2011-2016
ROAD SAFETY STRATEGY

WAIMAKARIRI
DISTRICT COUNCIL

OCTOBER 2011

CONTENTS

1 INTRODUCTION

This Road Safety Strategy for the Waimakariri District 2011-2016 intends to reduce fatalities and serious injury crashes occurring on our District's roads. Road crashes destroy lives and devastate families, and can also have a damaging effect on the local economy and on our community vitality. The Strategy provides a focus for the work of all those agencies and organisations that have a responsibility to improve road safety in the District.

The Waimakariri District Strategy draws from the Government's new "Safer Journey's: New Zealand's Road Safety Strategy 2010-2020" ("Safer Journeys"). The new Safe Systems approach acknowledges that it is not just road user fault, but also road design, speeds, vehicle condition and road use that all contribute to numbers of crashes. The Safer Journeys Strategy intends to improve all parts of the transport system and seeks the following:

Safer Roads and Roadsides
Safer Vehicles
Safer Speeds
Safer Road Use

The effective implementation of this strategy will rely on individual and collective ownership of the issues. It will require vision and dedication to support the actions that are necessary if the current occurrence of road crashes in the District is to be reduced.

The Strategy acknowledges that many vehicle injuries are caused by unintentional error or misjudgement as well as by intentional misuse. As such, the Strategy seeks to provide a road network environment that reduces the most serious impacts of driver misjudgements on the human body. At the same time the Strategy will continue to seek to minimise the level of unsafe road user behaviour through its ongoing approach to achieving improved personal and collective responsibility.

It seeks to support the implementation of national "Safer Journeys" action plans through local actions and initiatives. For example, the Safer Journeys proposed First Actions include making the restricted license test more difficult

(to encourage 120 hours of supervised driving practice for new drivers). This action is supported through the local strategy objective of increasing involvement of new drivers in local advanced and defensive driving programmes.

The Waimakariri District Road Safety Strategy 2011-2016 therefore provides the mechanism to implement the national Safer Journeys Strategy. Specific actions from the District Strategy will be confirmed and implemented each year through the preparation of the Districts annual Road Safety Action Plans.

In addition the District's Strategy broadly reflects the intent of the New Zealand Transport Strategy and Regional Land Transport Strategy by directing the local initiatives that support regional and national action plans and targets. The funding of the District Strategy will be achieved through the Waimakariri District Council Long Term Plan 2012-22, and subsequent Annual Plans, which include agreed actions in the Council's work programme. Various actions for the District will also be funded by other agencies that will assist the Council to achieve the Strategy's vision.

The Council's key partners in achieving improved road safety in the District are the New Zealand Transport Agency, New Zealand Police, Environment Canterbury, ACC and the Waimakariri District Council Road Safety Coordinating Committee. In addition to these, there are a number of other agencies, groups and individuals that work with the Council on achieving the goals and objectives within this Strategy. The role of these agencies and individuals is further outlined in Section 6 of the Strategy.

The Strategy gives effect to the following Waimakariri community outcomes:

There is a safe environment for all
- *Crime, injury and road accidents are minimised*

Transport is accessible, convenient, reliable, affordable and sustainable
- *The standard of our District's roads is keeping pace with increasing traffic numbers*
- *Christchurch is readily accessible by cycle, car, truck, bus or train*

2 VISION AND PRINCIPLES

VISION

The Waimakariri District has a safe road system that is increasingly free of death and serious injury

The following Principles for the District's Road Safety Strategy indicate the overall purpose of the Strategy and set the direction for all those agencies working on achieving safer use of roads in the District. These principles are aligned with the Government's Safe Systems approach to road safety.

PRINCIPLES

Safe Road Use

Road users are skilled and competent, alert and unimpaired

Safe Roads

Road design encourages safe travel speeds

Safe Speeds

People understand and comply with speed limits, and these limits are suitable for the locations to which they apply

Safe Vehicles

Vehicles used on our roads physically protect their passengers, as well as pedestrians and cyclists

The organisation of the key issues, goals and objectives into topics within this Strategy reflect the areas of "high concern" set out within the Government's 2010 Safer Journey's 2020 Strategy, together with the priority areas of concern identified within the Waimakariri District Council Road Safety Action Plan September 2010-June 2011. The topics within this Strategy are:

1. *Increasing the Safety of Young Drivers*
2. *Reducing Alcohol/Drug Impaired Driving*
3. *Inattention and Distraction*
4. *Intersections*
5. *Too Fast for the Conditions*
6. *Increasing the Safety of Motorcycling*
7. *Addressing Fatigue and Restraint Wearing (Seatbelts)*

Within this Strategy, principles are the overarching standards that guide our approach to improving road safety. Issues explain the problems we seek to resolve, goals describe the outcomes we are seeking to achieve, and objectives are the specific actions or approaches that contribute to the fulfilment of the Strategy goals.

The result of travelling too fast for the conditions

The key topics/issues within this Strategy were identified through discussions with District road safety practitioners, drawing on local knowledge of those factors that are most likely to contribute to vehicle crashes on roads in the District.

3 WHAT WE HAVE ACHIEVED

There have been ongoing improvements in the last few years in our District's collaborative approach to addressing road safety issues, including undertaking many new road design improvements and running educational programmes. These projects improve safety for all road users.

The following are examples of some of the key actions and programmes now underway that have been initiated by, or received continuing support from, the District's Road Safety Coordinating Committee. These programmes are developed through collaboration among Council's key road safety partners: the New Zealand Transport Agency, New Zealand Police, ACC, and Environment Canterbury.

Some key actions/programmes undertaken in recent years are:

- *Visible Police campaigns targeting speeding and drink driving;*
- *Education programmes targeting driver inattention, driver fatigue, intersections, and driving to conditions;*
- *Engineering design improvements to our roads including improved markings, signage and infrastructure and reducing or removing roadside hazards;*
- *Flashing warning signs outside some rural schools to encourage motorists to reduce speed;*
- *Delivery of high school workshops on consequences of fatal alcohol related crashes.*

The Waimakariri District currently has a very low motor-vehicle claim rate per 100,000 people, compared with most other Territorial Authorities (TA) areas in New Zealand. For instance, Waimakariri is rated third out of 74 TA's for motor vehicle claims, with one of the lowest claim rates in the country as shown in the following table.

Motor Vehicle Claim Rate (per 100,000 people) National Comparison	2004	2005	2006	2007	2008	2009	2010	2010 Rank
Minimum Rate	7	7	17	26	28	22	13	1
Waimakariri District	**43**	**49**	**39**	**27**	**28**	**30**	**19**	**3**
Median Rate	141	136	132	137	142	118	107	37
Maximum Rate	431	597	509	530	479	412	288	74

Source: ACC Motor Vehicle Claim data, produced in 2011

The following tables show that the District has a slightly lower crash and casualty rate per 100 million vehicle kilometres travelled than other New Zealand Councils and the peer Councils (Group D) for its urban Council roads. It also has a significantly lower crash and casualty rate than the peer Councils and the rest of New Zealand for both its urban and rural State Highways. In context, the Council has approximately 1,485 kilometres of Council managed sealed and metal roads (urban (204km) and rural (1281km)), and approximately 29.5 kilometres of State Highway in the District.

It is noted the rural Council roads have a slightly higher crash and casualty rate than the rest of New Zealand and the peer Councils. This issue is considered further in the Issues, Goals and Objectives Section of this Strategy.

GROUP D DISTRICTS

These are Districts that include both provincial towns and rural areas.

Figure 1.2 Crashes per 100 million vehicle kilometres travelled

	Council Roads		State Highways	
	Urban	Rural	Urban	Rural
Waimakariri District	32	30	9	10
Group D	35	27	24	17
All NZ	37	29	27	18

Figure 1.3 Casualties per 100 million vehicle kilometres travelled

	Council Roads		State Highways	
	Urban	Rural	Urban	Rural
Waimakariri District	44	43	11	14
Group D	45	40	34	27
All NZ	46	42	36	26

Source: Road Safety Report 2010, page 9

These relatively low motor vehicle claim rates, together with the lower crash and casualty rates in some areas of the District, illustrate the value of road safety programmes and collaboration on shared objectives. These are indications that the approach taken in the District to improving road safety is having a positive effect on keeping vehicle crash impacts in some parts of the District relatively low.

However the District continues to experience continuing road safety issues in some areas as highlighted in the following pages. The Strategy outlines the approach needed to achieve further improvement.

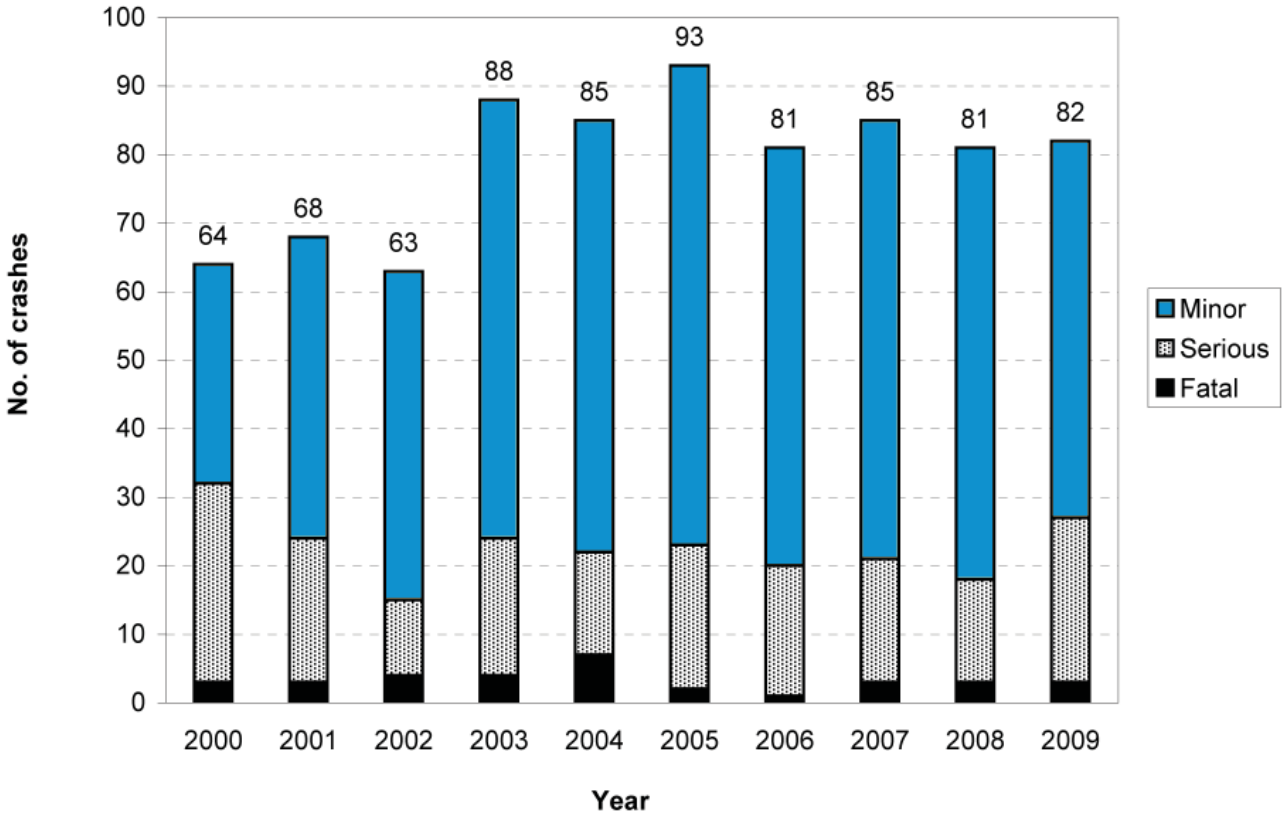
Photo taken during Christmas drink driving blitz (during this campaign drivers found to be sober were rewarded with chocolates by members of the Road Safety Coordinating Committee)

Waimakariri District Council Community Team members at a local A&P Show promoting seat restraints for children.

4 DISTRICT CONTEXT: OVERVIEW

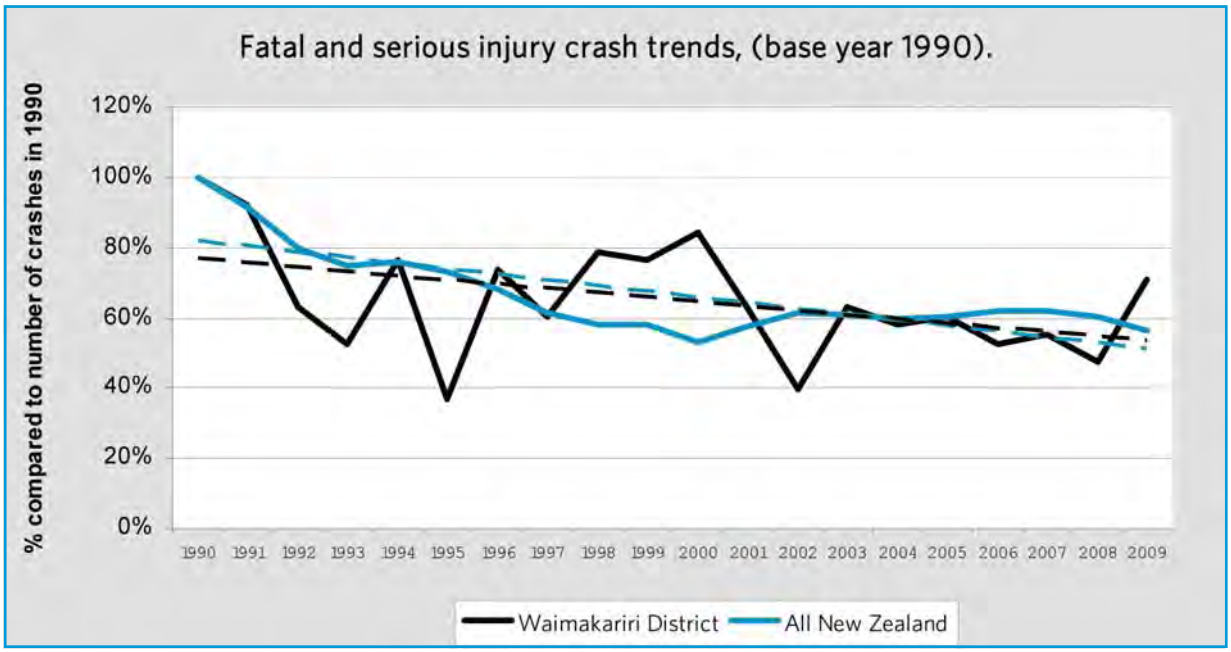
There is a strong rationale for achieving improved road safety in the District and working to prevent the crashes that are continuing to occur on our roads. The graph below shows that fatal and injury crashes in the Waimakariri District have been fluctuating over the last ten years. There is a clear need to reduce their occurrence and the devastating impacts they have on our communities.

Figure 2.7 Number of injury crashes
Waimakariri District all roads (urban & rural)



Source: Road Safety Report 2010, p22

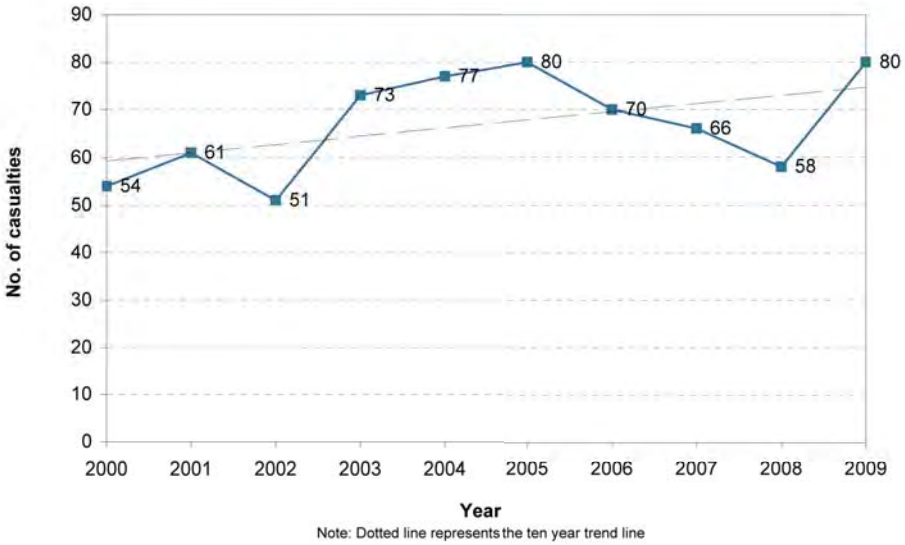
The following graph shows longer term trends in fatal and serious injury crashes for the District, in comparison with New Zealand wide trends. The graph shows that, although fatal and serious crashes nationally have been trending slowly downward since 1990, in our District there is continuing variation in the numbers of crashes occurring each year.



Source: Briefing Notes: Road Safety Issues 2010, p12

The number of casualties among drivers in the District is a further indicator of road safety trends. As shown in the following graph, the number of driver casualties in the District has been increasing in the last ten years.

Figure 3.8 Car/van driver casualties
Waimakariri District



Note: Dotted line represents the ten year trend line

Source: Road Safety Report 2010, p32

There were 33 fatal crashes in the District between 2000 and 2009. Over this period the District's population has increased from 36,900 usual residents in 2001 to an estimated 47,000 people in 2009 (a 27% increase). As the population is projected to continue to increase over time (to 56,000 by 2019), the planning to reduce road crashes will need to consider the ever increasing road usage, notwithstanding that some road users may be deterred from driving by future fuel price increases.

Recently, from 2008 to 2009, the number of fatal and serious crashes in the District rose from 18 to 27, a 50 percent increase. Although the number of crashes can be seen to fluctuate over time, all of these have a significant effect on those involved, together with their families, employers and the wider community. The "safe road system" endorsed by the Government's Safer Journey's Strategy challenges us to see these road deaths and serious injuries as preventable.

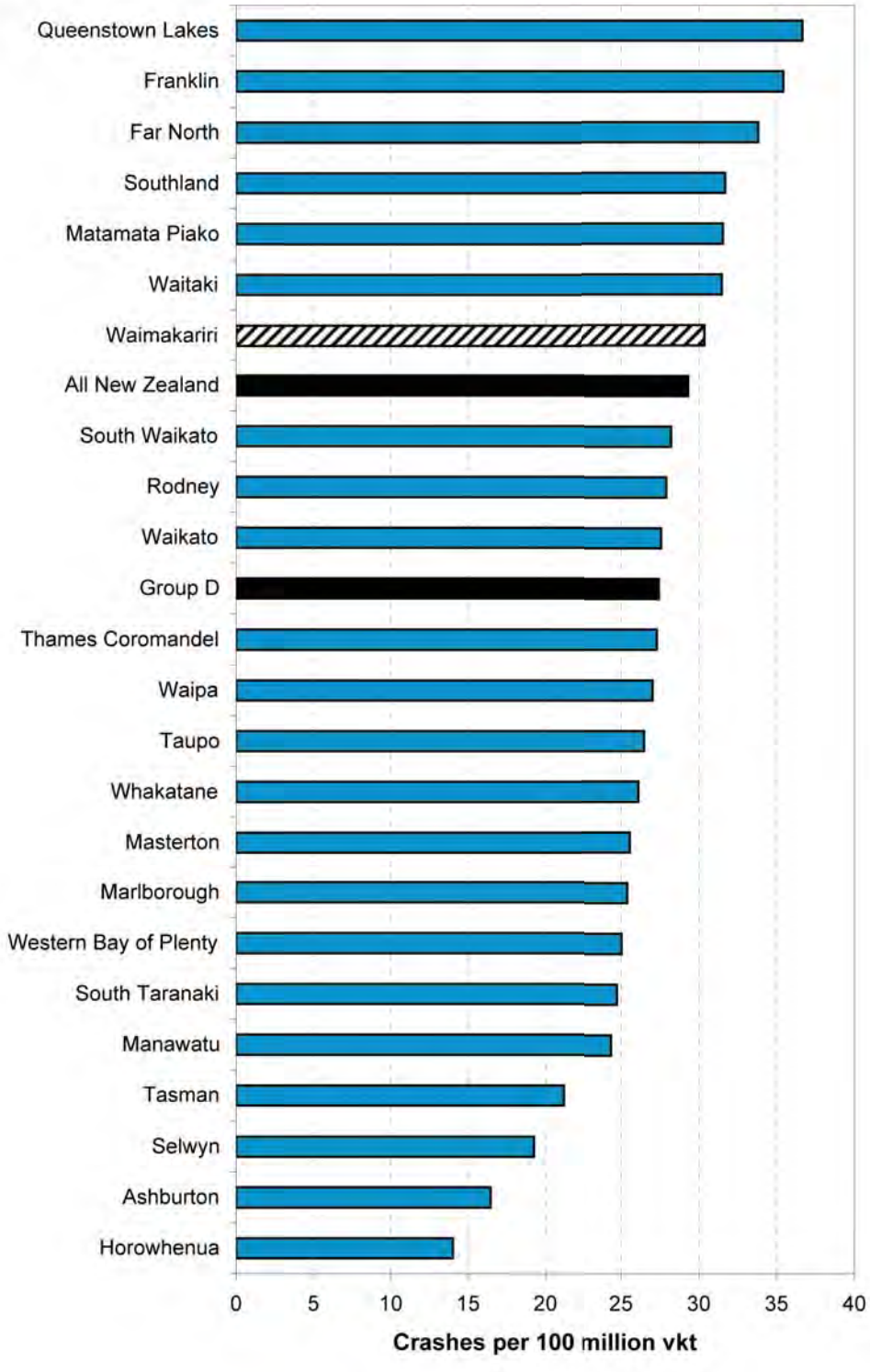
Further evidence of the overall impact of road crashes on the community can be demonstrated by the following statistics from the Road Safety Report 2010 (p17):

The social cost of crashes in the Waimakariri District in 2009 on local roads and State Highways was $41.32 million

This figure was determined by considering loss of life and life quality; loss of output due to temporary incapacitation; medical costs; legal costs; and property damage costs. The Report states that the average value of a loss of life is estimated by the amount of money the population would be willing to pay for a safety improvement that would result in the expected avoidance of one premature death.

A further indicator of levels of road crashes in the District can be seen in crashes per vehicle kilometres travelled. The following graph compares crashes occurring per 100 million vehicle-kilometres travelled in the Waimakariri District's rural roads with crashes occurring on peer districts' rural roads between 2005 and 2009. It shows that, in comparison with the peer group of Councils and the rest of New Zealand, the Waimakariri District's rural roads have a higher crash rate per vehicle kilometres travelled. Group D districts (peer Councils) are those that include both provincial towns and rural areas.

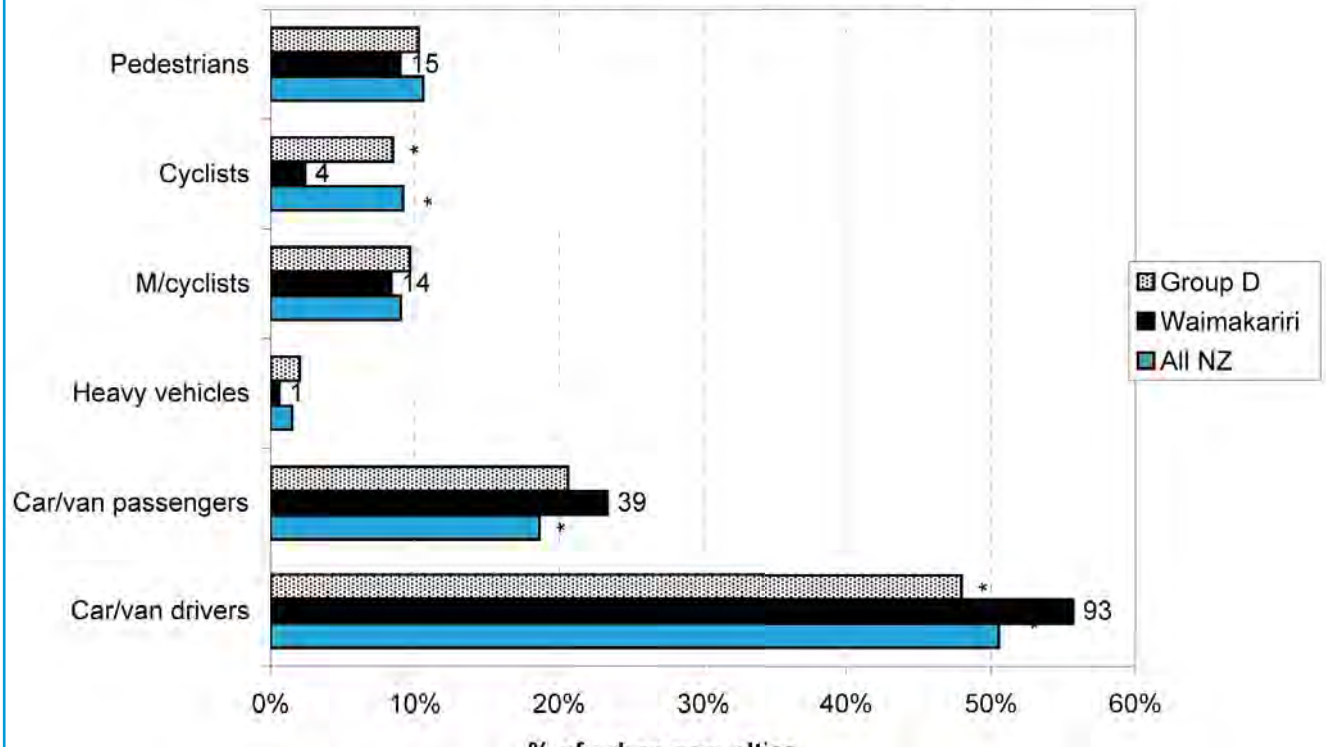
Figure 1.6 Crashes per 100 million vehicle-kilometres travelled - rural council roads



Source: Road Safety Report 2010, page 12

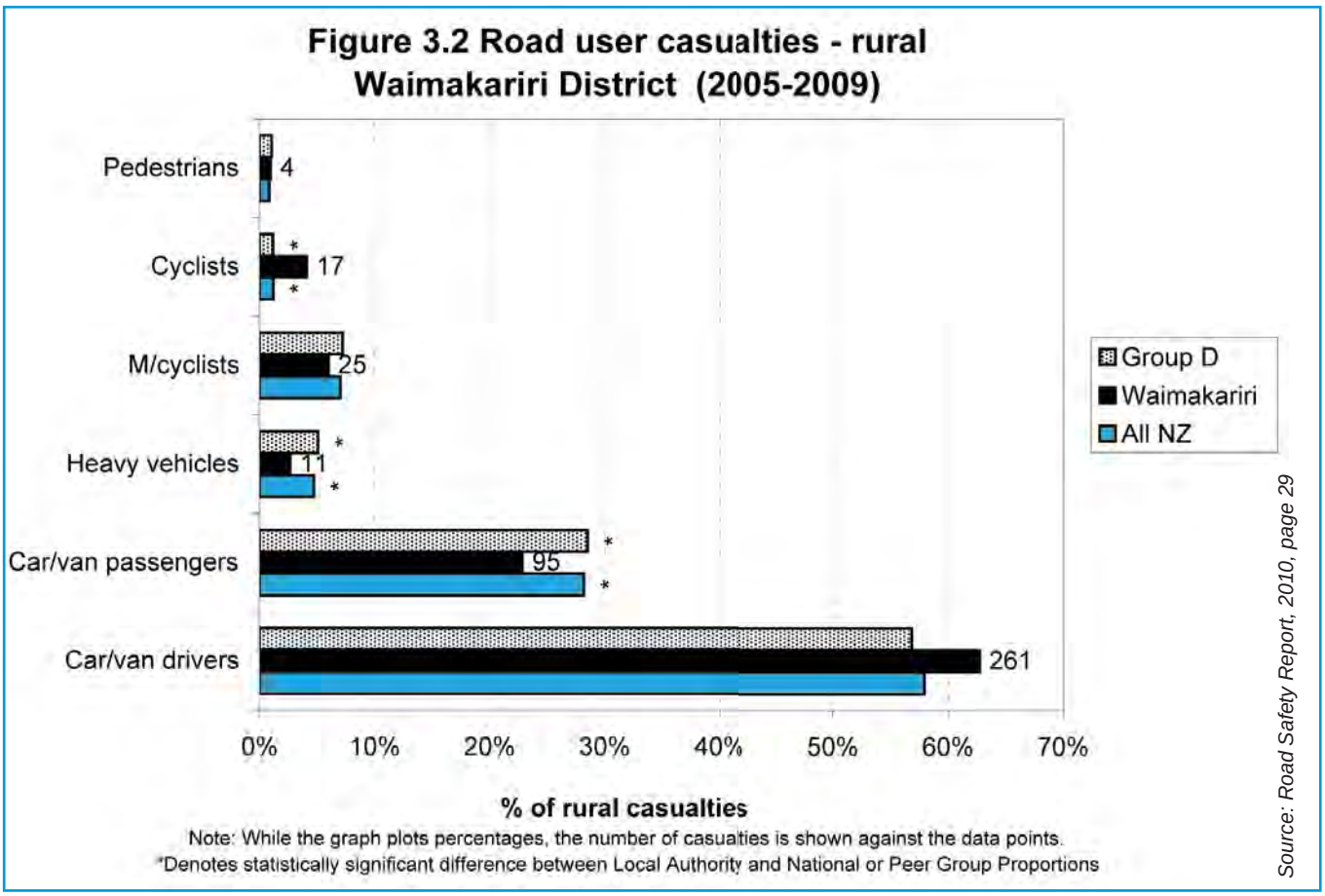
The following graphs indicate why this Road Safety Strategy has primarily focused on addressing road safety issues that are caused by, or that affect, car/van drivers and their passengers. In comparison with other road users such as pedestrians and cyclists, car/van drivers and passengers are a higher casualty risk. This is not to say that addressing road safety issues for pedestrians and cyclists is not important. The use of shared road space by pedestrians and cyclists is covered in detail in the Waimakariri District Council Walking and Cycling Strategy 2011, which outlines various actions that will be taken to improve the safety of pedestrians and cyclists that use the District's roads.

Figure 3.1 Road user casualties - urban Waimakariri District (2005-2009)



Note: While the graph plots percentages, the number of casualties is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Source: Road Safety Report, 2010, page 29



This Strategy covers both Council roads and State Highways. Although the Council only manages improvements to, and maintenance of, Council roads, the education and enforcement components of the Strategy apply equally to users of State Highways and users of Council roads. Other agencies such as the New Zealand Transport Agency and New Zealand Police implement aspects of the Strategy relating to State Highways.

5 KEY ISSUES, GOALS, AND OBJECTIVES

5.1 INCREASING THE SAFETY OF YOUNG DRIVERS

ISSUE:

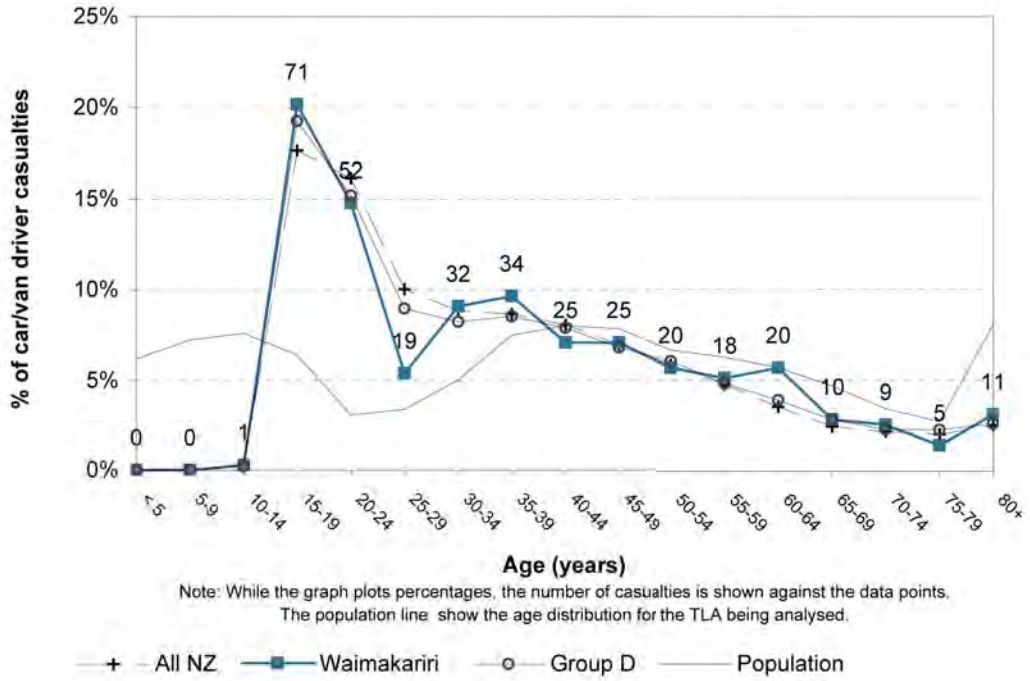
Young drivers are over-represented as a proportion of the total population involved in road crashes in the District. The following statistic from the Briefing Notes: Road Safety Issues 2010 (p.3), based on fatal and serious crashes in the District from 2005 to 2009 (on local roads and state highways), demonstrates the extent of the issue:

32% of all at fault drivers in fatal or serious injury road crashes in the District are aged 24 years or younger

The Briefing Notes (p.11) also show that there is no obvious trend in the annual number of crashes involving young drivers. The notes show, of young drivers involved in any fatal, serious or minor injury crashes between 2005 and 2009, just over half were on a learner or restricted license, and almost two thirds were males.

The following chart shows the prevalence of young drivers as casualties in District road crashes in comparison with all driver casualties of various ages. As can be seen, young drivers are highly over-represented in casualty figures when compared with other driver casualty ages, and compared with the overall age spread of the population.

Figure 3.19 Car/van driver casualty age Waimakariri District (2005-2009)



Source: Road Safety Report 2010, page 38

The Road Safety Action Plan, using NZTA crash records shows that young people are also particularly over-represented in alcohol related incidents:

- *56% of drivers at fault in alcohol crashes in the period 2006 to 2010 were under 25 years of age. These were mainly male drivers.*
- *40% of these culpable drivers in alcohol related crashes were on learner or restricted licenses.*

Although young people are over-represented in alcohol crashes, there are also a number of other factors observed in crashes caused by young drivers. The Briefing Notes (p.11) show that a majority of these crashes are occurring on rural roads and a reasonable number of all these crashes are occurring at intersections, at night, or on wet or icy roads. Poor handling, poor observation, failure to stop or give way, and loss of control, either on straight roads or bends are often factors in crashes caused by younger drivers, as well as alcohol or speed.

GOAL:

There is a decreasing occurrence of young people in the District each year involved in road crashes

OBJECTIVES:

- *Continue to deliver high school workshops on the consequences of a fatal alcohol related car crash*
- *Ensure all schools have a strong SADD group*
- *Parents are aware of situations where children may use alcohol and increasingly become role models for responsible drinking in front of children of all ages*
- *Parents are aware of the strength of Ready to Drink (RTD) mixes*
- *Run a programme targeting young drivers reinforcing messages about defensive driving at intersections*
- *Increase participation of younger drivers in defensive and advanced driving courses*
- *Engineering design of our roads will use best practice road markings, signage and infrastructure to prompt young drivers to pay attention and avoid potential errors on the road network*

5.2 REDUCING ALCOHOL / DRUG IMPAIRED DRIVING

ISSUE:

Alcohol and drug use by drivers in our District cause many preventable road crashes. The extent of this problem is demonstrated through the following statistic from the Briefing Notes: Road Safety Issues 2010 (Briefing Notes, p.3):

Alcohol was involved in 20% of all fatal or serious injury crashes in the Waimakariri District in the period from 2005 to 2009

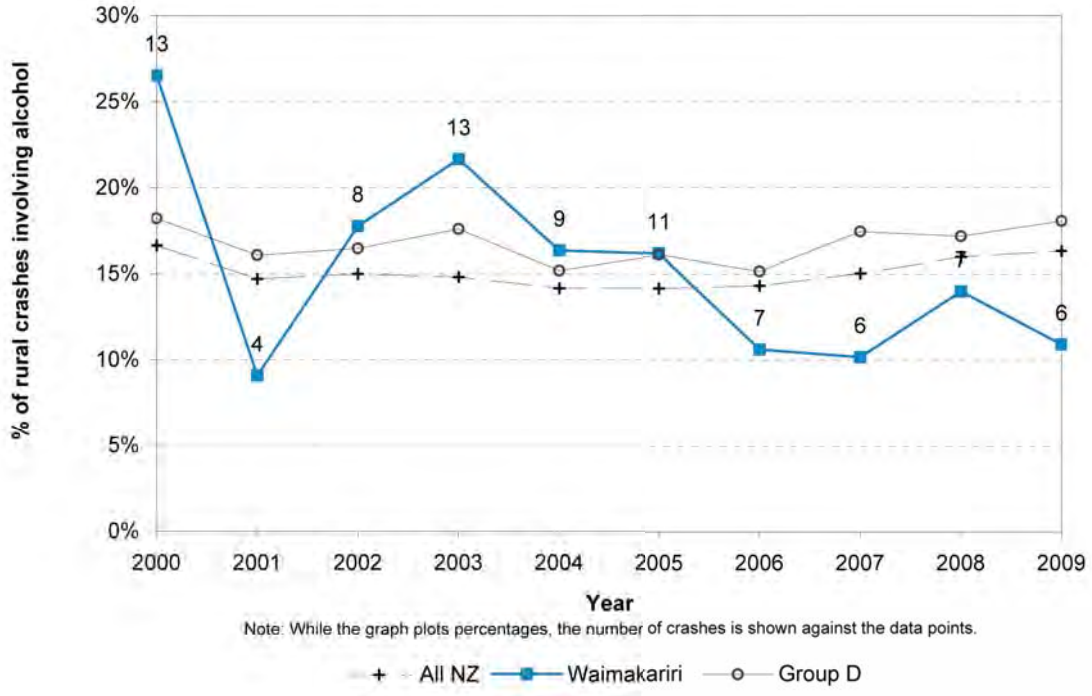
More specifically, the District's Road Safety Action Plan 2010-2011 uses New Zealand Transport Agency (NZTA) records to show that:

- *Between 2006 and 2010 there were 147 alcohol related crashes recorded in the Waimakariri District (including 3 deaths, 19 serious injuries, 32 minor injuries and 93 crashes where no injury resulted)*
- *40% of the culpable drivers were on learner or restricted licenses*
- *56% of drivers at fault in alcohol related injuries were under 25 years of age. These were mainly male drivers.*
- *More than half of the crashes occurred on a Saturday between 9pm and 3am.*
- *77% were single occupancy vehicles*
- *36% of these crashes also involved speed as a factor*

Further, the following graphs show that the percentage of rural crashes in the District involving alcohol has been declining from 2000 to 2009, and the percentage of urban crashes involving alcohol has been increasing over the same time period.

Road Safety Course for 150 students at Rangiora High School each year

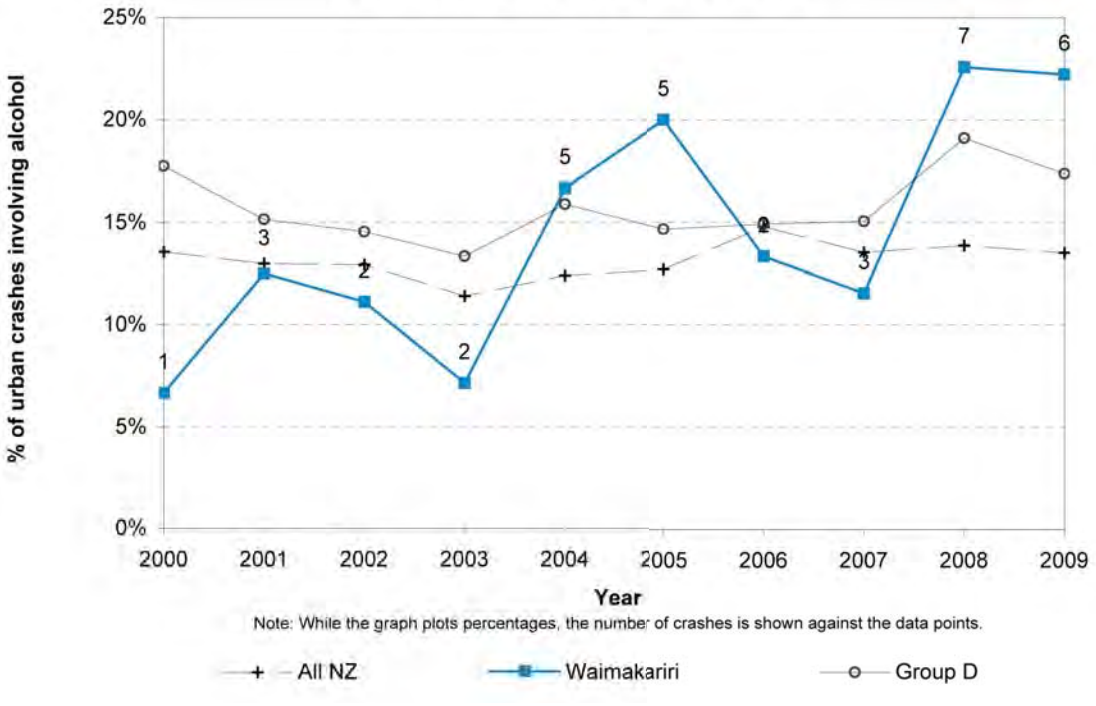
Figure 5.13 Alcohol involved trend
Waimakariri District - rural roads



Note: While the graph plots percentages, the number of crashes is shown against the data points.

Source: Road Safety Report 2010, page 57

Figure 5.7 Alcohol involved trend
Waimakariri District - urban roads



Note: While the graph plots percentages, the number of crashes is shown against the data points.

Source: Road Safety Report 2010, page 54

Role of older adult role models

There were 44% of drivers at fault in alcohol crashes in the District over 25 years of age. Many of these culpable people are parents, employers and other adult role models. These are the people who are in a position to influence the behaviour of younger people within the community every day. The need to change attitudes and behaviour seems applicable across all age groups and sectors of the community. The target is not just at risk young drivers, but people of all ages and from all walks of life.

Accessibility of Licensed Venues

The District population has been growing very rapidly in recent years and many District households are located within a half hour drive to a large number of licensed premises, many of which are easily accessible on the outskirts of the city and in the outlying towns. Further, many of the Districts' roads are long and straight, conducive to vehicles travelling at very fast speeds and with easy, non-congested access to the heart of the city and outlying urban areas. This accessibility to venues may exacerbate the issues with alcohol use in conjunction with vehicles, together with a lack of public transport availability for people living in the rural areas of the District.

GOAL:

Reduce the number of vehicle crashes that involve excessive alcohol use in the Waimakariri District

OBJECTIVES:

- *Visible police campaigns cover places and times with identified risk and all drivers stopped will be tested*
- *Achieve increasing provision of courtesy vans by publicans and increase the use of these by their customers*
- *Develop and implement a recidivist drink drive course suitable for the District*
- *Licensed premises will actively practice host responsibility and alcohol is not served to intoxicated people or minors*
- *Engineering design of our roads will use best practice road markings, signage and infrastructure to prompt motorists to pay attention and avoid potential errors on the road network*
- *Remove or protect large solid objects on road sides where these can be identified as likely to cause major damage to a vehicle swerving off the road side during a crash*
- *Local support and recognition of national TV and Radio advertising through "spin-off" localised campaigns occurs wherever applicable and practicable*

Driving under the influence of drugs and alcohol could result in this...

5.3 INATTENTION AND DISTRACTION

ISSUE:

The NZTA records show there were 486 crashes in the District between 2006 and 2010 where driver distraction, or inattention, was given as the cause.

Of these:

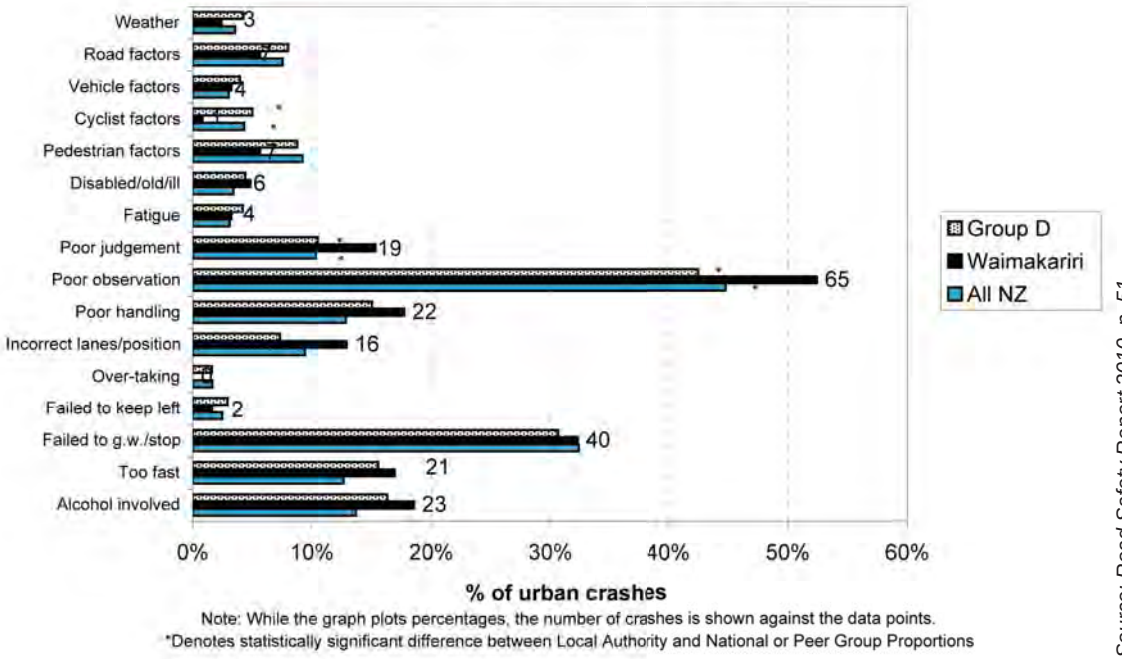
- *50% occurred at intersections*
- *69% of the drivers were on a full licence*
- *Distraction crashes occurred fairly evenly throughout the year and throughout the week*

Further to these figures, the Briefing Notes: Road Safety Issues 2010 (Briefing Notes, p.9 and p.11) show that:

- *Poor observation was a cause of 68% of injury crashes at intersections in the District between 2005 and 2009*
- *For young drivers poor observation was the cause of 33% of urban road crashes and 54% of rural road crashes between 2005 and 2009*

The following tables show that poor observation was a key contributing factor to both urban and rural crashes that occurred in the Waimakariri District between 2005 and 2009. The Waimakariri District appears to have more of an issue with poor driver observation compared to the peer districts and the rest of New Zealand.

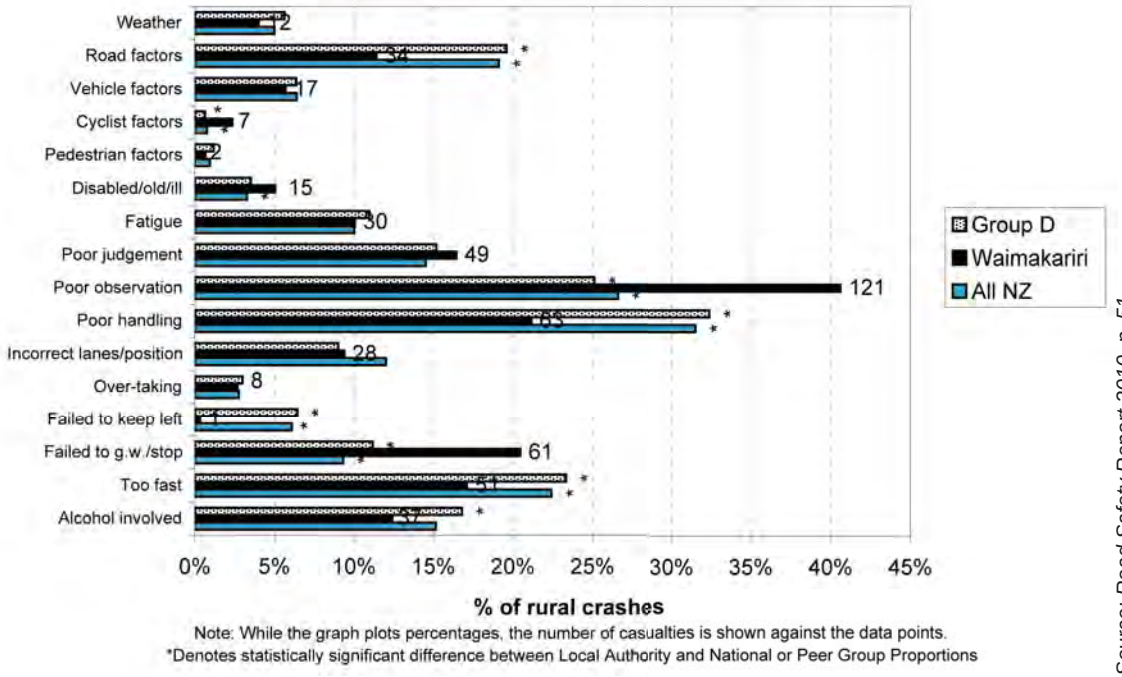
Figure 5.1 Contributing factors - urban Waimakariri District (2005-2009)



Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Source: Road Safety Report 2010, p. 51

Figure 5.2 Contributing factors - rural Waimakariri District (2005-2009)



Note: While the graph plots percentages, the number of casualties is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Source: Road Safety Report 2010, p. 51

GOAL:

Reduce road crashes resulting from inattention or distraction

OBJECTIVES:

- *Raise awareness of the risk of inattention causing crashes on our roads through radio advertising and other education programmes, particularly focusing on younger drivers*
- *Advise at risk drivers of strategies for dealing with driver inattention*
- *Remove or protect large solid objects on road sides where these can be identified as likely to cause major damage to a vehicle swerving off the road side during an accident*
- *Engineering design of our roads will use best practice road markings, signage and infrastructure to prompt motorists to pay attention and avoid potential errors on the road network*
- *Improve understanding of the types of distraction crashes occurring within the District*

The result of driver inattention

5.4 INTERSECTIONS

ISSUE:

The achievement of good design and layout at District intersections may be a factor in preventing some vehicle collisions, though driver error is recognised to also be a significant factor in causing intersection crashes. The Briefing Notes 2010, pages 5 show that:

28% of fatal and serious injury crashes in the District from 2005 to 2009 occurred at intersections.

Some further statistics for intersection crashes from NZTA accident records are:

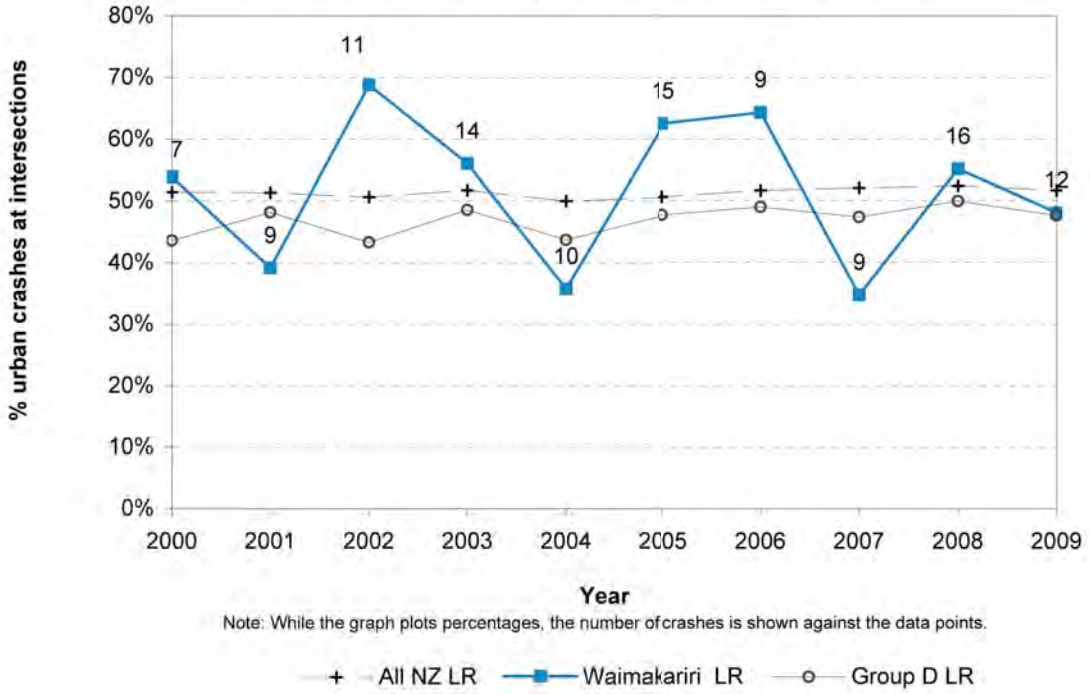
- *70% of the drivers involved in intersection crashes were on full licenses*
- *Friday between 3pm and 6pm was the most likely time for an intersection crash*

Further statistics for intersections from the Briefing Notes 2010, p. 9 are:

- *15-19 year olds had a disproportionately high level of involvement in intersection crashes*
- *Poor observation and failure to give way were the most common causes of collisions at intersections*
- *41% of crashes at intersections were at intersections in urban areas of the District*

It appears that the most common causes of road crashes at District intersections are inattention and driver error. In particular, many of the District's rural roads are long and straight, intersecting at a number of points that require increased driver awareness and observation. The following graphs show trends in intersection crashes throughout the District:

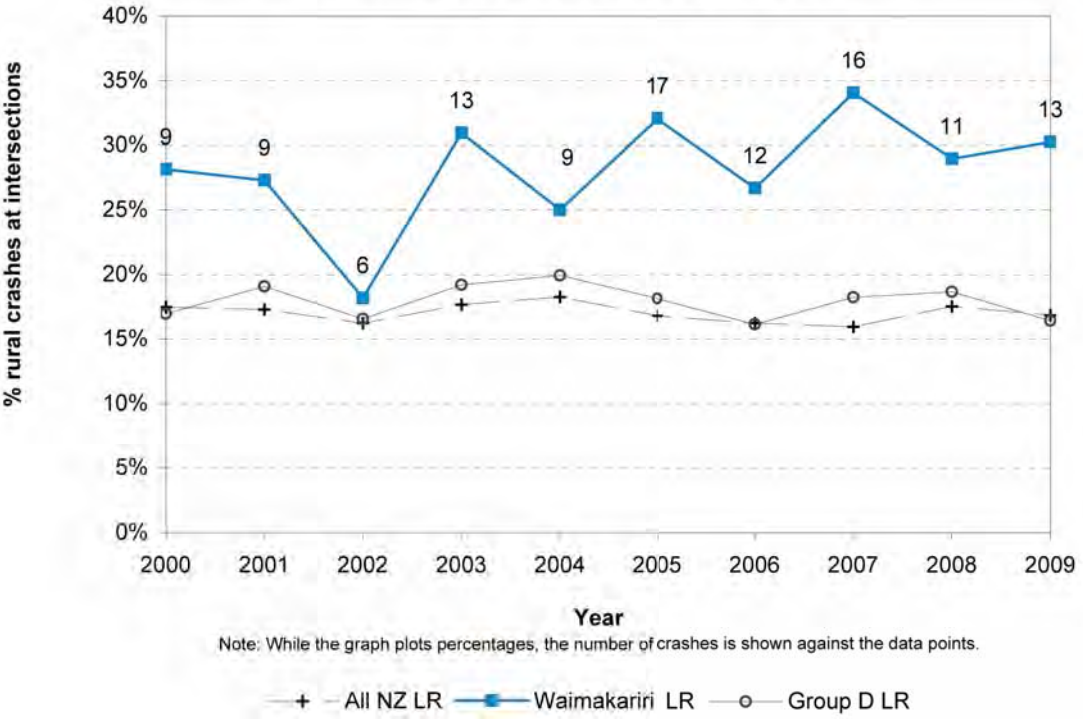
Figure 8.15 Intersection crashes
Waimakariri District - urban council roads



Note: While the graph plots percentages, the number of crashes is shown against the data points.

Source: Road Safety Report 2010, page 82

Figure 8.16 Intersection crashes
Waimakariri District - rural council roads



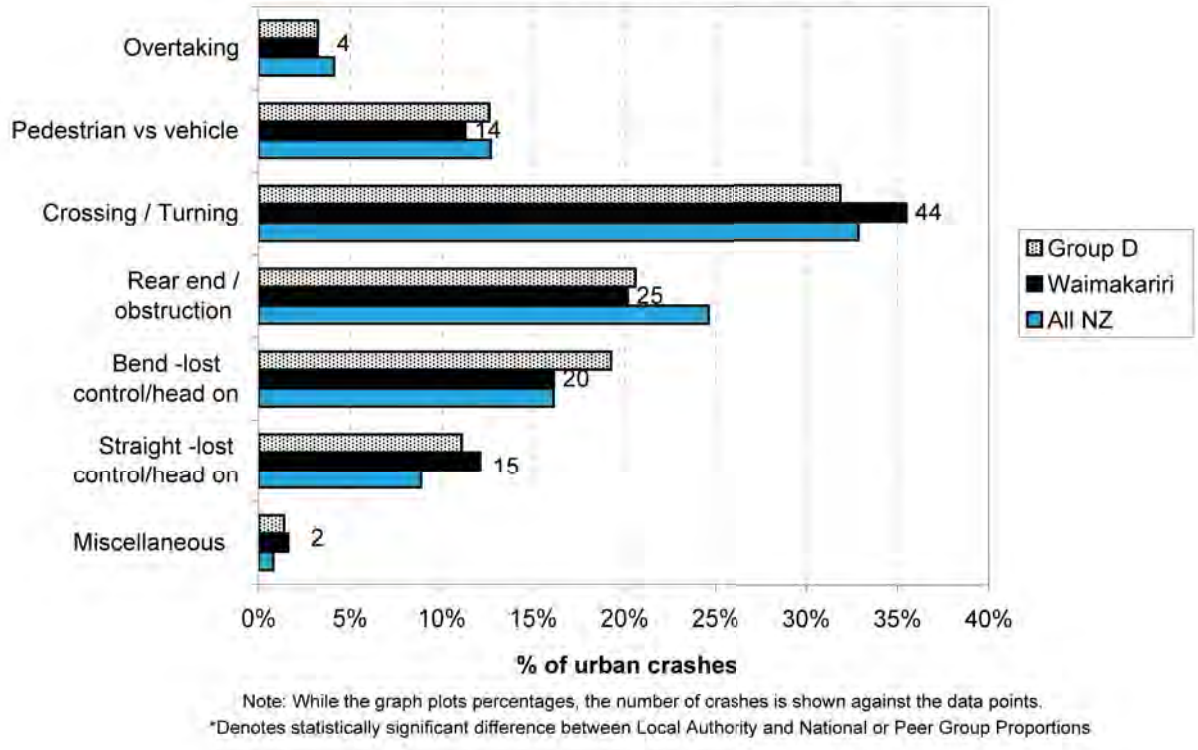
Note: While the graph plots percentages, the number of crashes is shown against the data points.

Source: Road Safety Report 2010, page 82

The graphs show that, over the last ten years, about half of all urban road crashes in the District are occurring at intersections and the numbers and proportions occurring at intersections are fluctuating over time. Around a third of all rural road crashes are occurring at intersections and the proportion of all rural crashes at intersections appears to be increasing slightly over time. The District's proportion of rural crashes at intersections is also notably higher than the New Zealand and comparison peer group Council levels.

The following graph is a further indicator of prevalence of crash movements in the urban areas of the District.

Figure 4.1 Crash movement type - urban Waimakariri District (2005-2009)



Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Source: Road Safety Report 2010, page 45.

The graph shows that on the District's urban roads crossing and turning was the most common crash movement type between 2005 and 2009.

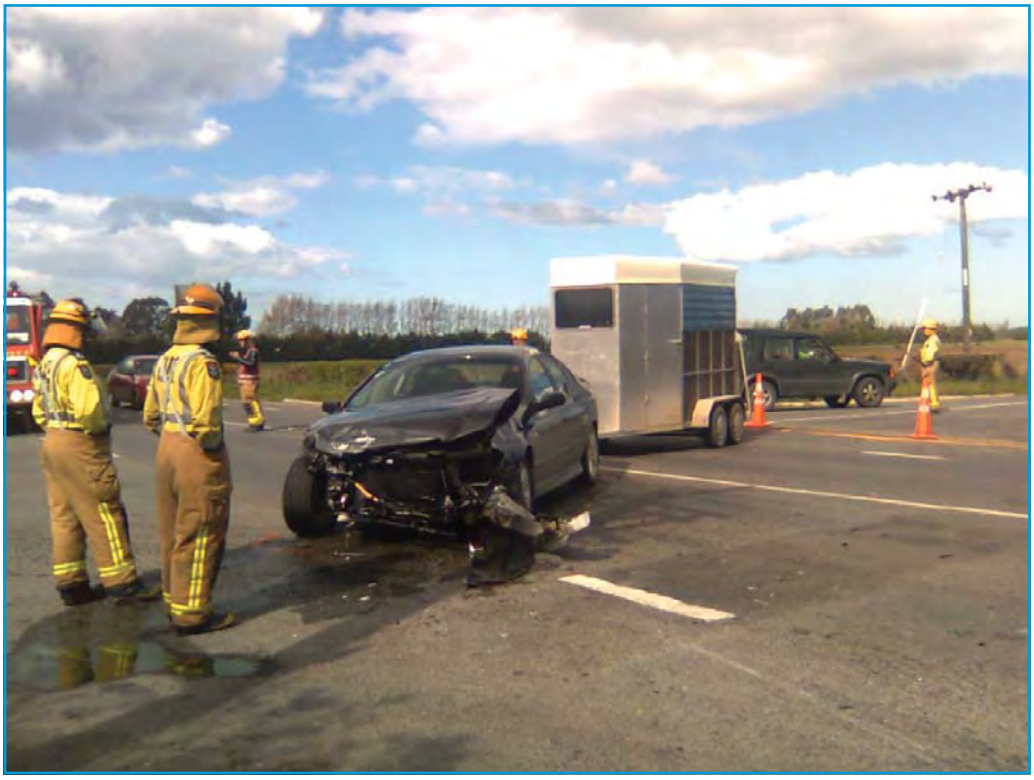
In the District the Briefing Notes 2010, page 9 show that there are 12 intersection sites that had 3 or more injury crashes between 2005 and 2009, including 4 sites which had 5 or more injury crashes over this time period. Remedial treatments in place for these intersections are likely to improve safety over time.

GOAL:

Improve intersection design and road user awareness so as to reduce crashes occurring at intersections.

OBJECTIVES:

- *Redesign and complete physical changes to intersections where particular safety concerns are identified*
- *Removal of vegetation from intersections so that they are free of visual obstructions*
- *Ensure road marking, signage and infrastructure at intersections follows best practice design by undertaking continual monitoring and auditing*
- *Develop a coordinated education campaign to improve road user behaviour at intersections including promoting defensive driving courses for young people that cover safe driving at intersections*
- *Police enforcement is targeted at intersections of local concern*
- *Remove or protect large solid objects on road sides where these can be identified as likely to cause major damage to a vehicle swerving off the road side during an accident*
- *Use local advertising to support national advertising of national give way rule changes*



Inattention and driver error at intersections can have serious consequences

5.5 TOO FAST FOR THE CONDITIONS

ISSUE:

Speed, or drivers travelling too fast for the conditions, has been a key factor in a number of vehicle crashes occurring in the District over time. For instance, the Briefing Notes 2010, p.3 show that:

Overall, from 2005 to 2009, 17% of all fatal and serious crashes in the Waimakariri District involved excessive speed

A number of these crashes are occurring on straight roads or road bends in the rural areas of the District, where greater speeds are typically reached by motorists. This is shown by the following statistics, from the Briefing Notes (pages 5):

26% of fatal and serious injury crashes occurred on straight roads (involving either loss of driver control, or head on crashes) from 2005 to 2009

24% of fatal and serious injury crashes over that time period were at road bends

In 2009, all deaths, 87% of serious injuries and 56% of minor injuries were from crashes in the rural areas of the District

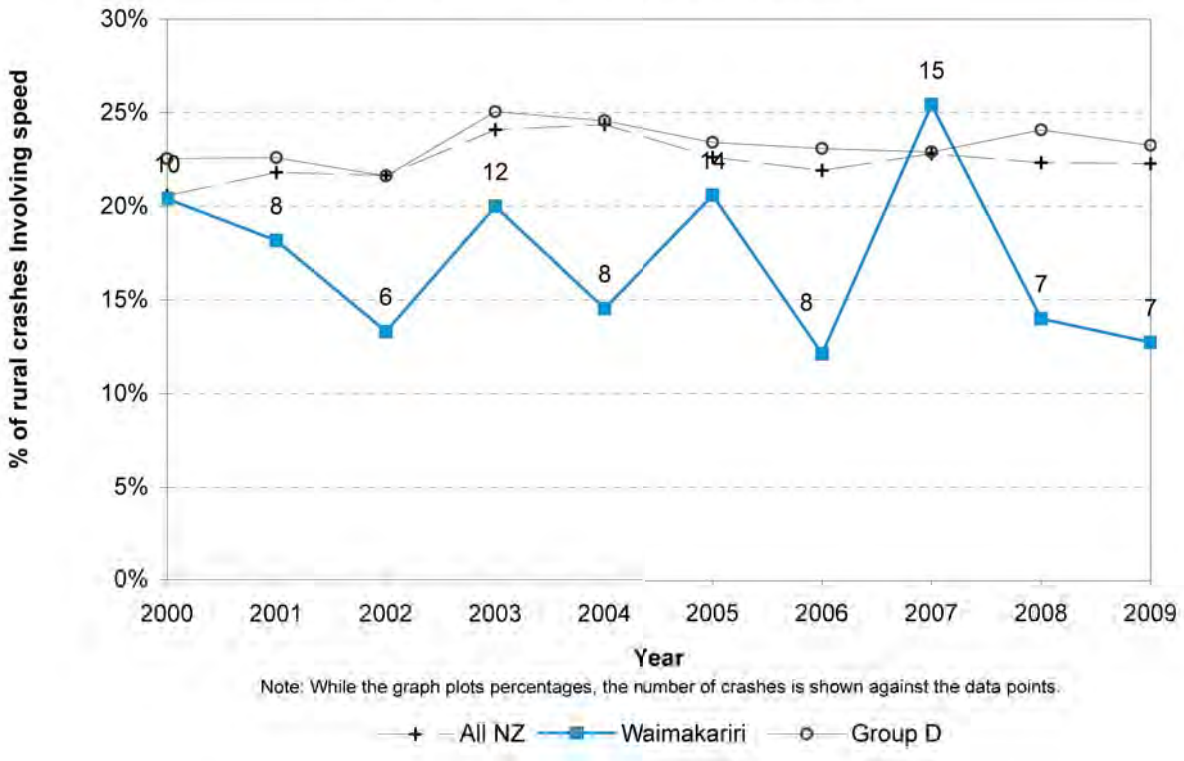
This indicates that there is some correlation between faster overall speeds travelled throughout the District and the occurrence of fatalities and serious injuries. The long, straight and narrow configuration of our rural roads seems to be a key cause of many of the District's most serious vehicle crashes.

In the rural areas of the District there is a prevalence of long, straight and narrow roads. The proportion of crashes occurring on these straight roads in the District is a real concern, as visibility on straight roads is often greater than at road bends, and there are typically fewer variables for drivers to consider on straight roads than at intersections. If drivers lose control they may crash into roadside hazards such as ditches, banks, trees, power poles or fences. Collision with these objects can make the consequences of driver loss of control very serious.

The most common crash type on straight roads is of drivers veering off the road to the left (Briefing Notes 2010, p.7). The notes also show that in the majority of all straight road crashes a roadside hazard is struck and that a significant number of these straight road crashes occur at night.

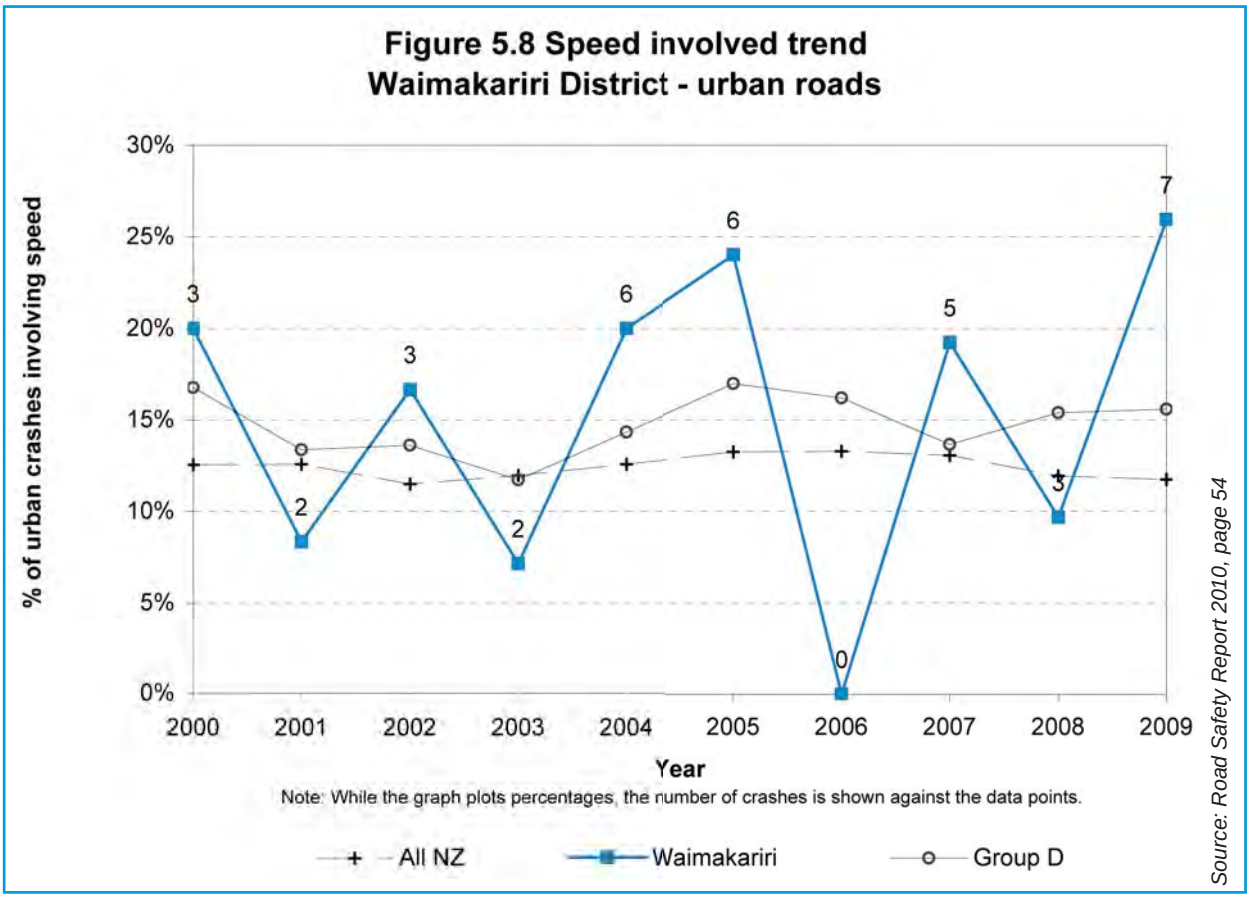
The following graphs show however that the percentage of rural crashes involving speed in the District is generally lower than the relative proportion of similar rural speed related crashes in the peer group of districts (Group D) and rural speed crashes across New Zealand. The proportion of urban crashes in the District involving speed is seen to be fluctuating over time.

Figure 5.14 Speed involved trend
Waimakariri District - rural roads



Note: While the graph plots percentages, the number of crashes is shown against the data points.

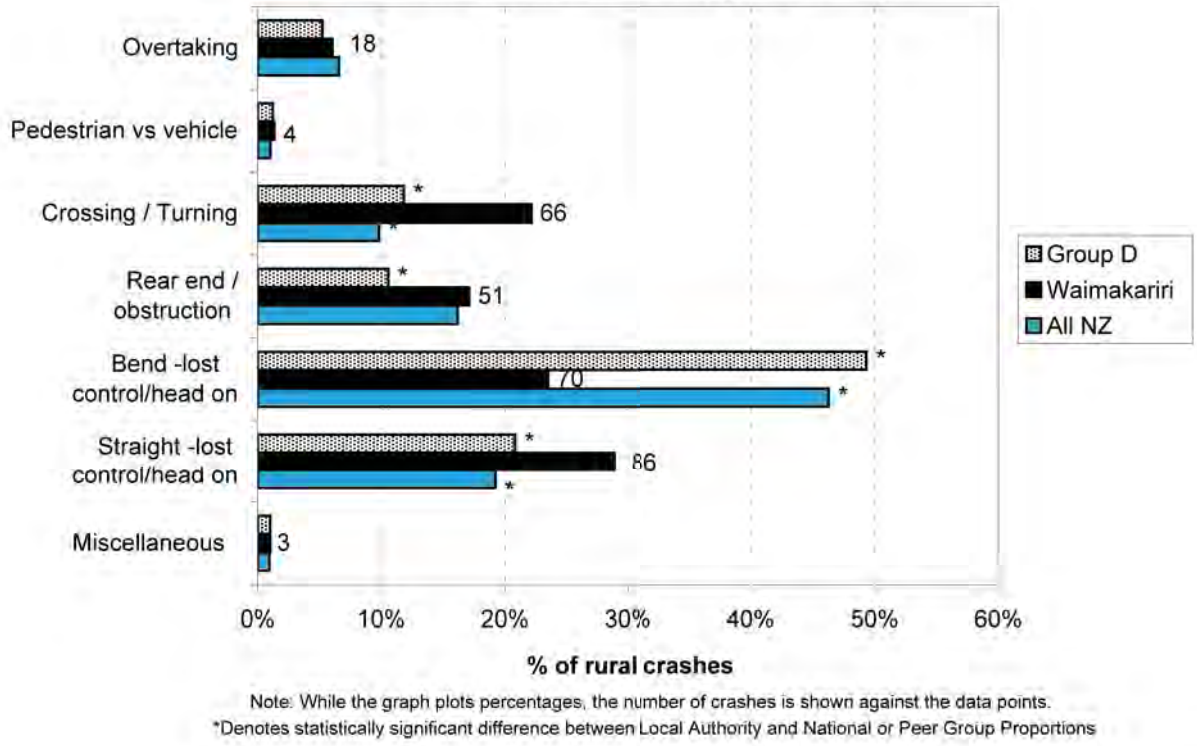
Source: Road Safety Report 2010, page 57



Some further information from NZTA crash records, about speed as a cause of vehicle crashes from 2006-2010, is:

- *Young drivers aged 15-19 were involved in just under half of the injury crashes where speed was a factor*
- *25% of these drivers were on their restricted license*

Figure 4.2 Crash movement type - rural Waimakariri District roads (2005-2009)



Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Source: Road Safety Report 2010, page 45

The graph shows that, between 2005 and 2009, for rural roads in the Waimakariri District head on or loss of control collisions on straight roads was the most likely movement occurring during a crash. These straight road crashes were also notably more common in the Waimakariri District than in the other peer Districts, which were relatively more likely to have greater issues at road bends than at straights.

GOAL:

Reduce the occurrence of motor vehicle crashes where drivers were found to be travelling too fast for the conditions

OBJECTIVES:

- *Engineering design of our roads will use best practice road markings, signage and infrastructure to prompt motorists to pay attention and avoid potential errors on the road network*
- *Remove or protect large solid objects on road sides where these can be identified as likely to cause major damage to a vehicle swerving off the road side*
- *Appropriate use of speed management techniques around schools such as use of active warning lights and traffic calming measures*
- *Removal of roadside hazards and vegetation that blocks visibility*
- *Determine and maintain appropriate speed limits throughout the District applicable to each speed zone*
- *Enhance police enforcement targeted to high risk areas, including around schools*
- *Local advertising promotes driving to conditions and safe speeds in response to variable local conditions including icy roads and sunstrike*
- *Encourage local communities in rural areas to collectively reduce their travelling speeds*
- *Increase young drivers involvement in driving programmes*

The result of driving too fast on an icy road

5.6 INCREASING THE SAFETY OF MOTORCYCLING

ISSUE:

A number of vehicle crashes in the District over time have involved motorcyclists. NZTA motorcycling accident records for the District show that a number of these are riders who visit the District from Christchurch City, alone or in groups during the weekends, often heading to our rural roads for their biking. The Briefing Notes 2010 (p.5) show that:

Overall, 15% of all fatal or serious vehicle crashes in the District between 2005 and 2009 involved a motorcyclist.

Some more specific statistics for motorcycling in the District, from NZTA records, are:

- *Most of the drivers involved in motorcycle crashes had full licenses and were aged from 25 to 39, or from 50 to 54.*
- *Motorcycle crashes were largely caused by crossing or turning movements.*

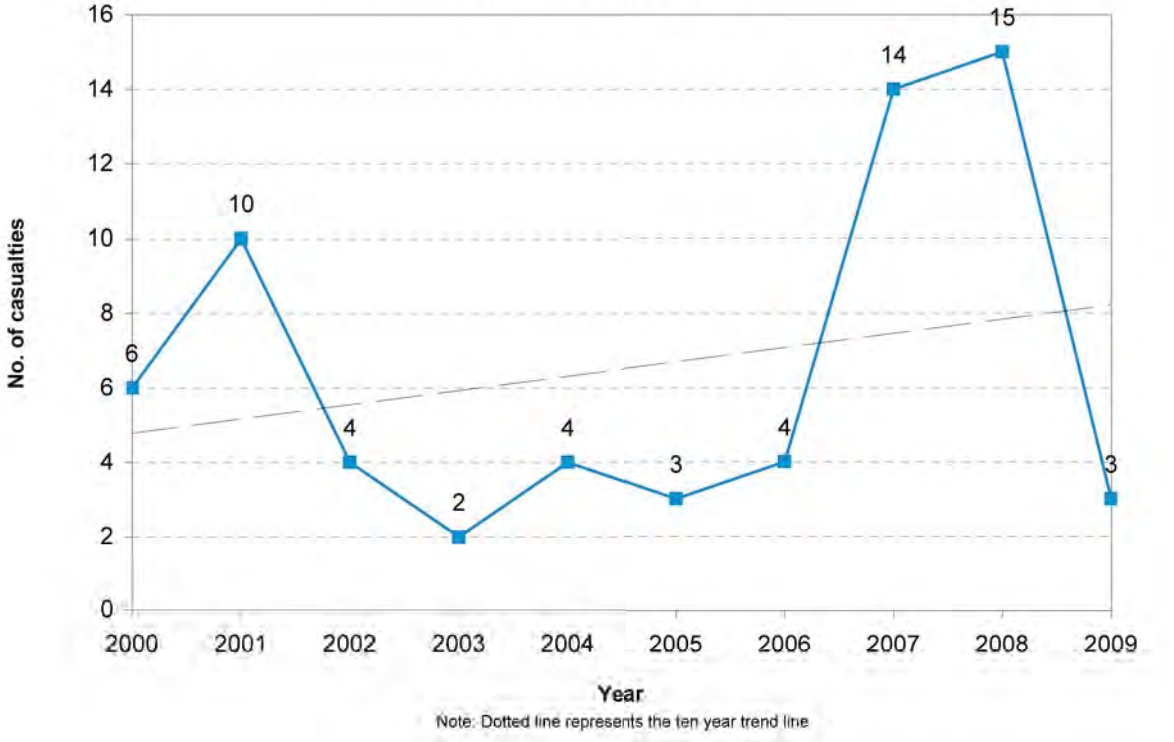
GOAL:

Reduce the number of motorcycle crashes occurring on District roads

OBJECTIVES:

- *Engineering design of our roads will use best practice road markings, signage and infrastructure*
- *Establish an annual motorcycle training day to promote safety for motorcyclists on our roads*
- *Use local media to promote the need for all vehicles to share the road, particularly promoting sharing between cars, motorbikes and cycles*
- *Enhance police enforcement of safe motorcycling particularly focusing on Tram Road, Lineside Road and State Highway 1*

Figure 3.14 Motorcyclist casualties
Waimakariri District



Source: Road Safety Report 2010, p. 35

5.7 FATIGUE AND RESTRAINT WEARING (SEATBELTS)

ISSUE:

FATIGUE

Fatigue as a cause of vehicle crashes in the District seems to affect largely younger drivers and the risk of fatigue collisions seems to be higher at night during the weekends. For instance, NZTA records on fatigue related crashes show:

There were 69 crashes between 2006 and 2010 where fatigue was a factor.

Of these:

- *15-24 year olds on restricted licenses accounted for over half the crashes*
- *The majority of fatigue crashes occurred on a Saturday or Sunday in the early hours of the morning*

There is also some anecdotal evidence of shift workers commuting in and out of Christchurch to and from their work crashing on the long straight rural roads near their homes. Many of these crashes may not be reported and may have a low impact on the vehicle occupant/s.

RESTRAINT WEARING (SEATBELTS)

Within Canterbury a Ministry of Transport survey in 2008 showed that 90% of backseat passengers in Canterbury were found to be wearing seatbelts, compared with 85% of these passengers across the rest of the country.

GOAL:

The numbers of vehicle crashes caused by fatigued drivers will reduce, and all drivers and passengers will wear seat belts when travelling within the District

OBJECTIVES:

- *Engineering design of our roads will use best practice road markings, signage and infrastructure to prompt motorists to pay attention and avoid potential errors on the road network*
- *Improve understanding of the types of fatigue crashes occurring within the District, including the prevalence of shift workers involved in fatigue crashes*
- *Raise awareness of the risk of fatigue causing crashes on our roads through radio advertising and other education programmes, particularly focusing on fatigued younger drivers*
- *Advise at risk drivers of strategies for dealing with driver fatigue*
- *Enhance a police enforcement campaign that includes enforcement where people in vehicles are found not to be wearing restraints (seat belts)*
- *Ensure all children under 5 are correctly restrained and increase the use of booster seats for children older than 5*

This is a billboard that is currently used on district roads.

6 KEY PARTNERS AND MEASURES TO MONITOR OUR PROGRESS

Key Issues	Goals	Key Partners	Monitoring our Progress: Measures
Increasing the Safety of Young Drivers	Decreasing occurrence of young people involved in road crashes each year	-New Zealand Police -New Zealand Transport Agency -Waimakariri District Council RSCC -Road Safety Co-ordinator -Schools -Students Against Drink Driving -Safer Community Council	• Reduction in alcohol crashes by 15-19 year old drivers • Increasing participation of young drivers in advanced and defensive driving programmes
Reducing Alcohol/Drug Impaired Driving	Reduce the number of vehicle crashes that involve excessive alcohol use	-New Zealand Police -New Zealand Transport Agency -Waimakariri District Council Road Safety Coordinating Committee (RSCC) -Road Safety Co-ordinator -Safer Community Council -Community and Public Health	• Reduction in alcohol crashes over a five year period (e.g. by 2016) • Increase in numbers & frequency of use of pub courtesy vans • Increasing resident attendance at a recidivist drink driving course
Inattention and Distraction	Reduce road crashes resulting from inattention or distraction	-New Zealand Transport Agency -New Zealand Police -Road Safety Co-ordinator -ECAN Road Safety Co-ordinator -MWH -SICON	• Reduction of crashes where inattention or distraction is given as a factor
Intersections	Improve intersection design and road user awareness so as to reduce crashes occurring at intersections	-New Zealand Transport Agency -New Zealand Police -Road Safety Co-ordinator -MWH -SICON	• Reduction of numbers of crashes at intersections • Ongoing monitoring at intersections • Levels of police enforcement

Key Issues	Goals	Key Partners	Monitoring our Progress: Measures
Too Fast for the Conditions	Reduce the occurrence of motor vehicle crashes where drivers were found to be travelling too fast for the conditions	-New Zealand Police -New Zealand Transport Agency -SICON -ACC -WDC Engineers -Road Safety Co-ordinator -Local schools and community groups	• Reduction in recorded speed related crashes over a five year period (e.g. by 2016) • Lowering speed counts at control sites • Police enforcement data-numbers ticketed
Increasing the Safety of Motorcycling	Reduce the number of motorcycle crashes occurring on District roads	-New Zealand Police -ACC -New Zealand Transport Agency -Local biker groups -Road Safety Co-ordinator	• Reduction in number of motorcyclist crashes
Fatigue and Restraint Wearing (Seatbelts)	Numbers of vehicle crashes caused by fatigued drivers in the District will reduce, and all drivers and passengers will wear seat belts when travelling within the District	-New Zealand Transport Agency -Road Safety Co-ordinator -ECAN Road Safety Co-ordinator -New Zealand Police -Injury Prevention Waimakariri	• Reduction in crashes where fatigue is a factor • Reduction in injury crashes where seatbelts not being worn is a factor
All Issues	As above	-New Zealand Transport Agency -New Zealand Police -ACC -Waimakariri District Council RSCC	• Social cost of crashes • Crash rates per vehicle kilometres travelled • Annual Road Safety Reports

REFERENCES

Ministry of Transport "Safer Journey's 2020: New Zealand's Road Safety Strategy 2010-2020", 2010.

New Zealand Transport Agency "Waimakariri District: Road Safety Report: 2005 to 2009", June 2010.

New Zealand Transport Agency; New Zealand Government "Briefing Notes, Road Safety Issues, Waimakariri District" 2010.

Waimakariri District Council "Road Safety Action Plan for the Waimakariri District Council: September 2010-June 2011", 13 October 2010.

Page 1 photo of car passing horses on Ashley Road.

WAIMAKARIRI
DISTRICT COUNCIL

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