

# road safety issues

July 2003

The Land Transport Safety Authority (LTSA) has prepared this road safety issues report. It is based on reported crash data and trends for the 1998–2002 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 Manukau City.

The data in this report applies only to local roads and not to any state highways within Manukau City as these are covered in a separate Transit New Zealand report.

This is the fourth road safety issues report for Manukau City. Since one new year's data is added and one is dropped for each new report, it is unlikely that the main issues for any local body would change radically from year to year. The issues chosen for this report are drawn from the most common crash types or those that appear over-represented when Manukau is compared with similar local bodies. This report also contains a comment on cyclist crashes which, although not high in numbers in Manukau, are topical in the context of the government's desire to see an increase in the use of sustainable, active transport modes (see the New Zealand Transport Strategy).

The actions suggested in this document are by no means an exhaustive list of what could help with each issue.

## Major road safety issues

Manukau City

Intersections

Alcohol

Speed

Pedestrians

Nationally

Speed

Alcohol

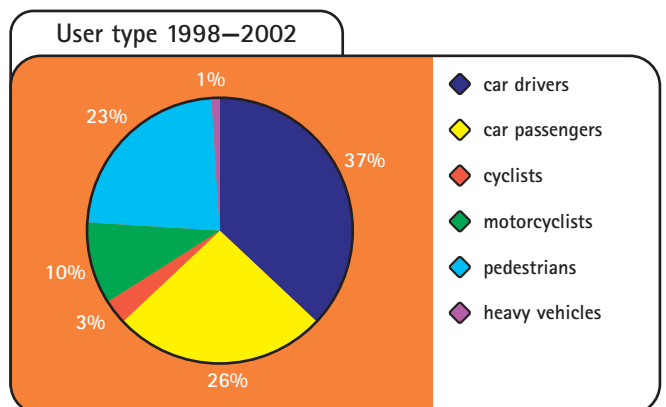
Failure to give way

Restraints

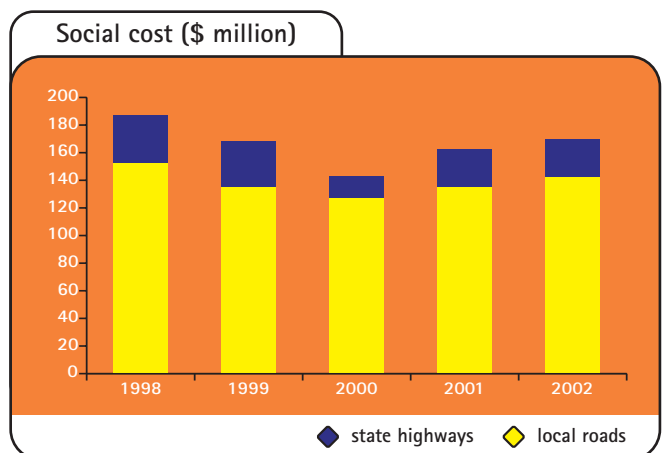
## 2002 road trauma for Manukau City

Deaths	19
Serious casualties	100
Minor casualties	558
Fatal crashes	14
Serious injury crashes	83
Minor-injury crashes	416
Non-injury crashes	2,024

## Road deaths 1998–2002



## 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 2002 prices.

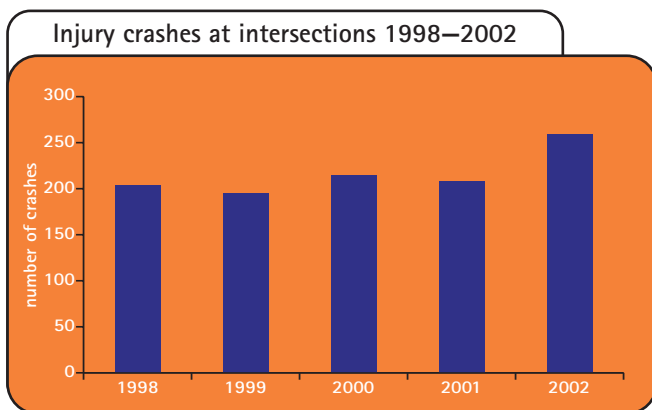


# Intersections

Manukau City is largely urban in nature and is expanding its urban area rapidly. It is not surprising, then, that 53 percent of all crashes in the city occur at intersections.

Between 1998 and 2002, the number of crashes at intersections grew from 930 to 1,430. At the same time, the overall crash numbers in the city also rose. Except for 2002, the percentage increase in crashes at intersections out-paced the general rise in crashes.

Interestingly, in 2002 there was a sharp rise in the number of injury crashes at intersections. This magnitude of rise was not present in non-injury crashes.



### Further facts about intersection crashes:

- as might be expected most crashes resulted from one party failing to give way to, stop for, or see another party
- 16 percent of injury crashes related to alcohol (a drop from last year's report)
- 13 percent of injury crashes related to speed (a small rise from last year's report)
- the worst month was August and the best month was January
- 87 percent of crashes were in areas with a speed limit of 50 km/h and 2.3 percent in areas with a speed limit of 100 km/h
- 16 people were killed
- 35 percent of crashes were at night
- 27 percent of crashes were on wet roads.

Type of intersection control	Total number of crashes (injury and non-injury)
Give Way	2,011
No control	1,638
Points-man	14
Stop	630
Traffic signals	1,673

Type of intersection control	Total number of crashes (injury and non-injury)
Multi leg	220
Roundabout	551
T junction	3,751
Crossroads	1,281
Y junction	167

### Three most common crash types



## Recommended actions

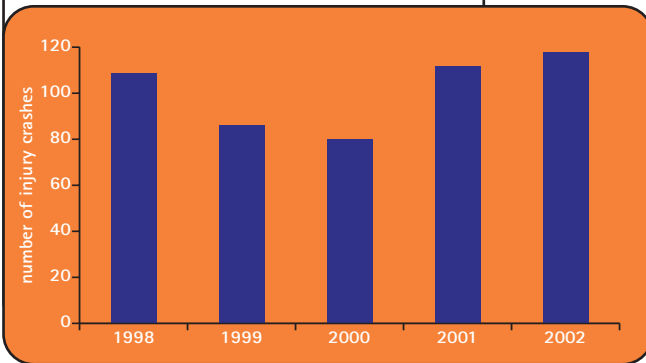
- Support strategic enforcement campaigns aimed at T junctions and crossroads.
- Encourage enforcement campaigns targeting drivers who fail to stop or give way.
- Encourage education programmes to address driving at an appropriate speed, keeping a safe distance, signalling correctly, choosing a safe gap, and checking for pedestrians and cyclists.
- Encourage crash reduction studies of known black spots.
- Consider installing roundabouts, where feasible, to reduce the severity of crash injuries whilst paying particular attention to the safety of pedestrians and cyclists.
- Remove any vegetation that might make signs, signals, vehicles and markings difficult to see.



# Alcohol

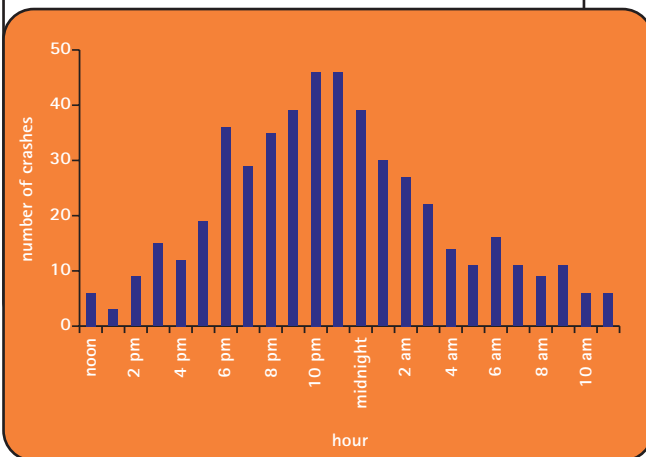
As in last year's report, alcohol as a crash factor is highly represented in injury crashes in the city. As a contributory factor in injury crashes it is very over-represented in urban Manukau, almost 30 percent more than in either peer local bodies or nationally. Clearly, drink-driving remains a major problem in Manukau.

Alcohol as a factor in injury crashes 1998–2002



There was a noticeable drop in alcohol-related injury crashes from 1998 to 2000, with rises in 2001 and 2002. Viewed against a backdrop of a significant rise in injury crashes in the city in 2002, it could be said that progress is still being made, but the figures indicate that there is no room for complacency.

Alcohol-related injury crashes by time of day 1998–2002



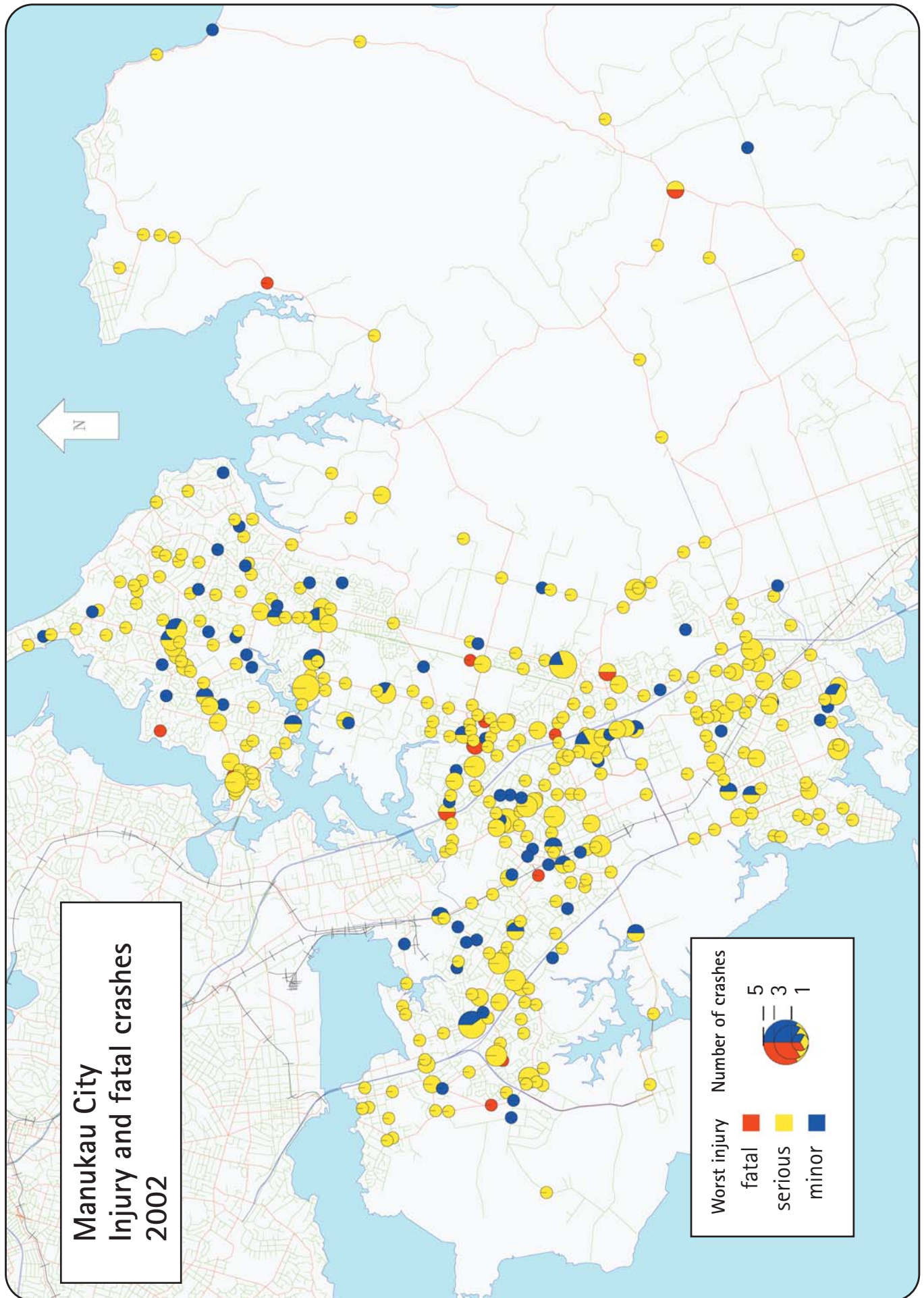
Unsurprisingly, three quarters of all alcohol-related crashes occurred at night. Considering traffic volumes, the hazard of the drunk driver is particularly significant after 10 pm and into the early hours of the morning. These problems are particularly acute on Fridays and weekends.

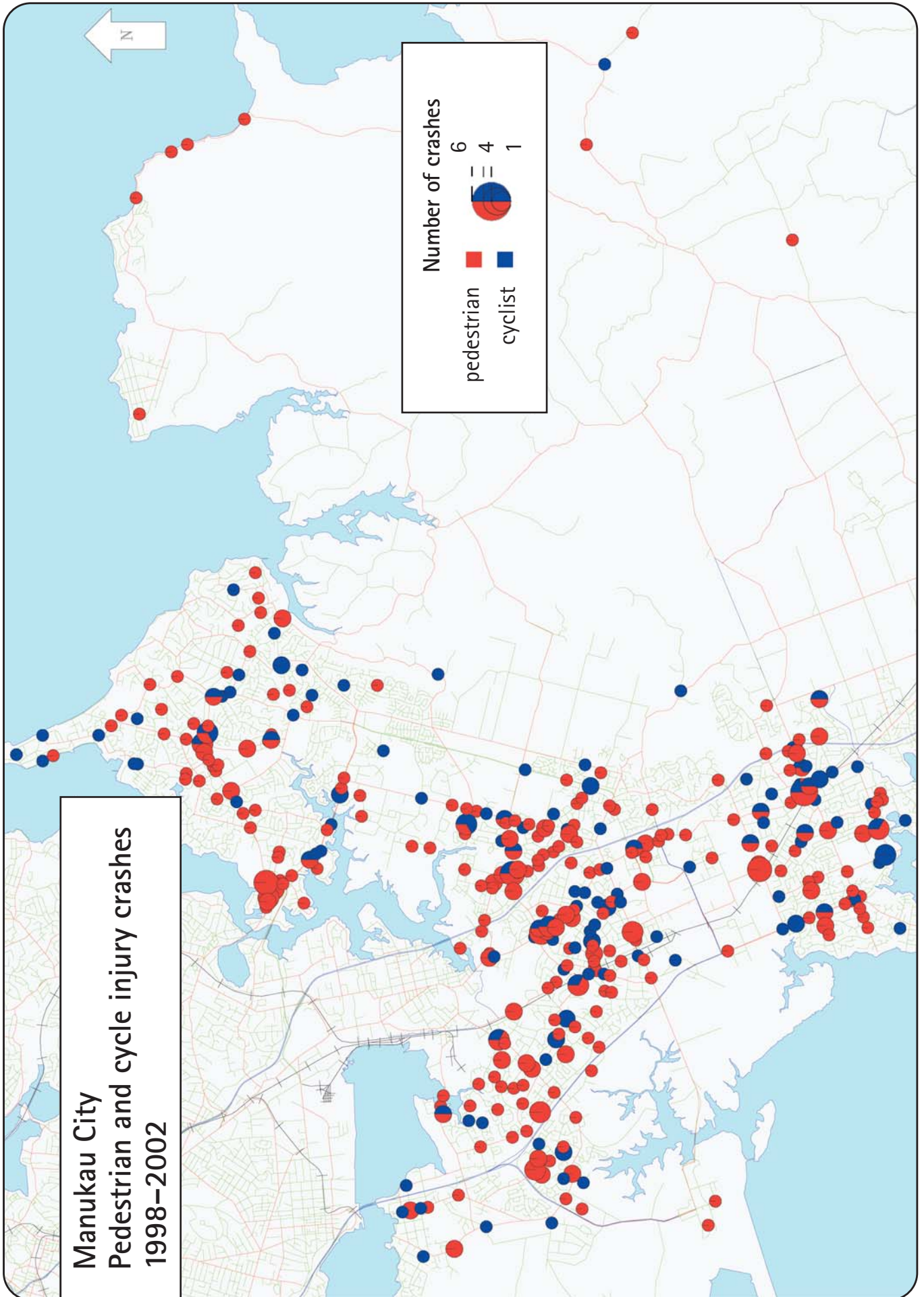
Further facts about alcohol crashes:

- alcohol as a crash factor can be found in 22 percent of injury crashes
- the worst month was June and the best month was February
- of the crashes that occurred in the dark, 32 percent were on wet roads
- 43 percent occurred at intersections
- 87 percent occurred in urban areas.

## Recommended actions

- Promote and support random alcohol checks by the Police.
- Support the use of roving roadblocks and the booze bus.
- Investigate ways of identifying recidivist drink-drivers and, where appropriate, direct them to alcohol awareness programmes.
- Continue existing programmes and initiate new ones to promote safe drinking and transport practices, particularly among young drivers.
- Remove roadside obstacles that might be hit by drivers having problems controlling their vehicle.
- Provide consistent 'no surprises' road environments.

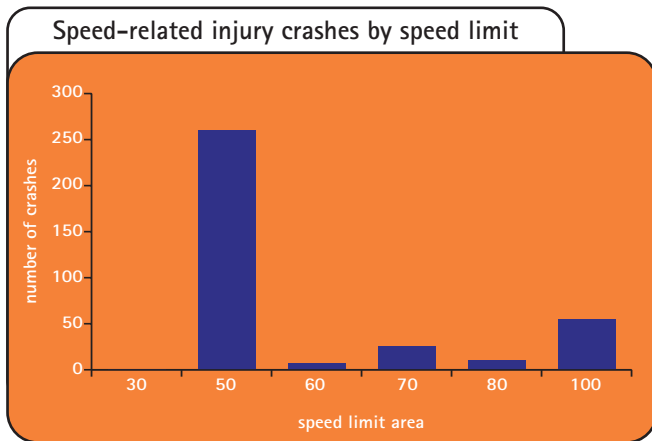




# 80 Speed

In rural Manukau, travelling too fast for the conditions is the major factor contributing to crashes. In urban areas it is also a very significant contributory factor and is found about 25 percent more than might be expected when Manukau is compared with similar local bodies. Overall, speed as a factor is found in 16 percent of all crashes in Manukau.

The majority of Manukau’s speed-related crashes occurred in urban areas, with 82 percent occurring in areas with a speed limit of 70 km/h or less. It is well known that pedestrian crash survivability at collision speeds over 50 km/h diminishes rapidly to a high certainty of death at 70 km/h. Manukau’s known pedestrian crash problem (see next issue) means that continued work on reducing urban speeds would benefit not only motor vehicle users but also pedestrians.



### Further facts about speed-related crashes:

- 21 percent of crashes involved drivers with breath or blood alcohol levels over the limit and a further 18 percent of drivers were either suspected of having been drinking or tested below the limit
- 53 percent of crashes occurred in the dark
- 37 percent of crashes occurred on wet roads
- 45 percent occurred at intersections
- 26 people died in these crashes
- 61 trees and 63 poles were hit in these crashes.

### Three most common crash types



## Recommended actions

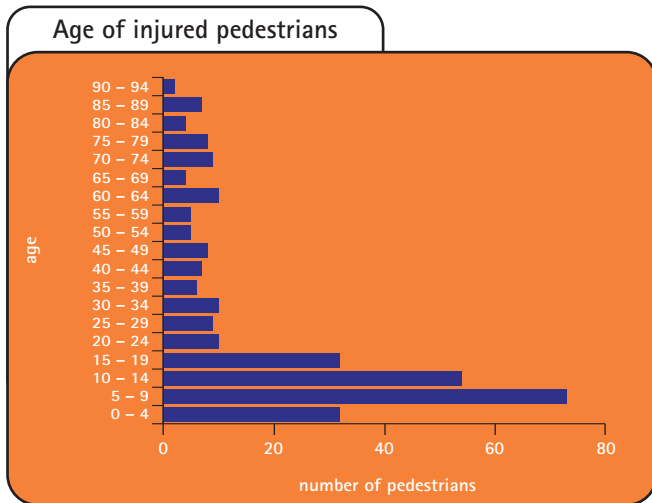
- Support enforcement campaigns aimed at speed control, especially at night.
- Encourage increased enforcement of speed limits in urban areas.
- Continue to work with the Police to carry out appropriate levels of speed enforcement, using risk-targeted patrol planning.
- Continue to educate the public to be more aware of the risks of speed and improve attitudes to fast driving.
- Conduct crash reduction studies of known black spots and routes.
- Review speed camera sites to ensure they are in the most appropriate locations.
- Investigate areas in the city where loss of control crashes are occurring, and apply remedial measures such as high friction surfacing.
- Maintain signs and markings to an appropriate/high standard.



# Pedestrians

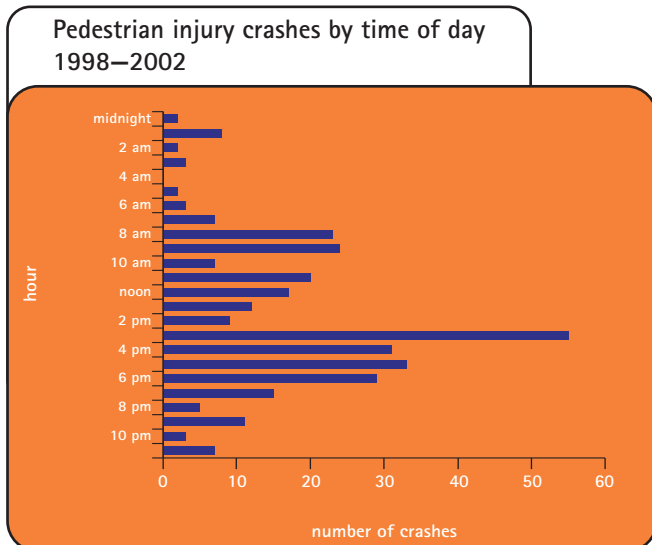
Between 1998 and 2002 there were 319 pedestrian injury crashes in Manukau City. Even though injury crashes rose in 2002, pedestrian crashes fell slightly from the previous year.

Manukau is a large city with a higher proportion of its residents below the age of 14 than the New Zealand average. It is, therefore, not unexpected that 54 percent of pedestrians injured are aged 14 years or younger.



**Further facts about pedestrian crashes:**

- 64 percent of the pedestrians involved were aged 19 or younger
- 12 percent of pedestrians involved were aged 65 or older
- two people over 90 years old were injured and 32 children aged four years or under were injured
- the worst day of the week was Wednesday and the best Sunday
- the worst month was August and the best April
- more crashes happened in the afternoon than in the morning and the worst hour was 3 pm, by a significant margin
- 17 pedestrians died, 83 were seriously injured and 226 received minor injuries
- Police reports indicated that in just under half of all crashes, the pedestrian was running across a road.



## Recommended actions

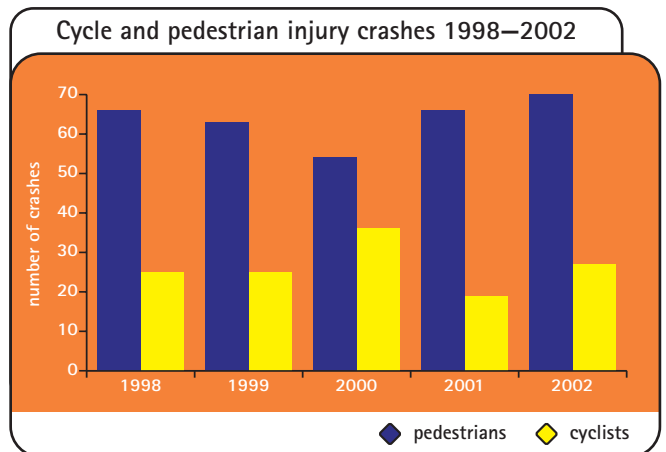
- Target increased enforcement to high-risk sites especially at school closing times.
- Support strategic enforcement and education campaigns aimed at encouraging drivers to share the road safely with others.
- Encourage safe pedestrian campaigns aimed at younger pedestrians.
- Encourage the development of pedestrian-friendly arterial roads.
- Continue implementing recommendations from the city’s pedestrian crossing audit programme.

## Supplementary comment on cyclists

In the government’s New Zealand Transport Strategy there is specific reference to the importance of sustainable transport modes such as walking and cycling. A number of projects are under way within the LTSA to assist in achieving an increase in the safe use of these modes.

The LTSA in Auckland has put considerable effort into assisting local bodies with information on the nature and extent of the pedestrian problems over the last decade, but we have not often focused on cyclists.

When compared in absolute terms with other modes of transport including pedestrians, cyclists make up a small number of the injury statistics. However, when compared with the number of cyclists on the roads, the actual number of crashes on a per cyclist basis might be quite high.



As the LTSA is now undertaking its household survey annually, it is hoped that over time the result will provide a clearer picture of the movements of the local walking and cycling population. Combining this information with the LTSA’s crash data will give a better understanding of the true size of the problem and will help with developing a safer road environment for cyclists and pedestrians.

In Manukau, between 1998 and 2002, there were 132 reported injury crashes between a cyclist and a motor vehicle (there were 319 pedestrian crashes in the same period). Two cyclists died, 23 received serious injuries and 109 received minor injuries.

# New Zealand Road Safety Programme

Reducing road trauma involves a multi-pronged approach, which includes education, engineering and enforcement. The New Zealand Road Safety Programme (NZRSP) is the primary planning and funding programme for road safety activity undertaken by the New Zealand Police, LTSA and community groups. Transfund New Zealand provides funding to Transit New Zealand and local authorities for roading projects through its National Land Transport Programme.

## Community projects

Through the Community Road Safety Programme (CRSP) the NZRSP provides funding for community development and community programmes to support road safety and to bring about positive and sustainable changes in community attitudes and behaviours. CRSP funding of community initiatives aims to encourage local involvement and ownership of road safety issues, and to target local resources and effort to local risks. This year's review of the programme initiates a re-focus of effort and funding into community development. This involves working with and within different communities of people to assist them in becoming aware of their own local road safety issues and developing solutions to achieve better road safety outcomes.

## Road policing

Police enforcement hours to support community projects are now allocated to police community services hours rather than to individual projects. The delivery of these hours to support community initiatives will need to be negotiated by the road safety co-ordinator.

In 2003/2004 the Police are funded to deliver 115,160 hours of road policing in the Counties-Manukau Police District as follows:

Project	Police hours
Strategic – alcohol/drugs, restraints, speed and visible road safety enforcement	80,250
Traffic management – crash attendance events, incidents, emergencies and disasters, traffic flow supervision	27,970
School road safety education	5,420
Police community services	1,520

## 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 22 percent in Manukau City (nine percent at state highway sites and 25 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

Manukau City Road Safety Report 1998–2002  
LTSA Crash Analysis System

## Where to get more information

For more specific information relating to road crashes in Manukau City, please refer to the 1998 to 2002 Road Safety Report or the Land Transport Safety Authority Crash Analysis System, or contact the people or organisations listed below:

### Contacts

Land Transport Safety Authority  
Regional Manager  
Peter Kippenberger  
  
Regional Education Advisor  
Sandra Mills  
  
Senior Road Safety Engineer  
Chris Hewitt

See LTSA staff contact details at bottom of page

Road Safety Co-ordinators  
Manukau City Council

City Traffic Engineer  
Manukau City Council  
Private Bag 76 917, Manukau City  
Phone 09 262 8900

New Zealand Police  
Sandy Newsome  
Phone 09 295 0200

Auckland Regional Office  
Level 6, 1 Queen Street  
Private Bag 106 602, Auckland  
Phone 09 377 3400, Fax 09 357 1615  
[www.ltsa.govt.nz](http://www.ltsa.govt.nz)

LAND  
transport safety  
AUTHORITY