

briefing notes road safety issues

Greater Wellington Region

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 Greater Wellington Region.

This report is the eighth road safety report for Greater Wellington Region. Most of the data in this report applies to both local roads and state highways. Where relevant the details of the crashes on the local road and state highways are provided and discussed.

In each new report the latest 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 Greater Wellington Region is compared to national average or those with high social cost (relating mainly to high numbers of fatal and serious crashes).

We have included a brief overview of crashes in the Region for 2006.

| Major road safety issues | 2006 road trauma | |
|---------------------------|--------------------|------|
| Greater Wellington Region | Casualties | |
| Vulnerable road users | Deaths | 32 |
| Rear end/obstruction | Serious casualties | 199 |
| Loss of control at bends | Minor casualties | 1024 |
| Failing to give way/stop | | |

| Nationally | Crashes | |
|---------------------|------------------------|------|
| Speed | Fatal crashes | 28 |
| Alcohol | Serious injury crashes | 174 |
| Failure to give way | Minor injury crashes | 793 |
| Restraints | Non injury crashes | 3040 |

Overview of crashes in 2006

In 2006 on local roads in Greater Wellington Region there were 705 injury crashes and 2216 non-injury crashes. In addition there were 290 injury crashes and 824 non-injury crashes on State Highways, as reported by the New Zealand Police. Note that Wellington City dominates crash statistics for the Region.

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

| | Casualties 2006 | | | |
|-------|-----------------|---------------------|-------------------|-------|
| | Fatalities | Serious injuries | Minor injuries | Total |
| Rural | 18 | 70 | 339 | 427 |
| Urban | 14 | 129 | 685 | 828 |
| Total | 32 | 199 | 1024 | 1255 |

It should be noted that 15 out of 32 fatalities in 2006 were vulnerable road users (pedestrians, cyclist and motorcyclist).

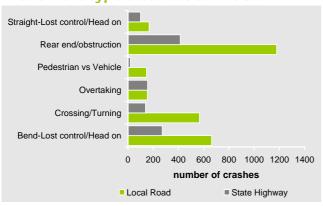
Number of casualties in 2006 is the highest in the last 5 years. Combined fatal and serious totals in 2006 is 3.5 percent higher than 5 year average. In addition, the number of minor injuries is consistently increasing.

Casualties trend 2002-2006



The previous chart shows the distribution of the injury and non-injury crashes on local roads and state highways in year 2006 by movement category.

Movement type distribution 2006



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

Local roads

- Worst month June (10 percent), best month February (6 percent)
- Worst day Friday (17 percent), best day Sunday (12 percent)
- Wet road 24 percent
- Night time 33 percent
- Mid-block 61 percent
- At fault male driver (injury crashes) 69 percent
- Full NZ licence (injury crashes) 66 percent of at fault drivers

State highways

- Worst month July (10 percent), best month September (6 percent)
- Worst day Wednesday (17 percent), best day Saturday (12 percent)
- Wet road 37 percent
- Night time 33 percent
- Mid-block 66 percent
- At fault male driver (injury crashes) 65 percent
- Full NZ licence (injury crashes) 62 percent of at fault drivers

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.

In the Greater Wellington Region 30 percent of at fault drivers in injury crashes were never licensed or held learner or restricted driver licences in year 2006.

| Licence status | Injury crashes percentage of at fault drivers | | |
|----------------|--|----------------|--|
| | Greater Wellington Region | New Zealand | |
| Full | 61.0 | 58.4 | |
| Learner | 8.2 | 9.5 | |
| Restricted | 18.5 | 17.6 | |
| Never licensed | 2.6 | 2.2 | |
| Disqualified | 2.3 | 1.7 | |
| Overseas | 2.0 | 4.2 | |
| Expired | 0.4 | 0.5 | |
| Other/Unknown | 5.0 | 5.6 | |

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.

On 24 February 2005, the Government launched *Getting there - on foot, by cycle*, its strategy to advance walking and cycling in New Zealand transport.

Getting there - on foot, by cycle aims to improve environments for walking and cycling, improve safety for pedestrians and cyclists, and increase the choice of walking and cycling for day-to-day travel.

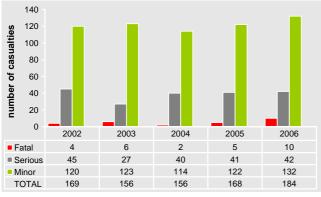
As a result Land Transport NZ expects local bodies to take a proactive approach to this subject. This should include the development of a walking and cycling strategy and making appropriate funding applications to progress that strategy.

It is vitally important to recognise that promotion alone of cycling and walking is not going to be effective at increasing their mode share unless they can be made safer.

Pedestrian

Pedestrian injuries feature highly in the total road injury picture in Greater Wellington Region, particularly in the major urban areas, representing 14 percent of all injuries, they make up 28 percent of all fatalities.

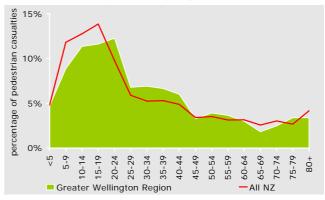
Pedestrian injuries trend (2002 -2006)



Most pedestrian crashes occurred on urban roads, out of which 54 percent occurred mid-block. Twenty-nine percent of these crashes occurred during hours of darkness.

Greater Wellington Region, especially Wellington city, is experiencing a problem with a significant number of pedestrian crashes involving younger people crossing the road. Approximately 30 percent of pedestrians injured during this five-year period were between 15 and 24 years of age. Young people under 15 years of age constitute 20 percent of the pedestrians injured in crashes

Pedestrian injuries by age 2002 -2006



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.

Following are the non driver crash factors involved in pedestrian crashes:

- 37 percent involved pedestrians crossing roads heedless of traffic
- 11 percent stepping out from behind a parked vehicle
- 10 percent of pedestrians were visibly intoxicated
- 8 percent involved pedestrians crossing the road without obeying traffic signals

Further information regarding 2002 -2006 pedestrian injury crashes:

Local roads

- The most common crash type was a pedestrian crossing the road hit by a driver approaching from their right (40 percent). The second was pedestrian crossing the road hit by a driver approaching for the left (35 percent)
- 18 deaths, 169 serious injuries and 548 minor injuries
- Worst month July (11 percent), best month January (5 percent)
- Worst days of week Thursday and Friday (18 percent each), best day Sunday (7 percent)
- Number of at fault drivers 336 (approx 50 percent)

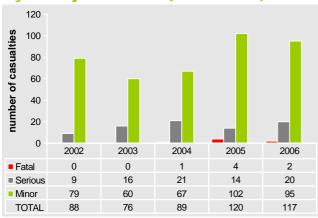
- The most common crash type was a pedestrian crossing the road hit by a driver approaching from their right (46 percent). The second was crossing the road hit by a driver approaching from their left (22 percent)
- 9 deaths, 26 serious injuries and 63 minor injuries
- Worst month March (18 percent), best month April (4 percent)
- Worst day of week Saturday (18 percent) best Sunday (7 percent)
- Number of at fault drivers 41 (approx 50 percent)

Cyclists

Cyclist injuries do not feature highly in the total road injury picture in Greater Wellington Region. They are representing only 9 percent of all injuries and make up 5 percent of all fatalities in the last 5 years. Most (94 percent) cycling crashes occurred on urban roads 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. Consequently the number of casualties have been found to be increasing.

Cyclist injuries trend (2002 -2006)



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

Cyclist casualties by age in 2002 -2006



Approximately a third of all the injured cyclist were between 15 - 24 years and nearly half (45 percent) between 25—44 years.

Further information regarding 2002 to 2006 cycling crashes:

Local roads

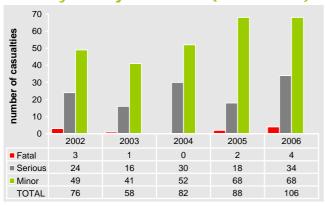
- 6 deaths, 84 serious and 91 minor injuries
- The most common crash type was a crossing or turning movement. The second was rear end or overtaking types.
- 52 percent at intersections
- 19 percent at night time
- Worst month March (12 percent) best months January and April (6 percent each)
- Worst day of the week Wednesday (21 percent) best day Sunday (5 percent)
- Number of crashes involving riding on the footpath 8 percent
- 76 percent of cyclists injured were male

- 4 deaths, 38 serious and 87 minor injuries
- The most common crash type was a crossing or turning movement The second was rear end or overtaking types
- 59 percent at intersections
- 18 percent at night time
- Worst months March and October (15 percent), best month February (3 percent)
- Worst day of the week Wednesday (23 percent) best day Saturday (7 percent)
- Number of crashes involving riding on the footpath 15 percent
- 85 percent of cyclists injured were male

Motorcyclists

Motorcyclist injuries in Greater Wellington region represent 8 percent of all injuries and also make up 8 percent of all fatalities. Total number of injuries as well as fatalities and serious injuries were highest in 2006 in comparison to any single year in the last five year period. Total injuries in the region have increased by 40 percent in five year.

Motorcyclist injuries trend (2002 -2006)



Nationally motorcycling fatalities dropped from a high of 20 percent of all fatalities in 1988 to just six percent in 2003. Since then there has been a significant increase in motorcycle registrations and this has reversed the downward trend. In 2006 motorcyclists accounted for 9.5 percent of road fatalities in New Zealand.

In Greater Wellington Region just over half (55 percent) of motorcycling crashes happened on urban roads away from intersections and during daylight hours.

One third of motorcycle casualties were in 15-24 year age group the majority of which were males. In addition nearly half (44 percent) of the casualties are evenly distributed through ages 25—44 years old.

Motorcyclist injuries by age in 2002 -2006



Further information regarding 2002 to 2006 motorcycling crashes:

Local roads

- 6 deaths, 84 serious and 191 minor injuries
- The most common crash type was a Crossing or turning movement (34 percent). The second was rear end/obstruction (24 percent) and Loss of control at bend (21 percent)
- 45 percent at intersections
- 26 percent at night time
- 16 percent on the wet road
- Worst month July (10 percent), best months January, May and November (6 percent each)
- Worst days of week Friday (19 percent), best days Tuesday and Wednesday (11 percent each)
- 82 percent of motorcyclists injured were male
- 6 percent of crashes involving road factors which were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance

- 4 deaths, 38 serious and 87 minor injuries
- The most common crash type was Rear end/ obstructions (36 percent). The second was Overtaking crashes (32 percent) followed by Crossing/Turning (15 percent)
- 29 percent at intersections
- 40 percent at night time
- 20 percent on the wet road
- Worst month June (13 percent), best month February (6 percent)
- Worst days of the week Friday (23 percent), best Monday (10 percent)
- 81 percent of motorcyclists injured were male
- 15 percent of crashes involving road factors which were mainly slippery surface due to loose material, oil/diesel/fuel, uneven surface and road surface under construction or maintenance

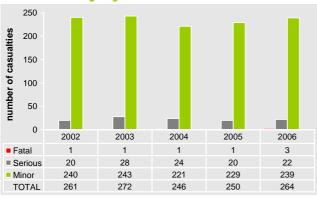
Rear-end crashes

Rear-end and obstruction type crashes were the most common crash type in Greater Wellington Region representing 39 percent of all injury and non-injury crashes in 2006.

Between 2002 and 2006, there were 7 fatal, 104 serious injury, 899 minor injury and 5398 non-injury rear-end/obstructions crashes recorded in Greater Wellington Region . These crashes resulted in 7 fatalities, 114 serious injuries and 1172 minor injuries.

Crash numbers have been fluctuating over the last five years as shown in the following graph:

Rear-end injury trend 2002-2006



The five most common crashes in this category are:

- collision with the end of a queue of traffic
- collision with a parked vehicle
- collision with a U-turning vehicle (turning from the left)
- collision with a slower vehicle
- 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 driver failing to notice other traffic in front slowing, has increased in recent years. Unsafe following distances is also commonly recorded as a contributing factor and increased in 2006.

Rear-end and obstruction crashes can more commonly be a route rather than site specific problem.

The following table lists the licence status of at fault drivers of Rear-end & Obstruction crashes:

| Licence status | Injury crashes percentage of at fault or part fault drivers | | |
|----------------|---|----------------|--|
| | Greater Wellington Region | New Zealand | |
| Full | 72.6 | 60.9 | |
| Learner | 5.8 | 9.4 | |
| Restricted | 12.5 | 14.8 | |
| Never licensed | 1.5 | 2.5 | |
| Disqualified | 1.3 | | |
| Overseas | 1.5 | 3.7 | |
| Expired | 0.4 | | |
| Other/ Unknown | 4.2 | 6.3 | |

Further facts about rear-end/obstructions related injury and non-injury crashes in Greater Wellington Region (2002 -2006):

Local roads

- 63 serious and 679 minor injuries
- Male drivers 63 percent at fault in injury crashes
- Most common crash factor "poor observation"
- Most common age group 30-39 years old
- 7 percent alcohol over limit in injury crashes
- Worst month August (9 percent), best month January (6 percent)
- Worst day of week Friday(18 percent), best day Sunday (9 percent)

State highways

- 7 deaths, 51 serious injuries and 493 minor injuries
- Male drivers 65 percent at fault in injury crashes
- Most common crash factor "poor observation"
- Most common age group 30-39 years old
- 5 percent over alcohol limit in injury crashes
- Worst month June (11 percent), best months January and February (7 percent each)
- Worst day of week Friday (18 percent), best day Sunday(10 percent)

"Poor observation" includes not only not looking for other road users but also being distracted and not seeing other road user until too late.

Give way/stop

Crashes where a driver failed to give way/stop was a factor in 757 crashes during 2006 in Greater Wellington Region. These resulted in 6 deaths, 39 serious injuries and 249 minor injuries.

During the five year period 2002 to 2006 failing to give way/stop was a factor in 3485 crashes: there were 19 fatalities, 197 serious injuries and 1109 minor injuries as a result of these crashes. Most (88 percent) of them involved crossing/turning movements, while 57% involved poor observation.

Injury trend 2002-2006



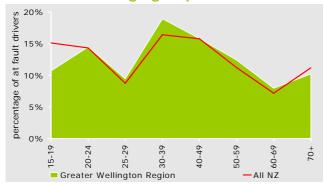
Failing to give way/stop crashes are predominantly crossing/turning movements (88%). In failing to give way/stop crashes causing injury 57% of these feature poor observation and 9% poor judgement as factors.

Poor observation includes not only failing to look for or see other road users but also being distracted and not seeing other road user until too late.

Nationally the largest age group of at fault or part fault drivers are aged between 30 to 49 years, accounting for nearly a third (32%) of all failing to give way/stop injury crashes.

In the Greater Wellington Region this same age group accounts for even more, 35%, of this type of injury crash. A fifth (19%) of the failing to give way/stop injury crashes have at fault of part fault drivers aged 30 to 39 years. The younger age group of 15 to 24 years accounts for a quarter (25%) of at fault or part fault drivers causing injury through failing to give way/stop.

Driver at fault age group 2002-2006



The following table lists the licence status of at fault drivers:

| Licence status | Injury crashes percentage of at fault or part fault drivers | | |
|----------------|---|-------------|--|
| Licence status | Greater Wel- lington Region | New Zealand | |
| Full | 71.8 | 65.3 | |
| Learner | 6.3 | 7.9 | |
| Restricted | 13.0 | 13.8 | |
| Never licensed | 0.9 | 1.6 | |
| Disqualified | 1.1 | 0.9 | |
| Overseas | 2.4 | 4.3 | |
| Expired | 0.9 | 0.8 | |
| Other/ Unknown | 3.6 | 5.4 | |

Further facts about failing to give way/stop related crashes in Greater Wellington Region 2002 to 2006 (divided into local roads and state highways):

Local roads

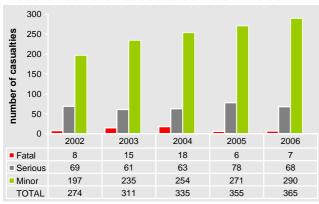
- 6 deaths, 137 serious injuries and 2822 minor injuries
- Male driver at fault in injury crashes—59 percent
- Most common crash factor Poor observation (60 percent of injury crashes)
- 2 percent alcohol over limit in injury crashes
- 22 percent wet roads
- 23 percent night time
- Worst months May, June, July and August (10 percent each), best month January (6 percent)
- Worst day of week Friday (18 percent), best day Sunday (9 percent)
- Worst time of day is between 3pm to 5.59pm (28 percent)

- 13 deaths, 60 serious injuries and 287 minor injuries
- Male driver at fault in injury crashes—59 percent
- Most common crash factor *Poor observation* (49 percent of injury crashes)
- 5 percent alcohol over limit in injury crashes
- 68 percent on urban roads
- 23 percent on wet roads
- 35 percent night time
- Worst month April, May and July (10 percent each), best months January, February, March and October (7 percent). There is very little monthly variance.
- Worst day of week Friday (18 percent), best day Monday (12 percent)
- Worst time of day of day is between 3pm to 5.59pm (25 percent)

Loss of control at bends

Between 2002 and 2006, there were 48 fatal, 269 serious injury, 812 minor injury and 1017 non-injury crashes recorded in Greater Wellington Region that occurred at bends. These crashes resulted in 54 deaths, 339 serious injuries and 1247 minor injuries.

Loss of control casualties 2002-2006



Most crashes at bends involved a driver losing control of their vehicle and either running off the road or colliding with another vehicle.

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

The three most common roadside hazards struck in a loss of control crash in Greater Wellington Region were: fence (794), followed by cliff/bank (535), post/pole (125) and parked vehicles (458) from a total of 4180 objects struck in 2002 –2006 Period.

The following table lists the main characteristics of these loss of control crashes in 2002–2006.

| Crash characteristic | |
|---|-----------------|
| Single vehicle | 68 percent |
| Roadside object struck (fence -most common) | 4180 objects |
| Alcohol | 22 percent |
| Excessive speed for the conditions | 44 percent |
| Road factors | 22 percent |
| Poor handling | 43 percent |
| Rural road | 41 percent |
| Wet road | 36 percent |
| Night time | 39 percent |

The following table lists the licence status of at fault drivers of loss of control crashes at bends:

| Licence Status | Injury crashes Percentage of at fault drivers | | |
|-----------------|--|-------------|--|
| Elochico otatas | Greater Wellington Region | New Zealand | |
| Full | 49.8 | 51.1 | |
| Learner | 13.7 | 10.7 | |
| Restricted | 21.4 | 17.9 | |
| Never Licenced | 5.0 | 4.1 | |
| Disqualified | 3.5 | 2.8 | |
| Overseas | 1.9 | 5.6 | |
| Expired | 0.4 | 0.9 | |
| Other/ Unknown | 4.0 | 6.8 | |

In the Greater Wellington Region the higher than national average proportion of at fault learner and restricted drivers being involved in injury crashes is matter of concern. The issue of loss of control at bends with learner and restricted licence drivers is particularly prevalent in Masterton and Carterton Districts and Porirua, Upper Hutt and Hutt Cities.

Further facts about injury and non-injury crashes loss of control at bends in 2002—2006 period are:

Local roads

- 26 deaths, 226 serious injuries and 864 minor injuries
- 74 percent of at fault drivers in injury crashes are male
- Most common crash factor excess speed, followed by poor handling
- Most common at fault age range 15-19 years old
- 24 percent alcohol over limit in injury crashes
- Worst month December (10 percent each), best month September (7 percent)
- Worst day of week Saturday (19 percent), best day Tuesday (10 percent)

- 28 deaths, 113 serious injuries and 383 minor injuries
- 67 percent of at fault drivers in injury crashes are male
- Most common crash factor poor handling
- Most common at fault age range 15-19 years old (23 percent)
- 19 percent over alcohol limit in injury crashes
- Worst month December (11 percent), best months August and September (6 percent each)
- Worst day of week Saturday (18 percent), best day Monday (11 percent)

National issues

Speed

Speed *too fast* was recorded in 17 percent of all nationally reported injury crashes in the last five years. In Greater Wellington Region, this factor was recorded in 16 percent of injury crashes resulting in 33 deaths, 214 serous and 802 minor injures. There were also 2495 non-injury speed-related crashes reported. Speed as a factor in crashes is not reducing in the region.

Sixty percent of speed-related injury crashes were bend-lost control/head on. Male drivers aged less than 25 years were most involved in speed-related crashes.

Alcohol

Alcohol was involved in 14 percent of all nationally reported injury crashes in the last five years. In Greater Wellington Region, alcohol was involved in 12 percent of injury crashes resulting in 39 deaths, 171 serious and 561 minor injuries. The number of injury crashes involving alcohol is not reducing in the region. In 5 year period, the highest number of fatalities (12 number) was recorded in year 2006.

Seventy-six percent of alcohol crashes were in urban areas of the region. Forty -seven percent of alcohol related crashes were lost control at bends.

Failure to give way

Failure to give way or stop was reported in 24 percent of all nationally reported injury crashes for the last five years. In Greater Wellington Region, this factor was recorded in 24 percent of injury crashes resulting in 19 deaths and 197 serious and 1109 minor injuries. There was also 2435 non-injury crashes reported with this factor. Ninety one percent of the crashes were in urban areas of the region.



Restraints

The Ministry of Transport conducts surveys of restrain use. The results of these surveys are at a regional level, and may not be fully appropriate to a Territorial Authority. The results are obtainable from the Ministry of Transport website.

http://www.transport.govt.nz/belts-index/

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