

briefing notes - road safety issues

Grey District

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.

The intent of the report is to highlight the key road safety issues and be a resource to help identify possible ways to reduce the number of road deaths and injuries in Grey District.

This report is the ninth road safety report for Grey District. All the material unless otherwise stated in this report applies to both local roads and to Transit New Zealand (Transit NZ) roads.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Grey District is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly). We have included a brief overview of crashes in the district.

We encourage local bodies to use the free access to the Ministry of Transport's Crash Analysis System to delve deeper into the highlighted issues.

Major road safety issues

Grey District

Bends

Speed

Intersections

2007 road trauma

Casualties

Grey District

Deaths

0

Serious casualties

7

Minor casualties

46

Nationally

Speed

Alcohol

Failure to give way

Restraints

Crashes

Grey District

Fatal crashes

0

Serious injury crashes

6

Minor injury crashes

31

Non-injury crashes

106

Overview

In 2007 on local roads in Grey District there were 17 injury crashes and 56 non-injury crashes. In addition there were 20 injury crashes and 50 non-injury crashes on Transit New Zealand (Transit NZ) roads, both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 37 injury crashes, by rural or urban areas for all roads, (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by environment 2007				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	0	4	26	30
Urban	0	3	20	23
Total	0	7	46	53

The annual numbers of fatal and serious injury crashes in the district have decreased from a high of 14 in 1998 to six in 2007. There were no fatal crashes in 2007. There were more minor and non-injury crashes than in previous years.

Crash trends				
Year	Fatal crashes	Serious injury crashes	Minor injury crashes	Non-injury crashes
1998	1	13	29	74
1999	2	8	22	73
2000	1	8	16	104
2001	4	5	25	72
2002	2	3	22	69
2003	0	13	23	59
2004	2	8	28	97
2005	3	9	23	74
2006	2	3	31	78
2007	0	6	31	106

Injury crashes 2003 - 2007

Crash type or contributory cause 2003 to 2007	Local Road Percent of injury crashes	Transit Road Percent of injury crashes
Alcohol	15%	9%
Too fast	37%	27%
Straight—lost control crash	10%	11%
Bend—lost control crash	56%	45%
Crossing / turning crash	13%	20%
Road factors	8%	16%
Vulnerable road users (Percent of casualties)	19%	10%
1, Pedestrians	4%	3%
2, Cyclists	2%	1%
3, Motorcyclists	13%	6%

Further information about 2003 to 2007 injury and non-injury crashes on local roads:

- Worst month March, December
- Worst day Saturday
- 34 percent on wet roads
- 31 percent at night
- 33 percent at intersections
- Social cost of crashes in 2007 was \$4.6m

Further information about 2003 to 2007 injury and non-injury crashes on Transit NZ roads

- Worst month January, March
- Worst day Saturday
- 42 percent on wet roads
- 30 percent at night
- 33 percent at intersections
- Social cost of crashes in 2007 was \$5.2m

Crashes at bends

Between 2003 and 2007 46 percent of all crashes in Grey District occurred at bends. These crashes resulted in 4 fatalities, 34 serious injuries and 110 minor injuries.

There were more non-injury crashes in 2007 than previous years. Injury crash numbers have been fairly constant.

Crashes at bends 2003 to 2007				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Non-injury crashes
2003	0	9	13	25
2004	2	4	14	36
2005	1	7	9	33
2006	1	1	19	34
2007	0	4	18	42
Total	4	25	73	170

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 their vehicles 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 injury crashes in Grey District were upright cliffs (18), over banks (16) and fences (15) from a total of 91 objects struck.

Main characteristics of injury crashes at bends	
Crash characteristic	Percentage of crashes
Single vehicle	73%
Alcohol	12%
Excessive speed for the conditions	45%
Road factors	19%
Poor handling	52%
Rural road	74%
Wet road	44%
Night time	34%

Further information about injury crashes on bends (2003 to 2007) on local roads in Grey District:

- 2 deaths, 20 serious injuries and 46 minor injuries
- 73 percent of at fault drivers were male
- Most common crash type "Lost control turning left"
- Most common age group 15-19 years
- 14 percent of crashes involved alcohol
- Worst month March
- Worst day of week Monday
- Worst time period 3 pm - 6 pm

Further information about injury crashes on bends (2003 to 2007) on Transit NZ roads in Grey District:

- 2 deaths, 14 serious injuries and 64 minor injuries
- 57 percent of at fault drivers were male
- Most common crash type "Lost control turning left"
- Most common age group 15-19 years
- 10 percent of crashes involved alcohol
- Worst month January
- Worst day of week Saturday
- Worst time period 3 pm - 6 pm

Speed

Nationally, speed is one of the major contributing factors to road crashes. Reducing speeds is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for drivers to respond to situations and it leads to more serious injuries. Research has shown that a one km/h reduction in mean speed can produce a three percent reduction in injury crashes.

Between 2003 and 2007 31 percent of injury crashes in Grey District involved travelling too fast for the conditions. These crashes resulted in 7 fatalities, 49 serious injuries and 204 minor injuries.

Speed related crashes					
Speed related crashes	2003	2004	2005	2006	2007
Rural	6	17	13	16	17
Urban	16	7	8	11	20
Total	22	24	21	27	37

In 2007 the number of reported speed related crashes was the highest in the five year period. It is possible that there is an upward trend in these crashes.

The most common speed related crash is Loss of control on right hand bends followed by loss of control on left hand bends.

The other main cause contributing to speed related crashes was:

- Poor handling

Age and sex of at fault speeding drivers

Drivers at fault in speed related injury crashes (2003- 2007)	Male	Female	Total
15 - 19 years	17	4	21
20 - 24	9	1	10
25 - 29	2	0	2
30 - 39	7	3	10
40 - 49	3	0	3
50 - 59	0	0	0
60 - 69	2	1	3
70+	1	1	2
Total	41	10	51

Males represented 80 percent of at fault drivers in speed related crashes. The most represented age group was the 15-19 years group.

Further information about speed related injury crashes in Grey District on local roads (2003 to 2007):

- no deaths, 10 serious injuries and 27 minor injuries
- Most common crash type "Lost control on bend"
- 83 percent mid-block
- 54 percent wet road
- 58 percent night time
- Worst month October
- Worst day of week Friday
- Worst time Midnight - 3 am, 6 am - 9 am

Further information about speed related injury crashes in Grey District on Transit NZ roads (2003 to 2007):

- 1 death, 7 serious injuries and 27 minor injuries
- Most common crash type "Lost control on bends"
- 92 percent mid-block
- 50 percent wet road
- 23 percent night time
- Worst month March
- Worst day of week Wednesday, Sunday
- Worst time 9 am - midday, 3 pm - 6 pm

Intersections

In Grey District during the period 2003 to 2007 there were 44 injury crashes at intersections and 149 non-injury crashes. In these crashes, no people died, 8 received serious injuries and 54 received minor injuries.

94 percent of these crashes were in urban areas of the district. These crashes make up 52 percent of all urban crashes. There were 12 intersection crashes in rural areas of the District.

Junction type Injury and Non-injury crashes		
Junction Type	Urban	Rural
Roundabout	15	0
Tee	100	12
Cross (X)	71	0
Multi leg	1	0
Total	187	12

Over the last five years the number of crashes at intersections has shown no obvious trend.

Crashes at Intersections					
	2003	2004	2005	2006	2007
Injury crash	13	8	9	9	5
Non-injury crash	24	33	27	28	37
Total	37	41	36	37	42

The most common intersection crash is one where vehicles cross paths at a right angle resulting in a collision. The second most common crash is when a driver turns right at an intersection and is hit by a vehicle approaching from the opposite direction.

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

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

Locations with high crash numbers

Intersection name	Total crashes 2003-2006	Total 2007
Cobden Bridge / Bright Street	8	3
Tainui Street / Mackay Street	7	2
Omoto Road / Mawhera Quay	5	3
Whall Street / Cobden Bridge	5	2
Tainui Street / Whall street	6	1
Boundary Street / Mackay Street	5	2

These locations are listed regardless of work done.

Further information about injury crashes at intersections 2003 to 2007 on local roads in Grey District :

- No deaths, 2 serious injuries and 26 minor injuries
- 21 percent involved alcohol
- 26 percent involved speed
- 37 percent wet roads
- 47 percent night time
- Worst month March
- Worst day of week Thursday, Friday, Saturday
- Worst time 3 pm - 6 pm

Further information about injury crashes at intersections 2003 to 2007 on Transit NZ roads in Grey District :

- No deaths, 6 serious injuries and 28 minor injuries
- 4 percent involved alcohol
- 12 percent involved speed
- 32 percent wet roads
- 20 percent night time
- Worst month January, August
- Worst day of week Friday
- Worst time 3 pm - 6 pm

National issues

This section contains some brief information on the key national road safety issues as measured in Grey District. They may have been covered elsewhere in this document or not be a specific issue.

Speed

In Grey District, "Too fast" was recorded in 50 fatal and injury crashes in the district in the last five years resulting in 1 death and 71 injuries. Speed as a factor in crashes is increasing in the district.

85 percent of all speed-related crashes were Loss of control on a bend. Poor handling was the other driver factor most often associated with speed in injury crashes.

80 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 19 years

Alcohol

In Grey District, alcohol was involved in 19 fatal and injury crashes in the district in the last five years resulting in 1 death, and 28 other injuries. The number of injury crashes involving alcohol is not reducing.

52 percent of all alcohol crashes were in rural areas of the district. 67 percent of these were Loss of control on a bend. Speed and Poor handling were the other factors often associated with alcohol in injury crashes.

83 percent of at fault drivers in these injury crashes were males. The most common ages of these drivers were between the ages of 15 to 24 years

Failure to give way

In Grey District, failure to give way or stop was reported in 32 fatal and injury crashes during the last five years resulting in no deaths and 46 other injuries.

Poor observation was the driver factor most often associated with failure to give way.

58 percent of at fault drivers in these injury crashes were females. All ages of these drivers were represented.

Restraints

The Ministry of Transport conducts surveys of restraint 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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