

# 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 key road safety issues and to identify possible ways to reduce the level of road deaths and injuries in the Rotorua Area.

‘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

### Rotorua Area

Poor observation
Speed
Failure to give way
Restraints and Helmets

### Nationally

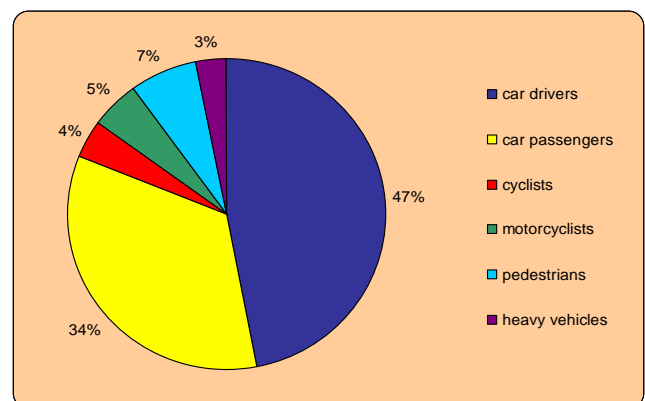
Speed
Drink-driving
Failure to give way
Restraints



## 2003 road trauma for Rotorua Area

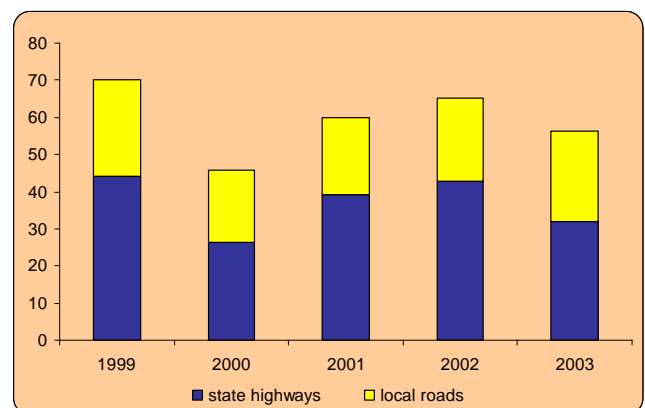
	Deaths	10
	Serious casualties	38
	Minor casualties	231
<hr/>		
	Fatal crashes	5
	Serious injury crashes	28
	Minor injury crashes	158
	Non-injury crashes	575

## Road user casualties 1999–2003



## Estimated social cost of crashes\*

### Social cost (\$ million)

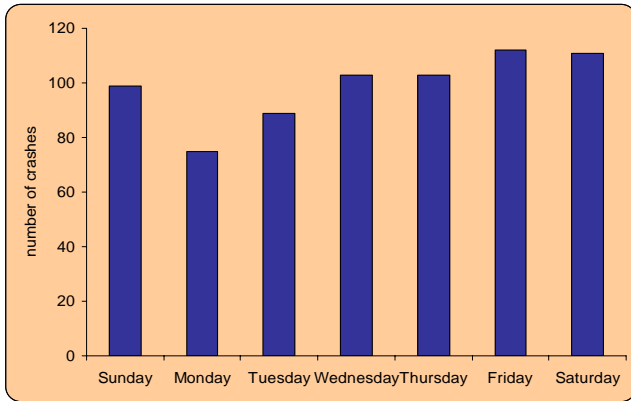


\*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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

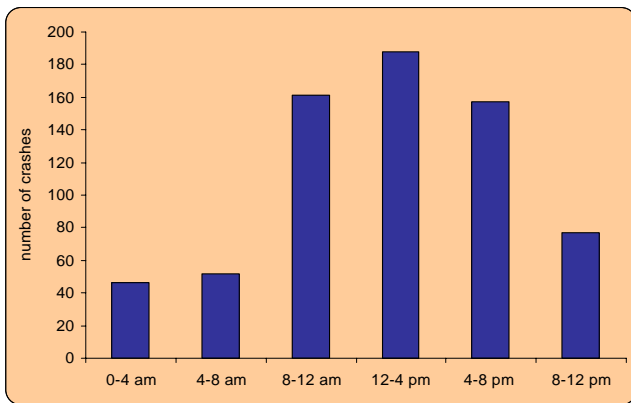
## When crashes occurred

Crashes resulting in injury can occur at any time, but in the Rotorua 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



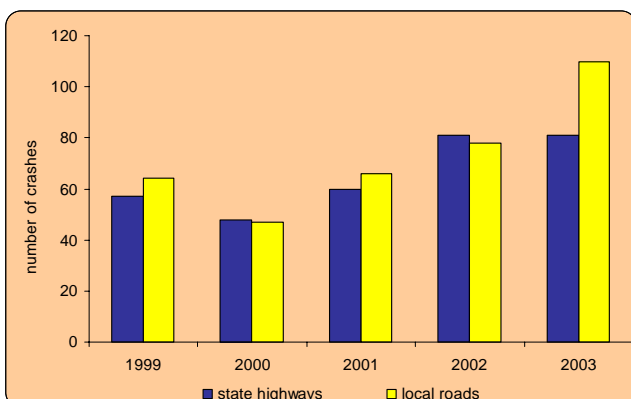
Time of day for crashes 1999–2003



## Where crashes occurred

During the 1999–2003 period, approximately 58 percent of fatal crashes (where one or more people were killed) and 41 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, 1,072 people were injured on Rotorua Area roads.

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

Licence status	Urban crashes	Rural crashes
Full licence	59%	60%
Learner or restricted	18%	20%
No or wrong licence	14%	5%
Forbidden or disqualified	4%	4%
Overseas	2%	6%
Unknown	3%	4%

### 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	52%	52%
Maori	40%	35%
Pacific Islander	2%	4%
Asian	3%	8%
Other	3%	1%



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

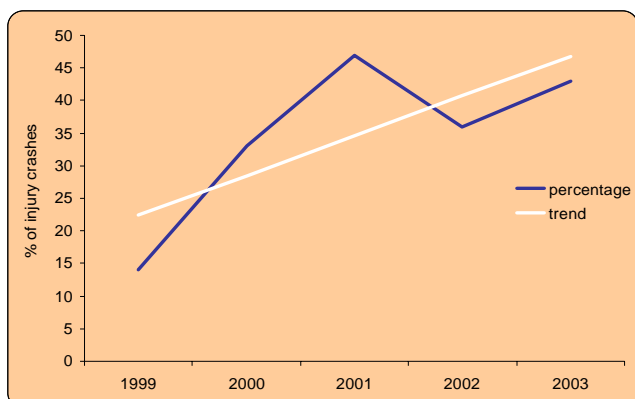
In the Rotorua Area, poor observation was a factor in 35 percent of injury crashes in 2003, an increase from 2002 and increasing in line with the national trend.

There were 195 injury crashes relating to poor observation reported in the last five years.

Poor observation was predominantly a urban issue in the Rotorua Area in 2003 and was a factor in 43 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 34 in 2002 to 51 in 2003.

The majority (54 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.

### Key crash locations

The following table provides a breakdown of the key locations at which poor observation crashes occurred during the 1999–2003 period:

#### Rotorua District

- SH 5 and Oturoa Road intersection
- SH 5 (1,000 m south of Ngongotaha Road)
- SH 30A and Te Ngae Road intersection
- SH 30A and Ranolf Street intersection
- Fenton and Devon Streets intersection
- Hinemoa and Hinemaru Streets intersection

### Territorial local authority performance

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

	TLA	Peer group*
Rotorua District	28%	32%

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

## 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.

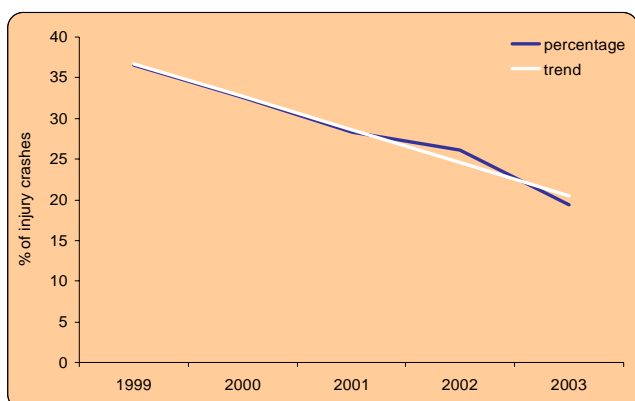
In 1,917 crashes during 2003, the driver was travelling too fast for the conditions. These crashes resulted in a total social cost of \$671 million. Drivers travelling at excessive speed accounted for around 14 percent of open road crashes.

In the Rotorua Area, speed was a factor in 14 percent of injury crashes in 2003. This was a decrease from 2002, decreasing against the national trend. There were 149 speed-related injury crashes reported in the last five years.

Speed was predominantly a rural issue in the Rotorua Area in 2003 and was a factor in 19 percent of the injury crashes occurring on roads with a speed limit greater than 70 km/h. Most roads in the Bay of Plenty Region were built for 80 km/h speeds and cannot be driven safely at the open road maximum of 100 km/h.

Speed has decreased as a factor on rural roads over the last five years, with the number of injury crashes falling from 17 in 2002 to 14 in 2003.

### Rural speed-related crashes

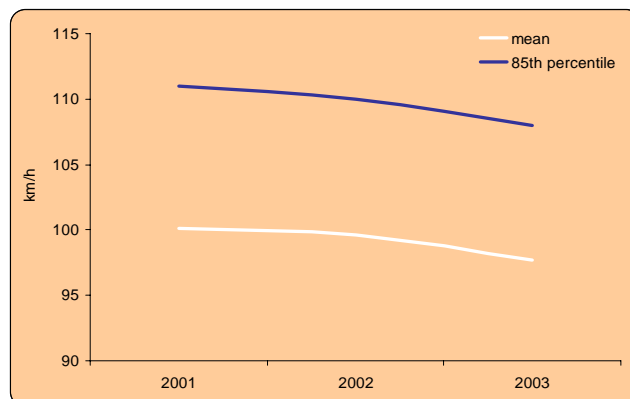


Responses from the Bay of Plenty Region to the 2003 Public Attitudes Survey indicated that:

- 45 percent of drivers said they enjoyed driving fast on the open road
- 28 percent of drivers agreed there was little chance of a crash when speeding if they were careful
- 30 percent of drivers thought the risk of being caught speeding was small
- 78 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 Bay of Plenty Region over the last three years.

### Bay of Plenty rural speeds



## Territorial local authority performance

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

	TLA	Peer group*
Rotorua District	22%	17%

\* 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 all crashes in New Zealand, ahead of drink-driving and speeding but with a lower social cost and a lower rate of severity.

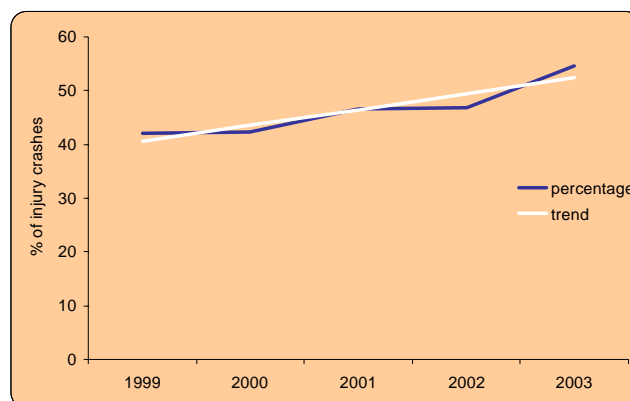
In the Rotorua Area, intersection crashes have increased over the last four years making up 38 percent of all crashes in the area in 2003.

Fifty-five percent of urban crashes occurred at intersections in 2003 (up from 47 percent in 2002). These were typically turning and crossing type conflicts.

The main factors associated with urban intersection crashes in the Rotorua Area were failure to give way or stop, and poor observation.

Rural intersections accounted for a smaller proportion of crashes in the Rotorua Area than urban intersections, with 10 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

#### Rotorua District

- SH 30A and Te Ngae Road intersection
- SH 30A and Ranolf Street intersection
- SH 5 and Sunset Road intersection
- SH 30A and Hinemaru Street intersection
- SH 5 and Malfroy Road intersection
- SH 5 and Tallyho Street intersection
- Fenton and Victoria Streets intersection

The following provides an indication of the key locations at which there was a significant increase in the number of crashes recorded in 2003:

### Increasing incidence locations

#### Rotorua District

- Arawa and Tutanekai Streets intersection
- SH 30A and Te Ngae Road intersection
- SH 5 and Tallyho Street intersection
- Fenton and Devon Streets intersection

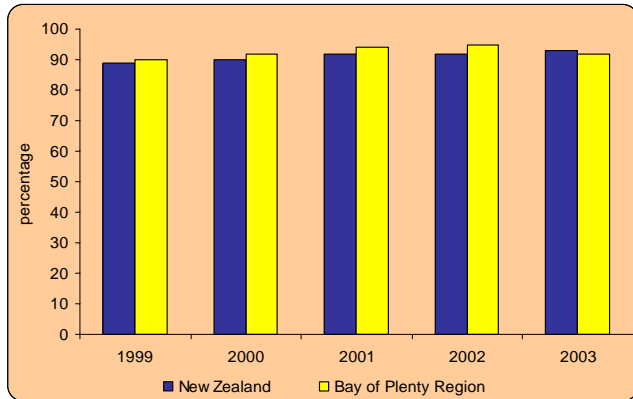


## Restraints and helmets

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

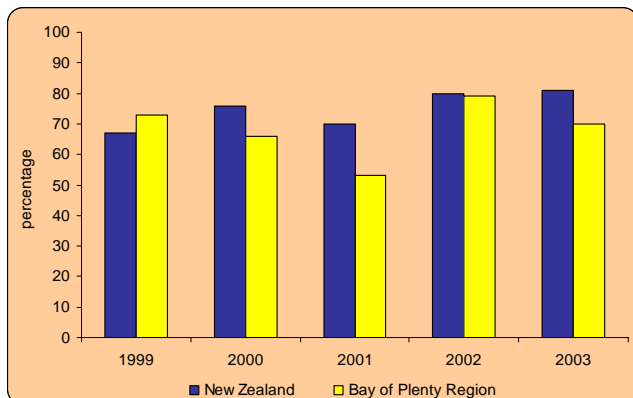
#### Wearing rates 1999–2003



Responses from the Bay of Plenty Region to the 2003 Public Attitudes Survey indicated that 35 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

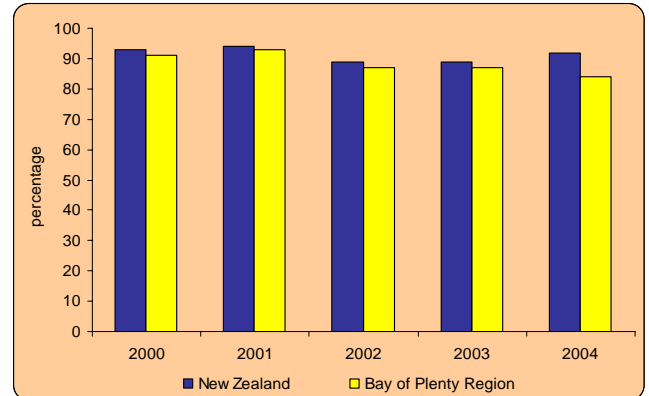
#### Wearing rates 1999–2003



Responses from the Bay of Plenty 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

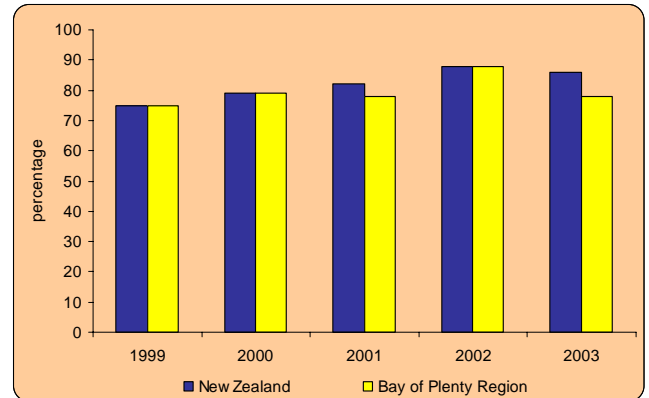
#### Wearing rates 2000–2004



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 Bay of Plenty Region to the 2003 Public Attitudes Survey indicated that 32 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 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:

- 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
- 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
- the introduction of 'anywhere anytime' speed cameras.

'Road policing in the Bay of Plenty Police District is the responsibility of all Police staff. While we now have a dedicated 'TAG' Traffic Alcohol Group focused on drink-drivers, alcohol enforcement is still the responsibility of all staff. Although speed enforcement on the highway network is one of the primary roles of the Highway Patrol, everyone else contributes to the effort. A similar approach is taken with other key strategic risk factors impacting on road safety.

While we continue to have unacceptably high levels of road trauma, we will continue to focus on the high-risk behaviours contributing to that trauma.

With the use of well constructed risk-targeted deployment plans, we aim to do the right thing in the right place at the right time, all the time!

Through a 'whole of policing' approach to road policing we intend to further reduce both the road toll and road trauma in the Bay of Plenty.'

Inspector Kevin Taylor  
Road Policing Manager  
Bay of Plenty Police 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 Rotorua Area include:

### **New Zealand Police**

District Road Policing Manager  
Inspector Kevin Taylor  
PO Box 741  
Rotorua  
Phone 07 349 9554

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

Cedric Rogers  
Rotorua District Council  
Private Bag 3029  
Rotorua  
Phone 07 348 4199

Mike Seabourne  
Transport Planner  
Bay of Plenty Regional Council  
PO Box 364  
Whakatane  
Phone 0800 368 267

### **Road Controlling Authority Engineer**

Kevin Thompson  
Rotorua District Council  
Private Bag 3029  
Rotorua  
Phone 07 348 4199

### **Accident Compensation Corporation**

ACC Injury Prevention Consultant  
Rotorua and Taupo area  
Louise Kirk  
PO Box 649  
Rotorua  
Phone 07 350 0315

## 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

### **Land Transport Safety Authority**

Regional Manager  
Glenn Bunting  
Phone 07 958 7840

Education  
Laura Whangapirita  
Phone 07 958 7843

Engineering  
Robyn Denton  
Phone 07 958 7864

Hamilton Regional Office  
Private Bag 3081  
183 Collingwood Street, Hamilton  
Phone 07 958 7840, Fax 07 958 7866  
[www.ltsa.govt.nz](http://www.ltsa.govt.nz)