

# 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 Far North district. The report provides guidance to those involved in road safety and will enable them to focus their efforts on the specific and critical issues facing the Far North district.

In 2001 the number of fatal crashes in the Far North district reduced by nearly half compared to 2000. Ten people died on the roads in the district in 2001 compared to an average of more than 15 in the previous four years. The number of crashes resulting in serious and minor injuries also fell in 2001. This related to a saving in social cost of \$18.6 million compared with 2000, but is still a \$5.5 million monthly cost to society.

However, despite the general reduction, the Far North has significant crash problems compared to the rest of the country. Serious injury crashes made up a high proportion of all injury crashes. There were many crashes involving vehicles losing control, a high proportion of children and young people were killed and injured in vehicles, and speed and alcohol were common factors and were well over-represented in crashes in the Far North district compared to other areas.

## Major road safety issues:

### Far North district

Loss of control and head-on crashes

Alcohol

Speed

Passengers

### Nationally

Speed

Alcohol

Failure to give way

Restraints



## 2001 road toll for Far North district



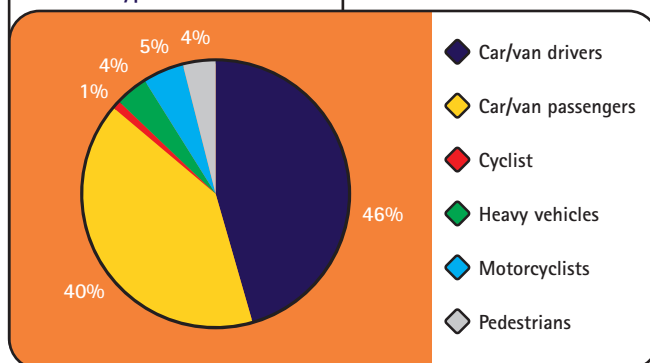
Deaths	10
Serious casualties	51
Minor casualties	140



Fatal crashes	8
Serious injury crashes	39
Minor injury crashes	67
Non-injury crashes	262

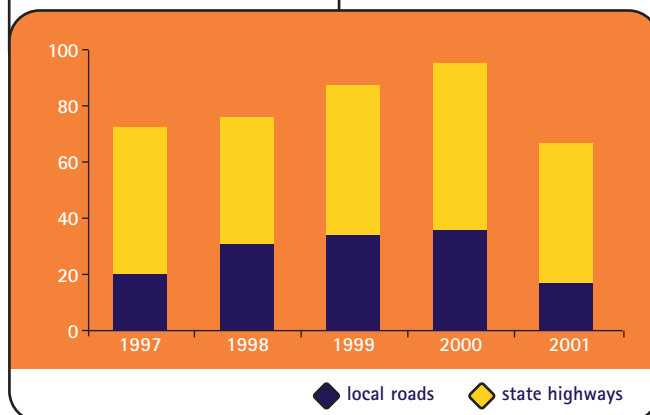
## Road user casualties 1997–2001

User type 1997–2001



## Estimated social cost of crashes\*

Social cost (\$ million)



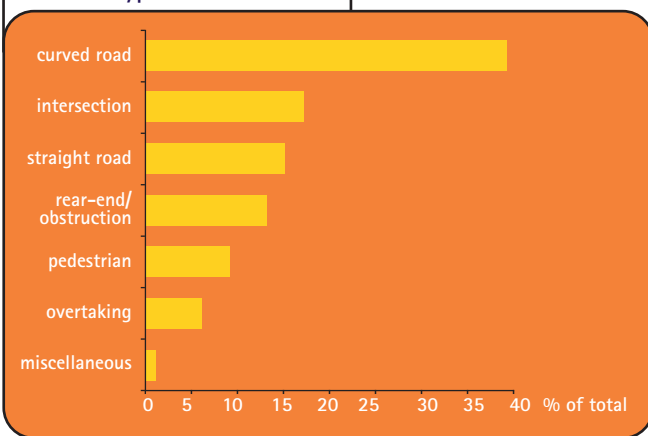
\* The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs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



## Loss of control and head-on crashes

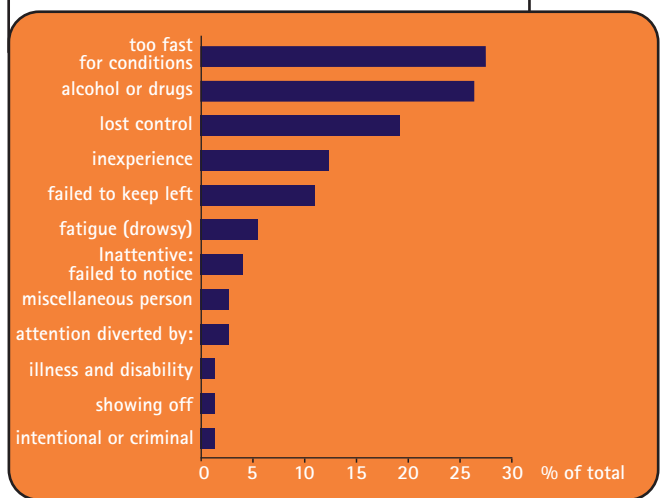
The most common crash type in the Far North district was drivers losing control on curves. Over half of the open road crashes, and more than a third of urban crashes in the district, were of this type. They also made up a high proportion (63 percent) of the fatal crashes.

Crash types 1997–2001



Typically these crashes involved a single vehicle with a male driver, and drivers were mostly in the 15 to 24 year age group. Drivers who were speeding or affected by alcohol were the main contributors, while inexperience, tiredness, poor tyres and slippery road surface were also common factors. Over two thirds (68 percent) of the crashes on curves resulted in a roadside object being struck.

Driver causes in crashes on curves



The three main movement types associated with these crashes were:



Many of the loss of control or head-on crashes on curves occurred on the section of state highway between Hukerenui and Paihia.

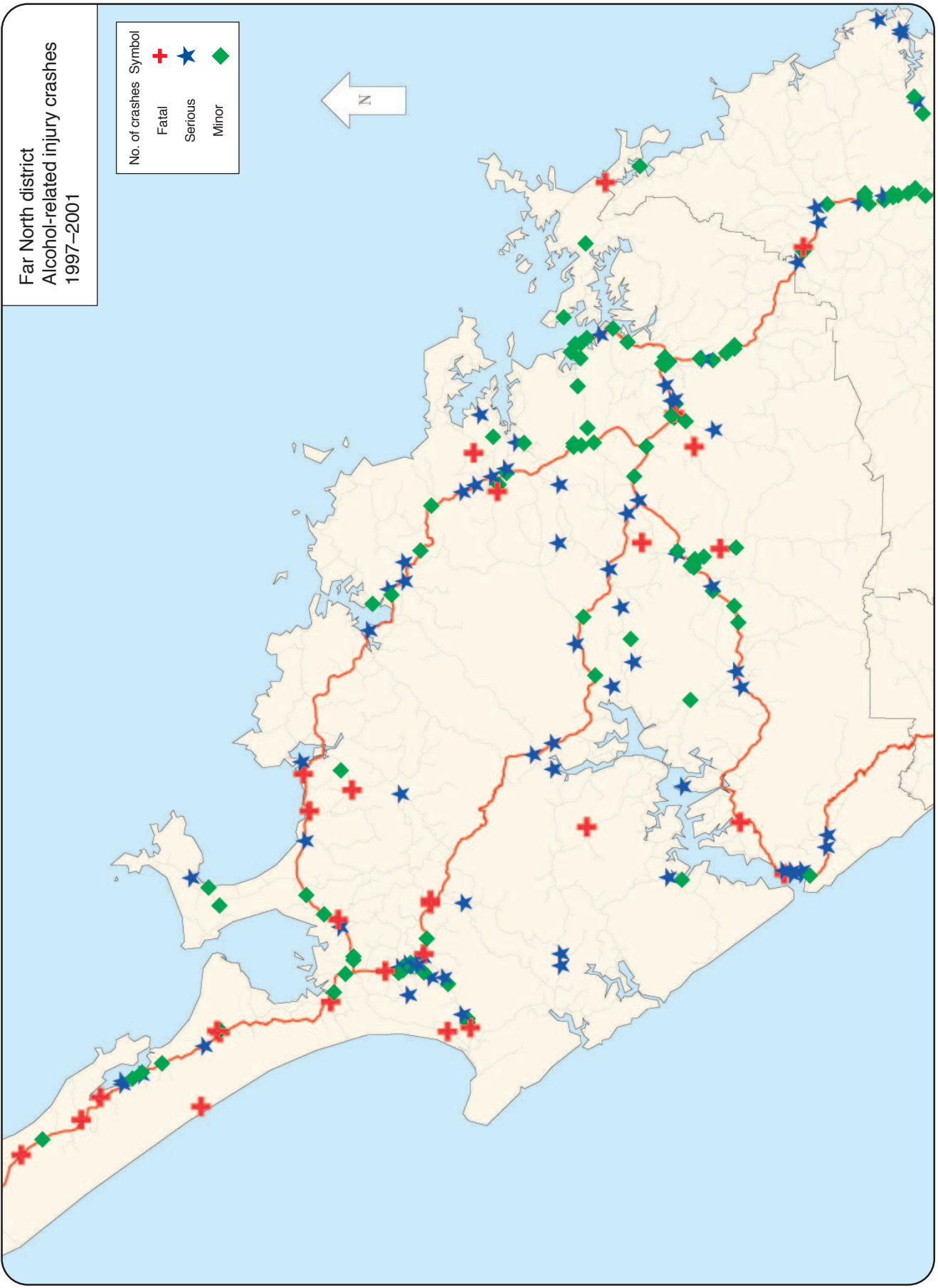
The good news is that the major contribution to the crash reduction in 2001 was in loss of control or head-on crashes, especially on the open road state highways.

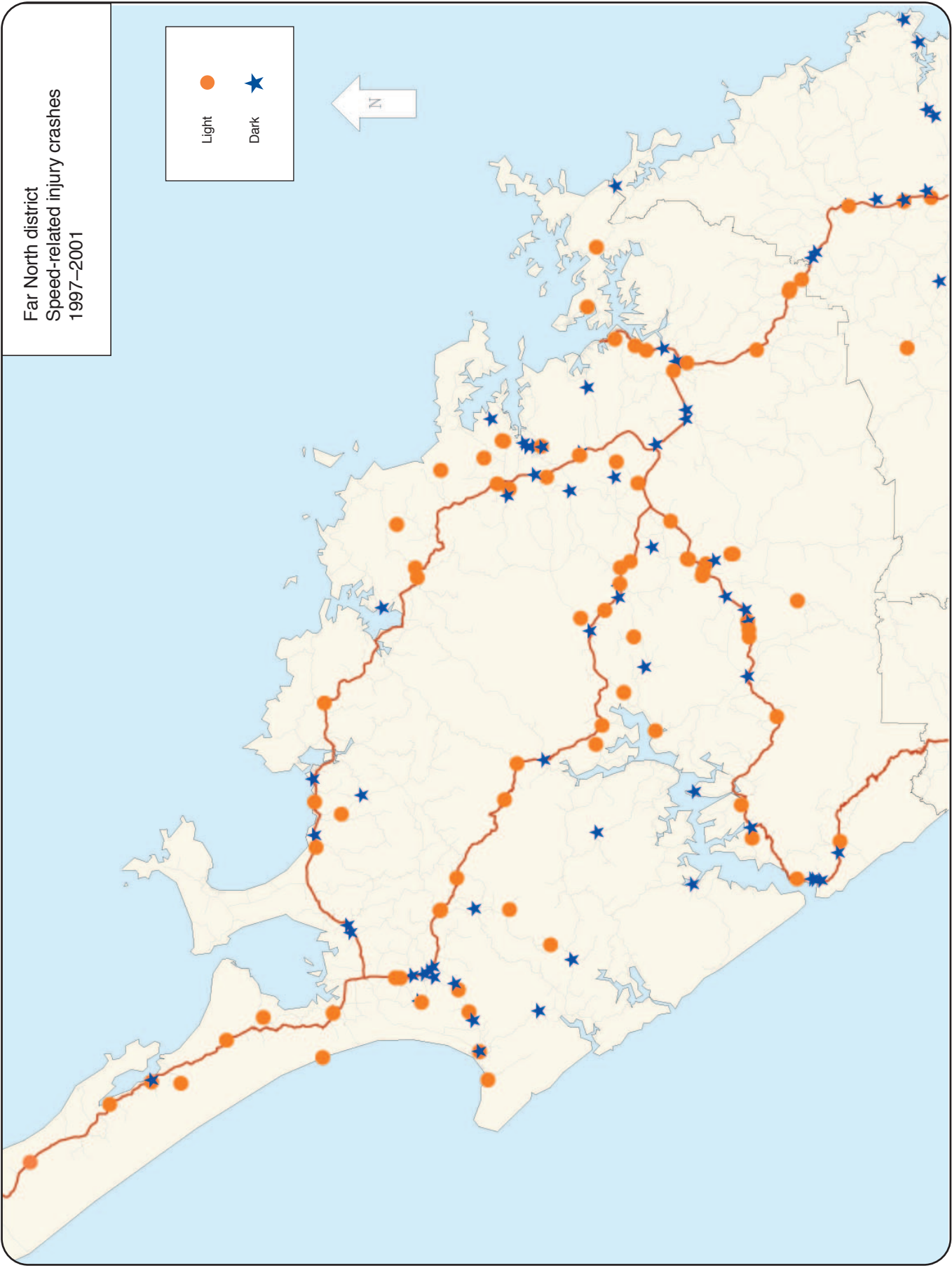
## Recommended actions

- Conduct safety audits targeting curve delineation, clear zones, sealed shoulder width, drainage, surface friction and road condition.
- Identify sub-standard curves and set up a programme of safety improvement projects.
- Conduct crash reduction studies on high-risk spots and routes.
- Ensure the enforcement programme focuses on speed and alcohol, while targeting high-risk locations.
- Conduct education programmes targeted primarily at young male drivers, highlighting the need for appropriate speed, particularly on curves.

Far North district  
Alcohol-related injury crashes  
1997-2001

No. of crashes	Symbol
Fatal	+
Serious	*
Minor	◆







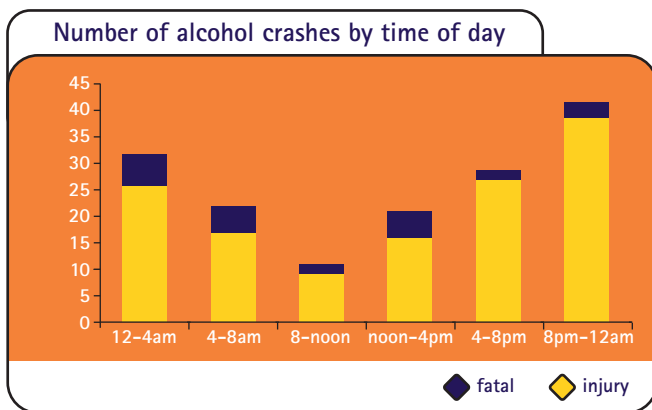
# Alcohol

The proportion of alcohol-related crashes on urban roads in the Far North district was more than double the national figure, and for the open road was more than 60 percent higher. Almost 30 percent of injury crashes had alcohol as a contributing factor and the proportion was even higher for fatal crashes (42 percent).

The majority of alcohol-related crashes involved a single vehicle, and over three quarters (77 percent) involved the driver losing control on a curve or on a straight road. Drivers tended to be male, and driver ages were spread over a wide range from 15 through to 45 years. The main crash movement types were:



Most alcohol-related crashes occurred at night. Over one third (38 percent) of fatal crashes involving alcohol occurred between midnight and 5am. Most occurred from Friday through to Sunday, and throughout the year, with a slight peak over the summer.



Alcohol-related crashes occurred right across the district, with key areas being Kaitaia and Ahipara, Pukenui, Omapere and Kapiro.

The effect of road safety initiatives is evident, with a continuing reduction in alcohol-related fatal or injury crashes, dropping from 62 in 1995 to 26 in 2001.

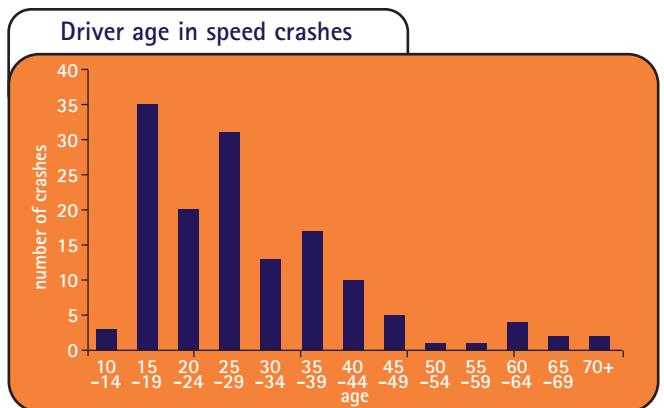
## Recommended actions

- Continue alcohol enforcement campaigns, with particular emphasis at night.
- Use targeted enforcement aimed at high-risk areas and times.
- Continue education and publicity campaigns targeting male drivers.
- Conduct studies of sections of road with high alcohol crash histories to identify improvements in delineation, markings, shoulder widths and clear zones.

# 80 Speed

Over a quarter (26 percent) of all injury crashes in the district involved excessive speed for the conditions. Speed was close behind alcohol as one of the main crash factors in the Far North district, with excessive speed being a contributing factor to 43 percent of fatal crashes. Crash numbers with speed as a contributing factor were rising sharply before dropping significantly in 2001.

The majority (81 percent) of speed-related crashes occurred on the open road. Ninety-three percent of the speed-related fatal crashes were on the open road. Although there were generally more crashes on state highways, half of the speed-related crashes occurred on local authority roads.



The majority of speed-related crashes involved loss of control at curves. The main crash movement types were:



Male drivers were generally at fault in speed-related crashes. Seventy three percent of drivers were male and 60 percent of at fault drivers were in the 15 to 30 year age range. Drivers were commonly affected by alcohol. Inexperience was another common factor.



Over half of the speed-related crashes occurred between Friday and Sunday, with late Friday and late Saturday nights being peak times. Early afternoon on weekdays was also a common time for the speed-related crashes to occur and this was mainly during the winter months.

### Recommended actions

- Maintain strict enforcement of speed on state highways and local roads, with emphasis on the open road.
- Target enforcement to high-risk times and locations.
- Conduct education and publicity campaigns to raise awareness of the risks of speed, particularly on the open road.
- Conduct education campaigns and community programmes targeting young male drivers.
- Conduct studies of areas with high speed-related crash rates to identify possible engineering improvements.

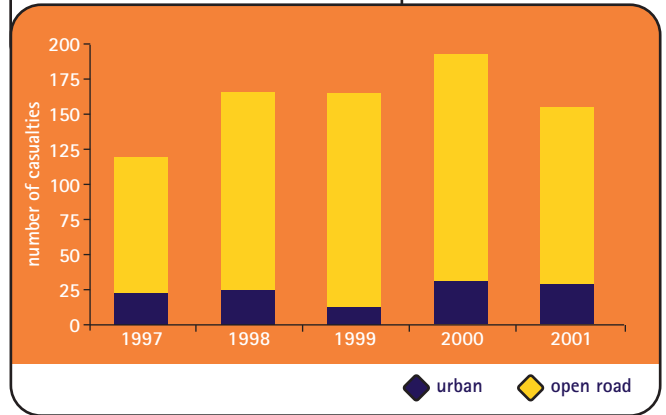
## Passengers

Although passengers were rarely responsible for causing crashes, they often suffered injuries as a result of a crash. Passengers made up over 40 percent of the casualties in crashes in the Far North district. From 1997 to 2001, 423 vehicle passengers were injured in crashes with 20 killed, 92 seriously injured and 311 suffering minor injuries. Eighty-five percent of the passengers were injured in open road crashes.

The bulk of the passenger casualties were in the 15 to 19 year age range, but there was also a high proportion of children injured with 32 percent aged under 15, compared with a national figure of 21 percent. Four child passengers aged under 15 were killed and 104 were injured.

The majority of passengers were female, mostly in the 10 to 30 year age range. Male passenger casualties, however, outnumbered females in the under 10 year age group and in the 20 to 24 year age group.

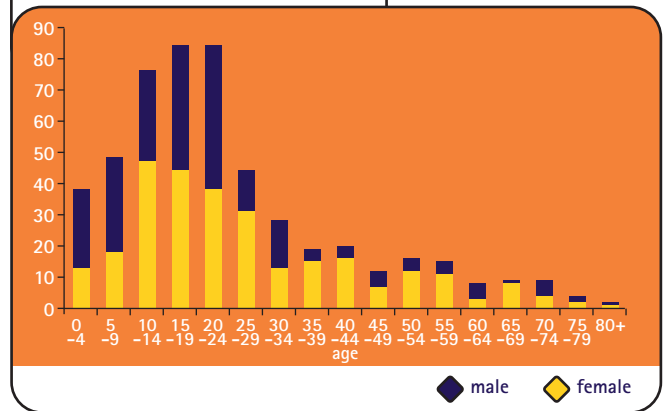
Passenger casualties by year



The most common factors in crashes where passengers were injured were drivers influenced by alcohol or drugs, or travelling too fast for the conditions. Failure to keep left, inexperience, tiredness and slippery road surface also played a part.

In over a third of the crashes in which passengers were injured, a driver was unlicensed or on a restricted licence.

Passenger age in crashes



### Recommended actions

- Conduct regular education and publicity campaigns to improve restraint wearing, especially for children and young adults.
- Develop community programmes targeting females as passengers.
- Conduct regular ongoing enforcement of restraint wearing, targeting high-risk times and locations.
- Ensure that enforcement of other issues also covers restraint wearing.
- Target enforcement of restricted and unlicensed drivers.

# 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 Roothing 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 in the district.

Funding for community projects across Northland from the NZRSP for the 2002/2003 year includes:

Project name	Funding	Police hours
Driver licensing	\$24,000	
Local road safety support	\$5,000	
Community road safety forum	\$5,000	
Youth road safety initiatives	\$10,000	
Community road safety initiatives	\$19,500	
Child restraint campaign/safety belt compliance	\$12,000	
He Oranga Poutama – Te Kohanga Reo training programme	\$5,000	
Driver education programme	\$5,000	
Pacific community safety campaign	\$5,900	
Road safety co-ordination	\$65,000	
Speed control for the conditions	\$22,000	200
Rural Alcohol Watch (RAW)	\$26,000	1,000
Restraint use programme	\$36,000	300
Intersection safety	\$10,000	
Driver licence training assistance	\$40,000	400
Safety culture	\$5,000	
Students against driving drunk (SADD)	\$9,500	
Small projects community involvement	\$12,300	
Sign project maintenance	\$4,500	

## Police enforcement

In addition to the 1,900 police hours spent regionally on community projects, a further 16,375 hours will be delivered by police in the Far North district as follows:

	Hours
Strategic – drinking or drugged driver, restraint device, speed, visible road safety enforcement	12,565
Traffic management – crash attendance events, incidents, emergencies and disasters, traffic flow supervision	2,830
School road safety education	800
Police community services	180

In addition to these hours there is the delivery by the Highway Patrol, Commercial Vehicle Investigation, Enhanced Alcohol CBT Project and traffic camera operations.

## Road environment

The LTSA's Crash Reduction Monitoring database shows that works implemented as a result of crash reduction studies have reduced crashes at the study sites by 46 percent in the Far North district (45 percent at state highway sites and 47 percent at local road sites).

Recommendations from recent studies should be implemented and further studies undertaken to consider mass action or local area traffic management to reduce crash problems.

## References

Far North District Road Safety Report 1997–2001

LTSA Crash Analysis System

## Where to get more information

For more specific information relating to road crashes in the Far North district, please refer to the 1997–2001 Road Safety Report or the LTSA Accident Investigation System, or contact the people or organisations as listed below:

### Land Transport Safety Authority

Regional Manager  
Peter Kippenberger  
Private Bag 106-602, Auckland  
Phone 09 377 3400

Regional Education Advisor  
Karen Sandoy  
PO Box 1664, Whangarei  
Phone 09 459 6314

Senior Road Safety Engineer  
John Garvitch  
PO Box 1664, Whangarei  
Phone 09 459 6315

### Road Safety Co-ordinator

Gillian Archer  
PO Box 1124, Whangarei  
Phone 0274 493 8703

### New Zealand Police

Strategic Traffic Manager  
Inspector Rex Knight  
Private Bag 9016, Whangarei  
Phone 09 430 4500

Inspector Paul Carpenter  
PO Box 31, Kerikeri  
Phone 09 407 4850

### Far North District Council

Manager Roading & Drainage  
Greg Ingham  
Private Bag 752, Kaikohe  
Phone 09 405 2750

### Transit New Zealand

Area Engineer Northland  
Richard Green  
PO Box 1899, Whangarei  
Phone 09 459 6933

Whangarei Office  
Level 1, NZ Post Building  
Cnr Rathbone & Robert Streets  
PO Box 1664, Whangarei  
Phone 09 459 6315, Fax 09 459 6318  
[www.ltsa.govt.nz](http://www.ltsa.govt.nz)

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