



New Zealand Government

briefing notes - road safety issues

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

Waipa District

Speed
Intersections
Fatigue
Young drivers

2009 road trauma

Casualties

Waipa District

Deaths	7
Serious casualties	38
Minor casualties	133

National priorities from Road Safety 2020— Safer Journeys

Speed
Alcohol / drugs
Young drivers
Roads and roadsides
Motorcyclists

Crashes

Waipa District

Fatal crashes	6
Serious injury crashes	25
Minor injury crashes	95
Non-injury crashes	262

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

Waipa District overview

In 2009 on local roads in Waipa District there were 74 injury crashes and 156 non-injury crashes. In addition on state highways in Waipa District there were 52 injury crashes and 106 non-injury crashes. The tables below show the number of injuries resulting from the 126 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	6	33	81	120
Urban	1	5	52	58
Total	7	38	133	178

Casualties by state highway / local road 2009				
	Fatalities	Serious injuries	Minor injuries	Total
Local	1	25	76	102
State	6	13	57	76
Total	7	38	133	178

Crash trends in Waipa District				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	10	21	80	111
2001	8	19	78	105
2002	2	21	84	107
2003	6	19	95	120
2004	6	24	87	117
2005	7	29	89	125
2006	7	22	104	133
2007	2	18	100	120
2008	7	25	96	128
2009	6	25	95	126

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	16	17
Speed	30	24
Intersections	20	28
Young Drivers	53	50
Fatigue	13	7

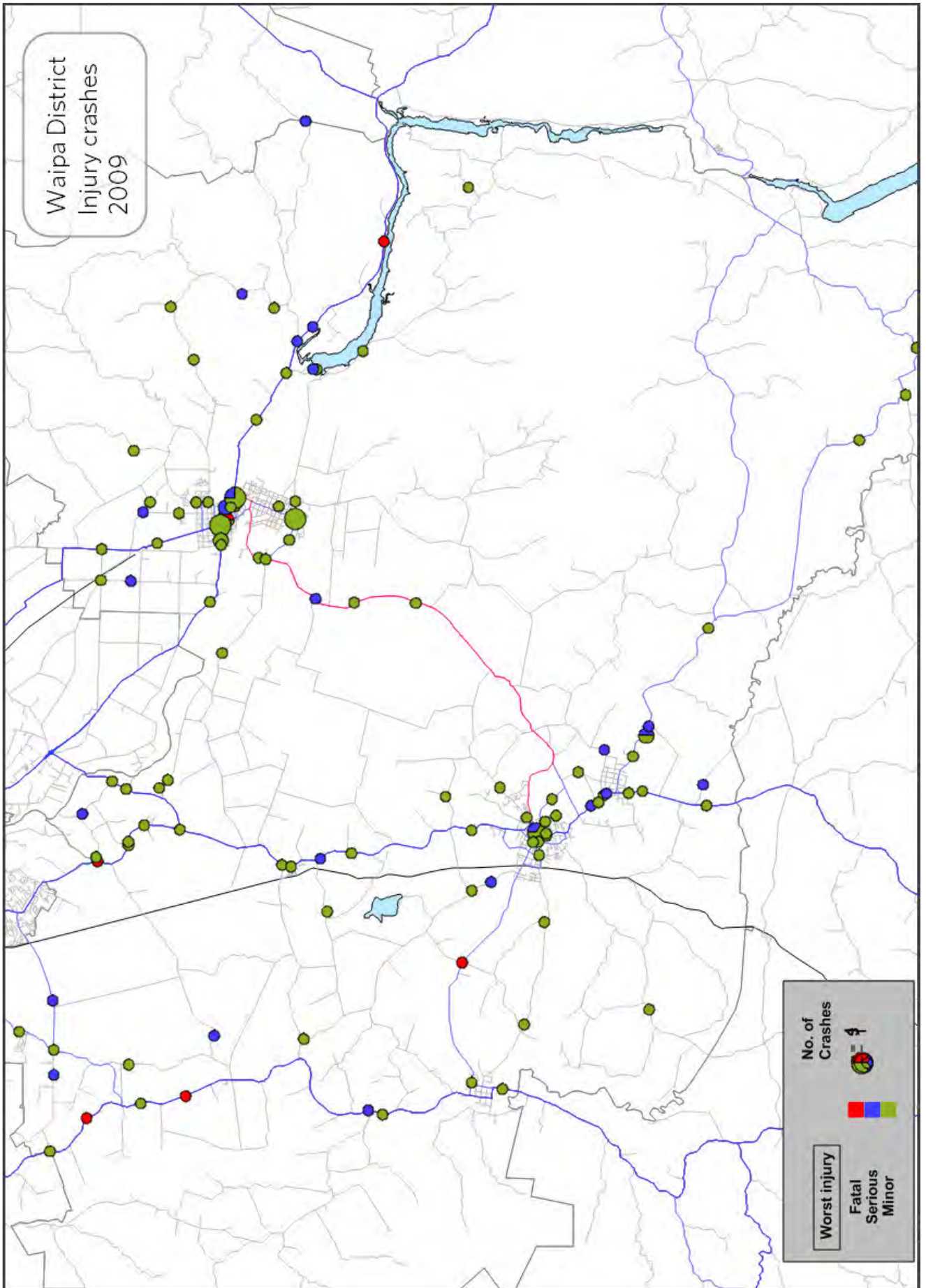
Further information about the 362 injury and 784 non-injury crashes on **local roads** in Waipa District 2005 to 2009:

- 18 deaths, 91 serious and 376 minor injuries
- Worst month February, best July
- Worst day Friday, best Monday
- 31 percent on wet roads
- 33 percent at night
- 34 percent at intersections
- 629 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 \$26.9m

Further information about the 270 injury and 597 non-injury crashes on **state highways** in Waipa District 2005 to 2009:

- 14 deaths, 72 serious and 312 minor injuries
- Worst month April, best December
- Worst day Friday, best Tuesday
- 30 percent on wet roads
- 32 percent at night
- 42 percent at intersections
- 354 roadside objects struck *
- Most represented five year age block in 'at fault' drivers in injury crashes: 15 to 19 years (23 percent of at fault drivers)
- Social cost of crashes in 2009 \$34.8m

* 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.



Intersections

During the five year period 2005 to 2009 within Waipa District there were a total of 199 injury crashes at intersections.

Injuries at Intersections (casualties)					
Injury type	2005	2006	2007	2008	2009
Fatality	1	1	1	3	1
Serious injury	12	7	7	5	12
Minor injury	54	49	37	48	37
Total	67	57	45	56	50

The most common crash type at intersections is when a driver is proceeding straight through an intersection and is hit by a vehicle approaching from a right angle. (48 crashes)

Ages of at fault drivers in injury crashes at intersections 2005 to 2009			
Age group	Female	Male	Total
15-19	11	20	31
20-24	14	15	29
25-29	5	9	14
30-34	8	12	20
35-39	7	6	13
40-44	3	7	10
45-49	7	8	15
50-54	8	7	15
55-59	3	6	9
60-64	7	5	12
65-69	4	3	7
70-74	6	4	10
75+	6	8	14
Total	89	110	199

In Waipa District there are six intersection sites which have had six or more injury crashes in the last five years, including two sites with 8 injury crashes in the past five years.

Locations with six or more injury crashes between 2005 to 2009 including at least one in 2009		
Intersection name	2005 to 2009	2009
SH 1 / SH 1B Cambridge	8	3
Lamb St / Shakespeare St Cambridge	8	4
SH 1 / Shakespeare St Cambridge	7	4
SH3 / SH 21 Rukuhia	7	1
SH 1 / Duke St Cambridge	6	1
SH 1 Raynes Rd Rukuhia	6	1

Further information about the 102 injury crashes at intersections on **local roads** in Waipa District 2005 to 2009:

- 6 deaths, 22 serious and 117 minor injuries
- 23 percent wet roads
- 25 percent night time
- Worst month June, best October
- Worst day Tuesday, best Sunday
- Worst three hour time period, 3pm to 6pm

Further information about the 97 injury crashes at intersections on **state highways** in Waipa District 2005 to 2009:

- 1 death, 21 serious and 108 minor injuries
- 31 percent wet roads
- 19 percent night time
- Worst month February, best September
- Worst day Saturday, best Tuesday
- Worst three hour time period, 3pm to 6pm

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 20 percent of injury crashes in Waipa District involved travelling too fast for the conditions.

Speed related crashes					
Speed related crashes	2005	2006	2007	2008	2009
Rural	19	22	17	21	27
Urban	3	4	4	8	4
Total	22	26	21	29	31

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 *	35	8	43
20 - 24	21	10	31
25 - 29	9	1	10
30 - 39	18	6	24
40 - 49	4	3	7
50 - 59	5	2	7
60 - 69	5	1	6
70+	1	0	1
Total	98	30	129

Further information about the 88 speed related injury crashes on **local roads** in Waipa District 2005 to 2009:

- 7 deaths, 29 serious and 99 minor injuries
- Most common crash type "Lost control on a bend" (72 crashes)
- 39 percent wet road
- 41 percent night time
- 28 percent include alcohol as a factor
- Worst day Sunday, best Friday
- Worst three hour time period 3pm to 6pm

Further information about the 41 speed related injury crashes on **state highways** in Waipa District 2005 to 2009:

- 3 deaths, 15 serious and 47 minor injuries
- Most common crash type "Lost control on a bend" (26 crashes)
- 37 percent wet road
- 41 percent night time
- 15 percent include alcohol as a factor
- Worst day Thursday, best Sunday
- Worst three hour time period midday to 3pm

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 Waipa District between 2005 and 2009, fatigue was reported as a factor in 16 percent of fatal and serious crashes and 11 percent of injury crashes.

Injury fatigue related crashes Waipa District 2005 to 2009				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	1	1	10	12
2006	2	6	12	20
2007	0	2	11	13
2008	1	8	7	16
2009	0	2	9	11
Total	4	19	49	72

The table below shows that young male drivers are overrepresented in fatigue related crashes with 46 percent being under the age of 25.

Age and gender of at fault drivers in injury fatigue related crashes 2005 to 2009 (note : age ranges are not equal)			
Drivers age	Male	Female	Total
15-19 years	22	0	22
20 - 24	11	3	14
25 - 29	2	4	6
30 - 39	9	1	10
40 - 49	9	1	10
50 - 59	5	0	5
60 - 69	3	0	3
70+	2	0	2
Total	63	9	72

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

Home locations of at fault drivers in fatigue related injury crashes in Waipa District 2005 to 2009	
Town of residence	No. of at fault drivers
Cambridge	11
Hamilton	11
Te Awamutu	8
Auckland	4
Tokoroa	3

Further information about the 25 fatigue related injury crashes in Waipa District on **local roads** 2005 to 2009:

- 2 deaths, 9 serious and 16 minor injuries
- 88 percent of at fault drivers were male
- 12 percent at intersections
- 24 percent urban
- 24 percent wet road
- 40 percent night time
- Worst time periods 3am to 6am and 6am to 9am
- Worst month November, best July
- Worst day of week Saturday, best Tuesday & Thursday

Further information about the 47 fatigue related injury crashes in Waipa District on **state highways** 2005 to 2009:

- 2 deaths, 13 serious and 51 minor injuries
- 85 percent of at fault drivers were male
- 4 percent at intersections
- 23 percent urban
- 32 percent wet road
- 60 percent night time
- Worst time period 3am to 6am
- Worst months May & September, best April & October
- Worst day of week Saturday, best Tuesday

Young drivers

Young drivers are those aged less than 25 years.

In Waipa District between 2005 and 2009, 50 percent of injury crashes involved young drivers.

The total number of injury crashes involving young drivers reduced in 2009 from the high of 70 in 2006. There is no obvious trend in the annual number of crashes involving young drivers.

Casualties from crashes involving young drivers Waipa District				
	Fatal	Serious	Minor	Total
2005	3	14	83	100
2006	5	18	79	102
2007	0	20	60	80
2008	5	22	82	109
2009	2	21	70	93
Total	15	95	374	484

44 percent of the young drivers in these crashes had a learner or restricted licence. Nearly two thirds of them were males and 45 percent were 15-19 year olds.

Over half all the young drivers were local residents.

Young drivers at fault in injury crashes Waipa District 2005 to 2009			
Licence type	Female	Male	Total
Full	42	101	143
Learner	14	29	43
Restricted	32	64	96
Overseas	2	6	7
Never licensed	3	4	10
Disqualified	1	9	8
Other (unknown, wrong class)	2	8	10
Total	96	223	317

Injury crashes involving young drivers Waipa District 2005 to 2009 (percentage of injury crashes)

Crash type or contributory cause	All roads
Alcohol	16
Speed	26
Failed to stop/Give way	20
Poor handling	23
Poor observation	32
Lost control - straight	19
Lost control - bend	35
Rear end / obstruction	15
Crossing / turning	22

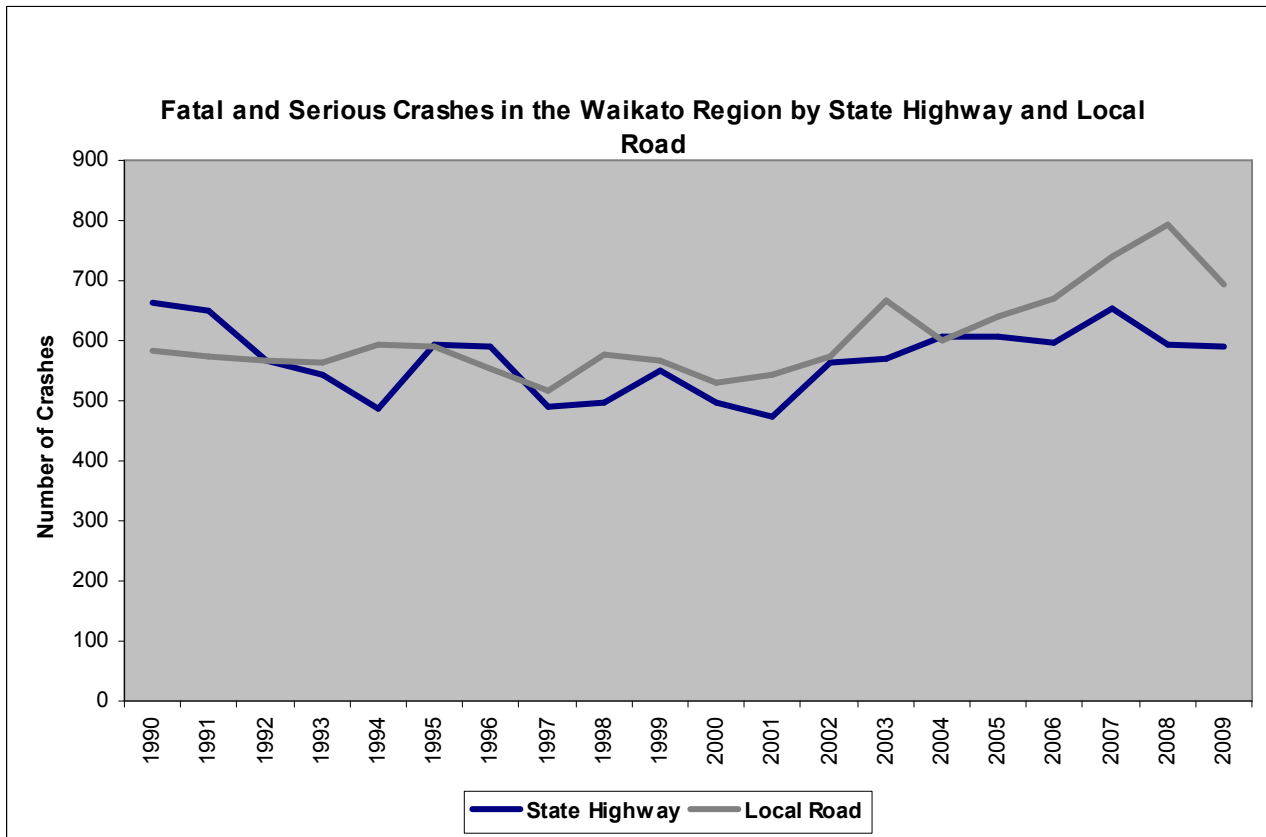
Further information about the 180 injury crashes involving young drivers on **local roads** in Waipa District 2005 to 2009:

- 10 deaths, 50 serious and 201 minor injuries
- 48 percent were single vehicle crashes
- 34 percent were on urban roads
- 27 percent at intersections
- 38 percent at night
- 32 percent wet roads
- Worst month February, best July
- Worst day of week Friday, best Wednesday
- Worst time 3pm to 6pm

Further information about the 137 injury crashes involving young drivers on **state highways** in Waipa District 2005 to 2009:

- 5 deaths, 45 serious and 173 minor injuries
- 36 percent were single vehicle crashes
- 26 percent were on urban roads
- 31 percent at intersections
- 37 percent at night
- 34 percent on wet roads
- Worst months April & May, best August
- Worst day of week Saturday, best Tuesday
- Worst time midday to 3pm

Looking back—the last two decades ...



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