

# road safety issues

July 2002

The Land Transport Safety Authority (LTSA) has prepared this Road Safety Issues Report. It is based on reported crash data and trends for the 1997–2001 period. The intent of the report is to highlight the key road safety issues and to identify possible ways to reduce the number of road deaths and injuries in the Rotorua district.

It happens to all drivers – their attention is diverted or they are distracted by something when driving, or they simply do not see another party on the road until it is too late. But just how much are these lapses in concentration costing us? A lot, according to this year's road safety statistics from the Bay of Plenty region. Lapses in concentration (we call it poor observation) are having more and more serious injury and fatal consequences in the region.

While speed and drink-driving remain serious road safety issues, we must also make drivers aware that lack of concentration on the road is having an increasingly high cost.

## Major road safety issues:

### Rotorua district

Speeding

Poor observation

Failure to give way

Restraints and helmets

### Nationally

Speeding

Drink-driving

Failure to give way

Restraints



## 2001 road toll for Rotorua district



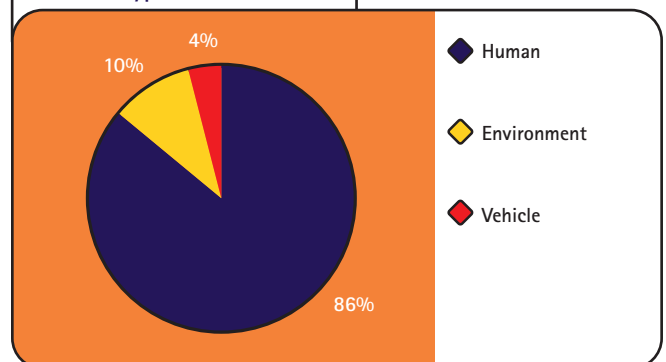
|                    |     |
|--------------------|-----|
| Deaths             | 9   |
| Serious casualties | 40  |
| Minor casualties   | 159 |



|                        |     |
|------------------------|-----|
| Fatal crashes          | 8   |
| Serious injury crashes | 28  |
| Minor injury crashes   | 87  |
| Non-injury crashes     | 498 |

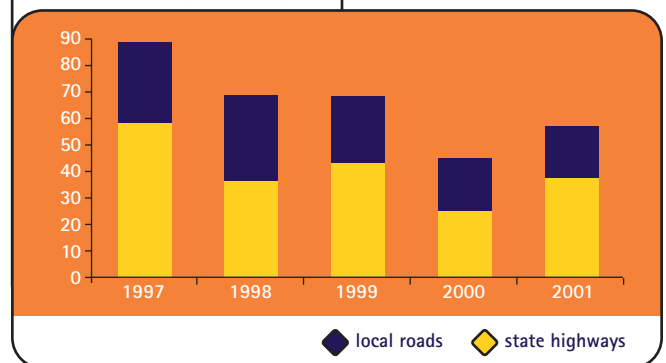
## Regional crash causes 1997–2001

User type 1997–2001



## Estimated social cost of crashes\*

Social cost (\$ million)

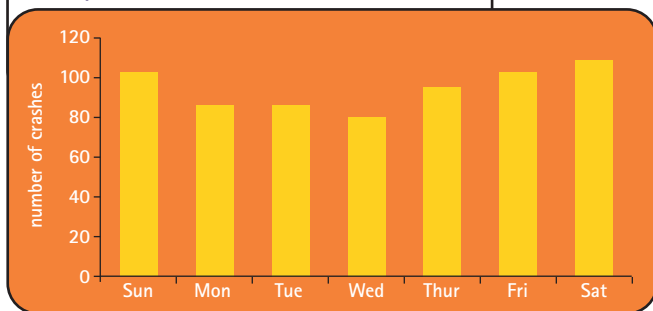


\* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2001 prices.

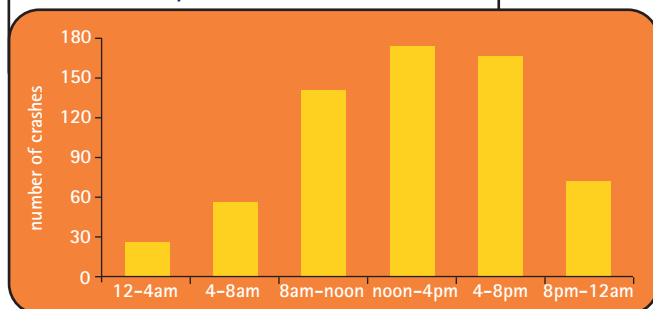
## When crashes occurred

Crashes resulting in injury can occur at any time, but in the Rotorua district between 1997 and 2001, Saturday and early afternoon (12–4pm) were the worst periods.

Day of week for crashes 1997–2001



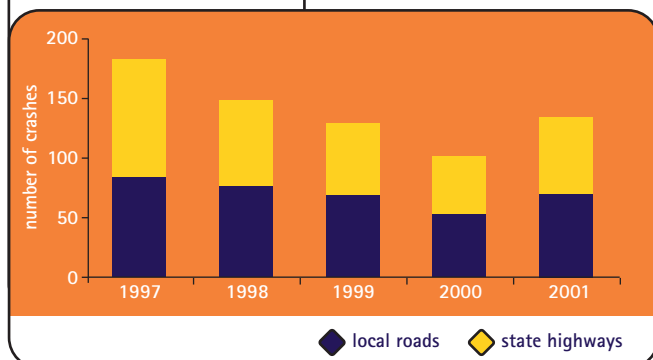
Time of day for crashes 1997–2001



## Where crashes occurred

During the 1997–2001 period approximately 46 percent of fatal crashes (where one or more people were killed) and 54 percent of injury crashes occurred on urban roads. In rural areas there was a greater chance of a crash being fatal due to higher speed limits, than in an urban area.

Location of crashes



## Who was involved in crashes

Between 1997 and 2001, 1,056 people were injured on Rotorua district roads. Drivers accounted for 45 percent of the people injured and passengers 35 percent.

Other road user groups among the injured in this period included motorcyclists (seven percent), cyclists (three percent) and pedestrians (seven percent).

### Licence status of all drivers involved in injury crashes in 2001

| Licence status            | Urban crashes | Rural crashes |
|---------------------------|---------------|---------------|
| Full licence              | 62%           | 48%           |
| Learner or restricted     | 14%           | 18%           |
| No or wrong licence       | 14%           | 11%           |
| Forbidden or disqualified | 2%            | –             |
| Overseas                  | 3%            | 3%            |
| Unknown                   | 5%            | 20%           |

# 80 Speeding

Speeding includes not only exceeding the speed limit, but also driving too fast for the condition of the road. Driving at 100 km/hr in a light rain requires the same stopping distance as driving at 120km/hr on a sunny day.

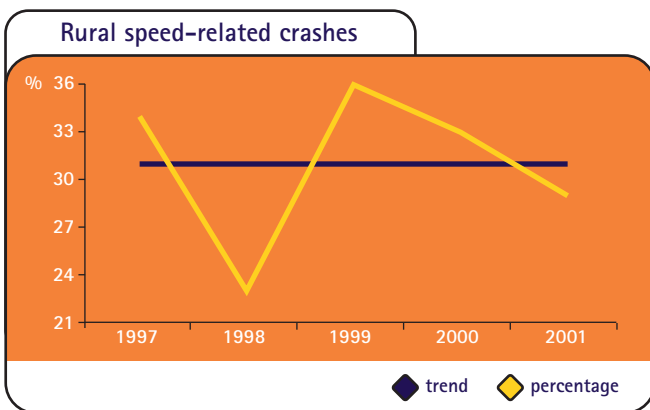
Nationally, speeding was the highest contributing factor in crashes in 2001 and resulted in a total social cost of \$770 million.

In the Rotorua district, speed was a factor in 24 percent of injury crashes in 2001 – an increase from 2000 – and increasing against the national trend.

There were 156 speed-related injury crashes reported in the last five years.

Speed was predominately a rural issue in the Rotorua district in 2001 and was a factor in 29 percent of the injury crashes occurring on roads with a speed limit greater than 70km/hr. Most roads in the Bay of Plenty were built for 80km/hr speeds and cannot be driven safely at the open road maximum of 100km/hr.

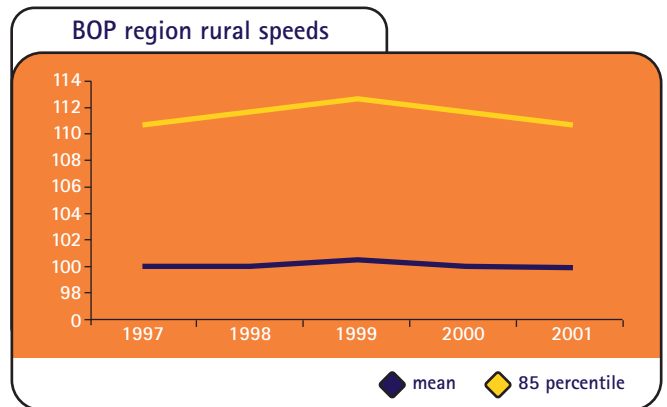
Speed has fluctuated as a factor on rural roads over the last five years, with the number of injury crashes rising from 14 in 2000 to 15 in 2001.



Responses from the Bay of Plenty region to the 2001 Public Attitudes Survey indicated:

- 26 percent of drivers said that they enjoyed driving fast on the open road
- 20 percent of drivers agreed that there was little chance of an accident when speeding if they were careful
- 44 percent of drivers thought that the risk of being caught speeding was small
- 82 percent thought that enforcing the speed limit helped to lower the road toll.

Speed surveys are undertaken annually throughout the country by LTSA and it is pleasing to see that nationally both urban and rural speeds are decreasing. The following graph illustrates the results of surveys undertaken in the Bay of Plenty region over the last five years:



## The initiatives

- Thirty-one New Zealand Police are dedicated to state highway patrol duties within the Bay of Plenty Police district. Their task is road safety enforcement, focusing on speed, alcohol, restraints and accident-promoting offences.
- A region-wide review of speed camera locations by the New Zealand Police, LTSA, road controlling authorities (RCAs) and other key stakeholders was undertaken this year with several existing sites being removed along with new sites being identified. Regular reviews of speed camera sites will ensure that their deployment continues to be targeted toward risk.
- The three-year region-wide open road project is now in its third and final year and is focused on crash causes on high-risk open roads.
- Regular reviews of speed limits by RCAs will ensure that they correctly reflect the level of development and the expectations of the average road user.
- Thresholds designed to encourage motorists to slow down upon entering urban areas are being used more throughout the region. Thresholds may include signs, planting, lighting, traffic islands and road marking.
- Knowledge-based road policing will ensure that police activities are targeted to risk locations.



## Poor observation

Poor observation is a challenging issue for all road safety groups to address. In particular, we need to consider how to address:

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

Driving requires a driver to concentrate not only on what they are doing, but also on the actions of others sharing the road.

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 talking on the cellphone or being distracted by children in the back seat
- not seeing or looking for another party until too late, eg not checking behind when changing lanes, 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 2001 and resulted in a total social cost of \$499 million.

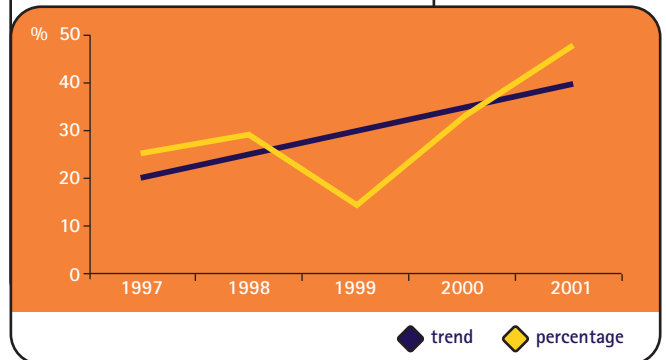
In the Rotorua district, poor observation was a factor in 33 percent of injury crashes in 2001 – an increase from 2000 – and increasing in line with the national trend.

There were 138 injury crashes relating to poor observation reported in the last five years.

Poor observation was predominately an urban issue in the Rotorua district during 2001, and a factor in 48 percent of the injury crashes occurring on roads with a speed limit lower than 70km/hr. Poor observation has increased as a factor on urban roads over the last three years, with the number of injury crashes rising from 17 in 2000 to 34 in 2001.

Forty-five percent of poor observation crashes occurred at intersections.

Poor observation related crashes



## The initiatives

- Roads need to be clear and self-explanatory, to reduce the scope for road user error. All road controlling authorities (RCAs) can help achieve this by ensuring that road marking and signage on their road network are maintained to appropriate standards and ensuring that motorists receive no surprises in their journeys.
- The driver licensing system now requires drivers to have their eyesight checked when they renew their licence (every 10 years) or when they apply for a licence, a new licence class or a new licence endorsement.
- Road safety audits can be used to ensure that appropriate and consistent sight distances and intersection controls are used by RCAs. The LTSA is able to assist with audits.
- The British government has established a long-term publicity strategy. Their THINK! campaign is about people using the roads safely, whether driving, walking, cycling or using public transport. Unlike previous campaigns, which concentrated on a particular road safety issue, THINK! is a year-round road safety banner for all campaigns, aiming to create a greater public awareness of all road safety issues. Further information can be found on the website: [www.think.detr.gov.uk](http://www.think.detr.gov.uk).



# Failure to give way

Failure to give way causes the highest number of crashes in New Zealand, ahead of drink-driving and speeding. In terms of social cost, it is the third biggest road safety problem.

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

- Those who do not 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 third highest contributing factor in injury crashes during 2001 and resulted in a total social cost of \$499 million.

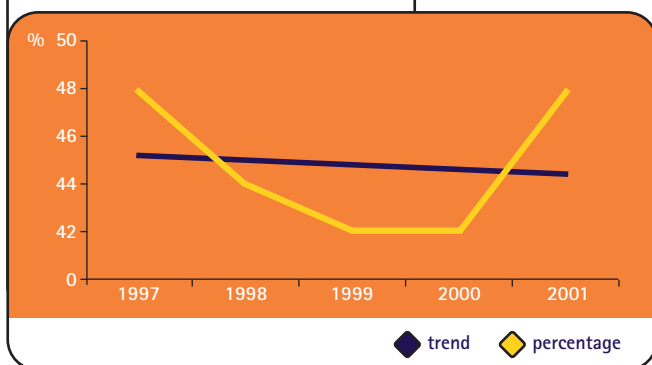
In the Rotorua district, intersection crashes have increased over the last three years, making up 33 percent of all crashes in the district in 2001.

Forty-eight percent of urban crashes occurred at intersections during 2001 (up from 42 percent in 2000). These were typically turning and crossing conflicts.

The main factor associated with urban intersection crashes in the Rotorua district was a failure to give way or stop.

Rural intersections accounted for a smaller proportion of crashes in the Rotorua district than urban intersections, with 12 percent of rural crashes occurring at intersections during 2001.

Urban intersection crashes



## Black spot intersections

State Highway 30 and State Highway 30A intersection

State Highway 30A and Fenton Street intersection

State Highway 5 and Old Quarry Road intersection

Arawa Street and Tutanekai Street intersection

State Highway 5 and State Highway 30A intersection

## Increasing incidence sites\*

Arawa Street and Tutanekai Street intersection

State Highway 30 and Tarawera Road intersection

State Highway 30A and Fenton Street intersection

Malfroy Road and State Highway 5 intersection

\* sites with significant increase in crashes in 2001

## The initiatives

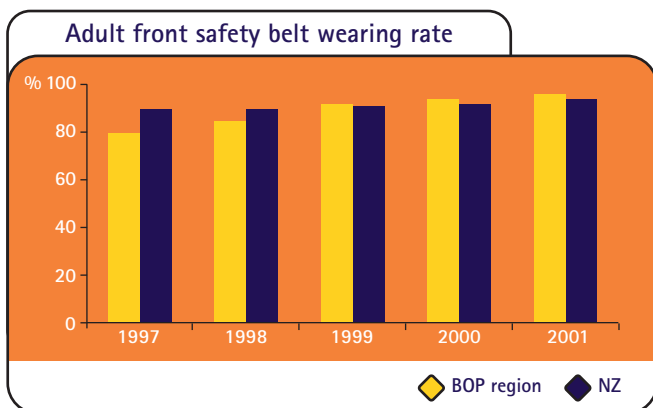
- Knowledge-based enforcement will ensure that police activities are targeted to risk locations.
- Public consultation documents for the Road User Rule and Traffic Control Devices Rule are due for release in the near future. These documents are proposing a number of changes, including changes to the give way rules, requirements for road marking and use of roundabouts.
- Road controlling authorities can assist motorists by giving good, clear messages on their roading networks. Intersections can be improved by installing devices such as signals, roundabouts, traffic islands, and Stop and Give Way controls.
- Signalised intersections also need to be regularly checked to ensure that detectors and signals are working correctly and that the phasing of the signals provides safe and efficient traffic movements.



# Restraints and helmets

## Front seat safety belt use – adults

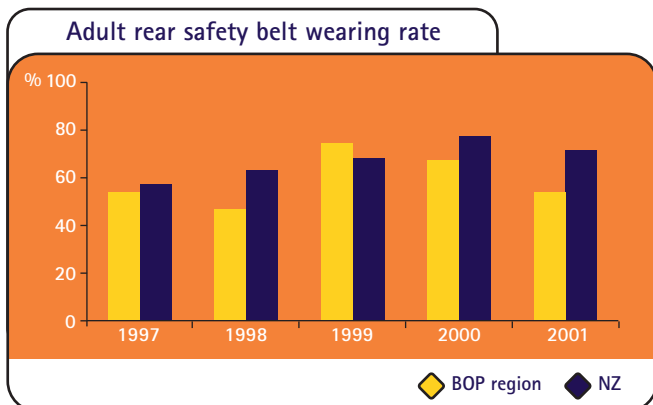
The national compliance rate for safety belt use by adults in front seats rose by two percent to 92 percent during 2001. In the Bay of Plenty region, the wearing rate continued to be above the national average and rose two percent to 94 percent.



## Rear seat safety belt use – adults

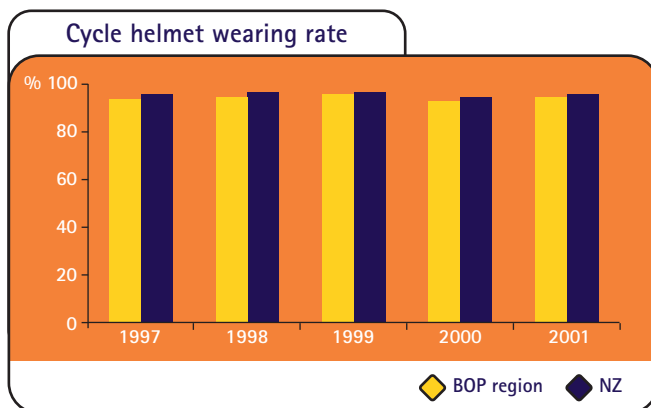
Responses from the Bay of Plenty region to the 2001 Public Attitudes Survey indicated that 11 percent of those surveyed thought that the chance of an adult being caught not wearing a safety belt as a rear seat passenger was very or fairly likely.

The national compliance rate of safety belt use by adults in rear seats fell from 76 percent to 70 percent in 2001. In the Bay of Plenty region, the wearing rate continued to be below the national average and fell a dramatic 13 percent to 53 percent.



## Cycle helmets

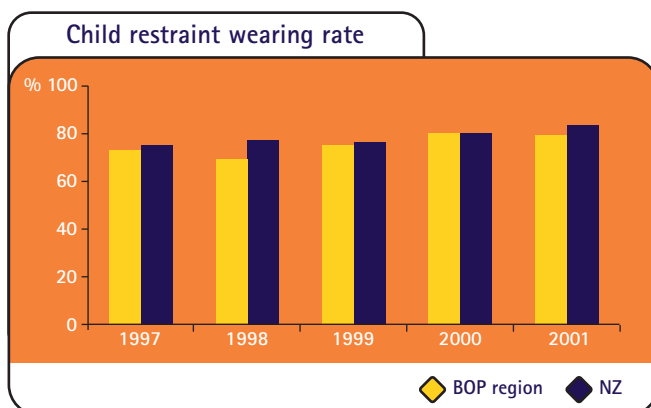
The national compliance rate for cycle helmet wearing improved by one percent to 94 percent during 2001. The Bay of Plenty region wearing rate also improved, rising two percent to 93 percent for 2001 – a similar level to 1998 wearing rates.



## Child restraint use

Responses from the Bay of Plenty region to the 2001 Public Attitudes Survey indicated that 27 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.

Nationally, the child restraint wearing rate improved slightly in 2001 – up three percent to 82 percent. In the Bay of Plenty region, the wearing rate dropped slightly in 2001 – down one percent to 78 percent.



# Partnerships

The LTSA works closely with many road safety partners at national, regional and local levels. These include the New Zealand Police, local authorities, Transit New Zealand, Accident Compensation Corporation, health authorities and local service providers.

## Road Safety Partnership Plans

Road Safety Partnership Plans will be developed over the next 12 months to reflect the collaborative process whereby the road safety partners agree on the risk, identify objectives, direct tasks, set targets and monitor and review road safety progress. Partnership Plans will focus on the joint local authority areas that reflect the seven New Zealand Police areas within the Waikato and Bay of Plenty regions and will be based on Road Safety Action Plans.

Road Safety Action Plans (RSAPs) take a number of forms. RSAPs focusing on community education and road environment are developed annually by road controlling authorities and regional councils to outline the road safety issues and risk areas, objectives, actions and management systems. Policing RSAPs are developed quarterly by the New Zealand Police and are used as the basis for weekly/monthly Risk Targeted Patrol Plans (RTPPs) for frontline staff.

## Community Road Safety Programme reviewed

A major component of the New Zealand Road Safety Programme, New Zealand's annual plan for road safety, is delivered through the Community Road Safety Programme (CRSP). The CRSP draws on major public health and community development strategies to assist its work, including those set out in the Ottawa Charter for health promotion.

A review of the CRSP has recently been completed. The aim of the review was to enhance the efficiency and effectiveness of the CRSP, which is now responsible for more than \$6 million in funding annually.

The review recommendations fall into four main groups.

- Ensuring a common understanding of the overall context and concept of the CRSP and developing operational alignment with this understanding.
- Improving decision making and streamlining the administrative processes.
- Building capacity at the community, local and regional levels to operate the programme effectively.
- Developing and implementing a treaty strategy and a cultural strategy.

Funding from the CRSP for the Rotorua district for the 2002/2003 year is proposed as follows:

### Community development

Road safety co-ordinator

Community run projects

### Road safety programmes

Driver licensing project

Small activities programme

The Rotorua district road safety co-ordinator is employed directly by the Rotorua District Council and part funded by the LTSA.

The Rotorua district will also be involved this year in the following region-wide projects:

### Road safety programme

Regional restraints campaign

### Social marketing

Open road safety project

## Road safety engineering

'Road controlling authorities can continuously improve road safety performance by adopting quality assurance systems for the design and management of their roading networks. Leading RCAs, with LTSA's assistance, are currently developing safety management systems to identify road safety strategies, standards, expertise, management systems and audit regimes appropriate to their roading network. Safe road environments through RCA commitments to their safety management systems will support policing and education in halving the road toll over the next 10 years.'

Glenn Bunting  
LTSA Regional Manager, Waikato and Bay of Plenty

The Rotorua district has a number of road safety engineering projects proposed for funding in 2002/2003, including:

- minor safety improvement involving right turn bay installation, sight benching, guard rails, curve realignments, traffic management and Kea Crossing installations
- widening of Ashpit Road.

## Road policing

'Police in the Bay of Plenty have set out to reduce the road toll in the district by 20 percent (71 deaths in 2001 to 57 in 2002).

We are confident this can be achieved through better deployment of police resources to the four key risks – speed, alcohol, poor observation and not using safety belts.'

Superintendent Gary Smith  
District Commander, Bay of Plenty

## Land Transport Safety Authority

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

- crash reduction studies
- safety audits
- crash data provision and analysis
- general road safety advice
- general road engineering advice.

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 ([www.ltsa.govt.nz](http://www.ltsa.govt.nz)).

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