# road safety issues

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 key road safety issues and to identify possible ways to reduce the level of road deaths and injuries in the Waikato Region.

'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

Waikato Region

#### Poor observation

Failure to give way

Speed

**Restraints and Helmets** 

**Nationally** 

Speed

**Drink-driving** 

Failure to give way

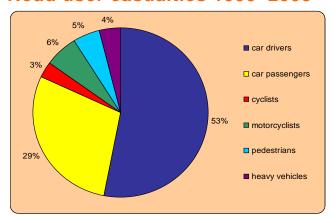
Restraints



# 2003 road trauma for Waikato Region

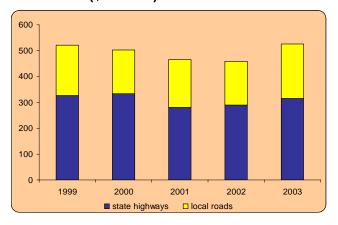
웆	Deaths Serious casualties Minor casualties	81 321 1,337
	Fatal crashes Serious injury crashes Minor injury crashes Non-injury crashes	70 242 902 2,384

#### Road user casualties 1999-2003



### Estimated social cost of crashes\*

#### Social cost (\$ million)



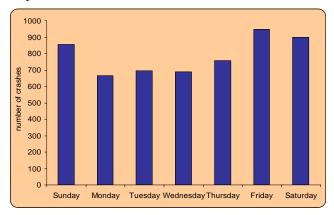
\*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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



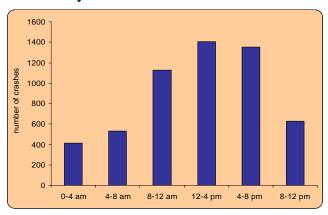
### When crashes occurred

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

#### Day of week for crashes 1999-2003



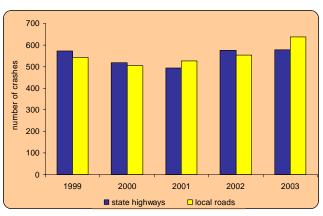
#### Time of day for crashes 1999-2003



### Where crashes occurred

During the 1999–2003 period, approximately 86 percent of fatal crashes (where one or more people were killed) and 59 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, 8,201 people were injured on Waikato Region roads.

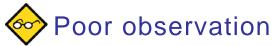
# Licence status of all drivers involved in injury crashes in 2003

Licence status	Urban	Rural	
	crashes	crashes	
Full licence	55%	66%	
Learner or restricted	19%	19%	
No or wrong licence	15%	2%	
Forbidden or disqualified	2%	2%	
Overseas	3%	4%	
Unknown	6%	7%	

# 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	Rural	
	crashes	crashes	
NZ European	66%	62%	
Maori	24%	25%	
Pacific Islander	2%	4%	
Asian	5%	7%	
Other	3%	2%	



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, however, with a lower social cost and a lower rate of severity.

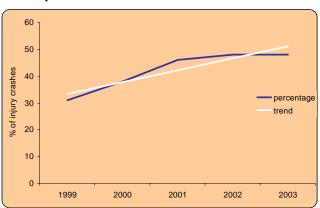
In the Waikato Region, poor observation was a factor in 36 percent of injury crashes in 2003. This is an increase from 2002 and increasing in line with the national trend.

There were 1,718 injury crashes relating to poor observation reported in the last five years.

Poor observation was predominantly an urban issue in the Waikato Region in 2003 and was a factor in 48 percent of the injury crashes occurring on roads with a speed limit lower than 70 km/h. Poor observation has increased as a factor on urban roads over the last five years, with the number of injury crashes rising from 219 in 2002 to 234 in 2003.

Just under half (46 percent) of poor observation crashes occurred at intersections.

#### Urban poor observation-related crashes



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.

# Territorial local authority performance

The Waikato Region is made up of a number of territorial local authorities (TLAs). The following table provides the percentage of poor observation related crashes that occurred for each TLA and their peer group\* during the period 1999–2003:

	TLA	Peer group*
Thames Coromandel	23%	28%
Hauraki	23%	23%
Matamata Piako	33%	28%
Waikato	28%	28%
Hamilton	45%	38%
Waipa	36%	28%
Otorohanga	22%	23%
Waitomo	17%	23%
South Waikato	23%	28%
Taupo	23%	28%

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

# Failure to give way

Failure to give way can occur at a number of locations including:

- at intersections with Give Way or Stop signs
- at pedestrian crossings
- when entering the roadway from a driveway.

Drivers who fail to give way generally fall into the following categories:

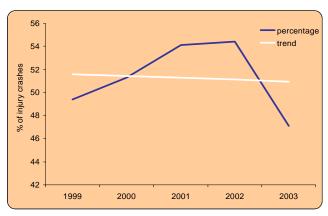
- those who don't understand the road rules and assume they have the right of way
- those who assume the other car is going to let them through or stop (and may be travelling too fast to stop themselves)
- those who lack courtesy in relation to lane changing and merging
- those who are complacent about (or deliberately ignore) the road rules.

Nationally, failure to give way was the fourth highest contributing factor in injury crashes during 2003. The total social cost of these crashes was \$303 million. In 2003, failure to give way caused the second highest number of crashes in New Zealand, ahead of drink-driving and speeding, but with a lower social cost and a lower rate of severity.

In the Waikato Region, intersection crashes have fluctuated over the last 10 years and continue to dominate, making up 30 percent of all crashes in the region in 2003. Forty-seven percent of urban crashes occurred at intersections in 2003 (down from 54 percent in 2002). These were typically turning and crossing type conflicts.

The main factors associated with urban intersection crashes in the Waikato Region were failure to give way or stop and poor observation. Rural intersections accounted for a smaller proportion of crashes in the Waikato Region than urban intersections, with 19 percent of rural crashes occurring at intersections in 2003.

#### **Urban intersection crashes**



#### **Key crash locations**

The following provides an indication of the key urban locations at which crashes occurred during the 1999–2003 period:

#### **Key locations**

#### **Thames Coromandel District**

- SH 26 and SH 25 intersection
- Mackay and Mary Streets intersection
- Mary and Pollen Streets intersection

#### **Hauraki District**

- SH 25 and Mueller Street intersection
- SH 2 and Kenny Street intersection
- SH 25 and Gilmour Street intersection

#### **Matamata Piako District**

- SH 26 and SH 27 intersection
- SH 27 and Peria Road intersection
- Studholme and Anderson Streets intersection

#### **Waikato District**

- SH 1 and Newcastle Street intersection
- SH 1 and Pukete Road intersection
- SH 1 and Gordonton Road intersection

#### **Hamilton City**

- Victoria and Mill Streets intersection
- Te Aroha Street and Peachgrove Road intersection
- SH 1 and Ellicott Road intersection

#### **Waipa District**

- Arawata and Mahoe Streets intersection
- SH 1 and Albert Street intersection
- Alpha and Bryce Streets intersection

#### **Waitomo District**

- Carroll and Ward Streets intersection
- SH 30 and SH 3 intersection
- SH 3 and Carroll Street intersection

#### **South Waikato District**

- SH 1 and Bridge Street intersection
- SH 1 and Hillcrest Street intersection
- Logan and Mannering Streets intersection

#### **Taupo District**

- SH 1 and Heuheu Street intersection
- Tauhara Road and AC Baths Avenue intersection
- SH 1 and Norman Smith Street intersection



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 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.

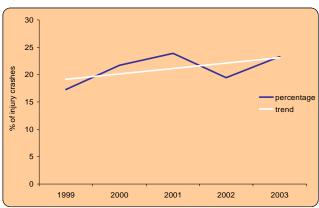
Nationally, speed is the major contributing factor to fatal road crashes. Crashes involving excessive speed tend to be more severe, and therefore, the associated social cost is much higher. In 1,917 crashes during 2003, the driver was travelling too fast for the conditions. These crashes resulted in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

In the Waikato Region, speed was a factor in 19 percent of injury crashes in 2003. This was an increase from 2002, increasing in line with the national trend. There were 953 speed-related injury crashes reported in the last five years.

Speed was predominantly a rural issue in the Waikato Region in 2003 and was a factor in 23 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 maximum speed of 100 km/h.

Speed has fluctuated as a factor on rural roads over the last 10 years, with the number of injury crashes rising from 130 in 2002 to 169 in 2003.

#### Rural speed-related crashes

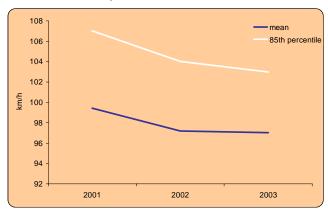


Responses from the Waikato Region to the 2003 Public Attitudes Survey indicated that:

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

	TLA	Peer group*
Thames Coromandel	26%	20%
Hauraki	20%	22%
Matamata Piako	16%	20%
Waikato	18%	20%
Hamilton	11%	13%
Waipa	16%	20%
Otorohanga	22%	22%
Waitomo	19%	22%
South Waikato	21%	20%
Taupo	22%	20%

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

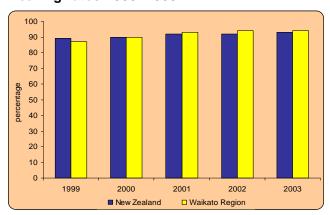


# Restraints and helmets

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

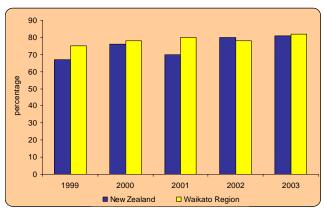
#### Wearing rates 1999-2003



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

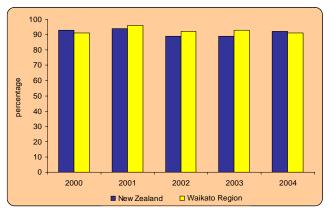
#### Wearing rates 1999-2003



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**

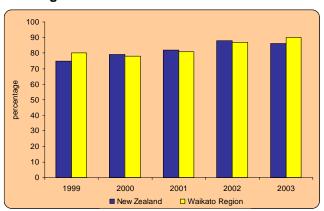
#### Wearing rates 2000-2004



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 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 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 drinkdrivers, 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

## **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 Waikato Region include:

#### **District Road Policing Managers**

New Zealand Police Inspector Leo Tooman PO Box 3078, Hamilton Phone 07 850 7063

Inspector Kevin Taylor PO Box 741, Rotorua Phone 07 349 9554

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

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

Hamilton City Dawn Williams Private Bag 3010, Hamilton Phone 07 838 6758

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

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

South Waikato District Robert Kathie Private Bag, Tokoroa Phone 07 886 1710

#### **Local Authority Engineers**

Andrew McKillop, Hamilton City Council
Alex Finn, Thames Coromandel District Council
Gene Thomsen, Hauraki District Council
Neville Boag, Matamata Piako District Council
Kaye Clark, Waikato District Council
Chris Clarke, Waipa District Council
Ian Gooden, Otorohanga District Council
Andrew Dixon, Waitomo District Council
Alex Shaw, South Waikato District Council
Bob Hopkins, Taupo District Council

#### **TNZ Area Managers**

Gerritt Van Blerk Alan Burkett Barry Dowsett 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

#### **Contacts**

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