

road safety issues

Auckland City

Land Transport New Zealand has prepared this road safety issues report. It is based on reported crash data and trends for the 2000–2004 period. The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in Auckland City.

Population levels, vehicle ownership and travel, both in vehicles and by other modes, continue to grow in the Auckland Region. In Auckland City, the heart of the region, this growth implies an increase in the risks faced by individuals while moving about in the busy metropolitan environment.

It is therefore increasingly important that this risk is well understood by those who design and manage the transport network, and that the best possible mitigation measures are adopted and progressively incorporated.

In addition to the known and proven physical interventions, one measure with the potential to contribute to better risk and overall management is a more integrated approach to land use planning. With a better understanding of risk generation and better planning to mitigate sources of risk, growth can be accommodated without compromising the safety of those who live and work in the city.

Major road safety issues

Auckland City

Pedestrians/cyclists

Crossing and turning/intersections

Heavy vehicles

Nationally

Speed

Alcohol

Failure to give way

Restraints



2004 road trauma for Auckland City



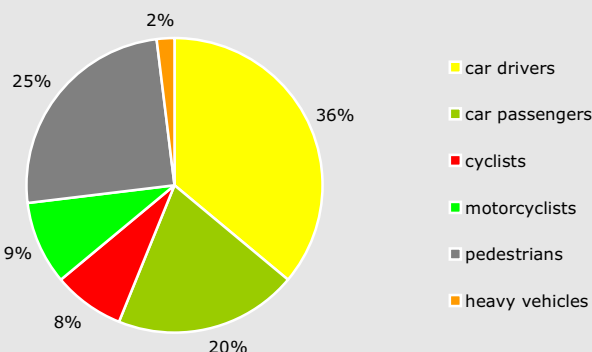
Deaths	18
Serious casualties	148
Minor casualties	1,198



Fatal crashes	16
Serious injury crashes	127
Minor injury crashes	948
Non-injury crashes	4,398

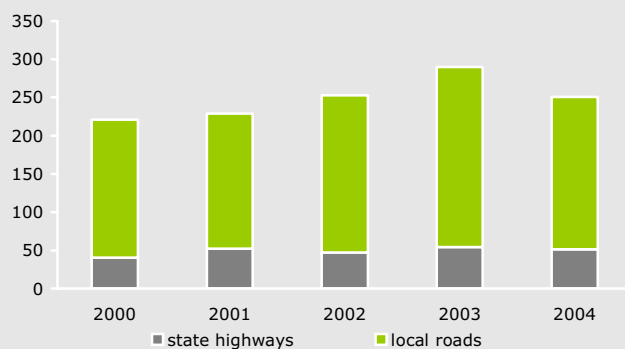
Fatal and serious casualties

User type 2000–2004

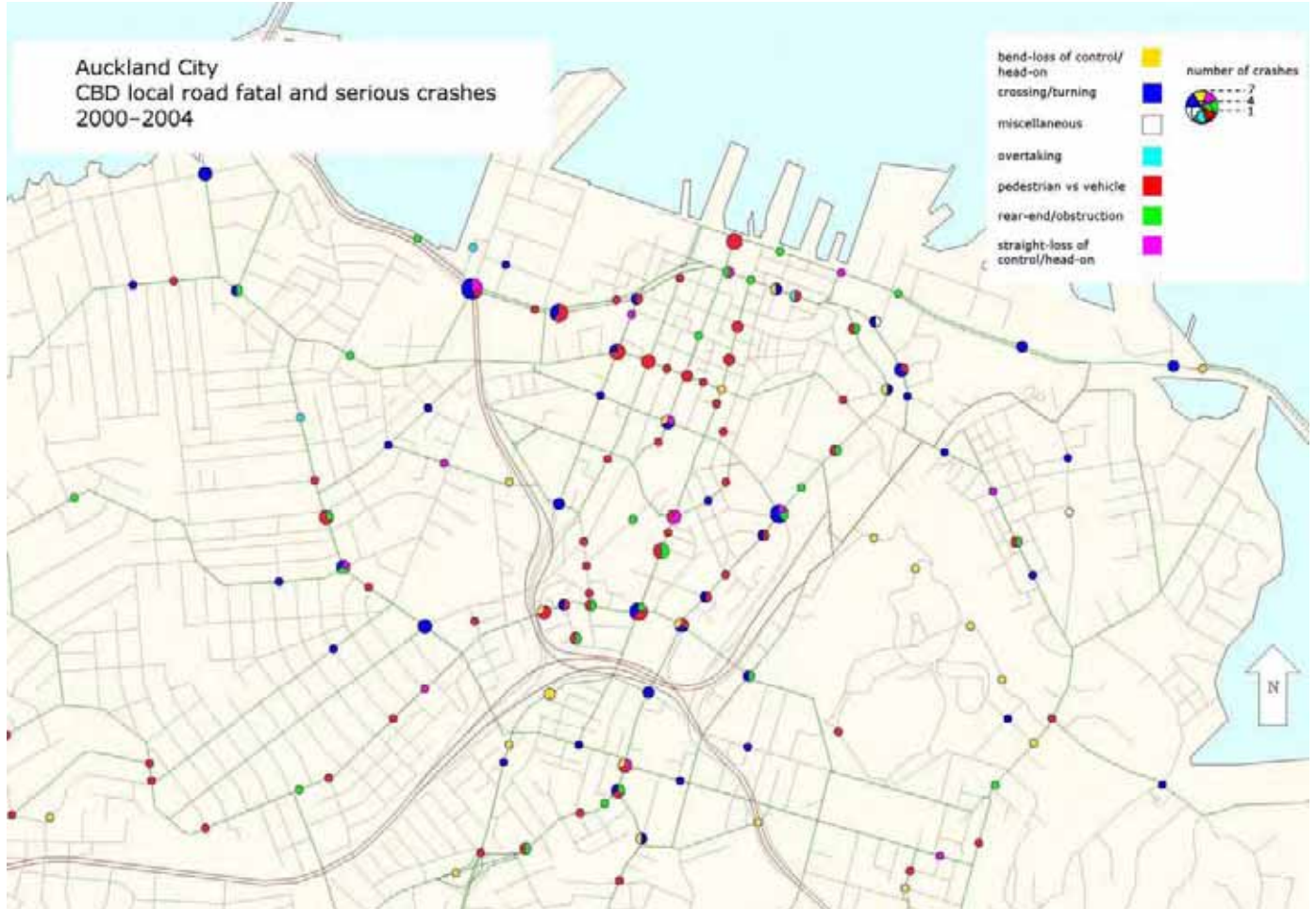
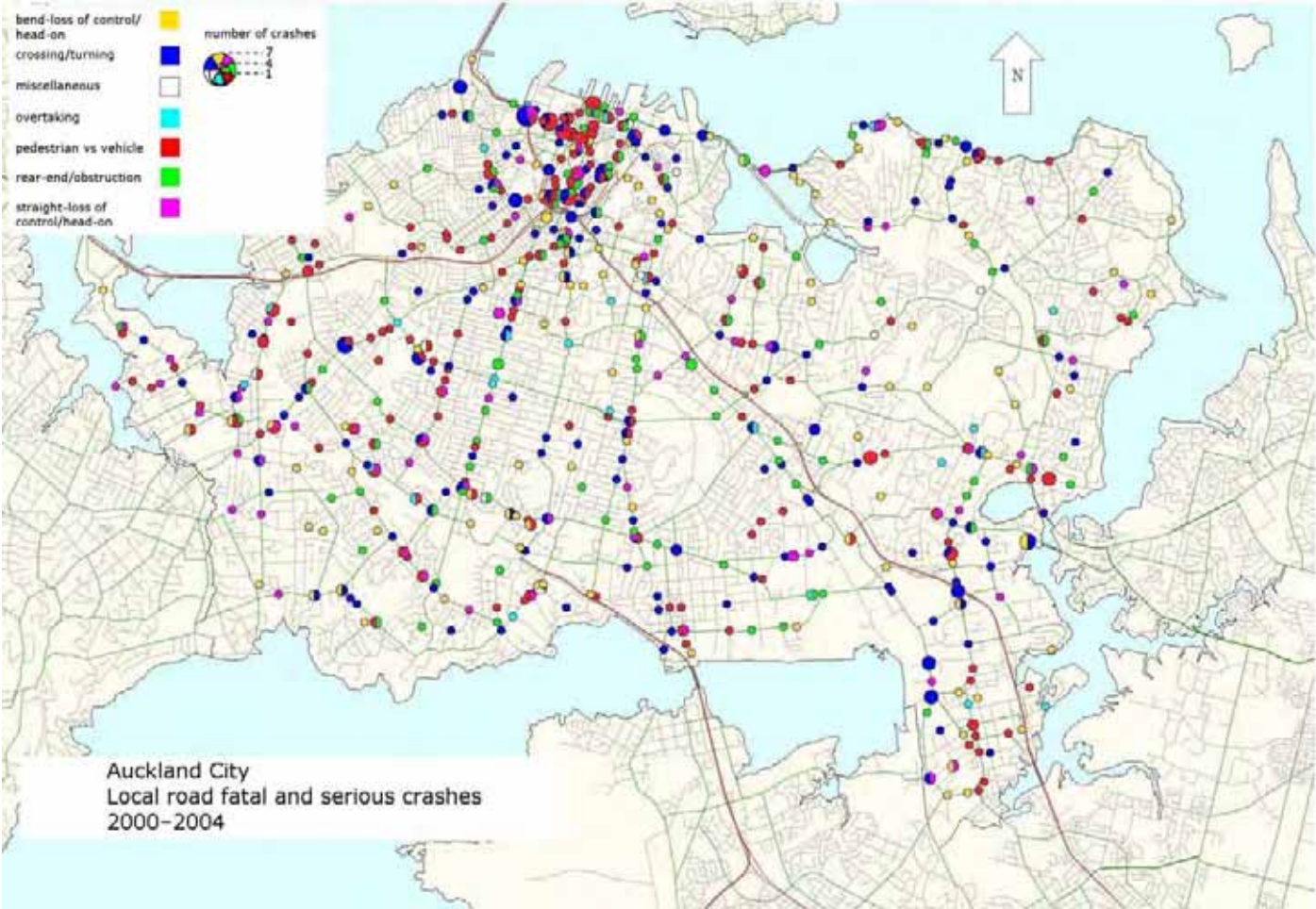


Estimated social cost of crashes*

Social cost (\$ million)

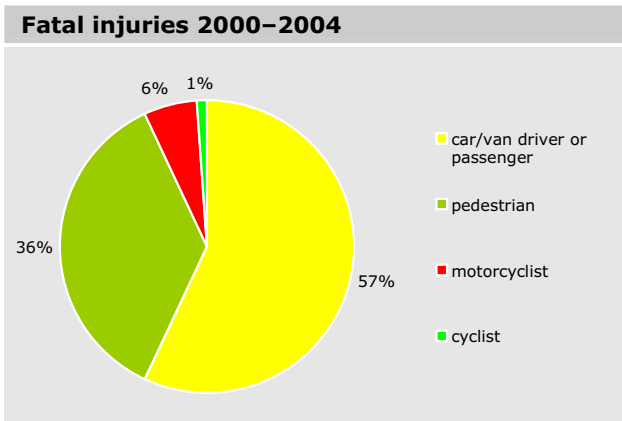


*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are expressed at June 2004 prices.



Pedestrians/cyclists

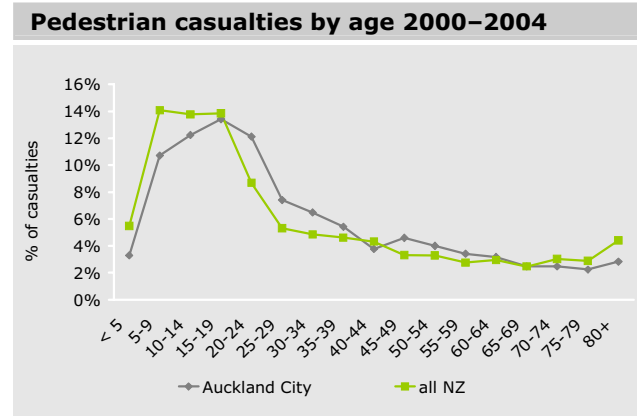
One in every four people suffering fatal or serious injury while moving about on the roads in Auckland City is a pedestrian. Pedestrian casualties are considerably over-represented when compared with peer group cities and national data.



Of the 83 fatalities in Auckland City from 2000 to 2004, 30 were pedestrians (36 percent).

On the city's busy road network, vulnerable users such as pedestrians and cyclists are constantly interacting with motorised traffic. Regardless of who is at fault in the event of a conflict, it is the vulnerable road user who bears the more serious consequences. Pedestrians represented 18 percent of all casualties in Auckland City, compared with an average of only 13 percent for all of New Zealand.

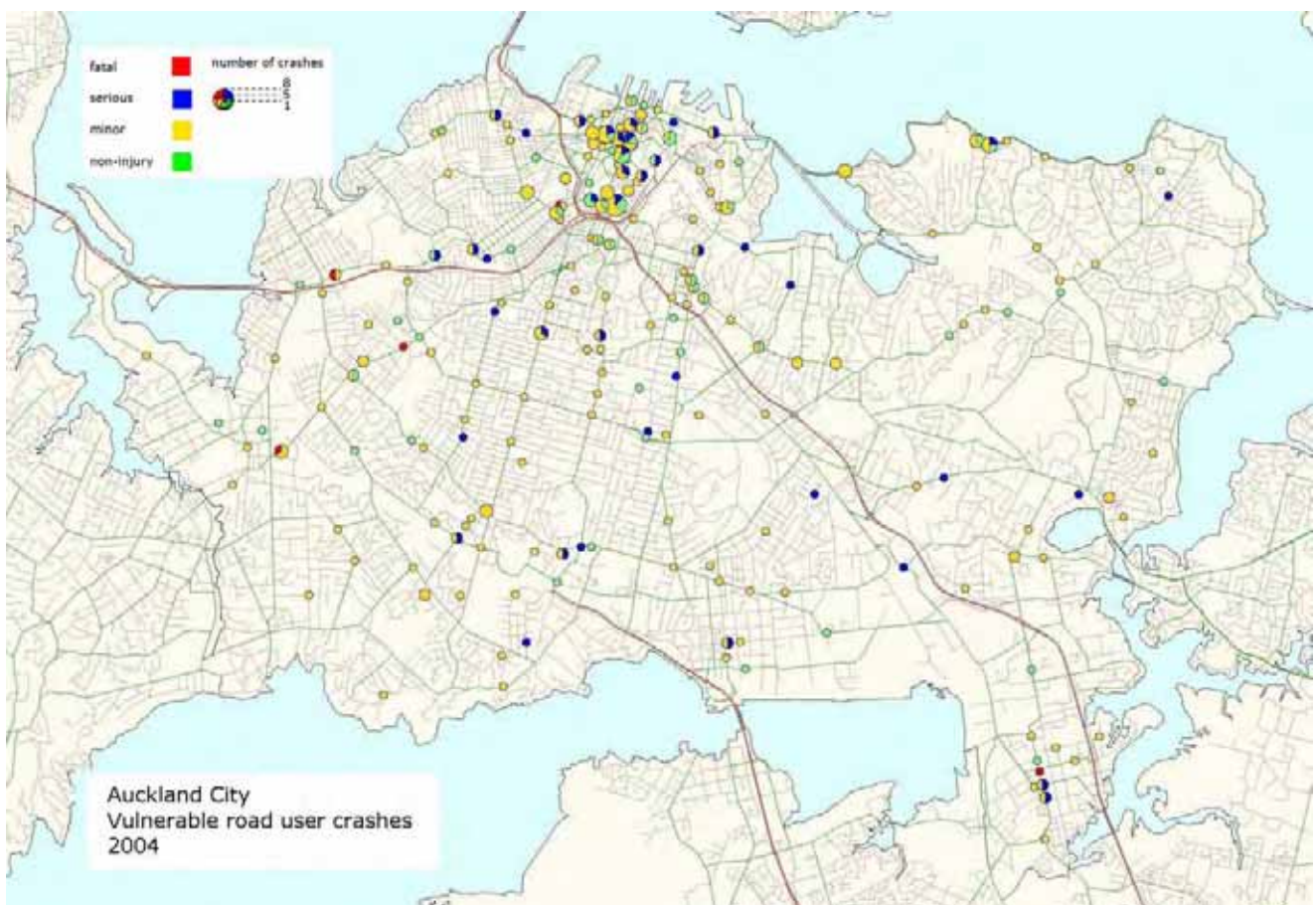
In Auckland City, the 20–39 year age group had a higher number of pedestrian casualties than the national average, while the figures for children were slightly lower. However, teenage pedestrians remained the highest risk group, in line with national statistics.



There were clear peaks for these crashes during the weekday morning and afternoon school travel times.

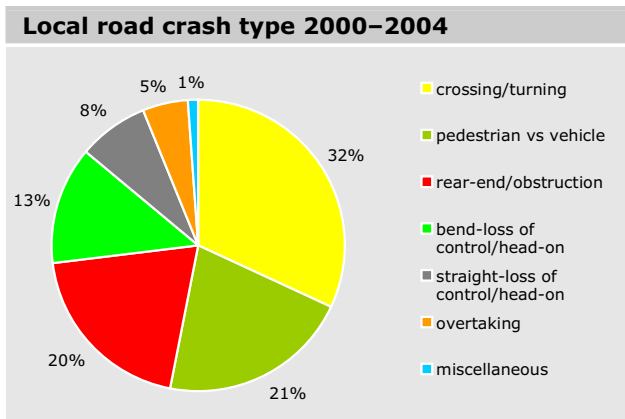
With the steady increase in cycling activity, cyclist casualties have increased from under five percent of all casualties in 1995 to around six percent in 2004. Cyclist casualties in the 20–40 year age bracket were higher in comparison with other cities and the nation as a whole, while the 20–30 year age bracket was seriously over-represented.

Safety engineers need to adopt measures that provide for the safest possible interaction between motorised traffic and other road users in locations where cyclist and pedestrian numbers are high, at intersections, and where there is a need to cross busy roads.



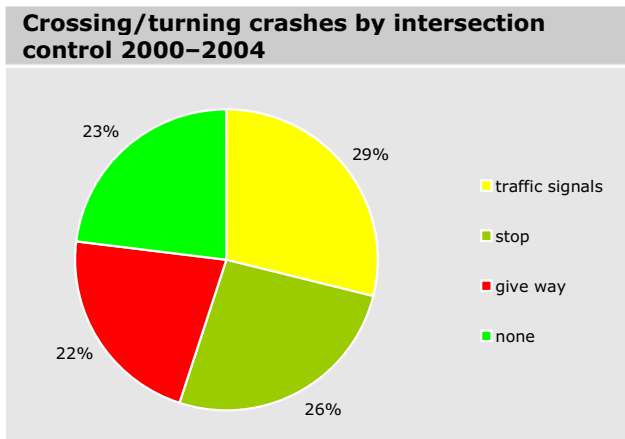
Crossing and turning/intersections

Crossing and turning crashes remained the most prevalent crash type in Auckland City between 2000 and 2004, accounting for 32 percent of all local road injury crashes reported in this period. The vast majority of these occurred at intersections, where crossing and turning conflicts principally occur.



While figures for this crash type were comparable to peer group cities and all New Zealand data, the high volume of traffic activity in Auckland City means that opportunities for addressing these crashes must be actively sought. Failure to give way or stop was the predominant factor contributing to crossing/turning crashes on local roads, while poor observation was the second. The number of reported crossing/turning crashes has trended upwards since 2001, however, the number in 2004 was slightly lower than in 2003.

Crashes at traffic signal controlled junctions featured prominently in these crashes.



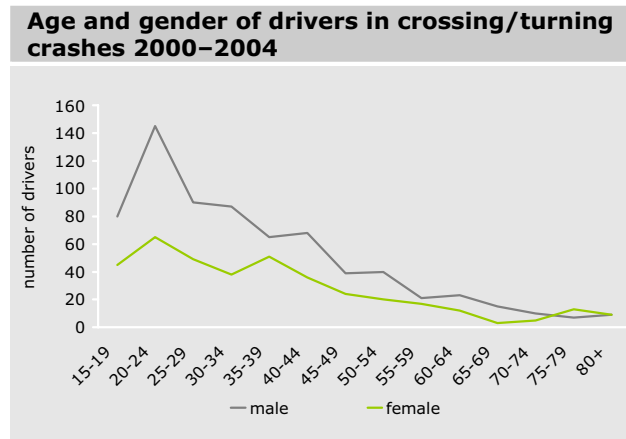
Approximately 11 percent of the injury crashes occurred when a driver failed to stop at a red light.

While many crossing/turning crashes do not result in injury due to the low impact speeds, serious or fatal injuries may occur as speeds increase. It is critical therefore that traffic signals be sequenced, phased and timed to minimise the crash risk at times of the day when speeds are higher.

The majority of crossing/turning crashes occurred at intersections but 16 percent occurred as vehicles entered or left driveways.

The most common crash movement involved an oncoming vehicle turning right in front of another vehicle (38 percent). A vehicle turning right out of a side street in the face of a straight-through vehicle was the next most common crash type, followed by right angle collision.

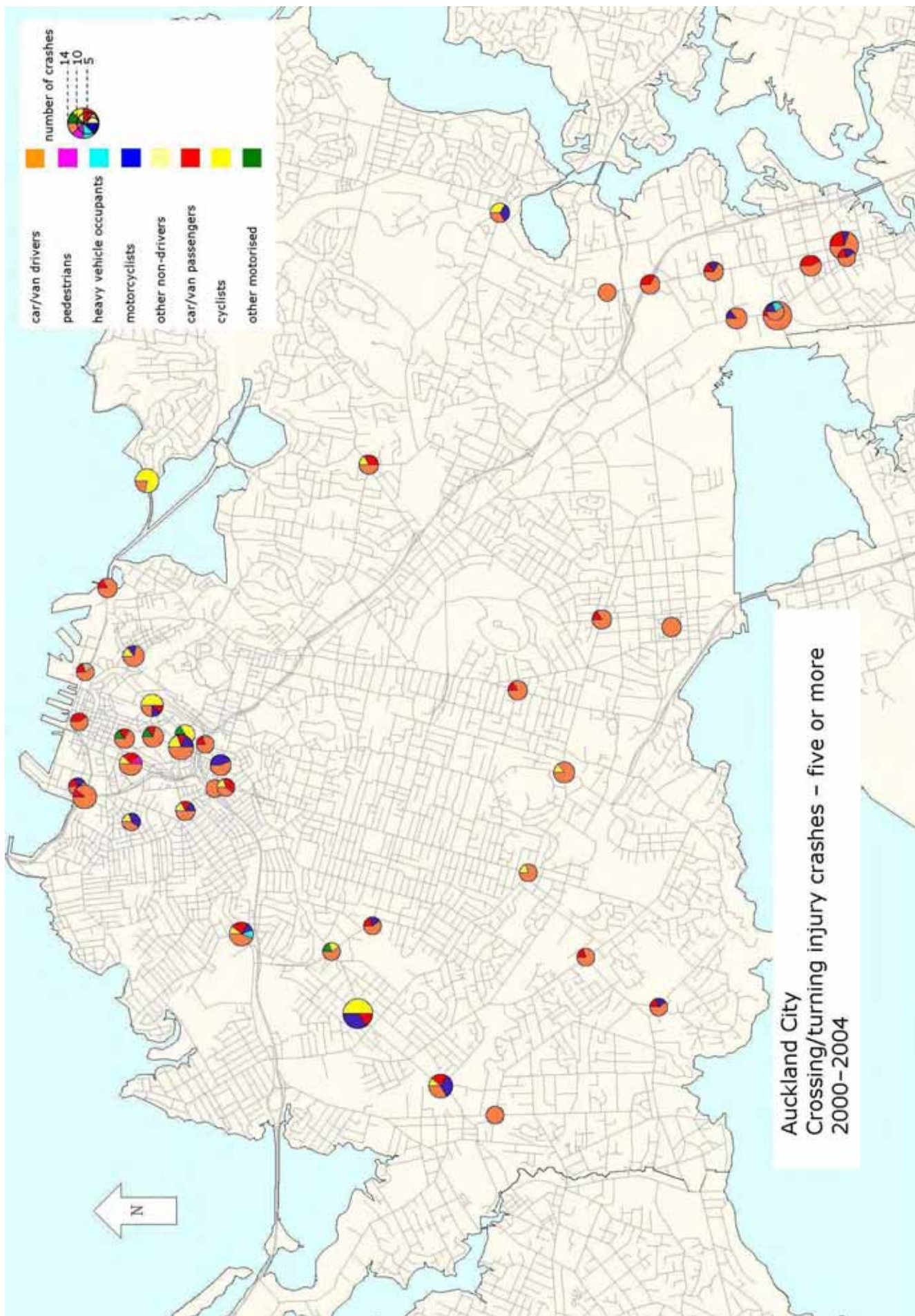
Of the drivers identified as being at fault in crossing and turning crashes, males in the 20 to 24 year old age group were over-represented. The same age group for females was also highly represented.



The eight worst locations for crossing/turning crashes over the last five years are listed below.

Intersection	Reported injury crashes
New North Rd/Asquith Ave	14
Church St/High St	13
Portage Rd/Saleyards Rd	13
Karangahape Rd/Queen St	10
Fanshawe St/Beaumont St	9
New North Rd/Hendon Ave	9
Great North Rd/Bullock Track	9
Tamaki Dr/Ngapipi Rd	9

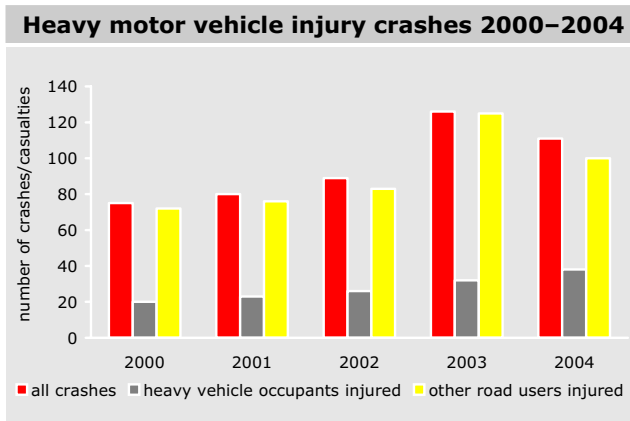
For intersections to operate as safely as possible, it is essential that the messages conveyed to road users be delivered clearly. Therefore the maintenance of signs, markings and advance visibility is extremely important.



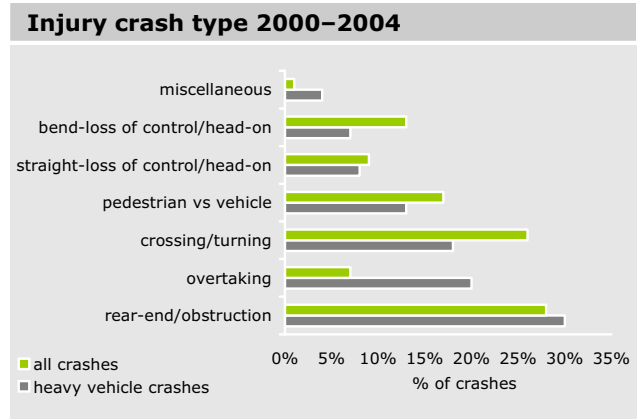
Heavy vehicles

For the period 2000 to 2004, heavy vehicle drivers and occupants made up a very small proportion of the total casualties in the city, representing just two percent of all injuries. However, the number and proportion over the last five years shows a general upward trend, from 20 injured in 2000 to 38 in 2004.

Collisions involving heavy vehicles resulted in a considerable number of injuries to other road users. In the 481 heavy vehicle injury crashes between 2000 and 2004, there were 595 people hurt. Over three quarters of those injured were not occupants of the heavy vehicle (including all 11 people fatally injured and 75 seriously injured).

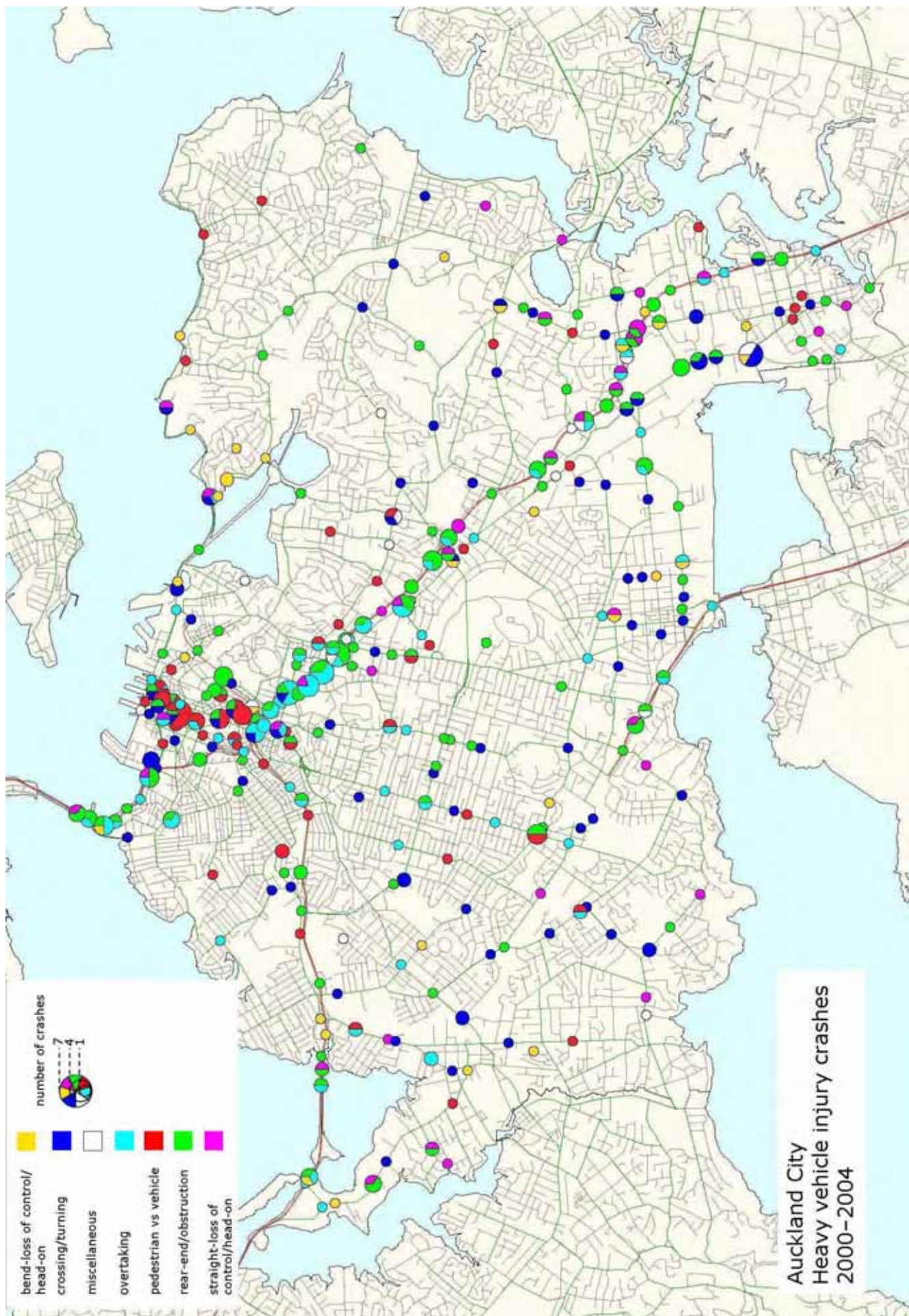


Rear-end crashes in queued traffic were the most common crash type involving heavy vehicles. Combined with other rear-end and obstruction crashes, they made up 30 percent of all crashes involving heavy vehicles. Overtaking and lane changing crashes were the next most common crash type and were over-represented when compared with all injury crashes in the city.



Of the 276 drivers identified as being at fault or partly at fault in heavy vehicle related crashes, 30 percent were the driver of the heavy vehicle.

This means that in the majority of cases, it was the driver of a light vehicle's actions that caused or contributed to a crash in which they themselves were likely to be injured. There is a need therefore to educate drivers to take extra care when around heavy vehicles.



Auckland City
Heavy vehicle injury crashes
2000-2004

Road environment

It is well understood that low cost improvements to the physical infrastructure, particularly the identification and treatment of known crash locations and the effective mitigation of roadside hazards, still have considerable potential to improve safety outcomes on the network. The Land Transport New Zealand crash reduction monitoring database shows that works implemented as a result of crash reduction studies have reduced crashes at the study locations by 20 percent in Auckland City (31 percent at state highway sites and 16 percent at local road sites).

However, only 56 percent of local road crash reduction study locations have had their recommended safety improvements installed. This means that crucial, identified safety benefits are not being realised.

Recommendations from past studies therefore need to be programmed for implementation as soon as possible. Analysis of the crashes at all completed sites should be undertaken regularly to ensure that safety has been improved and sites re-examined if no improvement has occurred. Further crash reduction studies can be undertaken to continue the reduction of crashes.

Where to get more information

For more specific information relating to road crashes in Auckland City, please refer to the 2000 to 2004 road safety data report, the Land Transport New Zealand crash analysis system or contact the office listed opposite.

Contacts

Land Transport New Zealand
Partnership Manager Northern
Peter Kippenberger

Regional Engineer
Brian McSwigan

Senior Road Safety Engineer
David Croft

See contact details at bottom of the page.

Auckland City

Road Safety Co-ordinators
Claire Dixon (Senior Road Safety Co-ordinator)
Henry (Midge) Perez
Private Bag 92516
Wellesley Street
Auckland
Phone 09 379 2020

Traffic Safety Manager – TARS

Karen Hay
Private Bag 92516
Wellesley Street
Auckland
Phone 09 379 2020

New Zealand Police
Auckland City Road Policing Manager
Inspector Heather Wells
Auckland Central Police
Phone 09 302 6400



Northern Regional Office

Level 6, 1 Queen Street
Private Bag 106602
Auckland

Phone 09 969 9800
Fax 09 069 9813

www.landtransport.govt.nz