

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 Hastings district.

The estimated social cost of 152 injury and 508 non-injury road crashes reported in the Hastings district last year was \$66.54 million. Six people died and 240 suffered injuries as a result of the crashes.

Of the 152 injury crashes reported last year, 66 (43 percent) occurred on urban roads and 86 (57 percent) occurred on rural roads.

There was a significant downward trend in crashes reported in the district until the year 2000. Last year 10 more injury crashes were reported in urban areas than in 2000. Thirty-six more people were injured in urban road crashes last year.

In the five-year period 1997 to 2001, 66 pedestrians, 93 cyclists and 101 motorcyclists were injured in road crashes. These road users account for nearly 20 percent of people killed or injured on roads in the Hastings district.

Over the past 10 years, the number of injury crashes reported annually in the district has reduced significantly and this is encouraging. However, continued effort is required to reduce the number of people injured in road crashes, particularly in rural areas where far more people suffer serious injuries.

Major road safety issues:

Hastings district

Loss of control on rural roads

Intersections

Alcohol

Cyclists

Motorcyclists

Pedestrians

Restraints

Nationally

Speed

Alcohol

Failure to give way

Restraints



2001 road toll for Hastings district

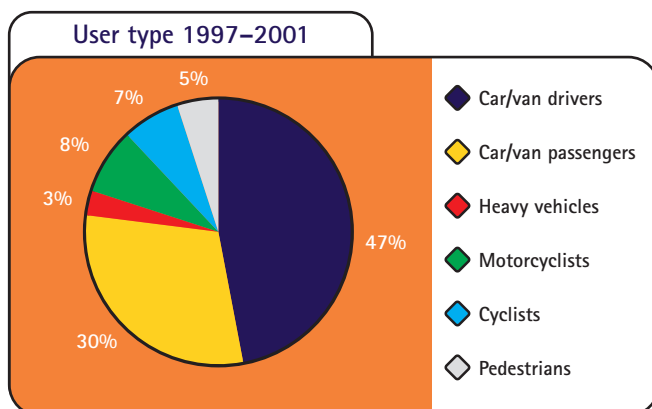


Deaths	6
Serious casualties	59
Minor casualties	181

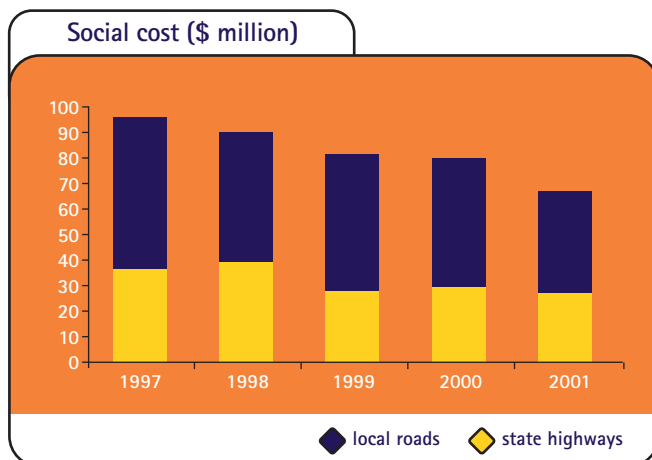


Fatal crashes	6
Serious injury crashes	46
Minor injury crashes	100
Non-injury crashes	508

Road user casualties 1997–2001



Estimated social cost of crashes*



* 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 on rural roads

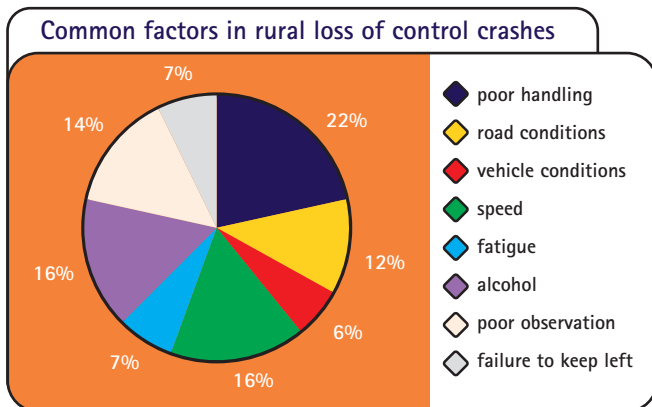
In the past five years, 376 loss of control or head-on crashes have resulted in people being injured. The loss of control and head-on accidents accounted for 46 percent of injury crashes reported in the district.

Three hundred loss of control and head-on crashes occurred on rural roads in the district. Due to higher travel speeds in rural areas, people often received more severe injuries.

Factors that were commonly associated with these crashes included drivers travelling too fast for road conditions, poor vehicle handling, failing to keep left, driver inattention, poor judgement and observation, fatigue, and road and vehicle conditions. Speed and alcohol were also commonly reported contributing factors.

In 2001, 33 percent of all injury crashes in rural areas occurred during hours of darkness. A high proportion (35 percent) of all rural injury crashes occurred in wet weather. This is high considering the number of days on which rain fell in the district.

The objects most commonly struck by vehicles in these crashes were fences, banks, ditches, trees, poles, bridges and guard rails. A number of vehicles lost control on shoulders of the highway or road or when returning to the seal from an unsealed steep shoulder.



Environmental factors commonly recorded as contributing to loss of control crashes on rural roads and state highways are:

- slippery road surfaces
- roads under construction
- restricted visibility.

Stray farm animals on roads in the district have caused some drivers to lose control of their vehicles.

Approximately 50 percent of rural loss of control injury crashes occurred on state highways in the district and 50 percent on local roads.



Recommended actions

Engineering

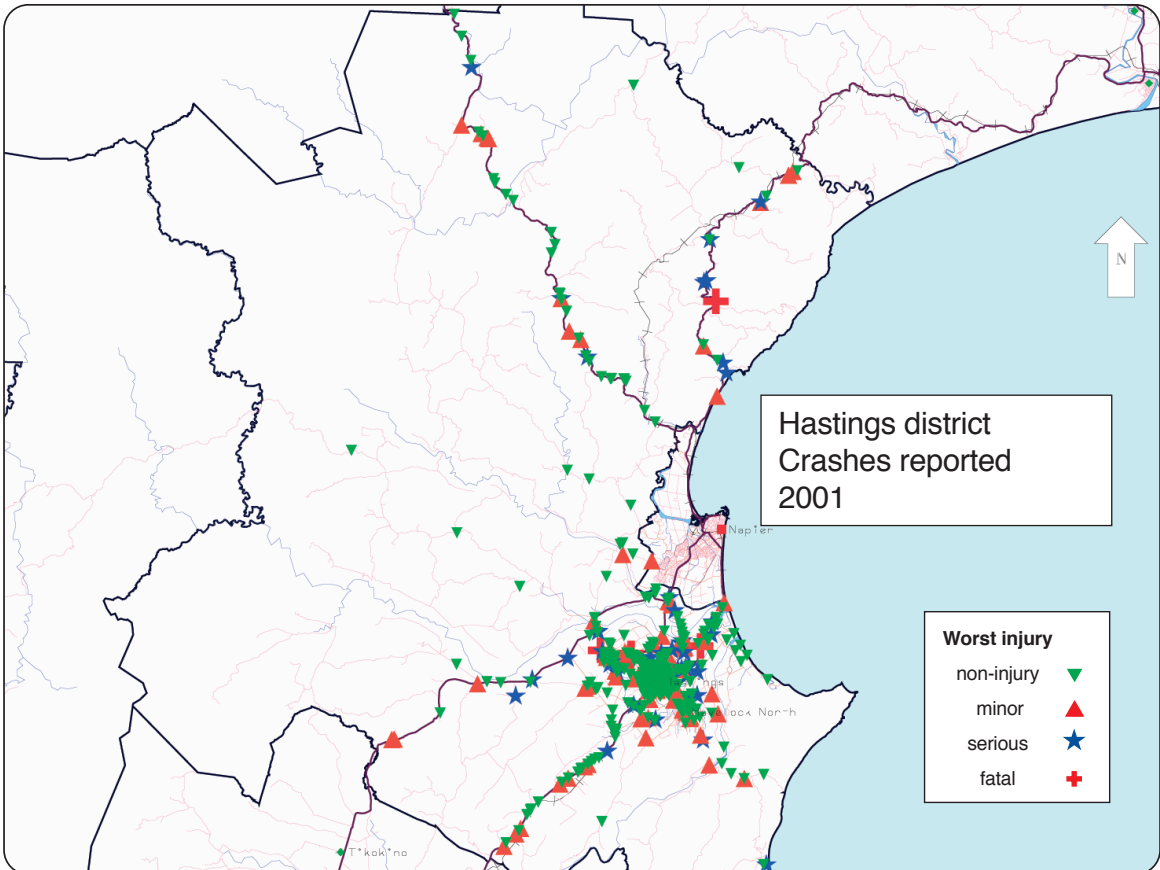
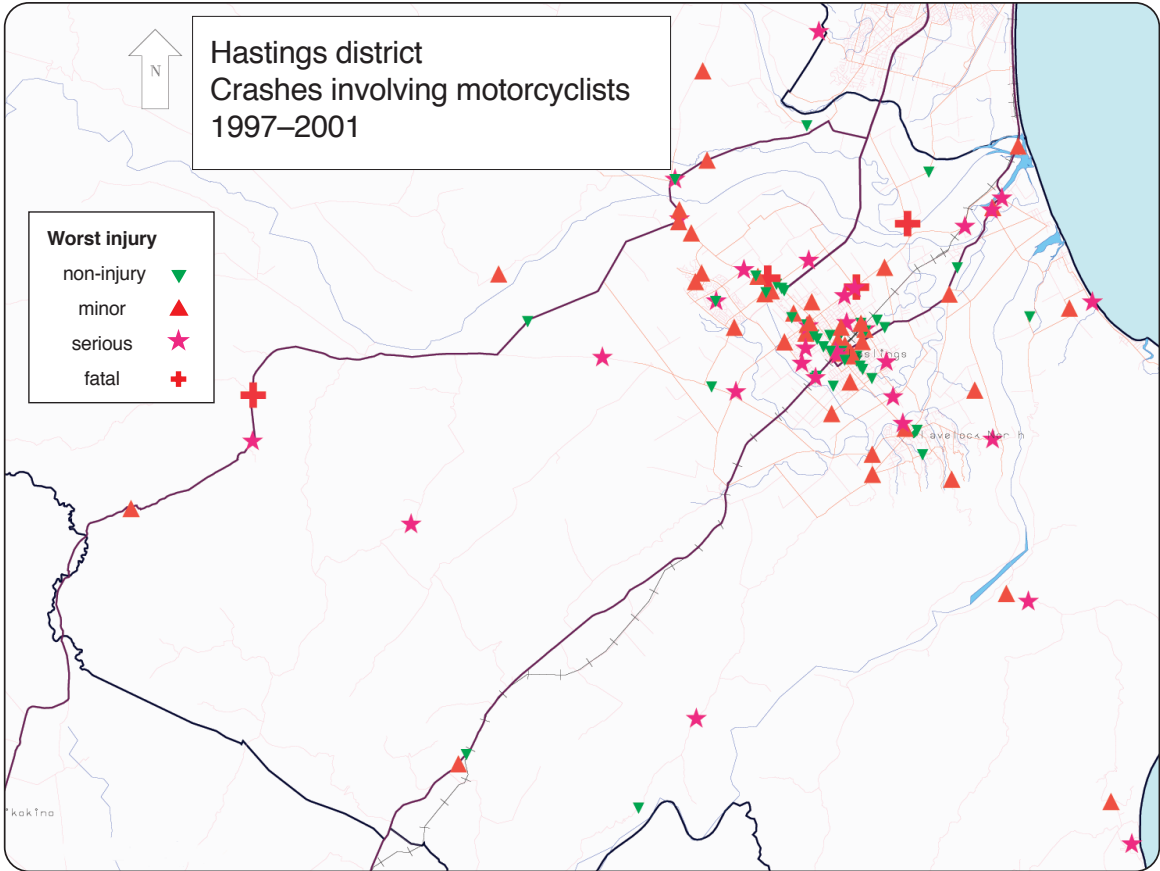
- Continue with programmes to upgrade and maintain curve warning signs, markings and delineation, on local rural roads, to the appropriate standards.
- Continue with rural crash reduction studies to investigate and carry out remedial treatment at black spots and treatment to routes, giving priority to those with a higher incidence of crashes reported.
- Maintain roadside clear of hazards and provide side protection where appropriate.
- Widen road carriageway and seal shoulders to provide additional vehicle wander and recovery space where feasible and cost effective.
- Maintain pavement surface to provide good standards for skid resistance.
- Improve road geometry.
- Promote safe and secure stock fences in rural areas.

Education

- Raise rural drivers' awareness of the need to drive appropriately for the roading environment, through various community programmes. Promote messages that relate to general driver behaviour activities, including speed.
- Educate drivers to be aware of the risks of speeding and driving too fast for road conditions.
- Promote safe and secure stock fences in rural areas.

Enforcement

- Continue enforcement focusing on inappropriate speed in rural areas.
- Target enforcement to times and locations of greatest risk.
- Co-ordinate enforcement campaigns targeting road user behaviour, working in conjunction with community programmes.
- Maintain stock and animal control in the district.



Intersections

In the past five years, 328 injury crashes and 1,173 non-injury crashes were reported at intersections (including driveways). LTSA records show that five people died and 437 suffered from injuries in crashes at intersections in the Hastings district in the period 1997 to 2001.

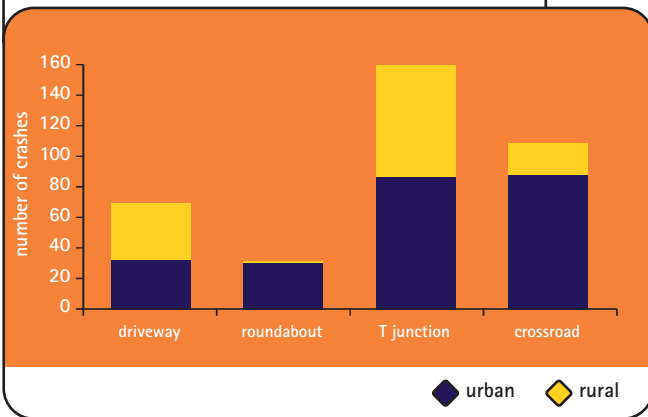
The crashes at intersections resulting in injury accounted for approximately 45 percent of all injury crashes reported in the Hastings district.

Of the injury crashes reported at intersections during the past five years:

- 206 occurred at intersections with Give Way controls
- 27 occurred at intersections with Stop controls
- 26 occurred at intersections with traffic signal controls
- 69 occurred at driveways and uncontrolled intersections.

Factors recorded in crashes at intersections were commonly failure to give way or stop when required, poor observation and driving in incorrect lanes or position on the road. Crashes into the rear of vehicles or other obstacles were also commonly reported in the Hastings district. The percentage of injury crashes at intersections was much higher than in similar authorities.

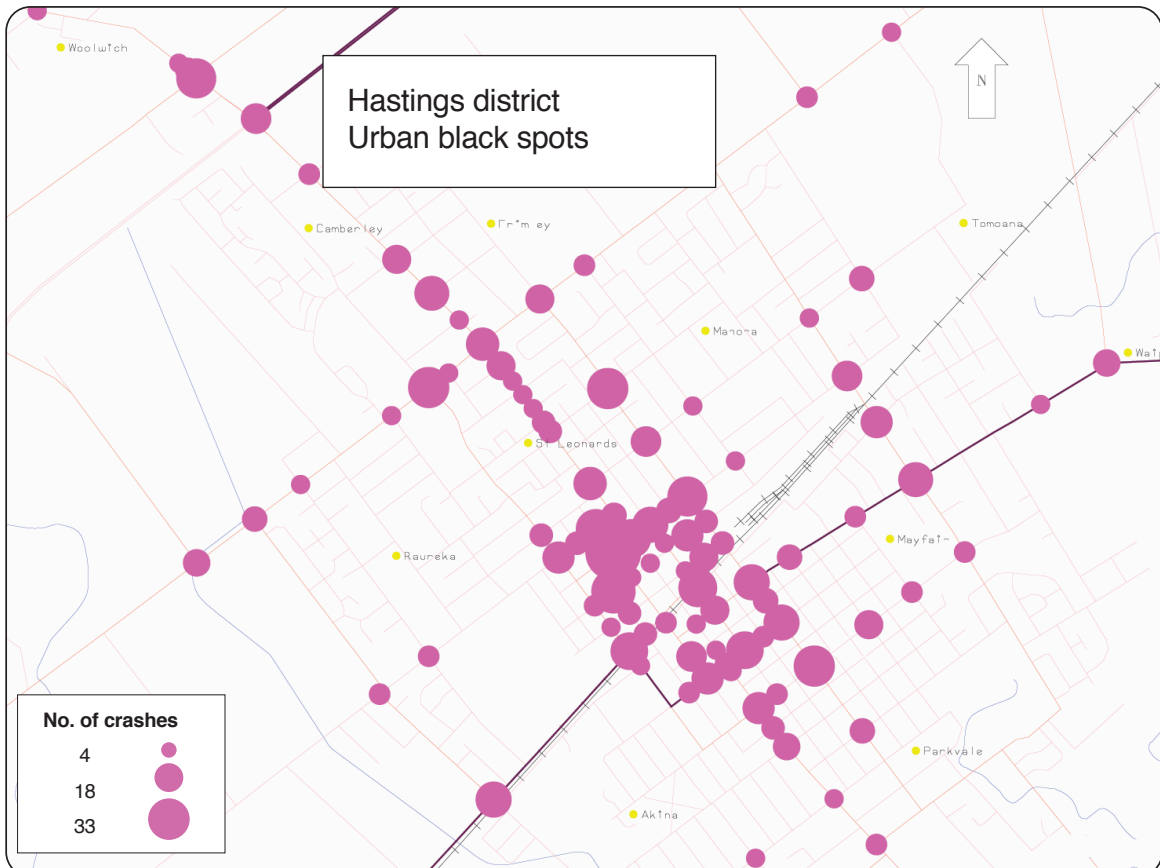
Injury crashes at intersections 1997–2001



Recommended actions

Engineering

- Continue with crash reduction studies to investigate and, if required, carry out remedial work at intersections.
- Ensure adequate sight distance is available at intersections and appropriate controls are installed.



Education

- Support education programmes and publicity campaigns focusing on road user behaviour at intersections, including roundabouts and those controlled with signals. Strategies should include radio and newspaper advertising, posters and brochures.
- Conduct campaigns to raise driver awareness of the need to check for oncoming traffic (including cyclists and motorcyclists) at intersections and also when entering and leaving driveways.

Enforcement

- Increase enforcement of compliance with Give Way, Stop and signal controls at intersections.
- Conduct enforcement campaigns in conjunction with community programmes targeting intersections.

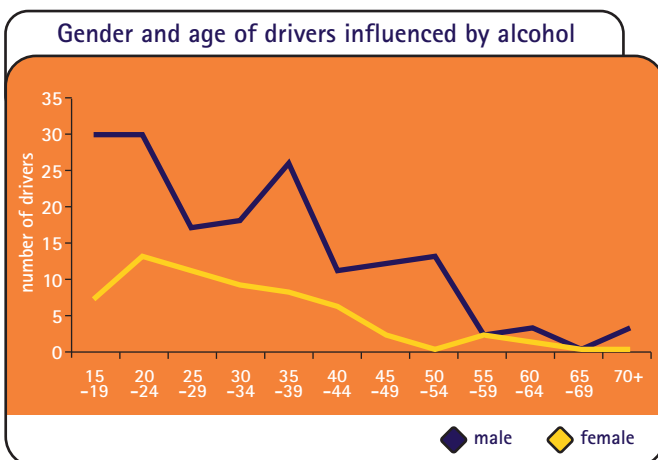
Alcohol

When compared with other similar districts and all of New Zealand, alcohol-related injury crashes were over-represented in both urban and rural areas of the Hastings district.

Of the 820 injury crashes reported in the Hastings district in the past five years, 163 (20 percent) had alcohol recorded as a key factor. Sixty-six of the injury crashes involving alcohol occurred in the urban areas. Ninety-seven occurred in rural areas.

Drivers in the 15 to 45 year age group were more commonly involved in crashes where alcohol was a recorded factor. Males featured predominantly in the drink-drive statistics.

While the percentage of injury crashes involving alcohol trended down noticeably until 1997, in the past five years numbers have plateaued. Continued effort is required to further reduce the number of people who drink then drive.



Recommended actions

Education

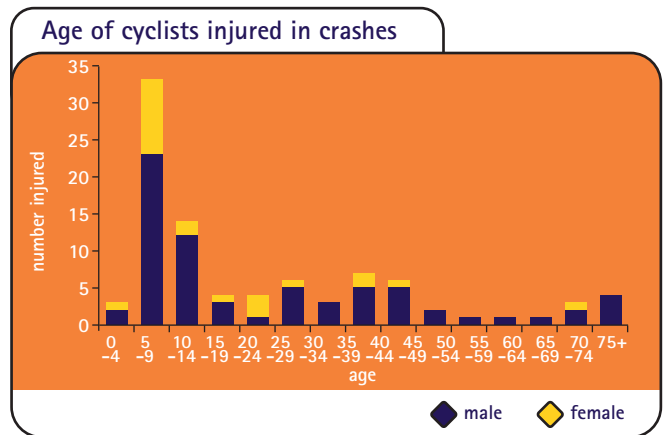
- Continue with existing and initiate new advertising campaigns to promote safe drinking and driving habits, particularly among male drivers in the 15 to 45 year age groups. Both urban and rural sectors need to be targeted.
- Encourage community responsibility (including licensees) by promoting host responsibility practices and designated driver schemes.
- Work with peer groups such as Students Against Driving Drunk (SADD) and other community groups to convey sober driver messages to young drivers.

Enforcement

- Target enforcement at known high-risk areas and times, and to the appropriate age group.
- Co-ordinate enforcement campaigns targeting drink-driving, working in conjunction with community programmes.
- Continue to support compulsory breath testing programmes.

Cyclists

In the five-year period 1997 to 2001, four cyclists died, 20 cyclists suffered serious injuries and 71 suffered minor injuries. Cyclists accounted for 7.5 percent of road users injured in crashes reported in the Hastings district.



Fortunately there has been a downward trend in cyclists injured in the district. However, the number injured annually is still of concern and requires further attention.

A high number of the cycle/vehicle conflicts occurred at intersections. Of the crashes reported involving cyclists:

- 59 occurred at Give Way controlled intersections
- six occurred at Stop controlled intersections
- seven occurred at intersections with traffic signals
- nine occurred at driveways
- 52 occurred away from intersections.

Younger cyclists – predominantly males in the 10 to 20 year age group – were most susceptible to being injured in collisions with vehicles. However, there were also a number of male cyclists aged between 30 and 50 who featured in the statistics.

The Hastings district cycling strategy identifies methods for the development of cycle facilities in the district that should enhance safety for cyclists. The strategy also details education and enforcement methods to address cycling safety issues in the district. The adoption and implementation of such methods, particularly those that will have an early effect on reducing the number of cyclists injured, are strongly supported.

Recommended action

Education

- Implement publicity to improve driver awareness of cyclists, especially at intersections.
- Continue with existing and implement new community programmes targeting road user behaviour, including cyclists.
- Conduct programmes to work in conjunction with nationally driven campaigns such as National Bike Week and Back to School promotions.
- Continue to support safe cycling programmes in schools.
- Introduce safe riding programmes and courses for cyclists.

Enforcement

- Co-ordinate enforcement campaigns targeting cycle safety, working in conjunction with community programmes.
- Increase enforcement of road user compliance with Give Way, Stop and signal controls at intersections.

Engineering

- Implement dedicated cycle lanes and cycleways in the city, commencing with routes with high cycle crash rates.
- Provide cycle facilities such as formal marked cycle lanes and establish cycleways to improve safety for cyclists.

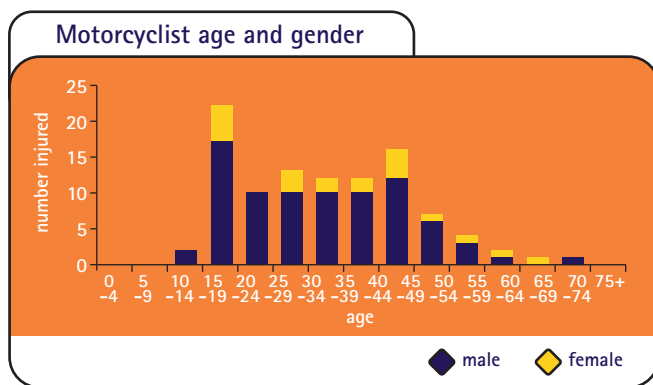
Motorcyclists

Four motorcyclists have been killed, 36 suffered serious injuries and 49 received minor injuries as a result of crashes during the past five years.

Motorcyclists accounted for 7.8 percent of road users injured in crashes reported in the Hastings district. Relative to all other road users, a high portion of motorcyclists suffered more severe injuries in crashes.

While the number of motorcyclists injured in crashes has trended down over the past 10 years, the number injured in the past three years has plateaued. Last year, 12 motorcyclists were injured in crashes.

Male motorcyclists in the 15 to 45 year age group were most susceptible to being involved in motorcycle crashes in the district. A high number of the motorcycle crashes occurred at intersections.



Recommended actions

Education

- Initiate publicity to improve driver awareness of motorcyclists, especially at intersections.
- Continue with existing and implement new community programmes targeting road user behaviour, including motorcyclists.
- Encourage motorcyclists to attend safe riding courses.

Enforcement

- Co-ordinate enforcement campaigns targeting cycle and motorcycle safety, working in conjunction with community programmes.
- Increase enforcement of road user compliance with Give Way, Stop and signal controls at intersections.

Engineering

- Ensure adequate visibility is provided and maintained at intersections.



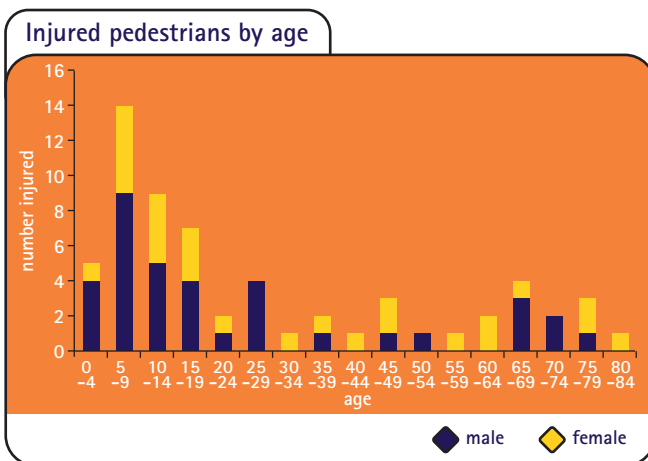
Pedestrians

In the past five years seven pedestrians have died, 15 suffered serious injuries and 42 suffered minor injuries on roads in the Hastings district. This number represents 5.5 percent of the road users killed or injured in the district in the past five years. Over the past 10 years, the overall trend in the number of pedestrians injured has remained static.

Most pedestrian injuries occurred on main arterial or collector roads in the city. However, a number of pedestrians were injured on suburban streets.

Pedestrians most frequently injured were children and young adults under the age of 20.

Pedestrians were more frequently injured on roads in the district between the hours of 10am and 5pm.



Recommended actions

Education

- Initiate new advertising campaigns to promote pedestrian safety targeting the three to 20 year age groups.
- Work with appropriate community groups to promote safe walking habits.
- Raise driver awareness of pedestrians as road users.
- Continue to support school-based safe walking programmes.

Engineering

- Improve pedestrian facilities, particularly on routes or locations where pedestrians are more frequently injured.



Restraints

There has been a significant improvement in the use of front seat safety belts and child restraints in the Hawkes Bay region. However, the use of rear safety belts remains well below the national average and needs to improve. A 100 percent restraint wearing rate is the target for front and rear passengers and also young passengers.

Results from surveys conducted are as follows.

- Adult front safety belt compliance 90 percent (national average 92 percent).
- Adult rear safety belt compliance 52 percent (national average 70 percent).
- Child restraint compliance 90 percent (national average 82 percent).

The benefits of wearing safety belts are significant in the event of a crash in preventing death or reducing the severity of injuries.

Recommended actions

Education

- Promote publicity to improve attitudes to safety belt wearing.
- Continue with existing and implement new community programmes that are designed to increase safety belt wearing compliance. Strategies will include radio advertising, print media and billboards.
- Co-ordinate programmes to work in conjunction with nationally driven campaigns, eg Kidsafe Week and Back to School promotions.

Enforcement

- Support strategic enforcement campaigns aimed at restraint usage.
- Promote random spot checks of restraint wearing.
- Co-ordinate enforcement campaigns targeting restraint usage, working in conjunction with community programmes.

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 Land Transport 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 deaths and injuries in the Hastings district and to enhance the level of safety within the region.

Hastings district road safety community projects funded by the NZRSP for 2002/2003 have been confirmed as follows.

Project	Funding
Urban and rural alcohol	\$22,300
Speed campaign	\$10,800
Committee approved community projects	\$14,200
Road user behaviour	\$7,000
Intersections	\$15,000

Police enforcement

To support community projects, the New Zealand Police will deliver a further 27,660 hours in the Hastings district as follows:

Project	Hours
Speed control	4,410
Drinking or drugged driver control	8,080
Restraint device control	3,300
Visible road safety enforcement	4,830
Traffic flow supervision	200
Crash attendance and investigation	4,600
Incidents, emergencies and disasters	240

Project	Hours
Events	520
School road safety education	1,310
Police community services	170

LTSA and Hastings District Council will liaise with the New Zealand Police who are responsible for delivering these hours, appropriate to risk.

Where to get more information

For more specific information relating to road crashes in the Hastings district, please refer to the 1997 to 2001 Road Safety Data Report or the Land Transport Safety Authority Accident Investigation System, or contact the people or organisations listed below:

Land Transport Safety Authority

Regional Manager
Pat Aldridge

Regional Education Advisor
Kate Irvine

Senior Road Safety Engineer
Colin Goble

For LTSA staff contact details see below

Road Safety Co-ordinator

Hawkes Bay Region
David Teesdale

Roadsafe Hawkes Bay
PO Box 447, Napier
Phone 06 834 1815

New Zealand Police

Inspector Tony McLeod
PO Box 49, Hastings
Phone 06 878 3007

Hastings District Council

Traffic Engineer
Simon Robson
Private Bag 9002, Hastings
Phone 06 878 0500

Transit New Zealand

Regional Highways Manager
Neville Harkness
PO Box 740, Napier
Phone 06 835 1750

Napier Regional Office
215 Hastings Street
PO Box 972, Napier
Phone 06 835 8187, Fax 06 835 2292
www.ltsa.govt.nz

LAND
transport safety
AUTHORITY