



briefing notes - road safety issues

South Waikato 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 South Waikato 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 South Waikato 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 South Waikato 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 South Waikato District and we encourage safety engaged staff at South Waikato 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

South Waikato District

Speed
Fatigue
Crashes at bends

2009 road trauma

Casualties South Waikato District

Deaths 8
Serious casualties 27
Minor casualties 77

National priorities from Road Safety 2020— Safer Journeys

Speed
Alcohol / drugs
Young drivers
Roads and roadsides
Motorcyclists

Crashes South Waikato District

Fatal crashes 7
Serious injury crashes 21
Minor injury crashes 46
Non-injury crashes 128

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

South Waikato District overview

In 2009 on local roads in South Waikato District there were 27 injury crashes and 46 non-injury crashes. In addition on state highways in South Waikato District there were 47 injury crashes and 82 non-injury crashes. The table below shows the number of injuries resulting from the 74 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	8	25	57	90
Urban	0	2	20	22
Total	8	27	77	112

Casualties by state highway / local road 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Local road	0	8	28	36
State highway	8	19	49	76
Total	8	27	77	112

Crash trends in South Waikato District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	7	18	17	42
2001	10	24	36	70
2002	9	24	63	96
2003	5	27	57	89
2004	9	19	56	84
2005	8	16	50	74
2006	6	10	47	63
2007	7	18	47	72
2008	8	23	42	73
2009	7	21	46	74

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
Speed	28	25
Fatigue	19	14
Bends	48	47
Alcohol	21	17
Youth	28	30

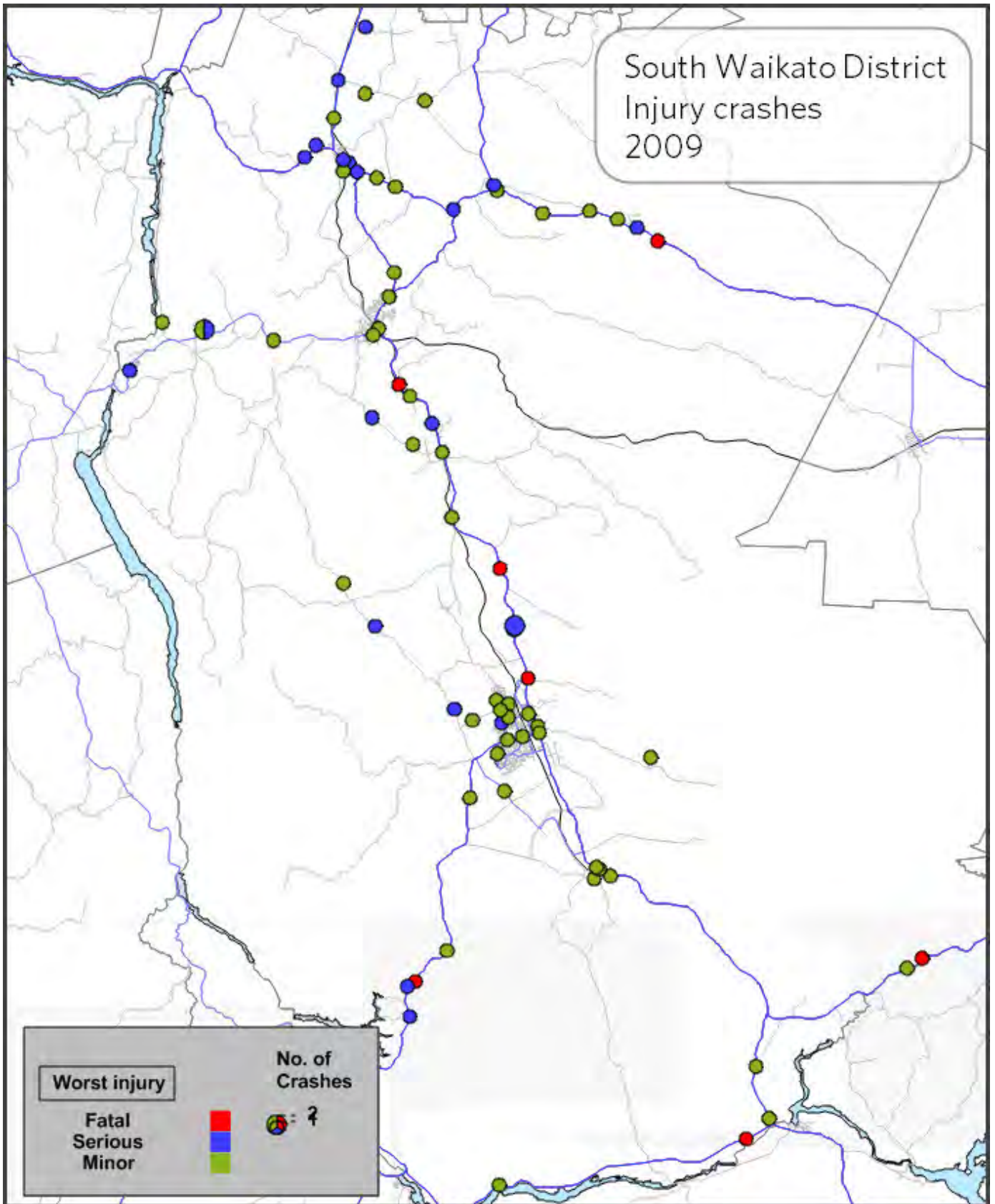
Further information about the 103 injury and 288 non-injury crashes on **local roads** in South Waikato District 2005 to 2009:

- 4 deaths, 32 serious and 104 minor injuries
- Worst month January, best April
- Worst day Friday, best Tuesday
- 24 percent on wet roads
- 35 percent at night
- 32 percent at intersections
- 233 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 15 to 19 years (24 percent of at fault drivers)
- Social cost of crashes in 2009 \$9.3m

Further information about the 253 injury and 396 non-injury crashes on **state highways** in South Waikato District 2005 to 2009:

- 41 deaths, 104 serious and 286 minor injuries
- Worst month March, best April
- Worst day Friday, best Thursday
- 32 percent on wet roads
- 31 percent at night
- 24 percent at intersections
- 355 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 20 to 24 years (14 percent of at fault drivers)
- Social cost of crashes in 2009 \$46.3m

* 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.



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 25 percent of injury crashes in South Waikato District involved travelling too fast for the conditions.

Speed related crashes					
Speed related crashes	2005	2006	2007	2008	2009
Rural	13	16	12	14	15
Urban	7	2	4	2	3
Total	20	18	16	16	18

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 *	10	4	14
20 - 24	13	5	18
25 - 29	8	2	10
30 - 39	16	5	21
40 - 49	11	2	13
50 - 59	2	3	5
60 - 69	3	2	5
70+	2	0	2
Total	64	23	88

Further information about the 31 speed related injury crashes on **local roads** in South Waikato District 2005 to 2009:

- 1 death, 8 serious and 32 minor injuries
- Most common crash type "Lost control on a bend" (21 crashes)
- 35 percent wet road
- 55 percent night time
- 42 percent include alcohol as a factor
- Worst day Saturday, best Wednesday
- Worst three hour time period 3pm to 6pm

Further information about the 57 speed related injury crashes on **state highways** in South Waikato District 2005 to 2009:

- 15 deaths, 32 serious and 59 minor injuries
- Most common crash type "Lost control on a bend" (38 crashes)
- 26 percent wet road
- 33 percent night time
- 28 percent include alcohol as a factor
- Worst day Sunday, best Thursday & Friday
- Worst three hour time period midday to 3pm

Crashes at bends

Between 2005 and 2009 forty eight percent of fatal and serious crashes and 47 percent of all injury crashes in South Waikato District were loss of control or head on at bends.

Crashes at bends 2005 to 2009				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	4	9	27	40
2006	1	6	24	31
2007	2	6	21	29
2008	4	11	16	31
2009	4	13	18	35
Total	15	45	106	166

43 percent of at fault drivers involved in crashes at bends were aged under 30 and 14 percent were aged under 20.

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

Ages of at fault drivers in bend related injury crashes 2005 to 2009			
Ages	Female	Male	Total
15 to 19	4	15	19
20 to 24	6	17	23
25 to 29	5	15	20
30 to 34	4	12	16
35 to 39	2	14	16
40 to 44	10	9	19
45 to 49	7	9	16
50 to 54	7	7	14
55 to 59	4	6	10
60 to 64	2	5	7
65 to 69	1	3	4
70 to 74	2	4	6
75+	3	3	6
Total	57	119	176

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. Appropriate clear zones and roadside management will continue to help improve road safety.

The most common roadside hazards struck in injury loss of control or head on crashes on bends in South Waikato District were cliffs and banks (37), fences (30), ditches (21), trees (22) and posts and poles (12) from a total of 122 objects struck.

Further information about the 44 injury loss of control or head on crashes on bends on **local roads** in South Waikato District 2005 to 2009:

- 2 deaths, 20 serious and 45 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type "loss of control turning right" (19 crashes)
- 30 percent of crashes involved alcohol
- 36 percent in the wet
- 48 percent of crashes involved speed, too fast for the conditions
- Worst month May, best April
- Worst day Friday & Saturday, best Monday & Wednesday
- Worst three hour time period 9pm to midnight
- Number of objects struck 31

Further information about the 122 injury loss of control or head on crashes on bends on **state highways** in South Waikato District 2005 to 2009:

- 16 deaths, 45 serious and 122 minor injuries
- 70 percent of at fault drivers were male
- Most common crash type "loss of control turning right" (45 crashes)
- 20 percent of crashes involved alcohol
- 28 percent in the wet
- 31 percent of crashes involved speed too fast for the conditions
- Worst month February, best August
- Worst day Saturday, best Thursday
- Worst three hour time period 3pm to 6pm
- Number of objects struck 91

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 South Waikato District between 2005 and 2009, fatigue was reported as a factor in 19 percent of fatal and serious crashes and 14 percent of injury crashes.

Injury fatigue related crashes South Waikato District (2005 - 2009)

Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	3	3	3	9
2006	2	2	8	12
2007	0	4	5	9
2008	2	4	4	10
2009	3	0	7	10
Total	10	13	27	50

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	3	10
20 - 24	4	0	4
25 - 29	5	1	6
30 - 39	9	1	10
40 - 49	5	2	7
50 - 59	4	4	8
60 - 69	1	1	2
70+	2	0	2
Total	37	12	49

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

Home locations of at fault drivers in fatigue related injury crashes in South Waikato District (2005 - 2009)

Tokoroa	11
Hamilton	4
Putaruru	3
Tirau	3
Auckland	3

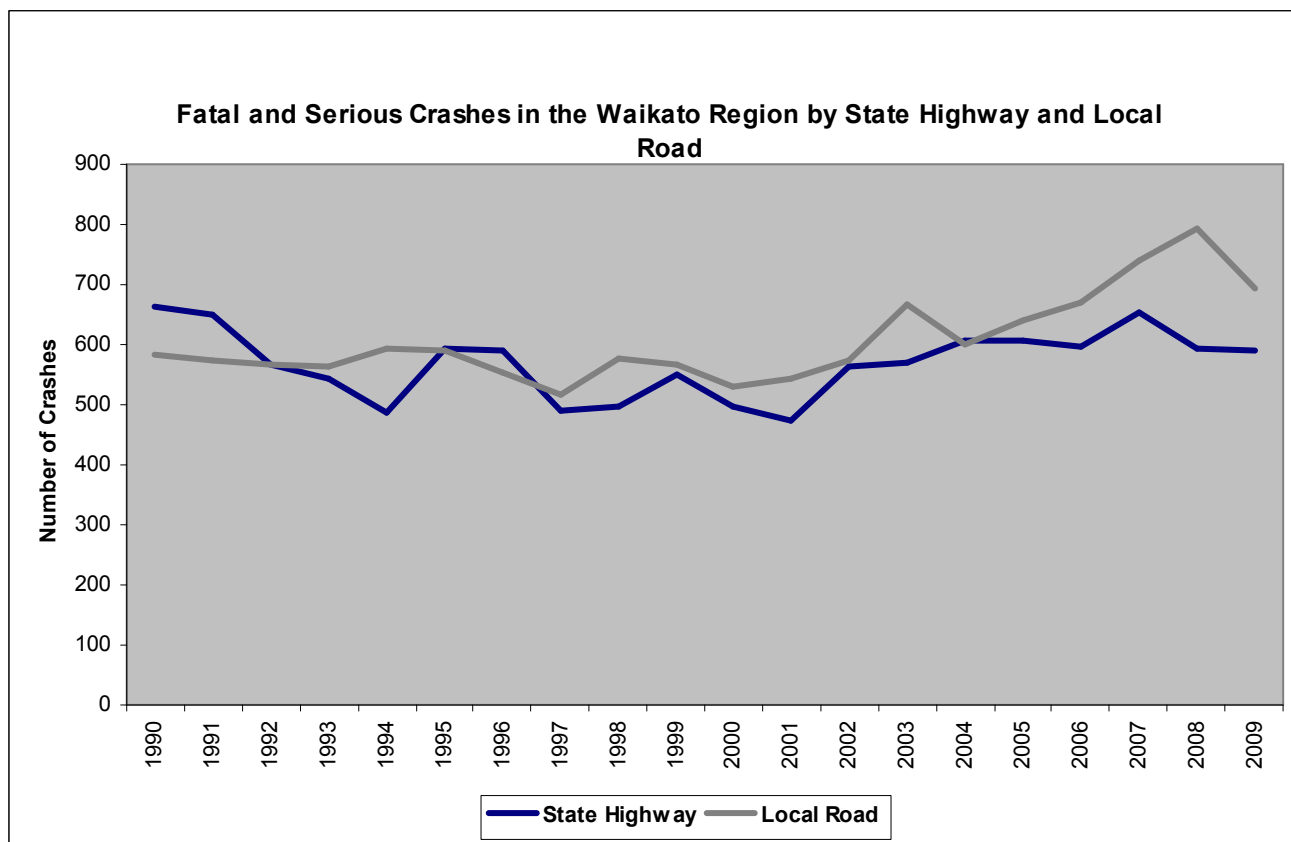
Further information about the 7 fatigue related injury crashes in South Waikato District on **local roads** 2005 to 2009:

- 1 death, 1 serious and 7 minor injuries
- 86 percent of at fault drivers were male
- 29 percent urban
- 14 percent wet road
- 29 percent night time
- Worst time period 3pm to 6pm
- Worst months May & December
- Worst days of week Thursday & Friday

Further information about the 43 fatigue related injury crashes in South Waikato District on **state highways** 2005 to 2009:

- 9 deaths, 17 serious and 32 minor injuries
- 74 percent of at fault drivers were male
- 5 percent urban
- 12 percent wet road
- 35 percent night time
- Worst time period 3pm to 6pm
- Worst month February
- Worst day of week Friday

Looking back—the last two decades ...



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