



briefing notes - road safety issues

Hauraki 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 Hauraki 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 Hauraki 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 Hauraki 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 Hauraki District and we encourage safety engaged staff at Hauraki 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

Hauraki District

Alcohol
Fatigue
Straight road crashes
Intersections

2009 road trauma

Casualties

Hauraki District

Deaths	4
Serious casualties	25
Minor casualties	92

National priorities from Road Safety 2020— Safer Journeys

Speed
Alcohol / drugs
Young drivers
Roads and roadsides
Motorcyclists

Crashes

Hauraki District

Fatal crashes	4
Serious injury crashes	14
Minor injury crashes	53
Non-injury crashes	123

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	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROAD-SIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe speeds	✓	✓	✓	
Increasing the safety of motorcycling	✓	✓	✓	✓
Areas of medium concern				
Improving the safety of the light vehicle fleet			✓	✓
Safe walking and cycling	✓	✓	✓	✓
Improving the safety of heavy vehicles	✓	✓	✓	✓
Reducing the impact of fatigue	✓	✓	✓	✓
Addressing distraction	✓		✓	✓
Reducing the impact of high risk drivers		✓	✓	✓
Areas of continued and emerging focus				
Increasing the level of restraint use			✓	✓
Increasing the safety of older New Zealanders	✓	✓	✓	✓

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 Waikato Region

(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
Thames Coromandel District	31	27	52	5	0	30	29
Hauraki District	25	24	51	3	2	29	18
Matamata Piako District	25	31	46	2	6	28	17
Waikato District	25	25	53	5	15	25	18
Hamilton City	23	35	30	97	8	19	17
Waipa District	17	40	47	5	8	26	15
Otorohanga District	29	25	50	2	0	15	23
Waitomo District	21	29	65	1	0	32	14
South Waikato District	21	27	42	1	3	28	15
Taupo District	25	31	47	15	6	26	21
Waikato Region	24	30	46	136	47	26	18
New Zealand	23	34	45	1938	320	23	18

Hauraki District overview

In 2009 on local roads in Hauraki District there were 17 injury crashes and 32 non-injury crashes. In addition on state highways in Hauraki District there were 54 injury crashes and 91 non-injury crashes. The tables below show the number of injuries resulting from the 71 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	4	21	69	94
Urban	0	4	23	27
Total	4	25	92	121

Casualties by state highway / local road 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Local road	0	4	19	23
State highway	4	21	73	98
Total	4	25	92	121

Crash trends in Hauraki District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	6	18	23	47
2001	5	11	36	52
2002	2	18	53	73
2003	6	22	48	76
2004	6	22	62	90
2005	8	24	49	81
2006	3	12	54	69
2007	9	10	64	83
2008	7	15	54	76
2009	4	14	53	71

Local road crash characteristics		
Crash type or contributory cause 2005 to 2009	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	25	19
Speed	29	21
Fatigue	19	16
Straight road	25	24
Intersections	9	14

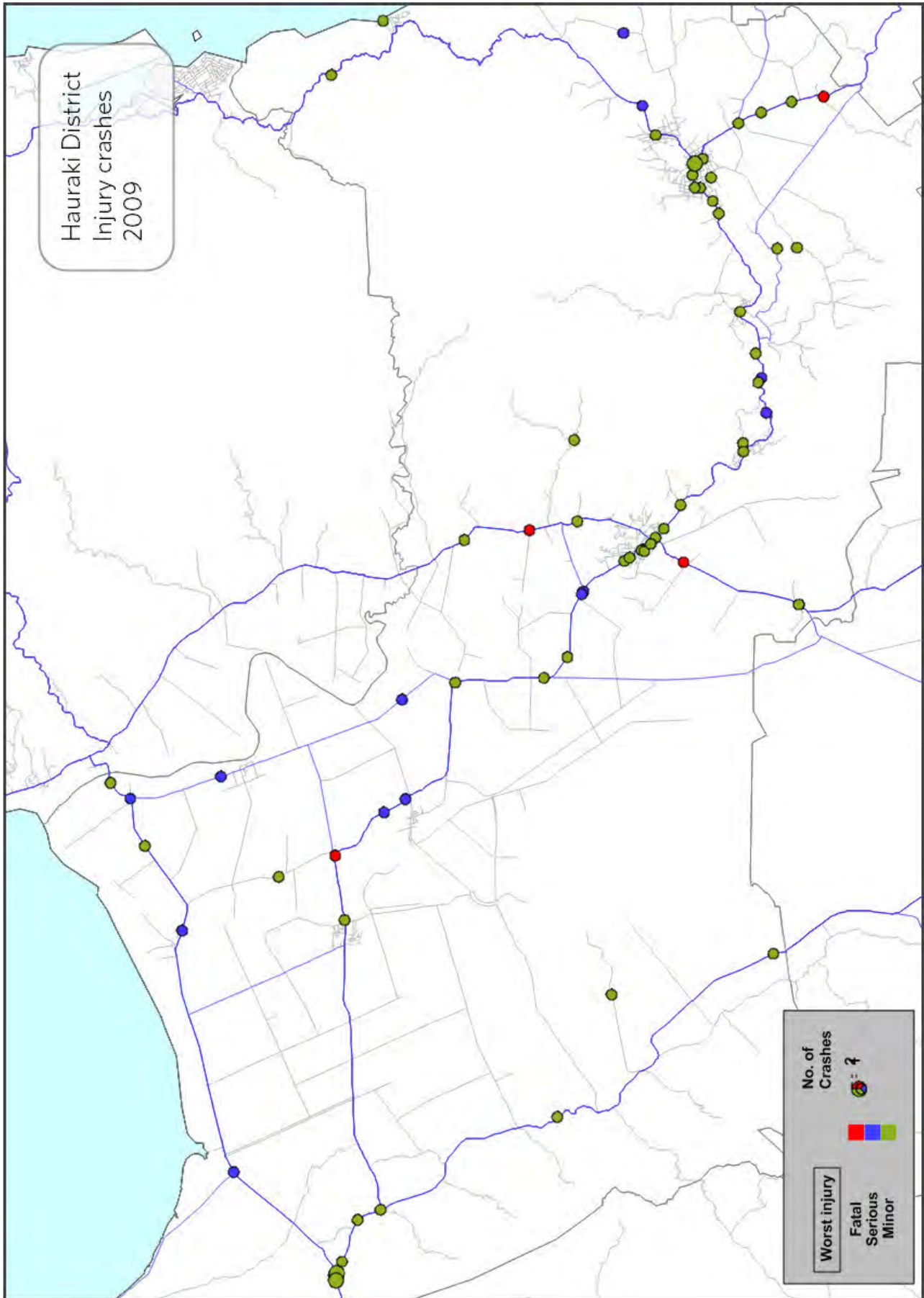
Further information about the 115 injury and 164 non-injury crashes on **local roads** in Hauraki District 2005 to 2009:

- 7 deaths, 23 serious and 118 minor injuries
- Worst month May, best March
- Worst day Sunday, best Tuesday
- 23 percent on wet roads
- 42 percent at night
- 29 percent at intersections
- 173 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 15 to 19 years (26 percent of at fault drivers)
- Social cost of crashes in 2009 \$5.3m

Further information about the 265 injury and 490 non-injury crashes on **state highways** in Hauraki District 2005 to 2009:

- 29 deaths, 82 serious and 301 minor injuries
- Worst month December, best June
- Worst day Sunday, best Thursday
- 30 percent on wet or icy roads
- 34 percent at night
- 24 percent at intersections
- 414 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 15 to 19 years (15 percent of at fault drivers)
- Social cost of crashes in 2009 \$32.0m

* 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.



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.

In Hauraki District, alcohol was a factor in 25 percent of fatal and serious crashes and 19 percent of injury crashes.

Number of alcohol related injury crashes			
Crash year	Open road	Urban road	Total
2005	18	2	20
2006	14	1	15
2007	14	3	17
2008	11	1	12
2009	10	0	10
Total	67	7	74

(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	15	25
20-24	18	20
25-29	20	20
30-34	11	16
35-39	6	3
40-44	10	3
45-49	15	3
50-54	0	4
55-59	3	1
60-64	1	4
65-69	0	0
70-74	1	1
75+	0	0

It is interesting to note the changing age patterns of those choosing to drink and crash.

In Hauraki District there has been a shift from being weighted to young drivers to a broader age spread. 25 years ago 81 percent of at fault drivers were aged under 35, today this is 64 percent.

It would appear then that while very young people are targeted for their binge drinking culture, which may manifest in other health and law issues, in the Hauraki District this has not translated into an increased proportion in youth alcohol related crashes.

In some areas of the Waikato region the number of alcohol related injury crashes has fallen in the five years 1980 to 1984 to the last five years, however crash numbers in the Hauraki District have increased.

Further information about the 32 alcohol related injury crashes on **local roads** in Hauraki District 2005 to 2009:

- 2 deaths, 11 serious and 29 minor injuries
- 85 percent of at fault drivers were male
- Most common crash type "lost control at a bend" (16 crashes)
- 19 percent at intersections
- 84 percent night time
- Worst three hour time period 6pm to 9pm
- Worst month November, best October
- Worst day Sunday, best Monday & Tuesday
- Number of roadside objects struck, 29
- Most common object struck, ditches

Further information about the 42 alcohol related injury crashes on **state highways** in Hauraki District 2005 to 2009:

- 3 deaths, 20 serious and 50 minor injuries
- 78 percent of at fault drivers were male
- Most common crash type "lost control at a bend" (25 crashes)
- 14 percent at intersections
- 81 percent night time
- Worst three hour time period midnight to 3am
- Worst months April & August, best October
- Worst day Saturday, best Monday & Thursday
- Number of roadside objects struck, 26
- Most common object struck , cliffs, banks & fences

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 21 percent of injury crashes in Hauraki District involved travelling too fast for the conditions.

Speed related crashes					
Speed related crashes	2005	2006	2007	2008	2009
Rural	14	16	13	16	9
Urban	4	1	3	3	1
Total	18	17	16	19	10

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 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 *	18	8	26
20 - 24	11	6	17
25 - 29	11	1	12
30 - 39	7	3	10
40 - 49	9	0	9
50 - 59	3	2	5
60 - 69	0	1	1
70+	0	0	0
Total	59	22	80

Further information about the 32 speed related injury crashes on **local roads** in Hauraki District 2005 to 2009:

- 4 deaths, 9 serious and 32 minor injuries
- Most common crash type "Lost control on a bend" (22 crashes)
- 34 percent wet road
- 63 percent night time
- 44 percent include alcohol as a factor
- Worst day Wednesday, best Tuesday
- Worst three hour time periods, 6pm to 9pm and 9pm to midnight

Further information about the 48 speed related injury crashes on **state highways** in Hauraki District 2005 to 2009:

- 8 deaths, 23 serious and 54 minor injuries
- Most common crash type "Lost control on a bend" (37 crashes)
- 50 percent wet road
- 48 percent night time
- 21 percent include alcohol as a factor
- Worst day Saturday, best Friday and Sunday
- Worst three hour time periods, midnight to 3am, 6am to 9am and 3pm to 6pm

Fatigue

Fatigue is a condition that is present long before a driver falls asleep. It has negative impacts on reaction time, the ability to concentrate, and a driver's understanding of the prevailing road and traffic conditions.

In New Zealand in 2009 fatigued drivers were reported as contributing to 8 percent of all fatal and serious crashes and 6 percent of all injury crashes.

In Hauraki District between 2005 and 2009, fatigue was reported as a factor in 19 percent of fatal and serious crashes and 16 percent of and injury crashes.

Injury fatigue related crashes Hauraki District (2005 - 2009)

Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	3	5	10	18
2006	3	1	8	12
2007	3	0	9	12
2008	1	1	6	8
2009	0	3	8	11
Total	10	10	41	61

Age and gender of at fault drivers in injury fatigue related crashes (2009 - 2009) (note : age ranges are not equal)

Drivers age	Male	Female	Total
15-19 years	7	1	8
20 - 24	3	2	5
25 - 29	6	2	8
30 - 39	10	3	13
40 - 49	8	0	8
50 - 59	3	1	4
60 - 69	7	2	9
70+	5	1	6
Total	49	12	61

A significant proportion of 'at fault' drivers in fatigue related injury crashes live in or relatively close to Hauraki District. This is illustrated in the table below.

Home locations of at fault drivers in fatigue related injury crashes in Hauraki District 2005 - 2009

Auckland	5
Paeroa	5
Waihi	5
Thames	4
Tauranga	4

Further information about the 12 fatigue related injury crashes in Hauraki District on **local roads** 2005 to 2009:

- 2 deaths, 5 serious and 12 minor injuries
- 72 percent of at fault drivers were male
- 17 percent at intersections
- 17 percent urban
- 8 percent wet road
- 67 percent night time
- Worst time period 3am to 6am
- Worst month November, best June
- Worst day of week Sunday, best Wednesday

Further information about the 49 fatigue related injury crashes in Hauraki District on **state highways** 2005 to 2009:

- 11 deaths, 13 serious and 59 minor injuries
- 82 percent of at fault drivers were male
- 8 percent at intersections
- 10 percent urban
- 13 percent wet road
- 44 percent night time
- Worst time period 3pm to 6pm
- Worst month December, best May and October
- Worst day of week Sunday, best Tuesday

Straight road – loss of control or head on

Between 2005 and 2009, 24 percent of all fatal and injury crashes in Hauraki District were straight road - loss of control or head on crashes.

Straight road - loss of control or head on crashes 2005 to 2009

Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	4	6	16	26
2006	1	1	9	11
2007	2	2	16	20
2008	3	1	13	17
2009	1	5	12	18
Total	11	15	66	92

These crashes occur when a driver has lost control and either runs off the road or collides with another vehicle.

When drivers lose control, they may crash into roadside hazards such as ditches, banks, poles or trees.

Hitting roadside objects can result in a minor off-road event becoming far more serious.

Ages of at fault drivers in straight road related crashes 2005 to 2009

Age group	Female	Male	Total
15-19	3	11	14
20-24	4	8	12
25-29	4	9	13
30-34	1	7	8
35-39	0	3	3
40-44	0	8	8
45-49	2	6	8
50-54	0	5	5
55-59	0	4	4
60-64	1	2	3
65-69	1	2	3
70-74	1	3	4
75+	1	4	5

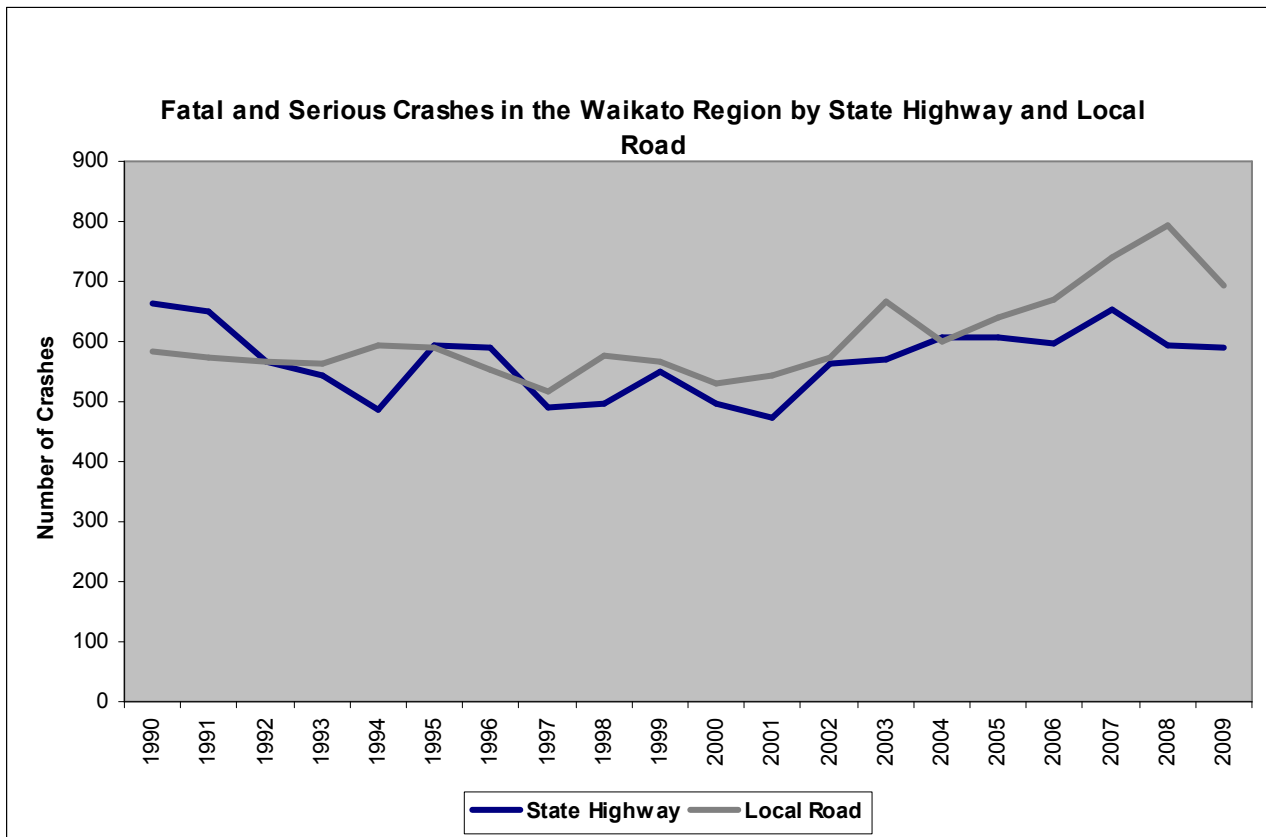
Further information about the 35 injury straight road - loss of control or head on crashes on **local roads** in Hauraki District 2005 to 2009:

- 4 deaths, 7 serious and 36 minor injuries
- Most common crash type “off road to left”
- 40 percent of crashes involved alcohol
- 20 percent of crashes involved speed
- 20 percent involved “road factors”
- 31 percent involved fatigue
- 94 percent resulted in a roadside hazard being struck
- 26 percent on wet roads
- 49 percent at night
- Worst month November, best January
- Worst days of week Saturday and Sunday, best Friday
- Worst three hour time period midday to 3pm

Further information about the 57 injury straight road - loss of control or head on crashes on **state highways** in Hauraki District 2005 to 2009:

- 9 deaths, 14 serious and 65 minor injuries
- Most common crash type “off road to left”
- 19 percent of crashes involved alcohol
- 9 percent of crashes involved speed
- 11 percent involved “road factors”
- 40 percent involved fatigue
- 70 percent resulted in a roadside hazard being struck
- 23 percent on wet or icy roads
- 38 percent at night
- Worst month February, best May
- Worst day of week Saturday, best Tuesday
- Worst three hour time period 3pm to 6pm

Looking back—the last two decades ...



Contacts

New Zealand Transport Agency

Regional Director (Waikato / Bay of Plenty)
Harry Wilson

Programme and Funding Manager
Andrew McKillop

Area Engineer State Highways
Alan Burkett

Regional Communications Advisor
Julie Hannam

Private Bag 3081, Hamilton
Phone 07 958 7840

www.nzta.govt.nz

Local Authority

Road Safety Co-ordinator
Ingrid Le Ferve
Hauraki District Council

Transportation Manager
Gene Thomsen
Hauraki District Council

New Zealand Police

Inspector Leo Tooman
Road Policing Manager
New Zealand Police
Waikato
PO Box 3078
Hamilton

Phone 07 858 6200