



briefing notes - road safety issues

Far North District

New Zealand Transport Agency has prepared this road safety issues report. It is based on reported crash data and trends for the 2004–2008 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 Far North District.

This report is the tenth road safety report for Far North District. All the material unless otherwise stated in this report applies to both State Highways and local 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 Far North 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 Far North District to use its 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 *

Far North District

Bends

Alcohol

Speed

Road factors

Nationally *

Speed

Alcohol

Failure to give way

Restraints

2008 road trauma

Casualties

Far North District

Deaths

10

Serious casualties

51

Minor casualties

213

Crashes

Far North District

Fatal crashes

8

Serious injury crashes

40

Minor injury crashes

134

Non-injury crashes

197

* not in any specific order of priority

Overview

In 2008 on local roads in Far North District there were 85 injury crashes and 171 non-injury crashes. In addition there were 97 injury crashes and 197 non-injury crashes on State Highways both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 182 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

Casualties by urban / rural 2008				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	9	40	174	223
Urban	1	11	40	52
Total	10	51	214	275

Over the past decade fatal and serious crashes have fluctuated but remained on the whole relatively consistent. Minor injuries on the other hand have rises then remained relatively consistent, most probably as a result of improved reporting.

Alcohol remains an issue in the Far North with this factor being reported in crashes at higher degree than might be expected when the district is compared to similar local bodies or the all New Zealand values.

Crash trends in Far North District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
1999	14	37	66	117
2000	14	42	75	131
2001	7	40	69	116
2002	11	56	92	159
2003	9	47	190	246
2004	12	45	170	227
2005	11	46	125	182
2006	13	44	172	229
2007	13	61	176	250
2008	8	40	134	182

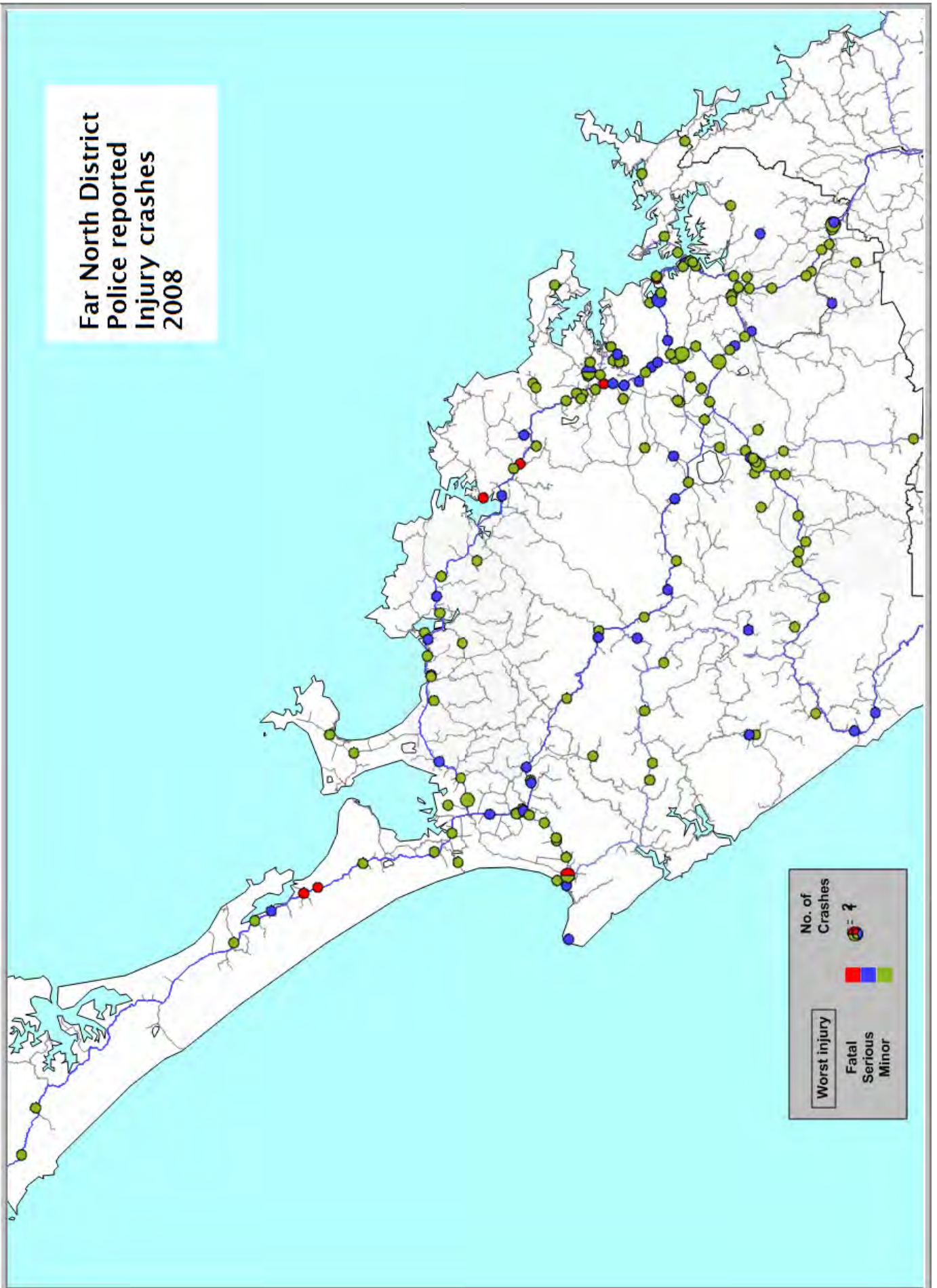
Crash characteristics		
Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	32	25
Too fast	34	28
At bends	60	57
Roadside object hit	57	57
Road factors	18	21
Night time	42	21

Further information about injury and non-injury crashes on **local** roads in Far North District 2004 to 2008:

- Worst month January, best September
- Worst day Friday, best Monday
- 24 percent on wet roads
- 37 percent at night
- 21 percent at intersections
- 903 roadside objects struck
- Social cost of crashes in 2008 \$ 34.6m

Further information about injury and non-injury crashes on **State Highways** in Far North District 2004 to 2008:

- Worst month December, best September
- Worst day Saturday, best Monday
- 32 percent on wet roads
- 34 percent at night
- 21 percent at intersections
- 1096 roadside objects struck
- Social cost of crashes in 2008 \$61.4m



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 sixteen times more likely to be involved in a fatal crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than a sober driver in the same crash, and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2008, alcohol-affected drivers contributed to 34 percent of all fatal crashes (the same as 2007) and 15 percent of all injury crashes (the same as 2007).

In the Far North District, alcohol was a factor in 25 percent of injury crashes in 2008.

Number of alcohol related injury crashes			
Crash year	Open road *	Urban road	Percentage of all injury crashes
2004	43	13	25
2005	36	15	28
2006	48	15	28
2007	43	11	22
2008	38	8	25

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

It would seem that despite the efforts of the Police and other agencies that the “don’t drink and drive” message is not getting through in the Far North.

The key crash locations of fatal and serious alcohol related crashes occurring between 2004 and 2008 are shown on the map on the following page.

From the beginning of 2007 NZTA has been adding driver factor codes to all non-injury crashes for the northern district.

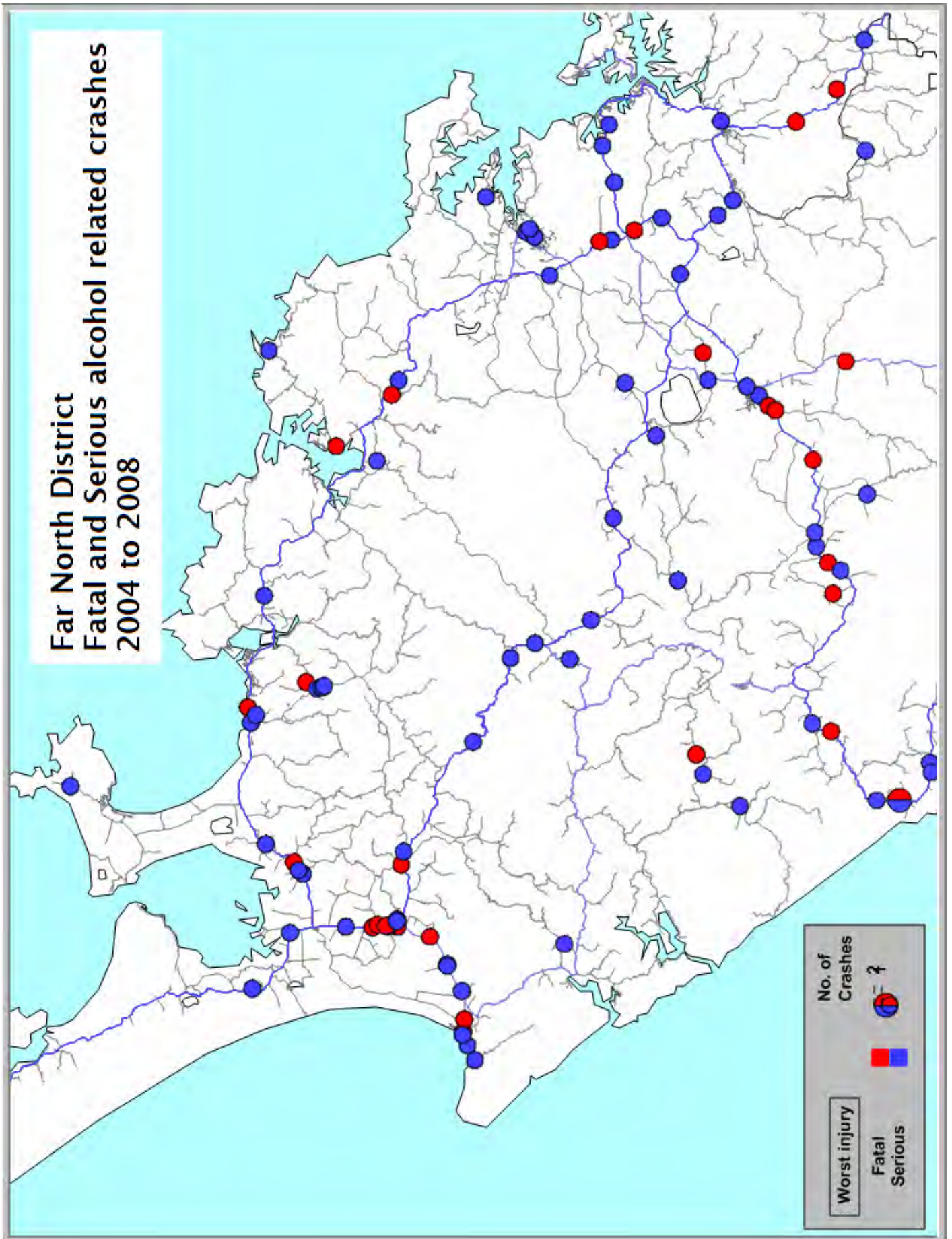
This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before.

Further information about the 151 alcohol related injury crashes in Far North District on **local** roads 2004 to 2008:

- 13 deaths, 41 serious injuries and 177 minor injuries
- 75 percent of at fault drivers were male
- Most common crash type “loss of control turning right” (61 crashes)
- 26 percent urban
- 21 percent wet road
- 70 percent night time
- Worst three hour time period 6pm till 9pm
- Worst months November and April (equal), best March
- Worst day Sunday, best Monday

Further information about the 119 alcohol related injury crashes in Far North District on **State Highways** 2004 to 2008:

- 21 deaths, 49 serious injuries and 117 minor injuries
- 78 percent of at fault drivers were male
- Most common crash type “loss of control turning right” (43 crashes)
- 18 percent urban
- 23 percent wet road
- 72 percent night time
- Worst three hour time period midnight till 3pm
- Worst month December, best April
- Worst day Saturday, best Tuesday



Bend - loss of control or head on

Between 2004 and 2008 fifty-seven percent of all injury crashes in Far North District were loss of control or head on bends. These crashes resulted in 44 fatalities, 200 serious injuries and 720 minor injuries.

Crashes at bends 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2004	9	21	97	127
2005	6	27	69	102
2006	9	27	90	126
2007	6	40	103	149
2008	4	26	77	107
Total	34	141	436	611

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 Far North District were cliffs or banks (129), trees (95), fences (110), posts or poles (29) and ditches (121) from a total of 600 objects struck.

Main characteristics of injury lost control or head on crashes at bends	
Crash characteristic	Percentage of crashes
Single vehicle	78
Alcohol	31
Excessive speed for the conditions	40
Road factors	25
Poor handling	43
Rural road	88
Wet road	31
Night time	43

Further information about the 279 injury loss of control or head on crashes on bends on **local** roads in Far North District 2004 to 2008:

- 11 deaths, 86 serious injuries and 344 minor injuries
- 73 percent of at fault drivers were male
- Most common crash type “loss of control turning right” (124 crashes)
- Most common at fault driver age group 15 to 19 years (25 percent of all at fault drivers)
- 39 percent of crashes involved alcohol
- 46 percent of crashes involved speed too fast for the conditions
- Worst month January and December (equal), best May
- Worst day Saturday, best Monday
- Worst three hour time period 6pm to 9pm

Further information about the 332 injury loss of control or head on crashes on bends on **State Highways** in Far North District 2004 to 2008:

- 33 deaths, 114 serious injuries and 376 minor injuries
- 71 percent of at fault drivers were male
- Most common crash type “loss of control turning right” (150 crashes)
- Most common at fault driver age group 20 to 24 years (18 percent of at fault drivers)
- 25 percent of crashes involved alcohol
- 36 percent of crashes involved speed too fast for the conditions
- Worst month January and December (equal), best July
- Worst day Saturday, best Monday
- Worst three hour time period midday to 3pm

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 2004 and 2008 28 percent of injury crashes in Far North District involved travelling too fast for the conditions.

These crashes resulted in 36 fatalities, 109 serious injuries and 363 minor injuries.

Speed related crashes - urban or rural

Road type	2004	2005	2006	2007	2008
Rural	54	50	43	51	45
Urban	13	9	14	10	7
Percentage of all injury crashes	30	32	25	24	29

The main causes contributing to speed related crashes were:

- Handling errors (49 percent of crashes)
- Alcohol (40 percent of crashes)

There are eight locations in the Far North with three or more speed related injury crashes in the last five years. Six of these are on State Highways and two on local roads.

Speed related injury crashes - three or more injury crashes in the last five years and at least one in 2008

Location	Number of crashes
SH 11 30m S Tirohanga Rd	3
SH 12 300m N Wharf Rd	3
SH 1N 420m S Barnes Rd	3
SH 1N / Waimatenui Rd	3
Otiria Rd 40 W Kingi Rd	3

Age and gender of drivers in speed related crashes

Drivers age	Male	Female	Total
15-19 years *	61	22	85
20 - 24	42	29	71
25 - 29	14	5	19
30 - 39	50	11	61
40 - 49	30	7	37
50 - 59	6	3	9
60 - 69	4	0	4
70+	2	0	2
Total	209	77	286

* note ranges are not equal

Further information about the 152 speed related injury crashes in Far North District on **local** roads 2004 to 2008:

- 13 deaths, 53 serious injuries and 198 minor injuries
- Most common crash type "Lost control on a bend"
- 88 percent mid-block (not at intersection)
- 25 percent wet road
- 51 percent night time
- Worst month December
- Worst day Saturday
- Worst three hour time period 6pm to 9pm
- 45 percent alcohol related

Further information about the 144 speed related injury crashes in Far North District on **State Highways** 2004 to 2008:

- 23 deaths, 56 serious injuries and 165 minor injuries
- Most common crash type "Lost control on bend"
- 88 percent mid-block (not at intersection)
- 40 percent wet road
- 52 percent night time
- Worst month December
- Worst day Saturday
- Worst three hour time period 9pm to midnight
- 35 percent alcohol related

Road Factors - including roadside hazards

A safe road environment includes appropriate geometric design standards, good delineation, adequate surface skid resistance and a roadside free of unforgiving hazards.

Between 2004 and 2008 in Far North District, “road factors” were a contributing factor in 18 percent of fatal and serious crashes and 21 percent of injury crashes.

Additionally in Far North District between 2004 and 2008 57 percent of all fatal and serious crashes and 57 percent of injury crashes involved roadside hazards being struck.

Road factor related injury crashes					
Road type	2004	2005	2006	2007	2008
Rural	51	23	33	51	46
Urban	3	2	6	6	3
Total	54	25	39	57	49

Roadside hazards normally contribute to the overall crash outcome by increasing injury severity but can in themselves be a contributory factor in a crash.

For example occupants in an errant vehicle striking a large tree close to the road edge are likely to sustain worse injuries than if the tree was not present. If the same tree had low branches and was located at an intersection it could also contribute to a lack of visibility.

In those injury crashes in Far North District where a roadside hazard was struck 31 people died, 175 received serious injuries and 704 minor injuries.

The most commonly struck objects are shown in the table below.

Most common types of hazards struck (all injury crashes in the Far North District)	
Type of hazard 2004 to 2008	Number of times hazard struck
Ditch	170
Cliff ore bank	166
Fence	149
Tree	115

Types of road factors in injury crashes

Road factor type identified by Police 2004 to 2008	Number of occasions reported
Slippery road *	117
Road surface in poor condition	100
Road obstructed	7
Visibility limited	41
Signs or signals (needed or faulty)	7
Markings (needed or faulty)	2
Street lighting	0

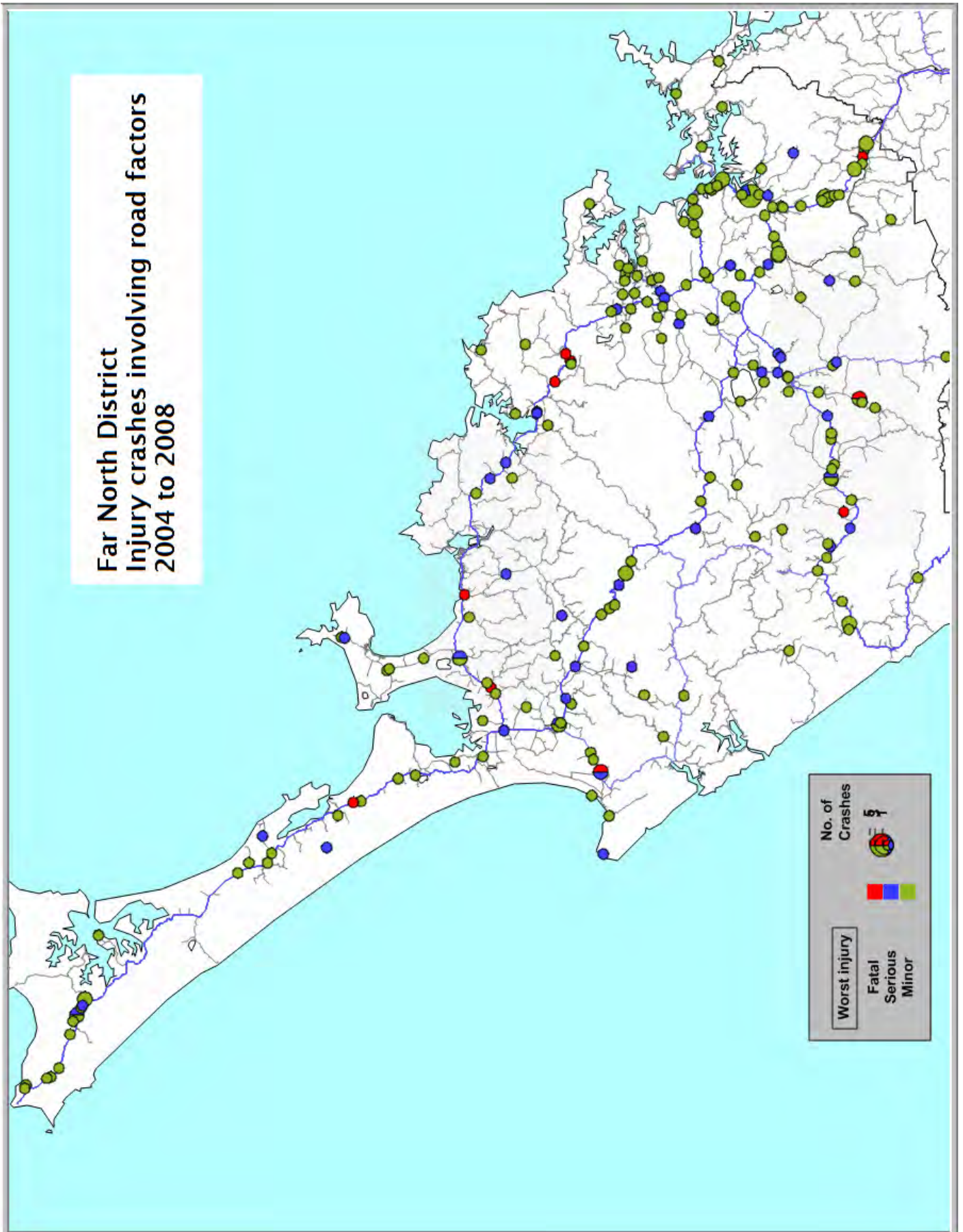
* note that NZTA does not assume that a road that is “wet” is necessarily “slippery”. This factor is only added to CAS if the attending Police Officer specifically mentions a “slippery road”.

Further information about the 105 road factor related injury crashes in Far North District on **local** roads 2004 to 2008:

- 3 deaths, 25 serious injuries and 129 minor injuries
- Most common crash type, “loss of control at bends”
- 12 percent at intersections
- 89 percent rural
- 27 percent wet road
- 25 percent night time
- Worst month January, best July

Further information about the 119 road factor related injury crashes in Far North District on **State Highways** 2004 to 2008:

- 10 deaths, 34 serious injuries and 162 minor injuries
- Most common crash type, “loss of control at bends”
- 6 percent at intersections
- 93 percent rural
- 59 percent wet road
- 28 percent night time
- Worst month December, best July



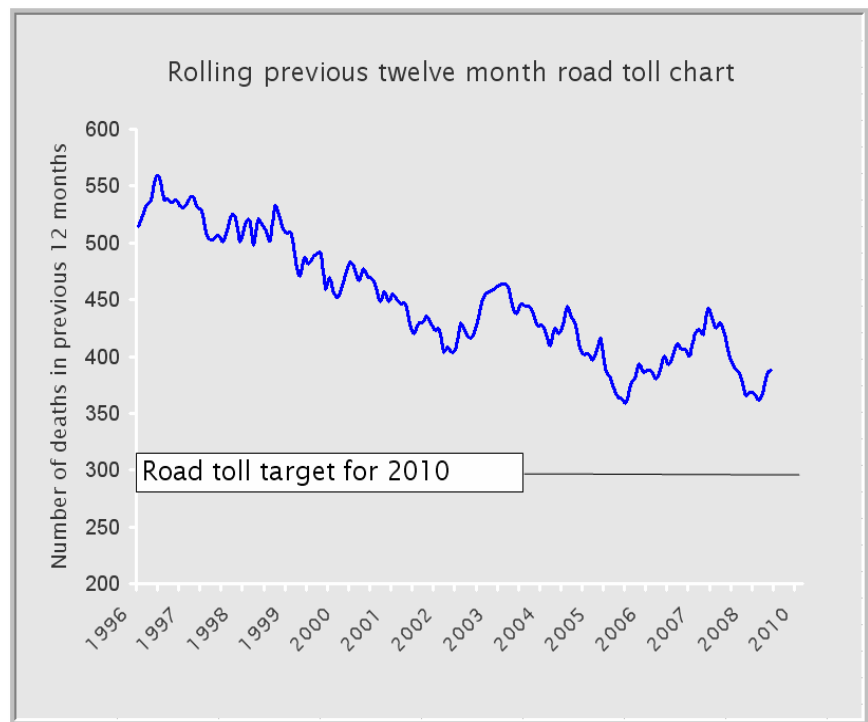
The next ten years—moving beyond Road Safety 2010

In August this year the Ministry of Transport will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

Information will be published on their web site and we would encourage any person or group with an interest in road safety to watch the site carefully for developments. Follow this link:

<http://www.transport.govt.nz/ourwork/Land/landsafety/SaferJourneys-RoadSafetyStrategyto2020/>

The chart on the right illustrates the progress made during the life of the Road Safety 2010 strategy and although progress has been made it would seem highly unlikely that the target of 300 or fewer fatalities will be met.



Restraints

The Ministry of Transport (MoT) conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level.

See the MoT website: <http://www.transport.govt.nz/research/safetybeltstatistics/>

Contacts

New Zealand Transport Agency

Manager Performance Information (Northern)
Chris Hewitt

Private Bag 106 602
Auckland

Phone 09 9699801

Senior Programme Advisor (Education — Northland)
Paul Scott
Phone 09 470 2389

Auckland Media Manager
Ewart Barnsley
Phone 09 368 2142

www.nzta.govt.nz

Road Safety Co-ordinator

Road Safety Co-ordinator (Far North)
Kiri Sloane
PO Box 200, Kaitaia
Phone 09 408 1380

New Zealand Police

Inspector Clifford Paxton
Road Policing Manager
Private Bag 9016, Whangarei
Phone 09 430 4500

Mid / Far North Area Controller
Inspector Chris Scahill
PO Box 31, Kerikeri
Phone 09 407 4850

Local Authority

Far North District Council
Private Bag 752
Kaikohe
Phone 09 405 2750
or 0800 920 029

Highways North
Incident reporting
0800 111 655