# road safety issues

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 number of road deaths and injuries in the Hastings District.

The estimated social cost of 234 injury and 524 non-injury road crashes reported in the Hastings District last year was \$96.40 million. Ten people died and 331suffered injuries as a result of these crashes. Of the 234 injury crashes reported last year, 103 (44 percent) occurred on urban roads and 131 (56 percent) occurred on rural roads.

There was a significant downward trend in crashes reported in the district until 2000. However, this trend changed and last year 92 more injury crashes were reported than in 2000. The increase has occurred on both urban and rural roads in the district.

In the five-year period from 1999 to 2003, 79 pedestrians, 91 cyclists and 91 motorcyclists were injured in road crashes. These road users accounted for nearly 19 percent of people killed or injured on roads in the Hastings District.

Due to the continued increase in injury crashes last year, it is clear that continued effort is required to address the road safety issues for the district, 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

ISSN 1175-897X

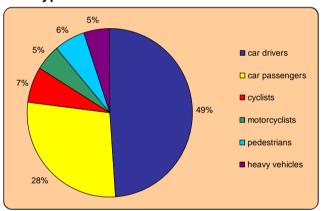
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## 2003 road trauma for Hastings District

0	Deaths	10
天	Serious casualties	66
	Minor casualties	265
	Fatal crashes	ç
_	Serious injury crashes	54
	Minor injury crashes	171
	Non-injury crashes	524

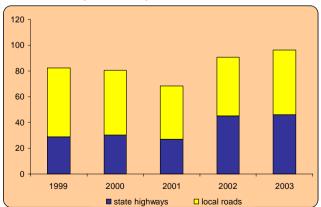
#### Road casualties 1999-2003

#### User type 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.





In the past five years, 334 loss of control or head-on type crashes have resulted in people being injured on rural roads in the Hastings District. Loss of control and head-on crashes accounted for 64 percent of rural injury crashes reported in the district. Due to higher travel speed in rural areas, people involved in these crashes often received more severe injuries.

Driver-related factors commonly associated with these crashes included:

- travelling too fast for road conditions
- poor vehicle handling
- inattention
- failure to keep left
- overtaking
- poor judgement and observation
- fatigue
- alcohol.

Environmental factors commonly reported as contributing to loss of control crashes on rural roads and state highways in the district were:

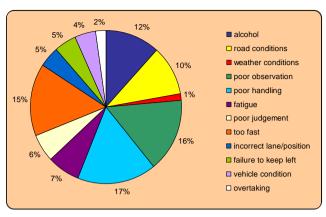
- slippery road surface (due to rain, loose material, fuel deposits or pavement condition)
- road under construction
- weather conditions
- visibility limited (due to road alignment, topography or vegetation)
- stray animals.

Last year, 34 percent of all injury crashes in rural areas occurred during the hours of darkness. Thirty percent of all rural injury crashes occurred in wet weather.

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

Approximately 47 percent of injury crashes in rural areas occurred on local roads and 53 percent on state highways in the district.

#### Common factors in rural crashes



#### 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 on roads, particularly at black spots.
- Maintain roadsides clear of hazards and provide side protection where appropriate.
- Widen road carriageways and seal shoulders to provide additional vehicle wander and recovery space where feasible and cost effective.
- Maintain the pavement surface to provide good standards for skid resistance.
- Improve road geometry.
- Promote safe and secure stock fences in rural areas.

#### Education

- Focus on raising awareness of inappropriate speed.
- Educate drivers to be aware of the risks of 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.
- Maintain stock and animal control in the district.

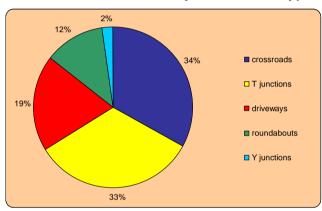
## 슋 Intersections

In the past five years, 437 injury crashes and 1,321 non-injury crashes were reported at intersections (including driveways).

LTSA records show that 15 people died, 114 suffered serious injuries and 519 sustained minor injuries in crashes at intersections in the Hastings District in the period from 1999 to 2003.

Crashes at intersections resulting in injury accounted for approximately 47 percent of all injury crashes and 55 percent of all non-injury crashes reported in the Hastings District.

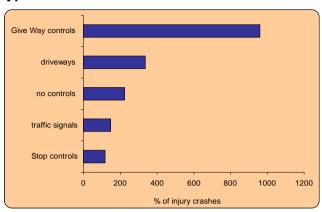
#### Crashes at intersections by intersection type



Factors commonly recorded in crashes at intersections were failure to give way or stop when required, poor observation, inattention, and driving in incorrect lanes or position on the road. Alcohol, and speed at intersections were other commonly reported driver-related factors. Crashes into the rear of vehicles or other obstacles were also commonly reported in the Hastings District.

When compared with similar districts, the percentage of injury crashes at intersections was much higher, especially in both urban and rural areas.

## Intersection crashes by intersection control type



#### **Recommended actions**

#### Engineering

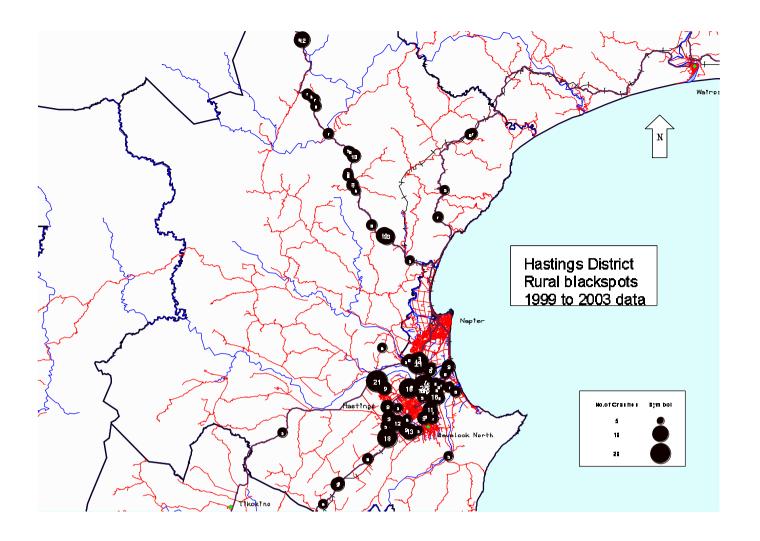
- Continue with crash reduction studies to investigate and, if required, carry out remedial work at intersections.
- Ensure adequate sight distance is available at intersections and appropriate Give Way or Stop signs are installed.

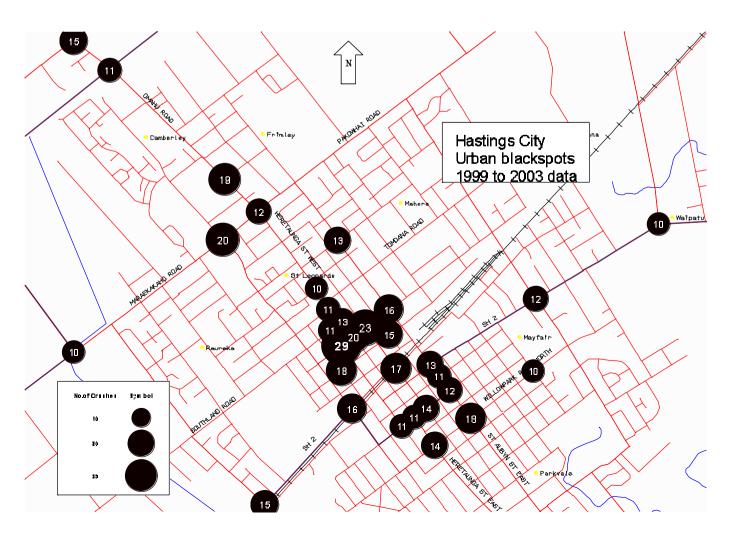
#### Education

- Focus on road user behaviour at intersections, including roundabouts and driveways.
- Consider targeted advertising promotions, involving the appropriate media channel and style of resource to be developed.
- Promote the need at intersections to:
  - check for oncoming traffic (including cyclists and motorcyclists)
  - give way to other traffic
  - reduce speed
  - increase following distance
  - be more alert.

#### Enforcement

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







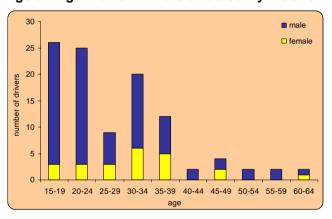
### **Alcohol**

When compared with similar districts and all of New Zealand, alcohol-related injury crashes continue to be over-represented in both urban and rural areas of the Hastings District.

Of the 927 injury crashes reported in the Hastings District in the past five years, 161 (17.4 percent) had alcohol recorded as a key factor. Sixty-eight (42 percent) of these injury crashes involving alcohol occurred in urban areas. Ninety-three (58 percent) occurred in rural areas.

Drivers in the 15 to 40 year age group were more commonly involved in crashes where alcohol was a recorded driver factor. Males featured predominantly in the drink-drive statistics.

#### Age and gender of drivers affected by alcohol



#### Recommended actions

#### Education

- Encourage and promote safe drinking and driving habits, particularly among drivers aged from 15 to 40 years.
- Encourage and support licensees to actively promote host responsibility practices and designated driver schemes.
- Work with peer pressure groups such as SADD to convey sober driver messages to young drivers.

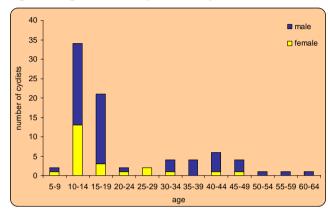
#### Enforcement

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



In the five-year period from 1999 to 2003, five cyclists died, 16 cyclists suffered serious injuries and 70 suffered minor injuries. Cyclists accounted for seven percent of road users injured in crashes reported in the Hastings District. In comparison with similar districts, the number of cyclists injured in crashes remains high in both the rural but more particularly urban areas.

#### Age and gender of cyclists injured in crashes



Last year there was an increase in cyclists injured in crashes in the district. The number injured in crashes continues to be of concern and requires further attention.

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

- 52 occurred at Give Way controlled intersections
- eight occurred at Stop controlled intersections
- seven occurred at intersections with traffic signals
- 15 occurred at driveways
- 35 occurred away from intersections.

Younger cyclists, predominantly males in the 10 to 20 year age group, were more likely to be involved in injury crashes with vehicles. However, there were also a number of male cyclists aged between 30 and 50 years who featured in the statistics.

The Hastings District cycling strategy identifies methods for the development of cycle facilities that should enhance safety for cyclists. The strategy also includes education and enforcement methods for addressing cycling safety issues. Immediate adoption and implementation of such methods, particularly those that will have an early effect on reducing the number of cyclists injured, is strongly supported. These include the establishment of cycle facilities giving priority to routes where the cycle crash rate is high.

#### **Recommended actions**

#### Education

- Continue to support safe cycling programmes in schools.
- Promote driver awareness of cyclists and motorcyclists, especially at intersections.
- Implement activities in conjunction with nationally driven campaigns, such as National Bike Wise Week and back to school promotions.

#### Enforcement

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

#### Engineering

- Implement dedicated cycle lanes and cycle ways in the city commencing with higher demand routes with high cycle crash rates.
- Provide cycle facilities such as formal marked cycle lanes and establish cycle ways to improve safety for cyclists as recommended in the cycling strategy.



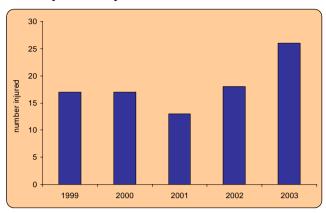
Three motorcyclists were killed, 43 suffered serious injuries and 45 received minor injuries as a result of crashes during the past five years.

Motorcyclists accounted for 6.5 percent of road users injured in crashes reported in the Hastings District. Relative to all other road users, a higher proportion of motorcyclists suffered more severe injuries in crashes.

In 2001, 13 motorcyclists were injured in crashes. Last year that number doubled to 26 people.

Male motorcyclists in the 15 to 45 year age group were more likely to be involved in motorcycle crashes in the district. A high number of the motorcycle crashes occurred at intersections.

#### Motorcyclists injured in crashes



#### **Recommended actions**

#### Education

- Focus on improving driver awareness of motorcyclists especially at intersections.
- Develop safe riding courses for motorcyclists.
- Continue to involve motorcycle clubs (eg Ulyses) in raising awareness of safety concerns relating to motorcyclists.

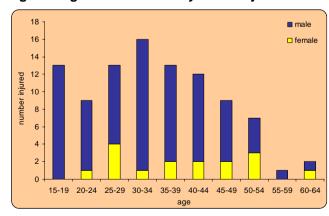
#### Enforcement

- Co-ordinate enforcement campaigns, programmes targeting cycle and motorcycle safety.
- 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.
- Ensure pavement skid resistance quality is maintained.

#### Age and gender of motorcyclists injured





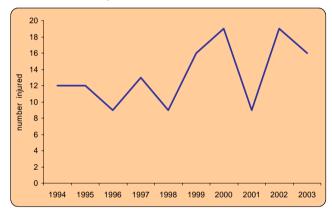
## **Pedestrians**

In the past five years, six pedestrians died, 18 suffered serious injuries and 55 suffered minor injuries on roads in the Hastings District. This number represents six percent of road users killed or injured in the past five years. Over the past 10 years, the overall trend in the number of pedestrians injured has increased. Last year, 16 pedestrians were injured on roads in the Hastings District.

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

Pedestrians most frequently injured were children and young adults under the age of 20 years with a significant number in the five to nine year age group. Pedestrians were more frequently injured on urban roads in the district between the hours of 10 am and 5 pm.

#### Pedestrians injured



#### Recommended actions

#### Education

- Promote safe walking habits and raise driver awareness of pedestrians as vulnerable road users.
- Continue to support 'walking school bus' programmes.

#### Engineering

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



## Restraints

There has been a significant improvement in the use of front and rear seat safety belts and child restraints in the Hawkes Bay Region. However, the use of adult front and rear safety belts and child restraints still needs to improve. A 100 percent restraint wearing rate is the target.

Results from surveys conducted in the Hawkes Bay Region in 2003 and 2004 are:

- adult front safety belt compliance 89 percent (national average 93 percent).
- adult rear safety belt compliance 69 percent (national average 81 percent)
- child restraint compliance 83 percent (national average 86 percent).

Further improvement in the wearing of restraints in vehicles should prevent or reduce the number and severity of injuries, particularly from higher-speed rural crashes and crashes at intersections

The benefits of wearing safety belts are significant in the event of a crash, as they assist in preventing injuries or reducing their severity.

#### Recommended actions

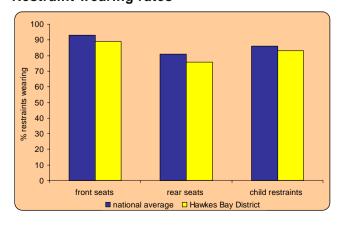
#### Education

- Focus on improving attitudes to restraint wearing.
- Promote and support child restraint schemes currently taking place locally.
- Implement activities to work in conjunction with nationally driven campaigns, eg Kidsafe Week and back to school promotions.

#### Enforcement

- Support enforcement campaigns and community programmes aimed at restraint usage.
- Promote restraint wearing random spot checks.

#### Restraint wearing rates



#### Where to get more information

For more specific information relating to road crashes in the Hastings District, please refer to the 1999 to 2003 Road Safety Data Report, or the Land Transport Safety Authority Crash Analysis System or contact the people or organisations listed on this page.

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