Further information regarding 2003 to 2007 cyclist crashes in the city are:

### Local roads

- 8 serious injuries and 30 minor injuries
- Worst month: *March (51 crashes)*
- Worst day of week: *Tuesday (66 crashes)*
- Most common injury crash factors: *poor observation (61 percent)* followed by *failed to give way/stop (42 percent)*
- Wet road crashes: *11 percent*
- Night time crashes: *18 percent*
- Alcohol over limit (injury crashes): *nil*
- Crashes at intersection: *48 percent*
- Male cyclist injured: *(76 percent)*

### State highways

- 7 serious injuries and 20 minor injuries
- Worst month: *August (5 crashes)*
- Worst day of week: *Wednesday (10 crashes)*
- Most common injury crash factors: *poor observation (64 percent)* followed by *failed to give way/stop (32 percent)*
- Wet road crashes: *9 percent*
- Night time crashes: *25 percent*
- Alcohol over limit (injury crashes): *nil*
- Crashes at intersection: *62 percent*
- Male cyclist injured: *(76 percent)*

## Motorcyclists

Nationally motorcycling fatalities dropped from a high of 20 percent of all road user deaths in 1988 to just 6 percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2007 motorcyclists accounted for 9 percent of road fatalities in New Zealand.

Motorcyclists injured in Wellington City accounted for 8 percent of all injuries and make up 9 percent of all fatalities during the last five year period, 2003 to 2007.

The total number of motorcyclists injured has been steadily increasing since 2004. Although there were no deaths in 2007, the total number of motorcyclist casualties was significantly higher than any other year of the last five year period.

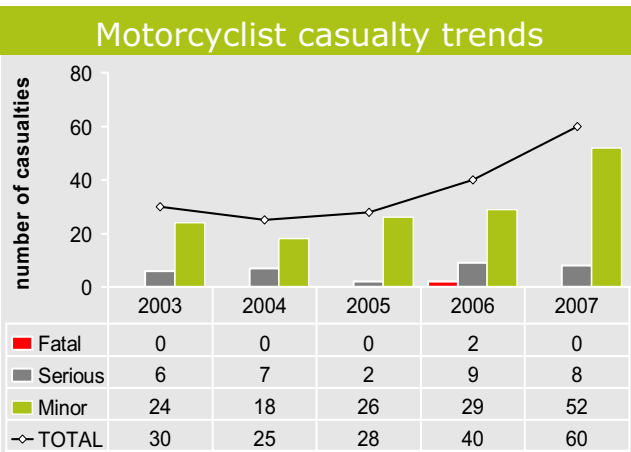
Further information regarding all crashes involving motorcyclists in the city during 2003 to 2007 on:

### Local roads

- 26 serious injuries and 106 minor injuries
- Worst month: *September (20 crashes)*,
- Worst day of week: *Friday (36 crashes)*
- Most common injury crash factors:
  - *failed to give way* and
  - *did not look behind when changing lanes, position/direction*
- Wet road crashes: 14 percent
- Night time crashes: 27 percent
- With alcohol over limit (injury crashes): 6 percent
- Crashes at intersection: 46 percent
- Male motorcyclist injured: (73 percent)

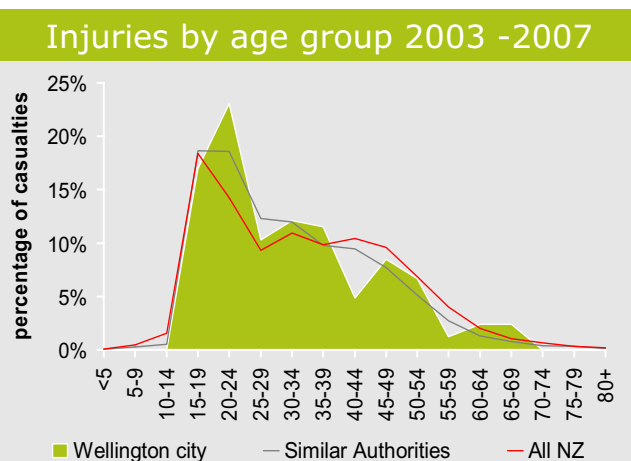
### State highways

- 2 deaths, 6 serious injuries and 43 minor injuries
- Worst months: *Many, June, August and September (7 crashes each)*,
- Worst day of week: *Tuesday (15 crashes)*
- Most common injury crash factors:
  - *did not look behind when changing lanes, position/direction* and
  - *following too closely*
- Wet road crashes: 16 percent
- Night time crashes: 33 percent
- With alcohol over limit (injury crashes): 10 percent
- Crashes at intersection: 43 percent
- Male motorcyclist injured: (77 percent)



Most (87 percent) motorcycling crashes happened on urban roads. Forty five percent of the motorcycling crashes happened at intersections. The most common crash type was *rear end/obstruction* followed by *crossing/turning* and *overtaking*.

Almost 40 percent of motorcycle casualties were in the 15 to 24 year age group, the majority of which were males.

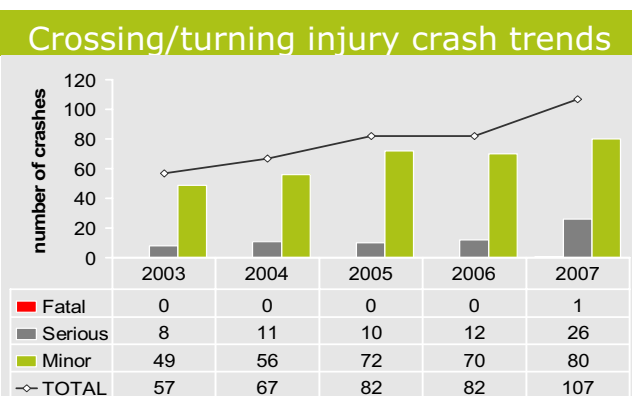


## Crossing/turning

Crashes due to a crossing/turning movement were the second most common crash type in Wellington City.

During the five year period 2003 to 2007, there were 1171 crashes at intersections and 205 crossing/turning crashes at driveways. These crashes, resulted in 1 deaths, 72 serious injuries and 401 minor injuries.

The number of crossing/turning injury crashes in the city has been increasing in the last five years. The numbers of each severity, fatal, serious and minor injury, of these crashes were significantly higher in 2007 than any other year during the last five year period.



The table below shows the locations of the intersections with a high number of these crashes in the city between 2003 and 2007.

Intersection name	Total crashes 2003 - 2007	Injury crashes 2003 - 2007	Total crashes in 2007
Courtney Place/Tory St	22	9	8
Customhouse Quay/Hunter St	19	9	6
Adelaide Rd/John St	26	8	7
Jervois Quay/Willeston St	15	8	4
Kent terrace/Courtney Place	28	8	6
Adelaide Rd/Drummond St	10	7	4
Constable St/Owen St	12	7	4
Bowen St/Lambton Quay	17	6	6
Cable St/Taranaki St	11	6	1

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

Junction Type	Rural	Urban
T (tee)	10	481
Driveways	1	231
X (cross)	10	435
Y	8	72
Roundabout	0	100
Multi road join	1	231
Unknown	1	11

The most common crash movement is a vehicle failing to give way while turning right across other traffic from a side road or driveway (28 percent). The second is where a vehicle turns right across oncoming traffic (26 percent).

Intersections present drivers with one of their biggest driving challenges, thus a high percentage (73 percent) of at fault drivers are full NZ licence holders in *crossing/turning* crashes.

Further information about all crossing/turning all crashes in the City for the period 2003 to 2007 on:

### Local roads

- 61 serious injuries and 324 minor injuries
- Worst month: *June (10 percent)*
- Worst day of week: *Wednesday (18 percent)*
- Wet road crashes: *20 percent*
- Night time crashes: *29 percent*
- Alcohol over limit (injury crashes): *1 percent*
- Most common injury crash factors: *failed to give way/stop (93 percent)* followed by *poor observation (60 percent)*
- Road factors: *8 percent*
- At fault male driver (injury crashes): *60 percent*
- Full NZ licence at fault drivers (injury crashes): *78 percent*
- Most common at fault drivers' age group (injury crashes): *30-39 years old*

### State highways

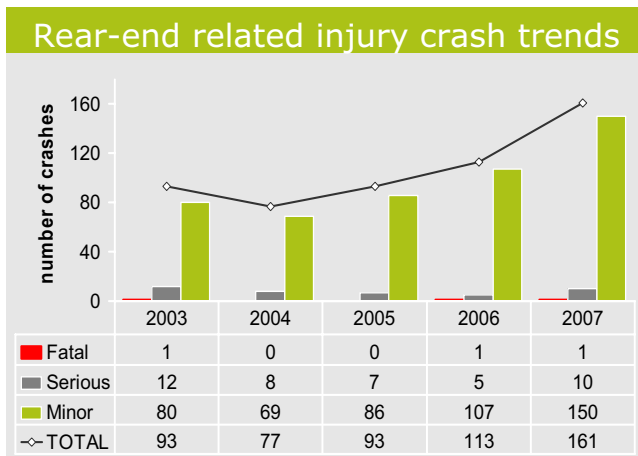
- 1 death, 11 serious injuries and 77 minor injuries
- Worst month: *April (11 percent)*
- Worst day of week: *Friday (18 percent)*
- Wet road crashes: *24 percent*
- Night time crashes: *43 percent*
- Alcohol over limit (injury crashes): *2 percent*
- Most common injury crash factors: *failed to give way/stop (94 percent)* followed by *poor observation (47 percent)*
- Road factors: *3 percent*
- At fault male driver (injury crashes): *61 percent*
- Full NZ licence at fault drivers (injury crashes): *66 percent*
- Most common at fault drivers' age group (injury crashes): *20-24 years old*

## Rear-end crashes

Rear-end and obstruction type crashes were the most common crash type in Wellington City, accounting for half of all injury and non-injury crashes in 2007.

Between 2003 and 2007, there were 3 fatal crashes, 42 serious injury, 492 minor injury and 3075 non-injury rear-end/obstruction crashes in Wellington City. These crashes resulted in 3 deaths, 43 serious injuries and 625 minor injuries.

Total number of rear-end/obstruction injury crashes has been steadily increasing since 2004, with a significant increase in 2007 from previous years.



The five most common crash scenarios in this category in Wellington City are:

- collision with the end of a queue of traffic
- collision with a parked vehicle
- collision with parked car with open door
- collision with a U turning
- collision with a slower vehicle/pedestrian/stationary vehicles
- collision with a vehicle waiting to make a right turn

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. Unsafe following distances are also commonly reported as a contributing factor, increasingly recorded in 2007.

Rear-end/obstruction crashes are more commonly a route rather than site specific problem. Most of the crashes have occurred at or near intersections.

Further information about all rear-end/obstruction crashes in the city between 2003 and 2007 on:

### Local roads

- 32 serious injuries and 379 minor injuries
- Worst month: *November (9 percent)*
- Worst day of week: *Friday (17 percent)*
- Wet road crashes: *15 percent*
- Night time crashes: *28 percent*
- Crashes at intersection: *82 percent*
- Road factors: *8 percent*
- Alcohol over limit (injury crashes): *4 percent*
- Most common injury crash factors: *poor observation (68 percent)* followed by incorrect lane position (*22 percent*)
- At fault male driver (injury crashes): *66 percent*
- Full NZ licence at fault drivers (injury crashes): *72 percent*

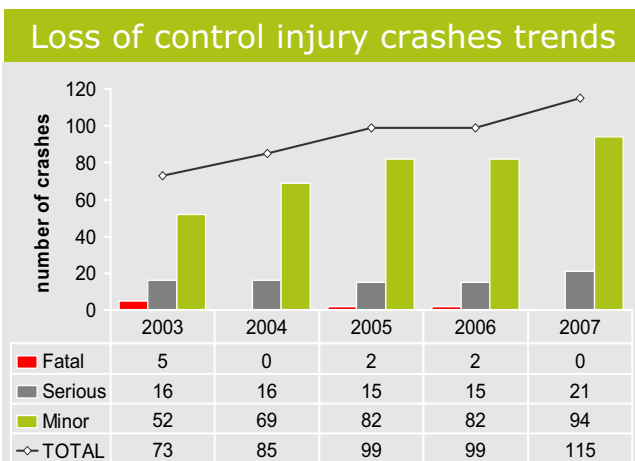
### State highways

- 3 deaths, 11 serious injuries and 246 minor injuries
- Worst months: *June and July (12 percent each)*
- Worst day of week: *Wednesday (20 percent)*
- Wet road crashes: *27 percent*
- Night time crashes: *29 percent*
- Crashes at intersection: *98 percent*
- Road factors: *3 percent*
- Alcohol over limit (injury crashes): *3 percent*
- Most common injury crash factors: *poor observation (56 percent)* followed by incorrect lane position (*43 percent*)
- At fault male driver (injury crashes): *67 percent*
- Full NZ licence at fault drivers (injury crashes): *79 percent*

## Loss of control

During the five year period 2003 to 2007, 22 percent of all injury crashes in Wellington City occurred due to the loss of control. These crashes resulted in 9 deaths, 93 serious injuries and 521 minor injuries. There were a further 1320 non-injury loss of control crashes reported in the last five years.

The total number of injury crashes related to the loss of control has been steadily increasing over the last five years. Although there were no fatalities in 2007, both serious and minor injuries increased significantly.



Three quarters of loss of control crashes occurred at bends.

Loss of Control crashes	Local Urban	Local Rural	SH urban	SH Rural
At bends	231	12	24	71
On Straight	69	4	9	51

The main identified characteristics of loss of control crashes are shown in the following table:

Main characteristics of crashes with loss of control	
Crash characteristic	Percentage of crashes
Single vehicle	55%
Alcohol (injury crashes)	22%
Too fast for the conditions (injury crashes)	33%
Road factors	16%
Poor handling (injury crashes)	39%
Rural road	24%
Wet road	33%
Night time	48%

Most crashes with loss of control involved a driver losing control of their vehicle and running off the road or on occasions colliding with another vehicle. 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.

The three most common roadside hazards struck during crashes in the city were *parked vehicles* (14 percent), *guard rails* (18 percent) and *cliff/banks* (13 percent) out of a total of 1744 reported objects struck.

Further information about all loss of control in Wellington City during 2003 to 2007 on:

### Local roads

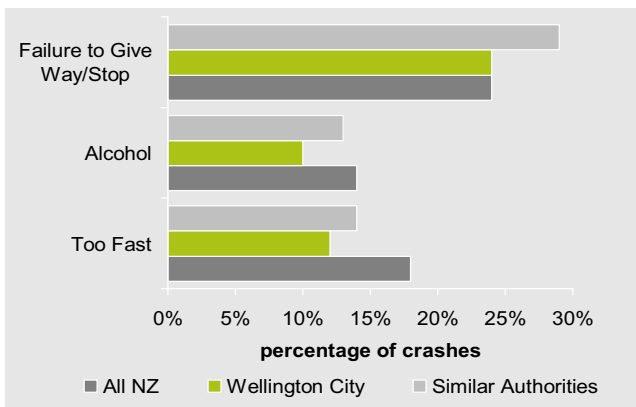
- 6 deaths, 62 serious injuries and 334 minor injuries
- Worst month: *June* (12 percent)
- Worst day of week: *Sunday* (19 percent each)
- Wet road crashes: 27 percent
- Night time crashes: 48 percent
- Alcohol over limit (injury crashes): 23 percent
- Most common injury crash factors: *poor handling* (37 percent) followed by *too fast* (36 percent)
- At fault male driver (injury crashes): 71 percent
- Full NZ licence at fault drivers (injury crashes): 52 percent
- Most common at fault drivers' age group (injury crashes): *15 to 19 years old*

### State highways

- 3 deaths, 31 serious injuries and 187 minor injuries
- Worst month: *October* (13 percent)
- Worst day of week: *Friday* (19 percent)
- Wet road crashes: 45 percent
- Night time crashes: 48 percent
- Alcohol over limit (injury crashes): 19 percent
- Most common injury crash factors: *poor handling* (43 percent) followed by *Too fast* (27 percent)
- At fault male driver (injury crashes): 61 percent
- Full NZ licence at fault drivers (injury crashes): 54 percent
- Most common at fault drivers' age group (injury crashes): *20 to 24 years old*



## National issues



### Speed

Speed *too fast* was recorded in 12 percent of injury crashes in Wellington city in the last five years resulting in 8 deaths and 331 injuries. *Speed* as a factor in crashes is increasing in the city.

Fifty nine percent of speed-related injury crashes were *bend-lost control/head on*. *Alcohol* and *poor handling* were the other driver factors most often associated with speed. Drivers aged under 24 years old were most involved in *speed* related crashes.

### Alcohol

In Wellington City, *alcohol* was recorded in 10 percent of injury crashes in the city in the last five years resulting in 8 deaths and 240 injuries. Although *alcohol* as a factor in crashes in 2007 in the city is slightly less than in 2006, actual five year trend seems to be increasing.

Most (87 percent) of *alcohol* crashes were in urban areas. Fifty-five percent of these involved *Loss of control/head-on crashes*. Travelling *too fast*, *pedestrian factors* and *poor handling* were often associated with *alcohol*. Seventy-four percent of at fault drivers in these crashes were males. Drivers aged under 30 years old were most involved in *alcohol* related crashes.

### Failure to give way

In Wellington City, *failure to give way or stop* was reported in 24 percent of all reported injury crashes for the last five years resulting in 2 deaths and 549 other injuries. Most (85 percent) of these were during *crossing/turning* manoeuvres and often associated with *failure to look for other parties*. For drivers at fault in injury crashes 59 percent are male and all age groups are represented.

### Restraints

The Ministry of Transport conducts surveys of restraint use. According to 2007 survey results restraint rate in Wellington City for front seat and rear seat are 92 and 80 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/belts-index/>

## Contacts

### Land Transport New Zealand

Wellington Regional Office

Master Builders House, L5  
234-242 Wakefield Street  
PO Box 27-249, Wellington  
Telephone 04 931 8900  
Fax 04 931 8929

[www.landtransport.govt.nz](http://www.landtransport.govt.nz)

Partnerships Manager Central

Ian Hunter (04 931 8904)

Manager Performance Information Central

Nabin Pradhan (04 931 8928)

Senior Engineer

Eddie Anand (04 931 8920)

Education Advisor

Roy Hitchcock (04 931 8910)

### Wellington City Council

101 Wakefield St  
PO Box 2199, Wellington

Transport Safety Manager

Paul Barker (04 803 8043)

Road Safety Co-ordinator

Emma Titcombe (04 801 3717)

### Transit New Zealand

Regional Safety Manager

Fabian Marsh (04 801 2580)  
P O Box 27-477, Wellington

### New Zealand Police

Road Policing Manager

Wellington Central  
PO Box 693, Wellington  
Telephone 04 3812000