

# 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 on Auckland motorways.

The number of fatal crashes on the Auckland motorways in 2001 was the lowest in the last 10 years. Serious injury numbers were similar to previous years. There has, however, been an increase in the reported number of minor injury and non-injury crashes.

Drivers in the 20 to 29 year-old age group are over-represented in the crash statistics when compared with all New Zealand state highway crashes and all New Zealand city state highway crashes. Just over half of this age group was male (52 percent).

Information in this report covers the northern motorway (in North Shore City), southern motorway and the north-western motorway.

Note: Local road crashes in the social cost graph are those that occurred at the junctions of motorway ramps and local authority roads.

## Major road safety issues:

### Auckland motorways

Rear-end crashes

Loss of control

Wet roads

Speed

### Nationally

Speed

Alcohol

Failure to give way

Restraints



## 2001 road toll for Auckland motorways



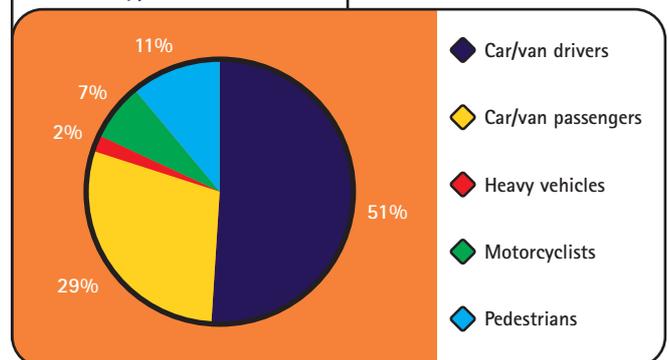
Deaths	4
Serious casualties	34
Minor casualties	511



Fatal crashes	4
Serious injury crashes	30
Minor injury crashes	390
Non-injury crashes	1,867

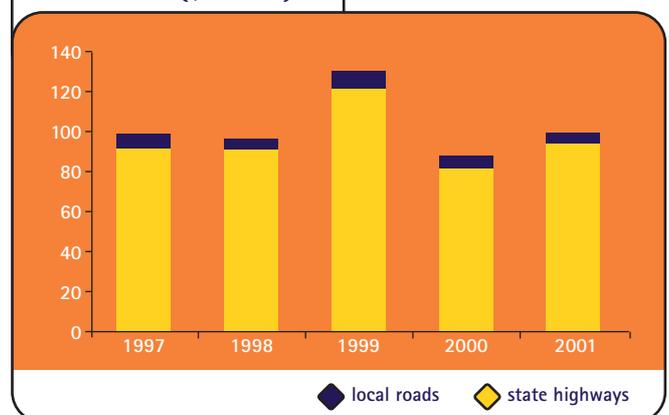
## Road deaths 1997–2001

User type 1997–2001



## Estimated social cost of crashes\*

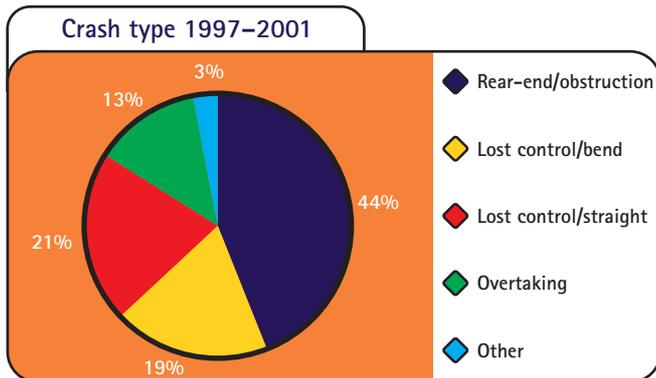
Social cost (\$ million)



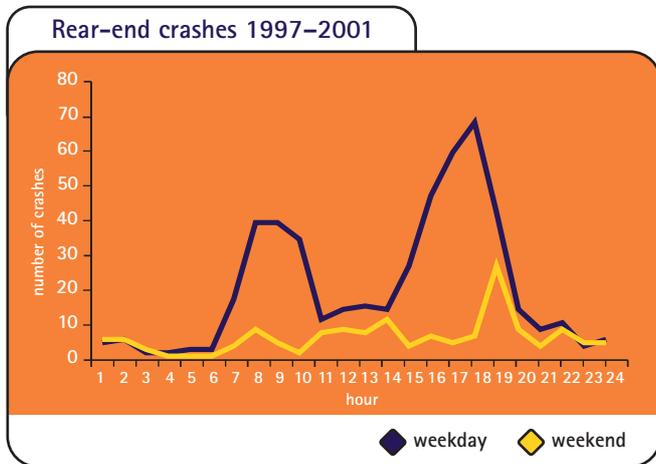
\* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs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

## Rear-end crashes

Rear-end crashes remain the most common crash type on Auckland motorways, accounting for 44 percent of all injury crashes. There was a large increase in the number of rear-end crashes recorded in 2001, when there were 189 injury crashes. This is just over twice the number recorded in 1997.



The following graph clearly shows that these crashes were a weekday peak-period problem. More crashes occurred in the evening peak which lasted longer than the morning peak.



The two most commonly reported contributing factors to these crashes were following too closely and failing to notice a vehicle slowing.

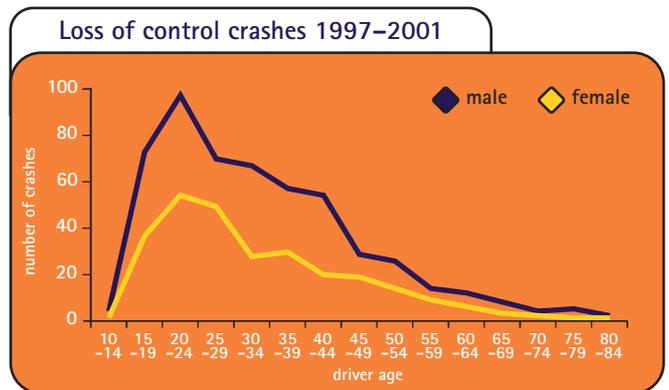
### Recommended actions

- Evaluate the effects of the Don't Be A Domino campaign and repeat if successful.
- Continue to improve incident detection systems and incident management plans to reduce secondary collisions.
- Enhance communication strategies with radio media to improve accuracy and frequency of incident reporting to the motoring public, especially during peak periods.

## Loss of control

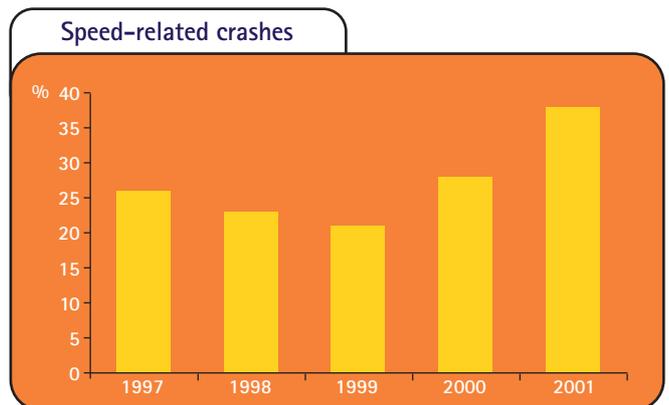
The second most common crash type on Auckland motorways was the loss of control crash. Just over half of these crashes occurred on straight sections of motorway, with running off the road to the left the most common. There was little change in the number of this type of crash from year to year. Three quarters of these crashes involved just one vehicle.

Male drivers in the 20 to 24 year-old age group were over-represented in these crashes.



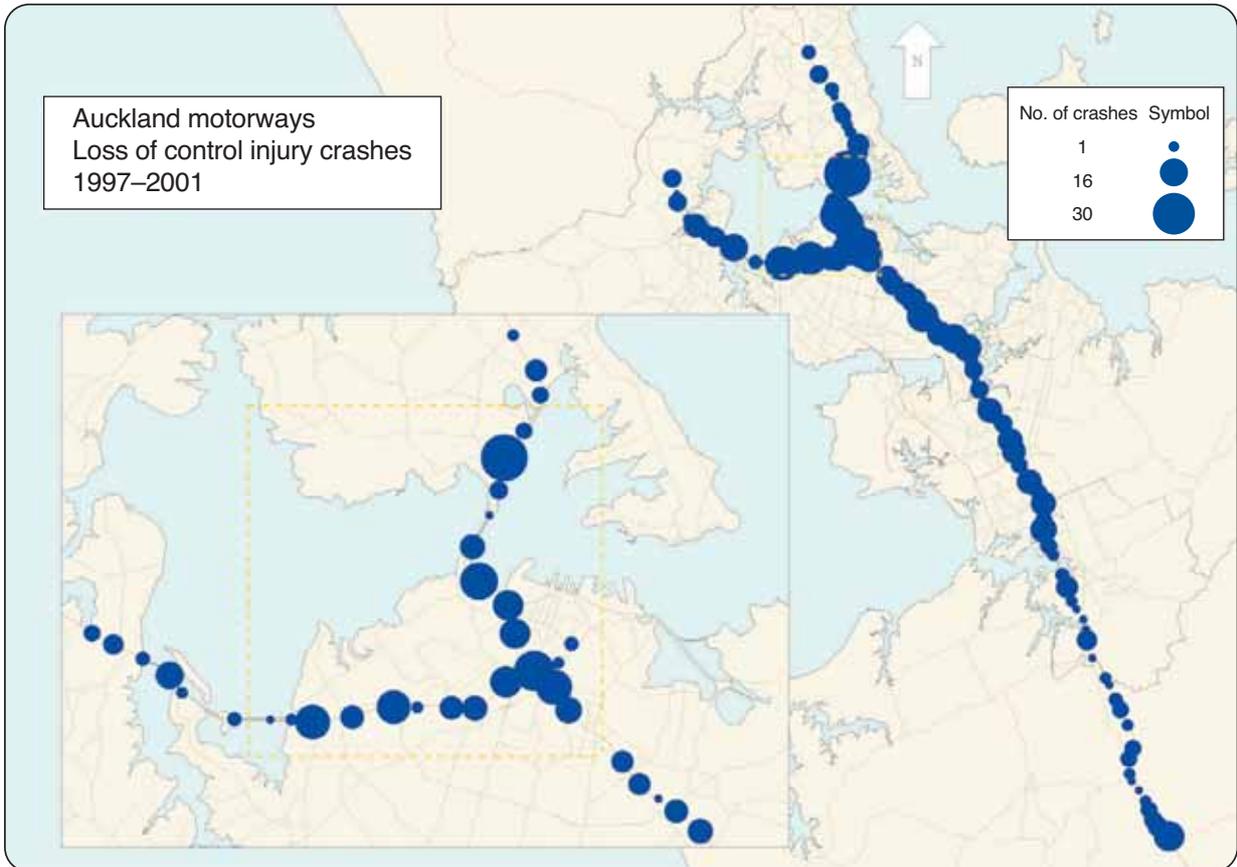
Almost half of these crashes occurred in wet conditions. The number and proportion of crashes in the wet increased noticeably in 2001, from 48 percent in 2000 to 68 percent in 2001.

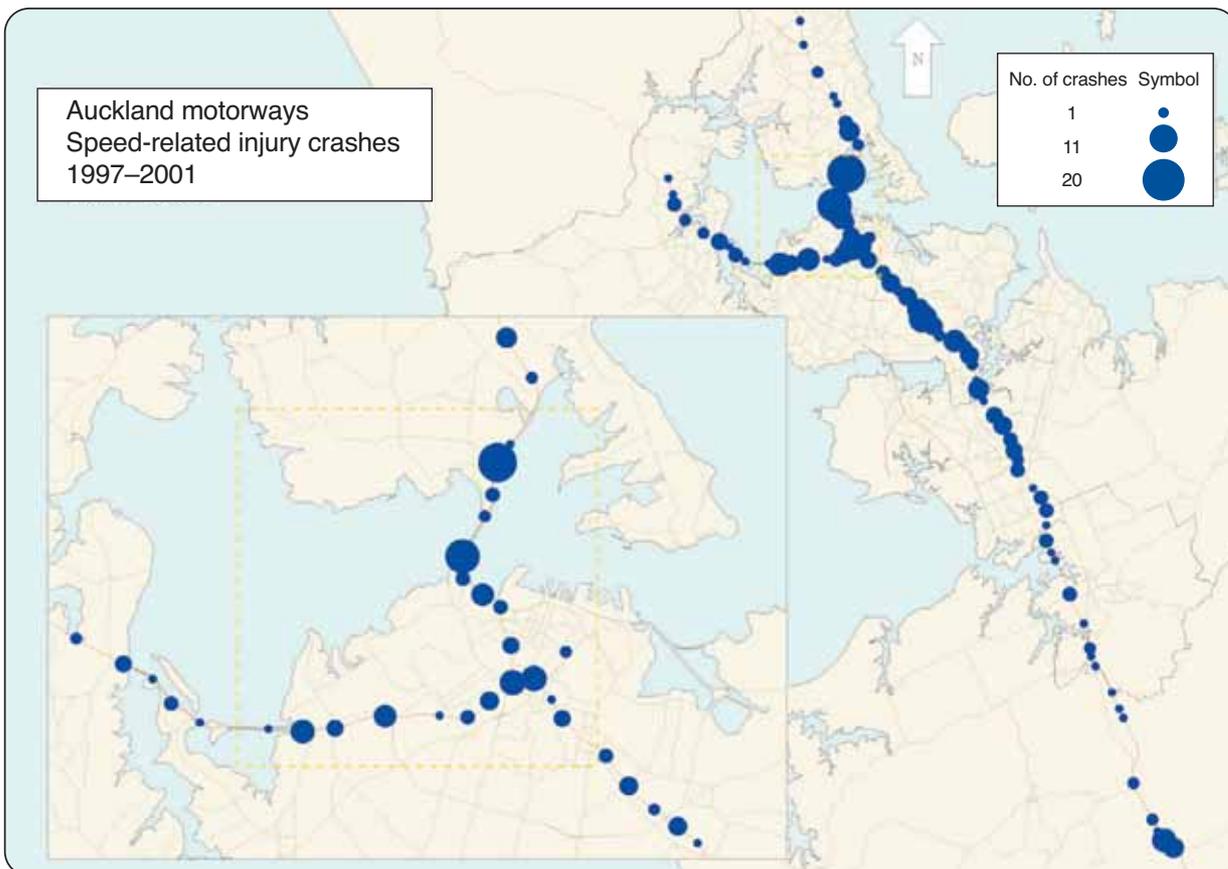
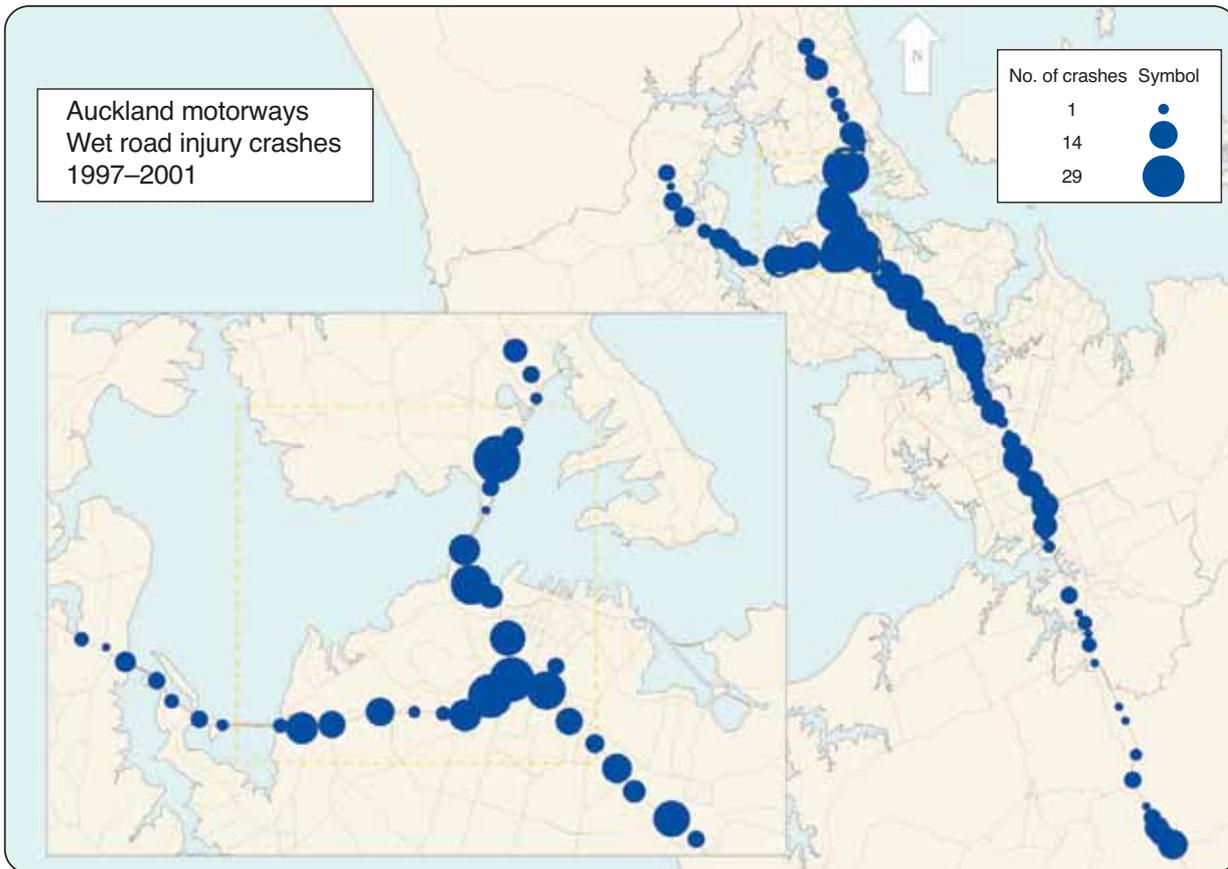
There were three main driver factors identified in these crashes: speed, poor handling and alcohol. The number and proportion of crashes involving excessive speed for the conditions increased in 2001.



### Recommended actions

- Support enforcement campaigns targeting driving too fast for the conditions.
- Support campaigns on adjusting drivers' speed for different driving conditions.
- Continue to regularly monitor skid resistance and review intervention levels for skid resistance on motorways.

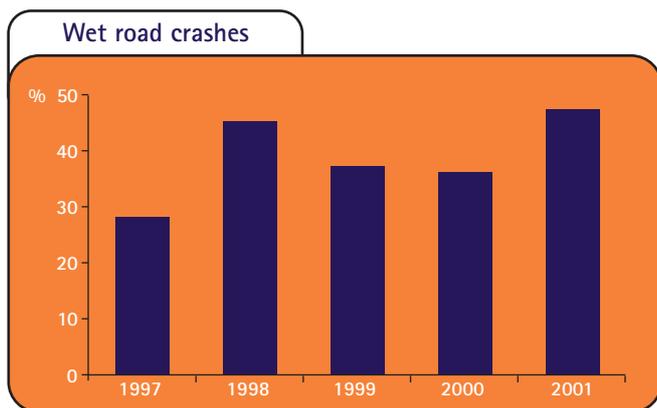






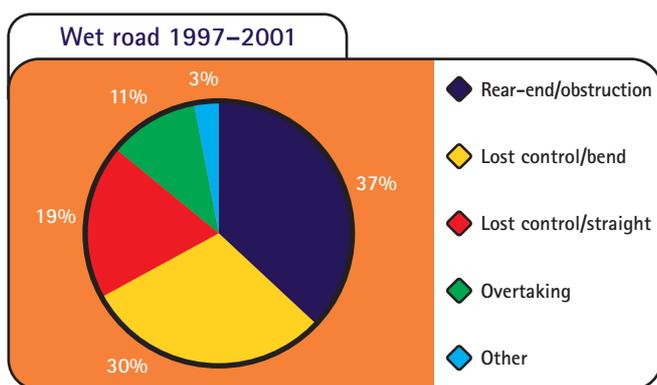
## Wet roads

The proportion of motorway crashes that occurred during wet road conditions was greater than that for all New Zealand state highways. While numbers have fluctuated over recent years, the number and proportion were highest in 2001 when just under half of all injury crashes occurred in wet conditions.



Weather conditions may have played an important part, as the number of crashes during heavy or light rain also increased in 2001. Speed too fast for the conditions was one of the most common contributing factors recorded.

Almost half of these crashes were loss of control followed by rear-end and overtaking collisions. These crashes resulted in 15 fatalities, 84 with serious injuries and 650 with minor injuries.



The majority of these crashes occurred during the winter months but a considerable number also occurred in November. Slightly more occurred during the weekday evening peak period.

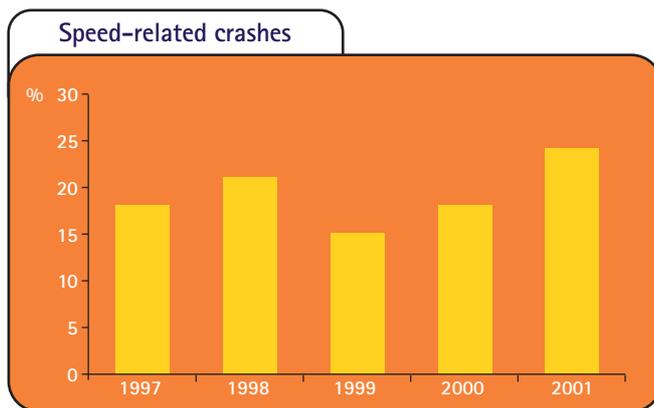
### Recommended actions

- Encourage enforcement campaigns aimed at driving too fast for the conditions.
- Support education campaigns aimed at improving awareness of appropriate speeds for the driving conditions.
- Continue to monitor skid resistance and carry out road inspections during heavy rain to identify drainage problems.



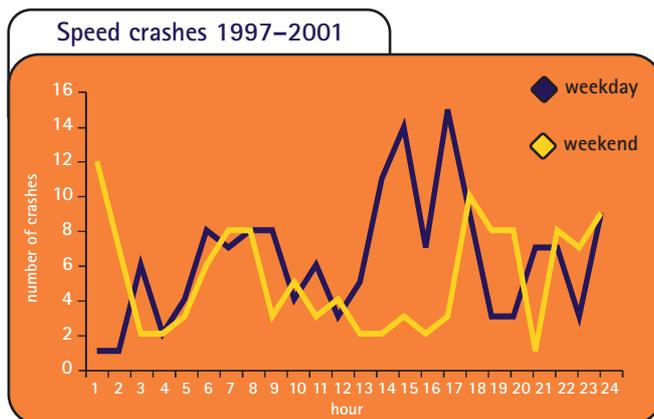
## Speed

Between 1997 and 2001 there were 281 reported injury crashes on Auckland motorways involving speed too fast for the conditions. The number in 2001 was almost twice that recorded in 1999. The proportion of speed-related crashes has generally increased over the last five years.



Loss of control on bend crashes were the most common crash involving speed, followed by rear-end and loss of control on a straight. High percentages of these crashes occurred in wet conditions and at night (55 percent wet and 47 percent night).

The following graph shows the time distribution of these crashes. Weekend and weekday crashes are shown separately.



Male drivers represent two thirds of all drivers involved in these crashes. Those aged 15 to 29 years feature predominately.

### Recommended actions

- Support enforcement campaigns aimed at speed control:
  - during wet and dark conditions
  - during weekends
  - aimed at young male drivers.
- Support education/publicity campaigns targeting young male drivers.
- Review speed camera vehicle placement to ensure they are in the most appropriate locations.

# New Zealand Road Safety Programme

Reducing trauma involves a multi-pronged approach, which includes education, engineering and enforcement. The New Zealand Road Safety Programme (NZRSP) provides funding to educate road users to change their behaviour through projects delivered by road safety co-ordinators and community groups. The programme also funds the New Zealand Police for their targeted enforcement activities and support of community road safety projects. Transfund New Zealand provides funding to local authorities for roading projects through its National Roding Programme.

## Community projects

Community funding of road safety projects aims to encourage local involvement and ownership of issues, and target local resources and effort to local risks. Central to community programmes is the need to develop and motivate local partnerships in road safety to help reduce the number of deaths and injuries on Auckland motorways.

Funding for community projects on the Auckland motorways from the NZRSP for the 2002/2003 year includes one project:

Project	Funding	Police hours
Motorways safety campaign	\$40,000	50

## Police enforcement

In addition to the 50 police hours spent on the motorways on the community project, a further 64,030 hours will be delivered by police as follows:

Project	Hours
Strategic – alcohol/drugs, restraint, speed and visible road safety enforcement	40,190
Traffic management – crash attendance events, incidents, emergencies and disasters, traffic flow supervision	22,900
Police community services	940

## Road environment

The LTSA's Crash Reduction Monitoring database shows that works implemented as a result of crash reduction studies have reduced crashes at state highway study sites by 43 percent in the Auckland region.

Recommendations from recent studies should be implemented and further studies undertaken to consider mass action and safety proofing to reduce crash problems.

## References

Auckland Motorways Road Safety Report 1997–2001

LTSA Crash Analysis System

## Where to get more information

For more specific information relating to road crashes on Auckland Motorways, please refer to the 1997 to 2001 Road Safety Report or the LTSA Accident Investigation System, or contact the people or organisations listed below:

Land Transport Safety Authority	New Zealand Police
Regional Manager Peter Kippenberger	David Walker PO Box 5994, Wellesley St Phone 09 481 0300
Regional Education Advisor Rae-Anne Kurucz	Transit New Zealand Regional Manager Wayne McDonald PO Box 1459, Auckland Phone 09 368 2000
Senior Road Safety Engineer Chris Hewitt	Traffic Safety Engineer Brian Rainford Phone 09 368 2013
See LTSA staff contact details at bottom of page	
Road Safety Co-ordinator Andrew Bell Auckland Regional Council Private Bag 92 012, Auckland Phone 09 373 9967	

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