

# road safety issues

**T**he Land Transport Safety Authority (LTSA) has prepared this road safety issues report. It is based on reported crash data and trends for the 1999–2003 period. The intent of the report is to highlight the key road safety issues and to identify possible ways to reduce the level of road deaths and injuries in the Western Waikato Area (Waikato, Waipa, Otorohanga and Waitomo Districts).

'A comparison of the data provided in this report with the road safety objectives outlined in your road safety strategy will provide an indication of the road safety performance you are achieving in your area. The challenge for us all is to achieve a year-on-year reduction in road crashes. We know that saving family and friends from the trauma of death and injury on our roads will be achieved through a balanced combination of the three Es:

1. Education – effective community involvement in addressing road safety issues.
2. Enforcement – risk targeted road policing.
3. Engineering – the systematic management of our roading infrastructure.

I hope this copy of *Road safety issues 2004* assists you in identifying ways of achieving that balance for road safety in your area.'

Glenn Bunting

LTSA Regional Manager, Hamilton

## Major road safety issues

Western Waikato Area

Poor observation
Speed
Road factors
Restraints and Helmets

Nationally

Speed
Drink-driving
Failure to give way
Restraints



## 2003 road trauma for Western Waikato Area

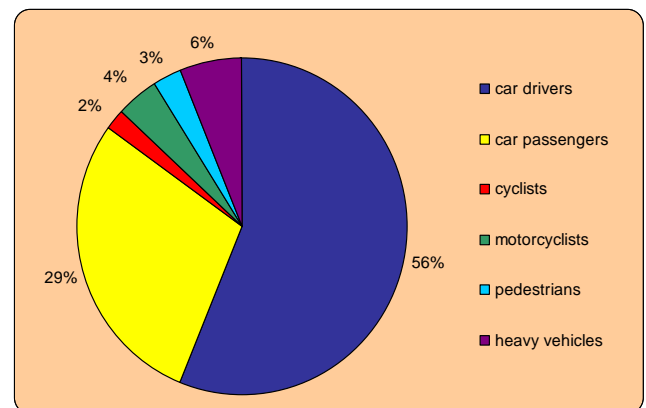


Deaths	30
Serious casualties	117
Minor casualties	492



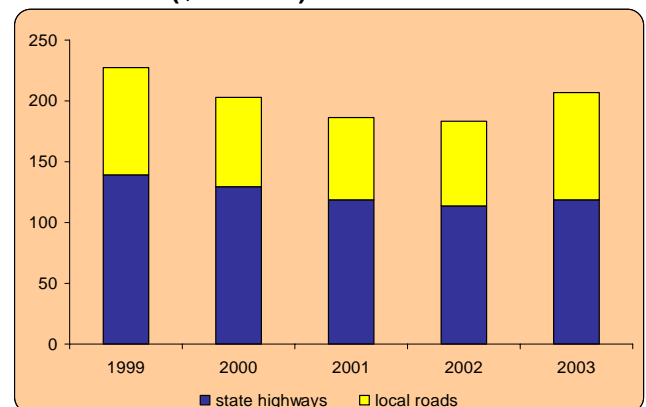
Fatal crashes	27
Serious injury crashes	86
Minor injury crashes	307
Non-injury crashes	641

## Road user casualties 1999–2003



## Estimated social cost of crashes\*

Social cost (\$ million)



\*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2002 prices.

## Road Safety to 2010

The *Road Safety to 2010* strategy provides a direction for road safety in New Zealand and describes the results the government wants to achieve by 2010.

It sets out:

- the government's balanced approach to road safety, using initiatives built around the three Es – engineering, education and enforcement
- the first stage of initiatives (to 2004)
- the co-ordination, funding and other mechanisms that will be involved in implementing the strategy
- the priority areas that will be a focus for the government's road safety activity up to 2010.

The *Road Safety to 2010* strategy is an important component in achieving the *New Zealand Transport Strategy* goal of an affordable, integrated, safe, responsive and sustainable transport system.

Regular progress updates for the 27 projects that are currently being undertaken as part of the *Road Safety to 2010* strategy can be found on the LTSA website.

## Community Road Safety Programme

The LTSA's Community Road Safety Programme (CRSP) has developed over the last decade on the basis that community involvement in, and ownership of, road safety issues are essential to the success of any country's road safety strategy.

The vision of the CRSP is:

*Community involvement in road safety so that positive and sustainable changes in attitudes occur and contribute to making New Zealand's roads safer.*

By funding community development for road safety and community road safety programmes, the CRSP generates demand and new initiatives for road safety, and also links communities with road safety professionals.

The *Community Road Safety Strategy* has recently been revised so that the CRSP can continue to develop in accordance with the recommendations from its recent review and the *Road Safety to 2010* strategy.

Further information on the *Community Road Safety Strategy* and the Programme can be found on the LTSA website.

## Road policing

In December 2003 the Minister of Transport announced new enforcement measures to help meet the *Road Safety to 2010* strategy goals of no more than 300 road deaths and 4,500 hospitalisations a year by 2010.

Unless further action is taken across the three Es – education, engineering and enforcement – we could be facing a road toll of 400 by 2010.

The additional enforcement measures zero in on serious and repeat drink-drivers and excessive speed.

The measures targeted at serious offenders include:

- speeding drivers now face immediate roadside licence suspension for exceeding the permanent posted speed limit by 40 km/h
- drink-drivers with blood alcohol levels of 130 mg/100 ml or higher will immediately lose their licence for 28 days. This penalty currently kicks in at 160 mg/100 ml
- a 'three-strikes and you're out' scheme for drink-drivers, including licence suspension for committing two offences within a four-year period and roadside vehicle impoundment for drink-drivers committing three offences within a four-year period
- further work on alcohol ignition interlocks that immobilise the vehicles of repeat drink-drivers if they have been drinking.

Other measures are:

- the introduction of 'anywhere anytime' speed cameras – where all speed camera zones and signs are removed and cameras are targeted at any area where speed puts lives at particular risk
- further work on establishing a specific offence to drive while impaired by illegal drugs.

'The Waikato Police District is totally committed to working with our road safety partners in order to reduce road trauma within the Waikato Police District.

The only way we will continue to drive our road toll down is through the co-operation of all our partners, a zero tolerance with enforcement issues and developing a safety culture within our district.'

P Munro

Acting District Commander

New Zealand Police – Waikato District

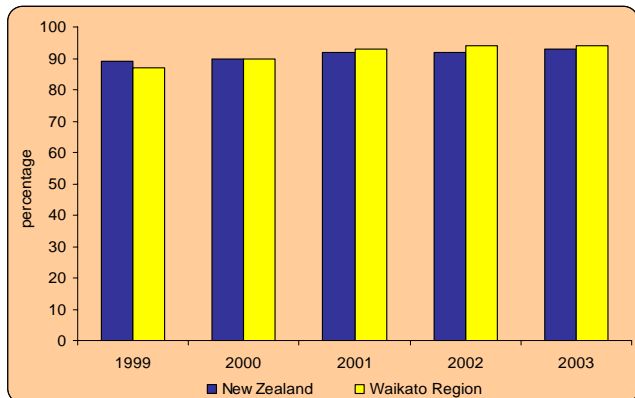


## Restraints and helmets

In 2003, 99 of the people killed on the roads were not wearing safety belts. At least 41 of those lives would have been saved had they used the safety belts available to them. Three were children.

### Front seat safety belt use – adult

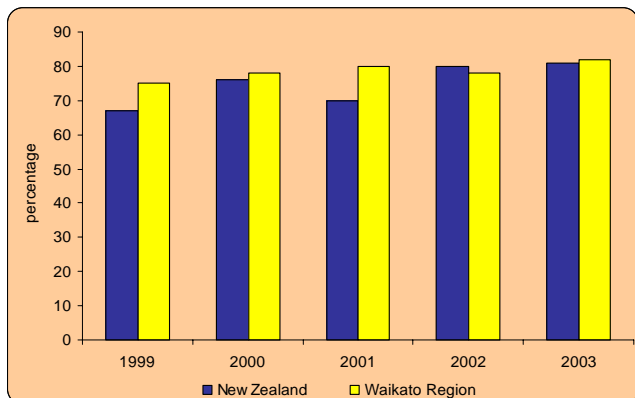
#### Wearing rates 1999–2003



Responses from the Waikato Region to the 2003 Public Attitudes Survey indicated that 34 percent of those surveyed thought that the chance of an adult being caught not wearing a safety belt when driving was very or fairly likely.

### Rear seat safety belt use – adult

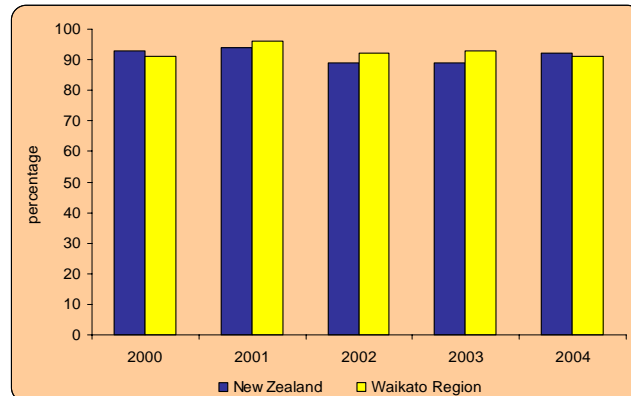
#### Wearing rates 1999–2003



Responses from the Waikato Region to the 2003 Public Attitudes Survey indicated that 12 percent of those surveyed thought that the chance of an adult being caught not wearing a safety belt as a rear seat passenger was very or fairly likely.

### Cycle helmets

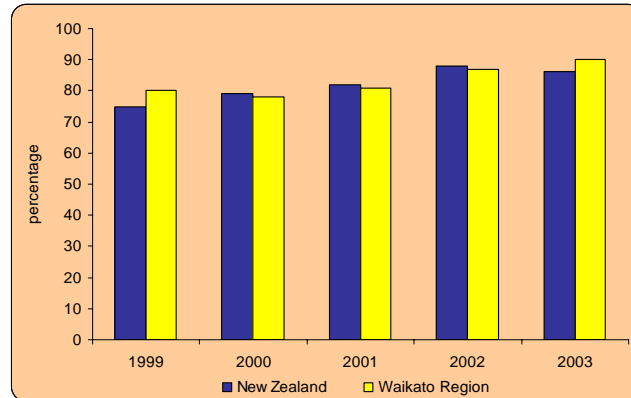
#### Wearing rates 2000–2004



Since becoming compulsory in 1994, cycle helmet use has increased substantially from wearing rates of 60 to 65 percent in 1992/93. In 2004, the helmet wearing rate of 92 percent was still lower than the 94 to 96 percent wearing rates observed from 1995 to 2002. It was, however, an increase on the 2003 wearing rate of 89 percent.

### Child restraint use

#### Wearing rates 1999–2003



Responses from the Waikato Region to the 2003 Public Attitudes Survey indicated that 29 percent of those surveyed thought that the chance of being caught if a child under five in a back seat was not in a child restraint was very or fairly likely.



## Road factors

A safe road environment incorporates numerous design principles, appropriate geometric design standards, good delineation under all conditions, adequate surface skid resistance and a roadside free of unforgiving hazards. It should serve the safety needs of all vehicles and road users.

Road factors contributing to crashes include:

- a slippery road surface
- obstructions on the road such as slips
- limited visibility
- signs, signals and/or roadmarkings being damaged or in poor condition.

Nationally, road factors were a contributing factor in eight percent of injury crashes in the 1999–2003 period, with slippery road surfaces and limited visibility being the two key road conditions.

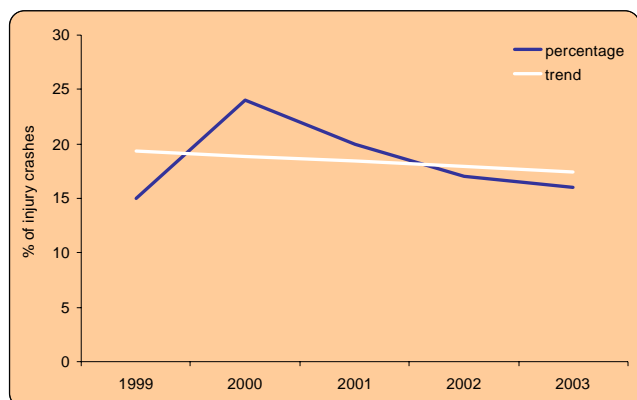
In the Western Waikato Area, road factors contributed to 15 percent of injury crashes in 2003, a decrease from 2002 and decreasing against the national trend.

There were 307 road factor related injury crashes reported in the last five years.

Road factors were predominantly a rural issue in the Western Waikato Area in 2003 and were a factor in 16 percent of the injury crashes occurring on roads with a speed limit greater than 70 km/h.

Road factors have decreased as a factor on rural roads over the last four years, with the number of injury crashes rising from 51 in 2002 to 52 in 2003.

### Rural road factor related crashes



## Territorial local authority performance

The following provides the percentage of road factors involved in crashes for each TLA and their peer group during the period 1999–2003:

	TLA	Peer group*
Waikato	15%	15%
Waipa	13%	15%
Otorohanga	19%	19%
Waitomo	24%	19%

\* Peer groups consist of TLAs with similar geographical, population and traffic volume profiles.

The following provides the number of crashes where road factors were a contributing factor in a crash:

	Number of crashes 1999–2003
<b>Waikato District</b>	
Slippery road	72
Road surface in poor condition	26
Road obstructed	5
Visibility limited	38
Signs and signals in poor condition	5
Roadmarkings in poor condition	1
Street lighting in poor condition	1
<b>Waipa District</b>	
Slippery road	32
Road surface in poor condition	13
Road obstructed	3
Visibility limited	24
Signs and signals in poor condition	6
Roadmarking in poor condition	1
Street lighting in poor condition	4
<b>Otorohanga District</b>	
Slippery road	21
Road surface in poor condition	6
Visibility limited	4
<b>Waitomo District</b>	
Slippery road	38
Road surface in poor condition	23
Road obstructed	2
Visibility limited	10
Signs and signals in poor condition	3

## 80 Speed

Speed includes not only exceeding the speed limit, but also driving too fast for the condition of the road. No matter how good drivers think they are, speeding significantly increases the chances of crashing and serious injury or death.

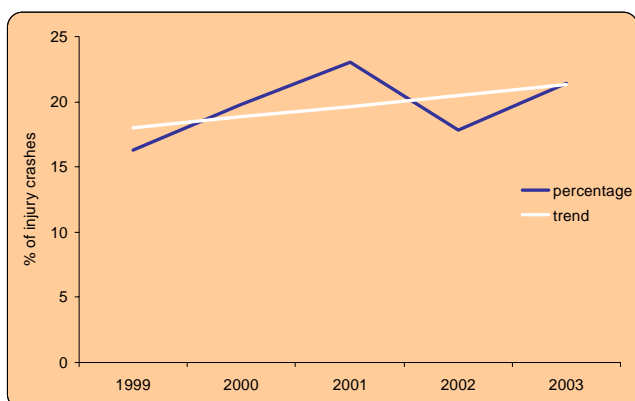
- A child struck in a suburban street by a car travelling at 10 km/h over the speed limit will be killed.
- Driving at 50 km/h in dry conditions requires 37 metres stopping distance. Driving at 100 km/h in dry conditions requires 111 metres stopping distance.
- Driving at 100 km/h in light rain requires the same stopping distance as driving at 120 km/h on a sunny day.

Nationally, speed is the major contributing factor to fatal road crashes. Crashes involving excessive speed tend to be more severe and, therefore, the associated social cost is much higher. In 1,917 crashes during 2003, the driver was travelling too fast for the conditions. These crashes resulted in a total social cost of \$671 million. Drivers travelling at excessive speed accounted for around 14 percent of open road crashes.

In the Western Waikato Area, speed was a factor in 20 percent of injury crashes in 2003. This was an increase from 2002 and increasing in line with the national trend. There were 337 speed-related injury crashes reported in the last five years.

Speed was predominantly a rural issue in the Western Waikato Area in 2003 and was a factor in 21 percent of the injury crashes occurring on roads with a speed limit greater than 70 km/h. Most roads in the Waikato Region were built for 80 km/h speeds and cannot be driven safely at the open road speed maximum of 100 km/h. Speed has increased as a factor on rural roads over the last five years, with the number of injury crashes rising from 52 in 2002 to 70 in 2003.

### Rural speed-related crashes

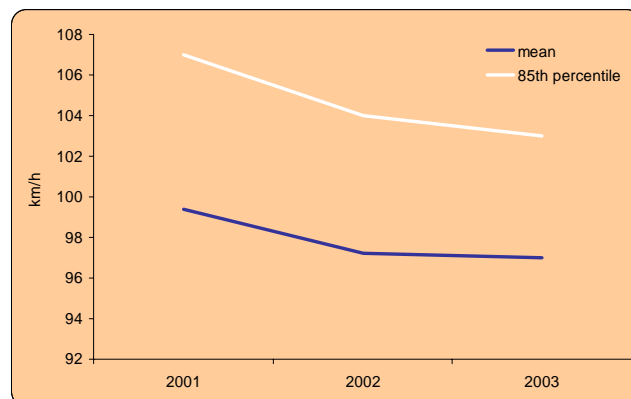


Responses from the Waikato Region to the 2003 Public Attitudes Survey indicated that:

- 46 percent of drivers said they enjoyed driving fast on the open road
- 17 percent of drivers agreed there was little chance of a crash when speeding if they were careful
- 38 percent of drivers thought the risk of being caught speeding was small
- 83 percent thought enforcing the speed limit helped to lower the number of road deaths.

Speed surveys are undertaken annually throughout the country by the LTSA and it is pleasing to see that nationally both urban and rural speeds are continuing to decrease. The following graph illustrates the results of surveys undertaken in the Waikato Region over the last three years.

### Waikato rural speeds



## Territorial local authority performance

The following provides the percentage of speed-related crashes that occurred for each TLA in the Western Waikato Area and their peer group during the period 1999–2003:

	TLA	Peer group*
Waikato	18%	20%
Waipa	16%	20%
Otorohanga	22%	22%
Waitomo	19%	22%

\* Peer groups consist of TLAs with similar geographical, population and traffic volume profiles.



## Poor observation

Poor observation includes:

- inattention or failing to notice, eg failing to notice traffic lights while driving home on 'autopilot' and thinking about what to cook for tea
- attention being diverted, eg being distracted by children in the back seat
- not seeing or looking for another road user until too late, eg not checking behind when changing lanes, or experiencing near misses at intersections.

Nationally, not seeing or looking for other parties until too late was the third highest contributing factor in injury crashes in 2003 and resulted in a total social cost of \$621 million.

Failure to see or look for another road user until too late caused 2,304 crashes in 2003 – a greater number of crashes than either speeding or drink-driving but with a lower social cost and a lower rate of severity.

In the Western Waikato Area, poor observation was a factor in 31 percent of injury crashes in 2003, a decrease from 2002 and decreasing against the national trend.

There were 531 injury crashes relating to poor observation reported in the last five years.

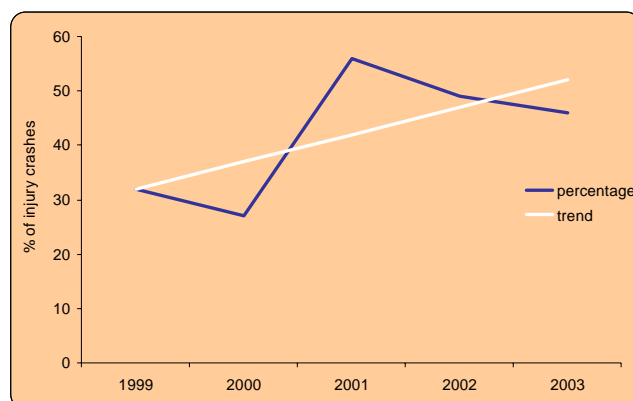
Poor observation was predominantly an urban issue in the Western Waikato Area in 2003 and was a factor in 46 percent of the injury crashes occurring on roads with a speed limit lower than 70 km/h. Poor observation has decreased as a factor on urban roads over the last three years, with the number of injury crashes remaining steady at 43 in 2002 and 2003.

The large percentage (39 percent) of poor observation crashes occurred at intersections.

Poor observation is a challenging issue for all road safety groups to address. In particular, thought needs to be given on how to address:

- complacency of drivers
- looking but not seeing
- roading networks that contain surprises for the inattentive driver.

### Urban poor observation-related crashes



### Key crash locations

The Western Waikato Area is made up of a number of territorial local authorities (TLAs). The following table provides a breakdown of the key locations at which poor observation crashes occurred during the 1999–2003 period:

#### Waikato District

- SH 1 and Hautapu Road intersection
- SH 1 and Newcastle Street intersection
- Ruakura Road and Nottingham Drive intersection

#### Waipa District

- Golf and Park Roads intersection
- Cambridge and Golf Roads intersection
- Arawata and George Streets intersection

#### Otorohanga District

- Pokuru Rd (1,350m south of Morgan Road)
- SH 3 and Kawa Road intersection

#### Waitomo District

- SH 3 and SH37 intersection
- SH 3 and King Street intersection
- SH 30 and Beros Road intersection

### Territorial local authority performance

The following provides the percentage of poor observation related crashes that occurred for each TLA in the Western Waikato Area and their peer group during the period 1999–2003:

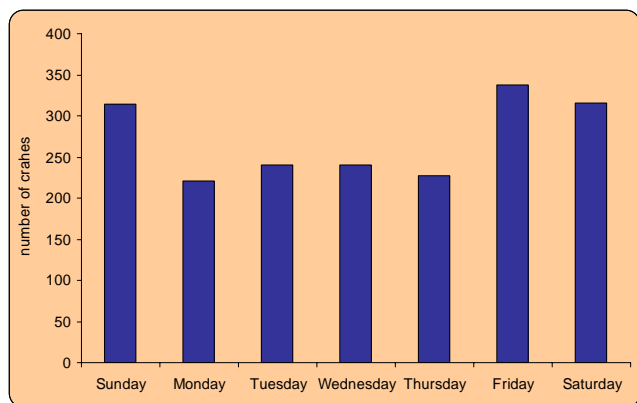
	TLA	Peer group*
Waikato	28%	28%
Waipa	36%	28%
Otorohanga	22%	23%
Waitomo	17%	23%

\* Peer groups consist of TLAs with similar geographical, population and traffic volume profiles.

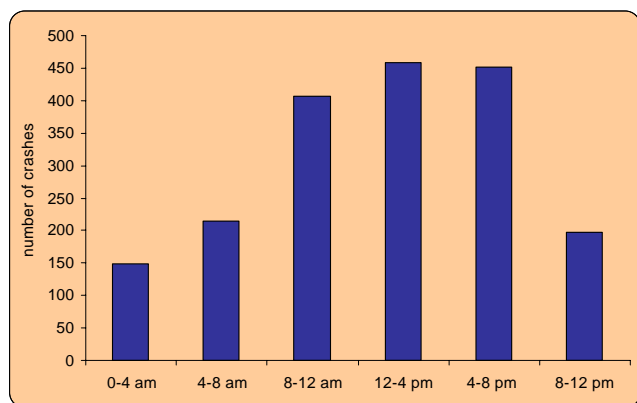
## When crashes occurred

Crashes resulting in injury can occur at any time, but in the Western Waikato Area between 1999 and 2003, Fridays and the hours between noon and 4 pm were the worst periods.

### Day of week for crashes 1999–2003



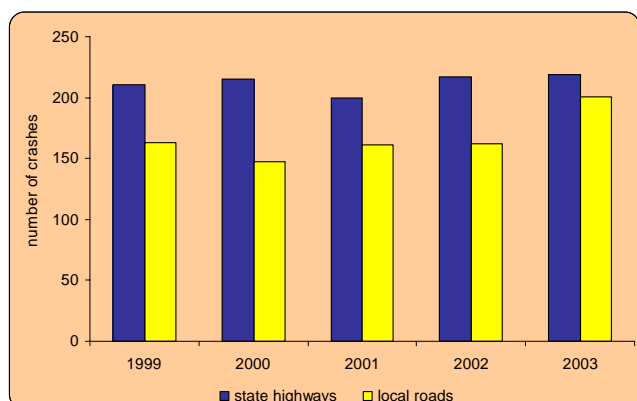
### Time of day for crashes 1999–2003



## Where crashes occurred

During the 1999–2003 period, approximately 87 percent of fatal crashes (where one or more people were killed) and 77 percent of injury crashes occurred on rural roads. In rural areas there is a greater chance of a fatal crash occurring than in an urban area, due to the higher speed limits.

### Location of crashes 1999–2003



## Who was involved in crashes

Between 1999 and 2003, 2,876 people were injured on Western Waikato Area roads.

### Licence status of all drivers involved in injury crashes in 2003

Licence status	Urban crashes	Rural crashes
Full licence	60%	70%
Learner or restricted	18%	18%
No or wrong licence	12%	2%
Forbidden or disqualified	1%	1%
Overseas	3%	4%
Unknown	6%	5%

### Ethnicity status of all drivers involved in injury crashes in 2003

The collection of ethnicity information commenced in late 2001 via the traffic crash reports completed by the New Zealand Police.

Ethnicity status	Urban crashes	Rural crashes
NZ European	62%	66%
Maori	32%	25%
Pacific Islander	1%	2%
Asian	3%	6%
Other	2%	1%

## Partnerships

The LTSA works closely with many road safety partners at national, regional and local levels. These include government departments, enforcement agencies, territorial local authorities, health authorities and local service providers. Some of the key road safety partners in the Western Waikato Area include:

### **New Zealand Police**

District Road Policing Manager  
Inspector Leo Tooman  
PO Box 3078, Hamilton  
Phone 07 850 7063

### **Road Safety Co-ordinators**

Megan Jolly  
Waikato and Waipa Districts  
1 Galbraith Ave, Hamilton  
Phone 07 850 5059

Rachel Stubbs  
Otorohanga and Waitomo Districts  
Wintec  
PO Box 339, Te Kuiti  
Phone 07 878 6558

Barnaby Bates  
Road Safety Promotions and Marketing  
Waikato Regional Council  
PO Box 4010, Hamilton East  
Phone 07 856 7184

### **Local Authority Engineers**

Kaye Clark  
Waikato District Council  
Private Bag 544, Waikato  
Phone 07 824 8633

Chris Clarke  
Waipa District Council  
Private Bag 2402, Te Awamutu  
Phone 07 871 7133

Ian Gooden  
Otorohanga District Council  
PO Box 11, Otorohanga  
Phone 07 873 8199

Andrew Dixon  
Waitomo District Council  
PO Box 404, Te Kuiti  
Phone 07 878 8801

### **TNZ Area Manager**

Gerritt Van Blerk  
PO Box 973, Hamilton  
Phone 07 957 1610

### **Accident Compensation Corporation**

ACC Injury Prevention Consultant  
Waikato/King Country area  
Lisa Taylor  
PO Box 952, Hamilton  
Phone 07 957 5826

## Assistance from the LTSA

The LTSA Hamilton Regional Office is able to assist in road safety activities such as:

- development of safety management systems
- crash reduction studies
- safety audits
- crash data provision and analysis
- general road engineering advice
- general road safety advice
- community development
- community programmes.

The LTSA website also contains road safety information, including electronic copies of this report and all of the others that have been produced for the country. We encourage you to visit this site: [www.ltsa.govt.nz](http://www.ltsa.govt.nz)

## Contacts

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