

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 Transit New Zealand (TNZ) Region Three.

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 Waikato 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:

TNZ Region Three

Poor observation

Speeding

Road factors

Restraints and helmets

Nationally

Speeding

Drink-driving

Failure to give way

Restraints



2001 road toll for TNZ Region Three



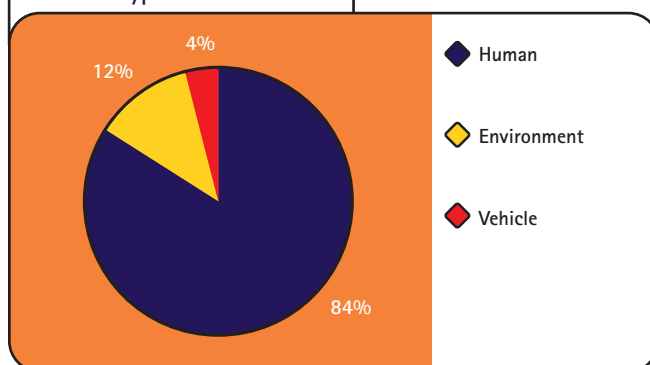
Deaths	62
Serious casualties	148
Minor casualties	537



Fatal crashes	45
Serious injury crashes	94
Minor injury crashes	313
Non-injury crashes	1,022

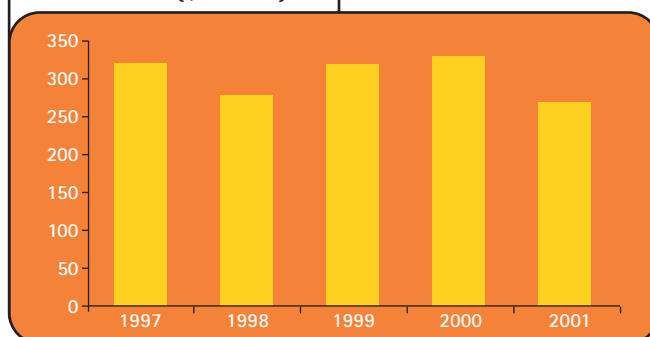
Regional crash causes 1997–2001

User type 1997–2001



Estimated social cost of crashes*

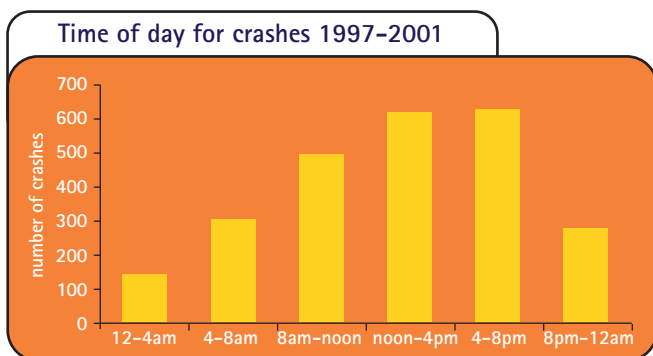
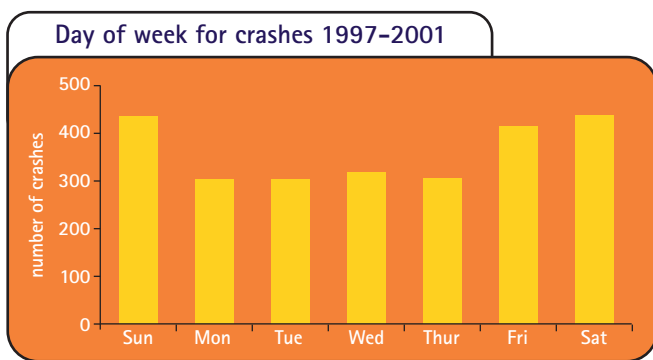
Social cost (\$ million)



* 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.

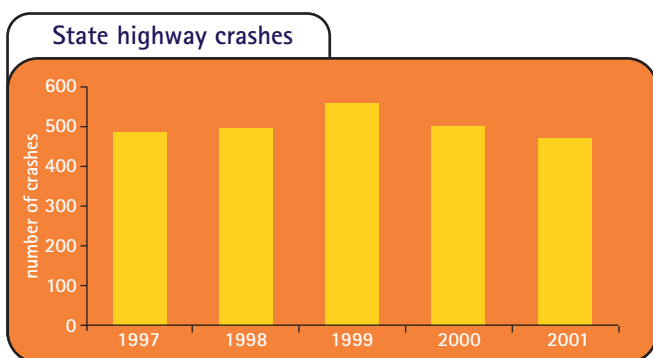
When crashes occurred

Crashes resulting in injury can occur at any time, but in TNZ Region Three between 1997 and 2001, Saturday and late afternoon (4–8pm) were the worst periods.



Where crashes occurred

During the 1997–2001 period approximately 90 percent of fatal crashes (where one or more people were killed) and 76 percent of injury crashes occurred on rural roads. In rural areas there was a greater chance of a fatal accident occurring than in an urban area, due to the higher speed limits.



Who was involved in crashes

Between 1997 and 2001, 3,993 people were injured on TNZ Region Three roads. Drivers accounted for 51 percent of persons injured and passengers 33 percent.

Other road user groups represented among those injured in this period include motorcyclists (five percent), cyclists (two percent) and pedestrians (three percent).

Licence status of all drivers involved in injury crashes in 2001

Licence status	Urban crashes	Rural crashes
Full licence	65%	67%
Learner or restricted	13%	14%
No or wrong licence	9%	6%
Forbidden or disqualified	2%	2%
Overseas	3%	2%
Unknown	8%	9%



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 TNZ Region Three, poor observation was a factor in 30 percent of injury crashes in 2001 – an increase from 2000 – and increasing in line with the national trend.

There were 520 poor observation related injury crashes reported in the last five years.

Poor observation was predominately a rural issue in TNZ Region Three in 2001 and was a factor in 27 percent of the injury crashes occurring on roads with a speed limit greater than 70km/hr.

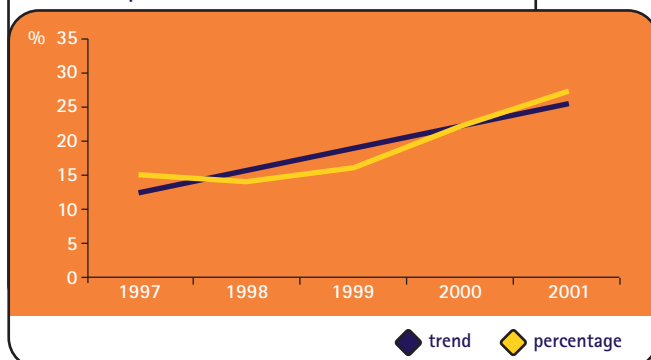
Poor observation has increased as a factor on rural roads over the last five years, with the number of injury crashes rising from 83 in 2000 to 91 in 2001.

More than one third (36 percent) of poor observation crashes occurred at intersections.

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 roadmarking and signage on their road network are maintained to appropriate standards and ensuring that motorists receive no surprises in their journeys.
- The LTSA 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.

Rural poor observation related crashes



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.

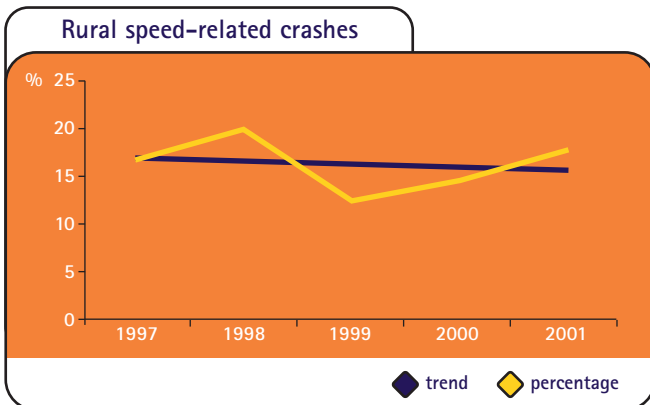
Nationally, speeding was the highest contributing factor in crashes in 2001 and resulted in a total social cost of \$770 million.

In TNZ Region Three speed was a factor in 18 percent of injury crashes in 2001 – an increase from 2000 – and increasing against the national trend.

There were 376 speed-related injury crashes reported in the last five years.

Speed was predominately a rural issue in TNZ Region Three in 2001 and was a factor in 19 percent of the injury crashes occurring on roads with a speed limit greater than 70km/hr.

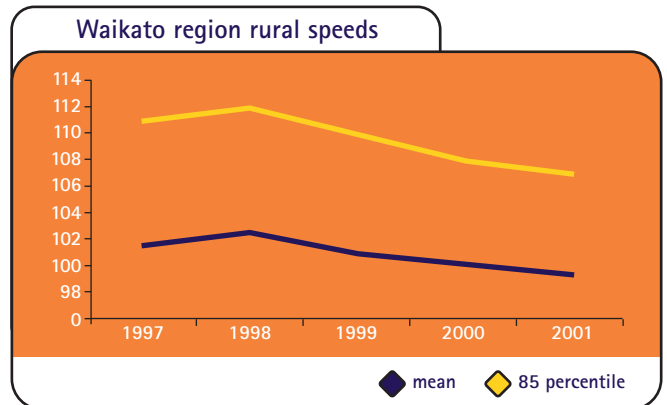
Speed has increased as a factor on rural roads over the last three years, with the number of injury crashes rising from 58 in 2000 to 64 in 2001.



Responses from the Waikato region to the 2001 Public Attitudes Survey indicated:

- 47% of drivers said that they enjoyed driving fast on the open road
- 19% of drivers agreed that there was little chance of an accident when speeding if they were careful
- 43% of drivers thought that the risk of being caught speeding was small
- 77% 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 Waikato region over the last five years.



The initiatives

- Thirty-one New Zealand Police are dedicated to state highway patrol duties within the Waikato 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.



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 as a contributing factor in crashes include those conditions that affect the way a driver reacts to the driving conditions, such as:

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

Nationally, road factors were a contributing factor in 12 percent of injury crashes in the 1997–2001 period, with slippery road surfaces and limited visibility being the two key conditions.

In TNZ Region Three, road factors featured in 16 percent of injury crashes in 2001 – a decrease from 2000 – and decreasing against the national trend.

There were 347 road factor related injury crashes reported in the last five years.

Road factors were predominately a rural issue in TNZ Region Three in 2001 and featured in 19 percent of the injury crashes occurring on roads with a speed limit greater than 70km/hr.

Road factors have increased as a factor on rural roads over the last 10 years, with the number of injury crashes falling from 81 in 2000 to 63 in 2001.

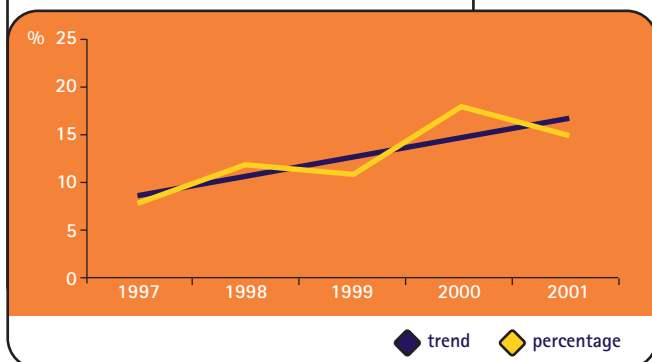
The road factors involved in crashes in TNZ Region Three over the last five years were:

	1997–2001
Slippery road	276
Road surface in poor condition	41
Road obstructed	7
Visibility limited	62
Signs and signals in poor condition	11
Street/lighting in poor condition	3

The initiatives

- Roading countermeasures can reduce or mitigate crashes by addressing both crash prevention (the safe construction, maintenance and management of roads) and crash reduction (the most effective and cost-beneficial techniques being applied to improving safety outcomes). Road controlling authorities (RCAs) can ensure crashes are reduced or mitigated on their road network most effectively by employing a balance of remedial (crash investigation studies) and preventive (road safety audit) programmes.
- The LTSA undertakes annual surveys of RCAs to monitor compliance with road and traffic standards and guidelines. The survey this year has focused on school patrol crossings.
- Slippery road surfaces are the most common road factor in crashes. Road controlling authorities should be utilising crash data to identify locations where resealing may be warranted due to low levels of skid resistance in the current surfacing.

Rural road factor related crashes

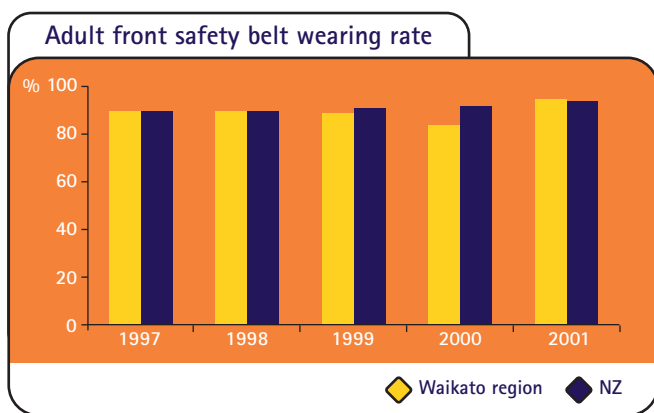




Restraints and helmets

Front seat safety belt use – adults

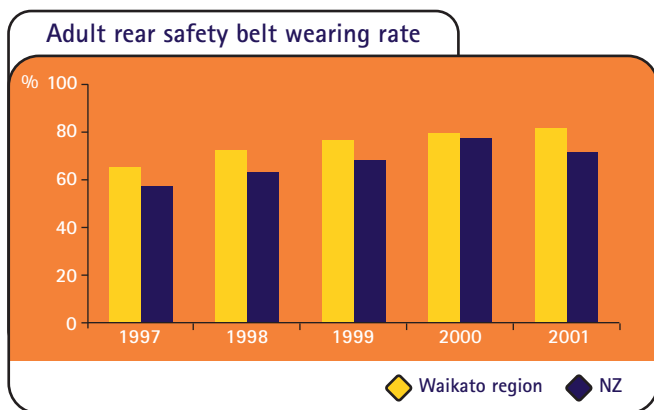
The national compliance rate for safety belt use by adults in front seats rose by two percent to 92 percent during 2001. In the Waikato region, the wearing rate improved a substantial 11 percent to be above the national average at 93 percent.



Rear seat safety belt use – adults

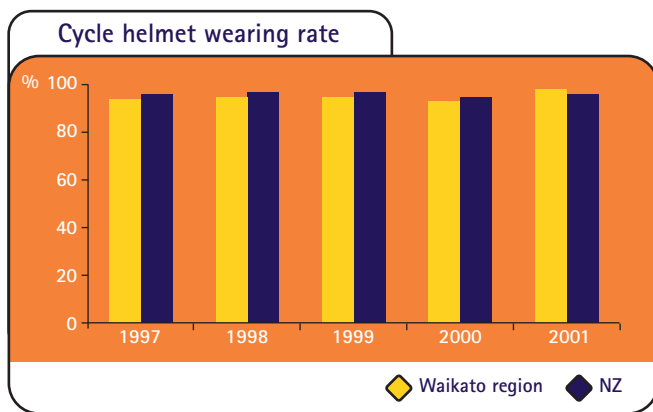
Responses from the Waikato region to the 2001 Public Attitudes Survey indicated that 13 percent of those surveyed thought that the chance of an adult being caught not wearing a safety belt as a rear seat passenger was very or fairly likely.

The national compliance rate of safety belt use by adults in rear seats fell from 76 percent to 70 percent in 2001. In the Waikato region, the wearing rate continued to be above the national average and rose by two percent to 80 percent.



Cycle helmets

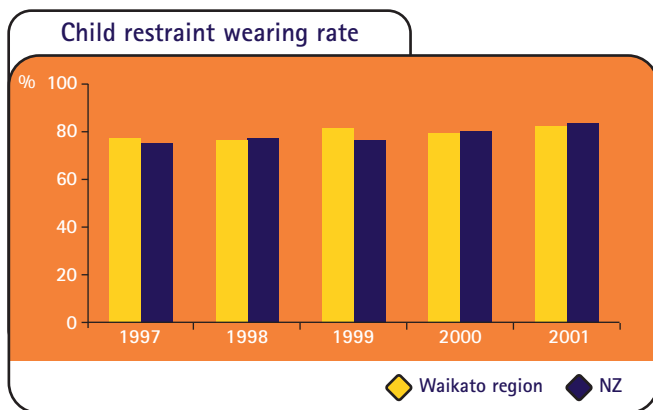
The national compliance rate for cycle helmet wearing improved by one percent to 94 percent during 2001. The Waikato region wearing rate also improved and is now above the national average for the first time in five years. The wearing rate rose five percent to 96 percent for 2001.



Child restraint use

Responses from the Waikato region to the 2001 Public Attitudes Survey indicated that 22 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 Waikato region, the wearing rate also improved – up three percent to 81 percent in 2001.



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 key 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 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 and a cultural strategy.

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

Road policing

'As members of the community, each of us has a responsibility to do all that we can to reduce the number of crashes on our roads, and in turn make our roads safer places to travel on.'

The police represent the enforcement flagship for achieving enhanced road safety. The introduction of our 31 member dedicated highway patrol reduced the Waikato Police district's road toll to a new low of 53 last year.

Drivers taking responsibility for their actions, along with an improved environment and continuing commitment and action from our partners, are contributing to the lower road toll in the Waikato and I look forward to this trend continuing.'

Superintendent Kelvin K W Powell
District Commander, Waikato Police

Land Transport Safety Authority

The LTSA 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).

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