

## New Zealand Government

# briefing notes - road safety issues

# Opotiki District

New Zealand Transport Agency has prepared this eleventh road safety issues report. It is based on reported crash data and trends for the 2005–2009 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 Opotiki District.

All the material unless otherwise stated in this report applies to both local roads and state highways. Local roads are all non state highway roads in Opotiki District.

In March the Government released Safer Journeys the road safety strategy for the next ten years. The two following pages contain a brief introduction to the strategy and a link to find more information.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Opotiki 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 Opotiki District and we encourage safety engaged staff at Opotiki District Council to use their free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data and maps in this note are from CAS.

# Major road safety issues

Opotiki District
Alcohol
Speed
Crashes at bends

#### 2009 road trauma

Casualties	Opotiki District
Deaths	6
Serious casualties	23
Minor casualties	31

National priorities from Road Safety 2020—
Safer Journeys

Safer Journeys	
Speed	
Alcohol / drugs	
Young drivers	
Roads and roadsides	
Motorcyclists	

Crashes	Opotiki District
Fatal crashes	6
Serious injury crashes	13
Minor injury crashes	21
Non-injury crashes	31

### Safer Journeys

For the past decade road safety in New Zealand has been directed by the Road Safety 2010 strategy.

This strategy was introduced in 2003 and aimed to reduce deaths and casualties from road crashes.

In March 2010 the Government released a new strategy, "Safer Journeys", to build on the gains made under the Road Safety to 2010.

Under the new strategy, road safety will be looked at from a system wide approach rather than focusing so strongly on the road user.

The emphasis will be on improving all the parts of the road transport system that impact on safety; the road, the vehicle, travel speeds and the road user.

Under the 2020 strategy a number of priority areas have been chosen as the areas of focus.

These areas were assigned a priority, based on research that shows five major areas of concern, six areas of lesser concern, and two areas where continued focus is needed, or concern is emerging.

These divisions are shown in "Table 3" opposite.

This table is a direct extract from page 12 of the Safer Journeys document which can be found at: http://www.transport.govt.nz/saferjourneys/
Documents/SaferJourneyStrategy.pdf

To reflect the new strategy, changes to the wording and the way data is presented in these briefing notes to reflect and emphasise the connections to the new strategy. In particular, we have included more tables showing age distribution as problems with the safety of young drivers as a particular focus of Safer Journeys.

However, as these reports are based on crash data, particularly fatal and serious crashes, the actual "issues" identified by our analysis remain as before, fact based. It would be irresponsible of us to ignore an area of high social cost in a particular local body or region just because it wasn't a national priority.

We have prepared a table on the following page which shows the areas of "high concern" under Safer Journeys 2020 strategy.

This table allows some relative comparison of Safer Journeys priorities across the local bodies in the area covered by the Hamilton NZTA Office.

Table 3 – Safer Journeys' areas of concern and the Safe System

AREAS OF CONCERN WE WILL ADDRESS		VE WILL TA		١
	SAFE ROADS AND ROAD- SIDES	SAFE SPEEDS	SAFE VEHICLE	SAFE ROAD S USE
Areas of high concern				
Reducing alcohol/drug impaired driving			1	1
Increasing the safety of young drivers	1	1	1	1
Safe roads and roadsides	1			
Safe speeds	1	1	1	
Increasing the safety of motorcycling	1	1	1	1
Areas of medium conce	ern			
Improving the safety of the light vehicle fleet			1	1
Safe walking and cycling	1	1	1	1
Improving the safety of heavy vehicles	1	1	1	1
Reducing the impact of fatigue	1	1	1	1
Addressing distraction	1		1	1
Reducing the impact of high risk drivers		1	1	1
Areas of continued and	emergin	g focus		
Increasing the level of restraint use			1	1
Increasing the safety of older New Zealanders	1	1	1	1

For some priorities (eg motorcycling), complementary action will be taken across all four areas of the Safe System. For others (eg reducing the impact of drink driving or safe roads), more effort would be focussed on one or two of the four Safe System areas.

Table source: Ministry of Transport 2020 Safer Journeys

# Status of the areas of "high concern" from Safer Journeys 2020 for the Bay of Plenty Region 2005 to 2009

(table below refers only to fatal and serious crashes on both local roads and state highways for the years 2005—2009 except for the "intersection" columns which also include minor crashes for reasons of sample size)

Safer Journeys area of concern	Reducing alcohol and drug impaired driving	Increase the safety of young drivers	Safer roads and roadsides			Safe speeds	Increasing the safety of motorcycling
Measure	Percentage of fatal and serious crashes with this factor	Percentage of fatal and serious crashes with at fault drivers aged 24 years or less	Percentage of fatal and serious crashes with an object struck	Number of urban intersections with three or more injury crashes in the last five years	Number of rural intersections with three or more injury crashes in the last five years	Percentage of fatal and serious crashes where speed was a factor	Percentage of fatal and serious crashes involving a motorcyclist
Western BOP District	32	31	48	1*	9	25	15*
Tauranga City	25	28	29	36	1*	20	26
Rotorua District	27	31	42	24	4	33	14
Whakatane District	32	36	49	2	3	32	17*
Opotiki District	37*	37*	68	0**	0***	41*	19**
Kawerau District	56***	56***	89***	0***	0****	33***	22***
BOP Region	29	32	43	63	16	28	18
New Zealand	23	34	45	1938	320	23	18

#### Note:

- \* Sample size of 30 crashes or less
- \*\* Sample size of 20 crashes or less
- \*\*\* Sample size of 10 crashes or less
- \*\*\*\* No crashes in sample

## **Opotiki District overview**

In 2009 on local roads in Opotiki District there were 7 injury crashes and 4 non-injury crashes. In addition on state highways in Opotiki District there were 33 injury crashes and 27 non-injury crashes. The tables below show the number of injuries resulting from the 40 injury crashes by rural or urban areas for local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by urban / rural 2009					
	Fatalities	Serious injuries	Minor injuries	Total	
Rural	3	17	20	40	
Urban	3	6	11	20	
Total	6	23	31	60	

Casualties by state highway / local road 2007					
	Fatalities Serious Minor Totalities Injuries				
Local road	3	6	3	12	
State highway	3	17	28	48	
Total	6	23	31	60	

Crash trends in Opotiki District				
Year	Fatal crashes	Serious crashes	Minor crashes	Total crashes
2000	1	5	6	12
2001	2	5	5	12
2002	2	8	20	30
2003	5	7	17	29
2004	7	5	23	35
2005	4	8	10	22
2006	2	8	14	24
2007	3	3	20	26
2008	4	8	24	36
2009	6	13	21	40

Crash characteristics (all roads) 2005 to 2009					
Crash type or contributory cause	Percentage fatal and serious crashes of this type or contributory cause	Percentage <b>all</b> injury crashes of this type or contributory cause			
Alcohol	37	25			
Speed	41	31			
Bend	59	57			
Poor handling	44	39			
Night	39	32			

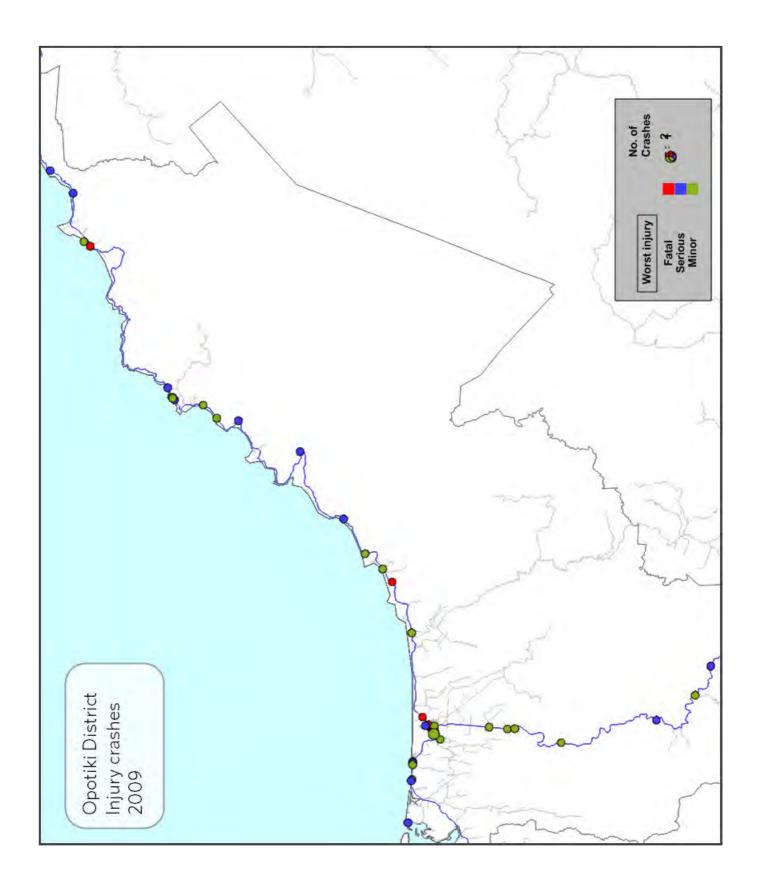
Further information about the 31 injury and 26 non-injury crashes on **local roads** in Opotiki District 2005 to 2009:

- 4 deaths, 11 serious injuries and 29 minor injuries
- Worst month March, best October
- Worst day Saturday, best Wednesday
- 14 percent on wet roads
- 26 percent at night
- 44 percent at intersections
- 37 roadside objects struck \*
- Most represented five year age group of 'at fault' drivers in injury crashes: 20 to 24 years (20 percent of at fault drivers)
- Social cost of crashes in 2009 \$14m

Further information about the 117 injury and 104 noninjury crashes on **state highways** in Opotiki District 2005 to 2009:

- 16 deaths, 49 serious injuries and 118 minor injuries
- Worst month April, May and June (equal), best July and September (equal)
- Worst day Friday, best Wednesday
- 29 percent on wet roads
- 35 percent at night
- 20 percent at intersections
- 171 roadside objects struck \*
- Most represented five year age group of 'at fault' drivers in injury crashes: 15 to 19 years (23 percent of at fault drivers)
- Social cost of crashes in 2009 \$29m

<sup>\*</sup> It needs to be noted that if a vehicle hits the same type of object more than once it is only counted in CAS once.



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#### Alcohol

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises.

A driver over the legal limit (80mg of alcohol per 100ml of blood) is 16 times more likely to be involved in a fatal crash than a sober driver.

In Opotiki District, alcohol was a factor in 37 percent of fatal and serious crashes and 25 percent of injury crashes.

#### Number of alcohol related injury crashes

Crash year	Open road	Urban road	Total
2005	6	3	9
2006	1	3	4
2007	5	1	6
2008	3	1	4
2009	7	7	14
Total	22	15	37

(Open road is classified as any area with a speed limit of 80km/hr or more)

# Ages of at fault drivers in alcohol related crashes 2005 to 2009 and 25 years ago (prior to lowering the drinking age.)

Age group	Percentage drivers in this age band 2005 to 2009	Percentage drivers in this age band 1980 to 1984				
15-19	14	23				
20-24	22	20				
25-29	5	10				
30-34	16	7				
35-39	16	3				
40-44	8	3				
45-49	8	10				
50-54	3	3				
55-59	3	7				
60-64	3	0				
65-69	0	3				
70-74	3	10				
75+	0	0				

The number of alcohol related injury crashes in the Opotiki District has risen in 2009, reaching double figures for the first time in the last five years. Fatal (5), serious (10) and minor (7) casualties for 2009, were at their highest for the five year period also.

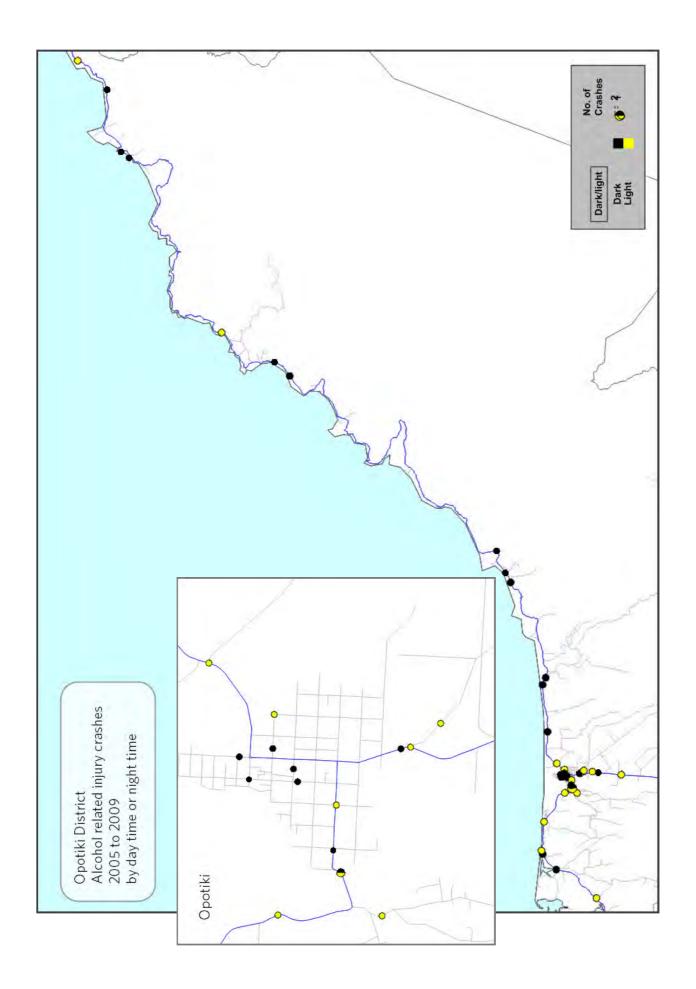
It is interesting to note the changing age patterns of those choosing to drink and crash. In Opotiki District there has been a shift from being weighted to young drivers to a broader age spread. 25 years ago 43 percent of at fault drivers were aged under 25, today this is 36 percent. The most significant shift is in the 15 to 19 year old age group, accounting for 14 percent today (2005-2009) compared with 23 percent 25 years ago (1980-1984).

Further information about the 10 alcohol related injury crashes on **local roads** in Opotiki District 2005 to 2009:

- 4 deaths, 8 serious and 7 minor injuries
- 80 percent of at fault drivers were male
- Most common crash type "lost control on straight roads towards the left" (3 crashes)
- 30 percent at intersections
- 50 percent night time
- Worst three hour time period 3pm to 6pm
- Worst month August
- Worst day Thursday, best Monday, Tuesday and Sunday (equal)
- Number of roadside objects struck, 10
- Most common object struck, fence

Further information about the 27 alcohol related injury crashes on **state highways** in Opotiki District 2005 to 2009:

- 8 deaths, 10 serious injuries and
   19 minor injuries
- 86 percent of at fault drivers were male
- Most common crash type "lost control turning right" (12 crashes)
- 11 percent at intersections
- 63 percent night time
- Worst three hour time period 6pm to 9pm
- Worst month December, best January
- Worst day Saturday, best Monday
- Number of roadside objects struck, 36
- Most common object struck, ditch



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## Speed

Nationally, speed is one of the major contributing factors to road crashes. Appropriate speeds are an important road safety goal for road safety strategy 2020 as it was for 2010.

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.

Between 2005 and 2009, 31 percent of injury crashes in Opotiki District involved travelling too fast for the conditions.

#### 7 3 4 Rural 6 12 Urban 3 3 1 2 5 9 Total 9 6 5 17

The other main causes contributing to speed related crashes were:

- Handling errors
- Alcohol
- General errors of judgement

Speed related crashes in CAS are not necessarily crashes where the driver was exceeding the posted speed limit (although that may also be the case) but are crashes where in the opinion of the reporting Police Officer the driver was travelling too fast for the prevailing conditions.

Certainly getting the message through that the posted speed limit is a maximum, but not necessarily a safe speed for every bend, crest, dip or isolated development (or driver) is the key to lowering the injury rate.

Local authorities and highway managers can do their part by ensuring speed limits, including temporary speed limits at road work sites are appropriate, comply with the Speed Limits Rule and are adequately signposted. When inappropriate speed limits are used there is a poor level of speed compliance by motorists and require a higher level of police enforcement.

Age group and gender of at fault drivers in speed related injury crashes 2005 to 2009 (\* note age ranges are not equal )

Drivers age	Male	Female	Total
15-19 years *	11	2	13
20 - 24	11	0	11
25 - 29	4	0	4
30 - 39	7	3	10
40 - 49	2	3	5
50 - 59	1	0	1
60 - 69	1	0	1
70+	0	1	1
Total	37	9	46

Further information about the 10 speed related injury crashes on **local roads** in Opotiki District 2005 to 2009:

- 2 deaths, 7 serious injuries and 8 minor injuries
- Most common crash type "lost control off straight roads towards the left" and "lost control turning right" (equal) (2 crashes each)
- 20 percent wet road
- 30 percent night time
- 70 percent include alcohol as a factor
- Worst day Thursday, best Tuesday, Wednesday and Sunday (equal)
- Worst three hour time period, 3pm to 6pm

Further information about the 36 speed related injury crashes on **state highways** in Opotiki District 2005 to 2009:

- 6 deaths, 18 serious injuries and 37 minor injuries
- Most common crash type "lost control turning right" (18 crashes)
- 36 percent wet road
- 50 percent night time
- 44 percent include alcohol as a factor
- Worst day June, best February and July (equal)
- Worst three hour time period, 6pm to 9pm

# Crashes at bends

Between 2005 and 2009, 59 percent of fatal and serious crashes and 57 percent of all injury crashes in Opotiki District were loss of control or head on at bends.

#### Injury crashes at bends 2005 to 2009

	Fatal crashes	Serious crashes	Minor crashes	Total
2005	4	5	6	15
2006	2	2	9	13
2007	2	3	8	13
2008	2	5	13	20
2009	2	8	13	23
Total	12	23	49	84

38 percent of at fault drivers involved in crashes at bends were aged under 30 and 18 percent were aged under 20.

Drivers fuelled by alcohol and travelling too fast for their own abilities and those appropriate to the conditions are all too common themes in bend related crashes in the district. (see bullet points)

# Age groups of at fault drivers in bend related injury crashes 2005 to 2009

Female	Male	Total
5	13	18
2	7	9
1	4	5
0	8	8
5	7	12
2	3	5
3	7	10
0	4	4
1	2	3
0	2	2
1	2	3
0	1	1
1	3	4
21	63	84
	5 2 1 0 5 2 3 0 1 0 1 0	5 13 2 7 1 4 0 8 5 7 2 3 3 7 0 4 1 2 0 2 1 2 0 1 1 3

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 most common roadside hazards struck in injury loss of control or head on crashes on bends in Opotiki District were cliffs and banks (18), fences (16), ditches (11) and trees (10) from a total of 88 objects struck.

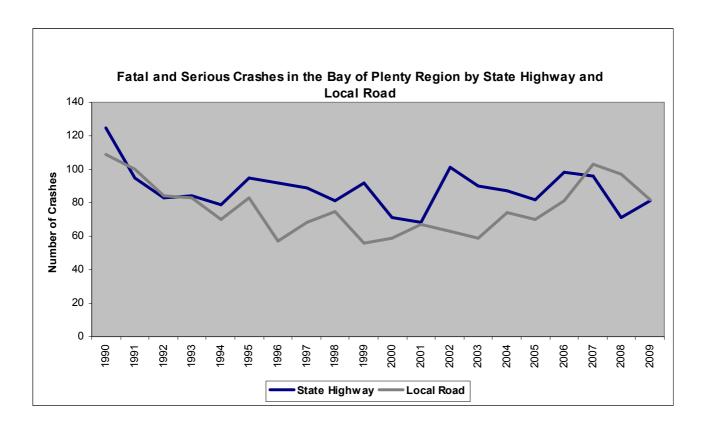
Further information about the 9 injury loss of control or head on crashes on bends on **local roads** in Opotiki District 2005 to 2009:

- 1 death, 2 serious injuries and 6 minor injuries
- 67 percent of at fault drivers were male
- Most common crash type "loss of control turning left" (3 crashes)
- 33 percent of crashes involved alcohol
- 11 percent in the wet
- 44 percent of crashes involved speed too fast for the conditions
- Worst month, June
- Worst day Saturday, best Wednesday and Sunday (equal)
- Worst three hour time period, 6am to 9am and 3pm to 6pm (equal)
- Number of objects struck, 8

Further information about the 75 injury loss of control or head on crashes on bends on **state highways** in Opotiki District 2005 to 2009:

- 11 deaths, 30 serious injuries and 79 minor injuries
- 75 percent of at fault drivers were male
- Most common crash type "loss of control turning right" (42 crashes)
- 28 percent of crashes involved alcohol
- 35 percent in the wet
- 43 percent of crashes involved speed too fast for the conditions
- Worst month October, best July
- Worst day Sunday, best Wednesday and Thursday (equal)
- Worst three hour time period, midday to 3pm
- Number of objects struck, 80

# Looking back—the last two decades ...



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