

road safety issues

Whangarei District

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 on both local authority roads and state highways within the Whangarei District.

The Whangarei District, with a population of 72,000, is one of the larger authorities in the country. The district has a high proportion of crashes on the open road and crashes tend to be more severe than for similar authorities. In the five-year period 2000–2004, there were a total of 1,121 reports of people injured in crashes in the Whangarei District, with a further 2,649 non-injury crashes.

The total social cost of crashes to the Whangarei District in 2004 was \$75.4 million, \$50.6 million of which occurred on the local authority road network. Only a small proportion of the local road crashes were on unsealed roads (five percent).

Crash numbers were significantly higher in 2003 and 2004 compared with earlier years. The most common crash type on the open road network was loss of control on a curve, while crashes at intersections dominated on urban roads. The most common factors contributing to crashes were speed, alcohol, fatigue, pedestrians and road factors.

Major road safety issues

Whangarei District

Loss of control on curves

Intersections

Pedestrians

Speed

Nationally

Speed

Alcohol

Failure to give way

Restraints



2004 road trauma for Whangarei District



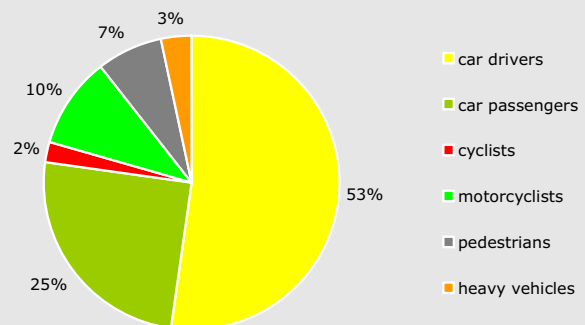
Deaths	6
Serious casualties	67
Minor casualties	205



Fatal crashes	6
Serious injury crashes	55
Minor injury crashes	148
Non-injury crashes	555

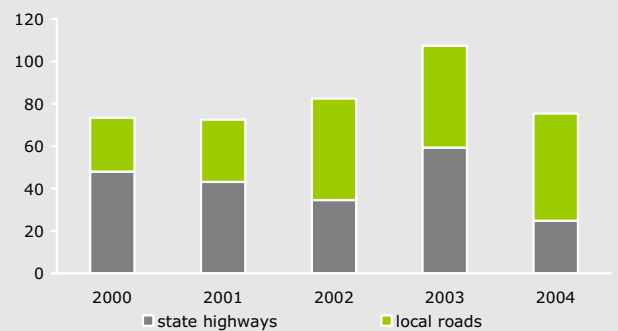
Fatal and serious casualties

User type 2000–2004



Estimated social cost of crashes*

Social cost (\$ million)

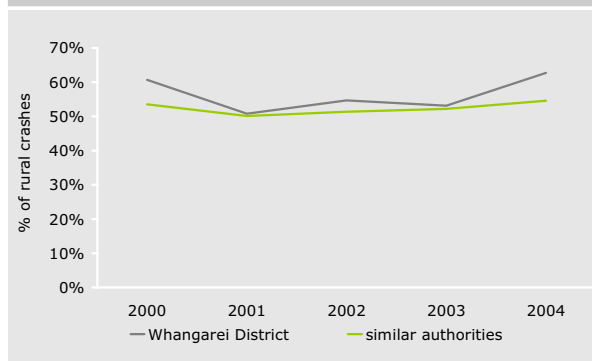


*The estimated social cost includes loss of life or life quality (estimated by the amount New Zealanders are prepared to pay to reduce their risk of fatal or non-fatal injury), loss of output due to injuries, medical and rehabilitation costs, legal and court costs, and property damage. These costs are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

Loss of control on curves

The most common crash type on the open road network in the Whangarei District was a driver losing control of their vehicle on a curve. The frequency of this type of crash has increased significantly since 2002, and is higher than that of similar authorities. When compared with other parts of the country, the Whangarei District's loss of control crashes were over-represented on both urban and open roads, making up 57 percent of open road crashes and 18 percent of urban crashes between 2000 and 2004.

Rural loss of control crashes 2000–2004



More than half of all open road crashes in the district occurred off the state highway network, on local authority controlled roads. On these rural local roads, 80 percent of crashes were loss of control (on a curve or straight section of road).

The number of crashes at night on rural roads has doubled in number since 2000, with nearly half of the loss of control on curve crashes occurring at night.

After drivers lose control of their vehicles, they may crash into hazards close to the roadside, such as ditches, trees, poles or other solid structures such as bridges. This increases the likelihood of serious injury. Collisions with roadside objects increased from 38 crashes in 2000 to 74 in 2004.

The driver, the road and the vehicle can all contribute to loss of control crashes. From 2000 to 2004, one common driver factor was driving too fast for the conditions. This has increased as a factor in rural crashes. Alcohol was also frequently recorded (especially in open road crashes), as was tiredness/fatigue.

Common road factors included a wet slippery road surface, poor delineation or lighting and lack of roadside shoulders. Vehicle factors often included worn tyres, uneven tyre pressures, punctures and steering or suspension faults.

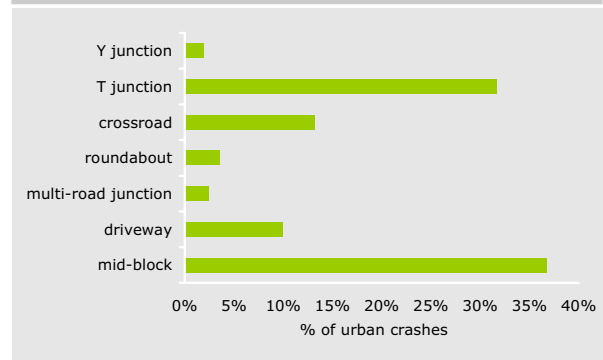
Some local authority roads with higher concentrations of loss of control crashes include Ngunguru Road, Kokopu Road, Tauraroa Road and SH 1 across the Brynderwyns, near Portland and near Mata. Reviews of road markings and delineation, maintaining appropriate skid resistance and programmes to identify routes where roadside obstacles are struck will all assist in reducing crash numbers and severity.

Intersections

The most common crash types in urban areas were at intersections with vehicles crossing or turning. These crashes have been increasing since 2000 and rose sharply in 2004.

From 2000 to 2004, crossing and turning crashes made up 29 percent of all urban crashes. A further 25 percent of urban crashes were rear-end/obstruction crashes (often intersection-related in urban areas). Most of the intersection crashes in the urban areas of the Whangarei District occurred at T junctions.

Urban crash locations 2000–2004



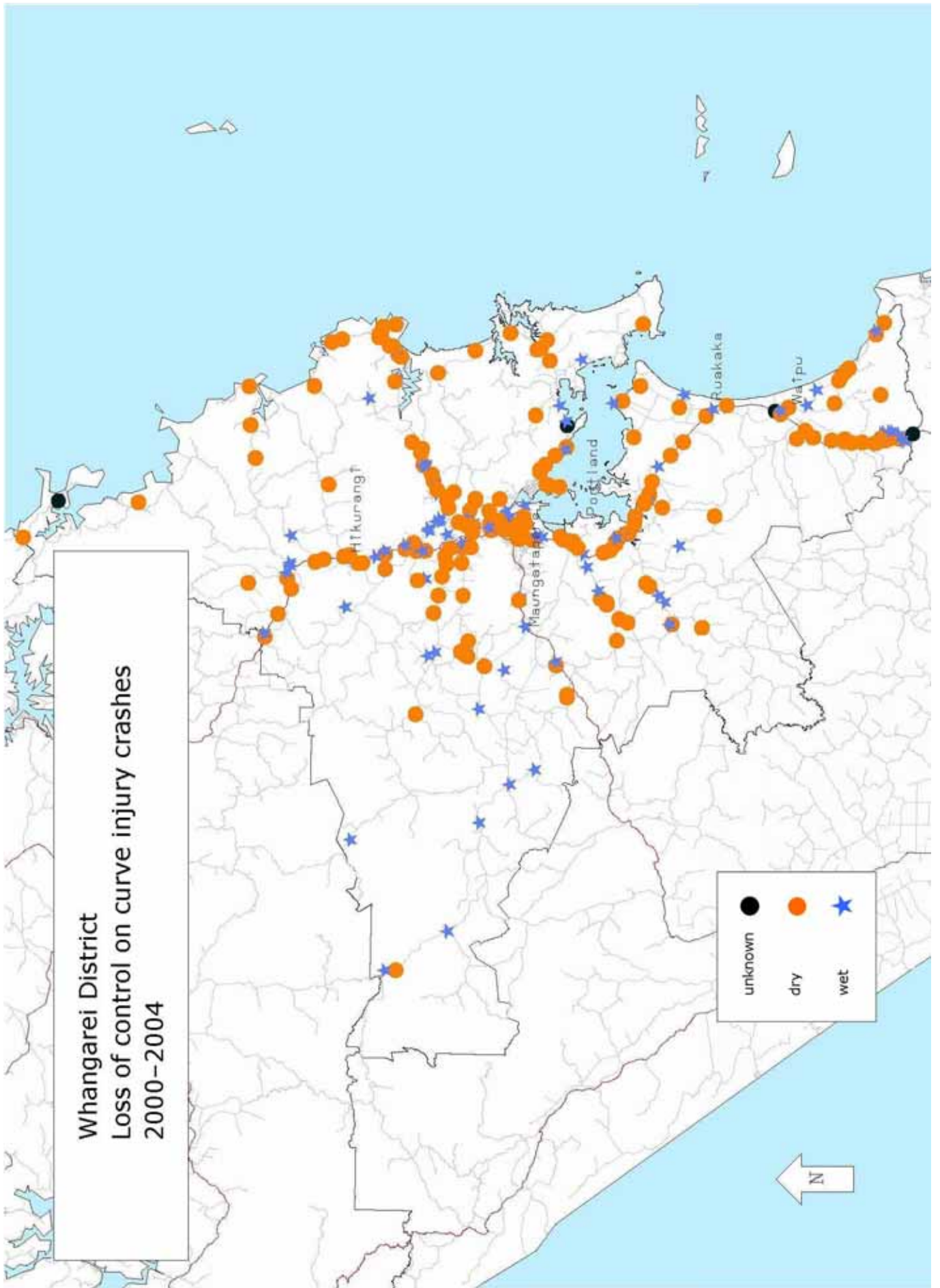
Common factors in crashes at intersections were drivers failing to give way or stop for other vehicles. This can be associated with inattention or poor observation of signs or signals. A programme of regular audits will ensure that signs and signals are appropriately located and maintained.

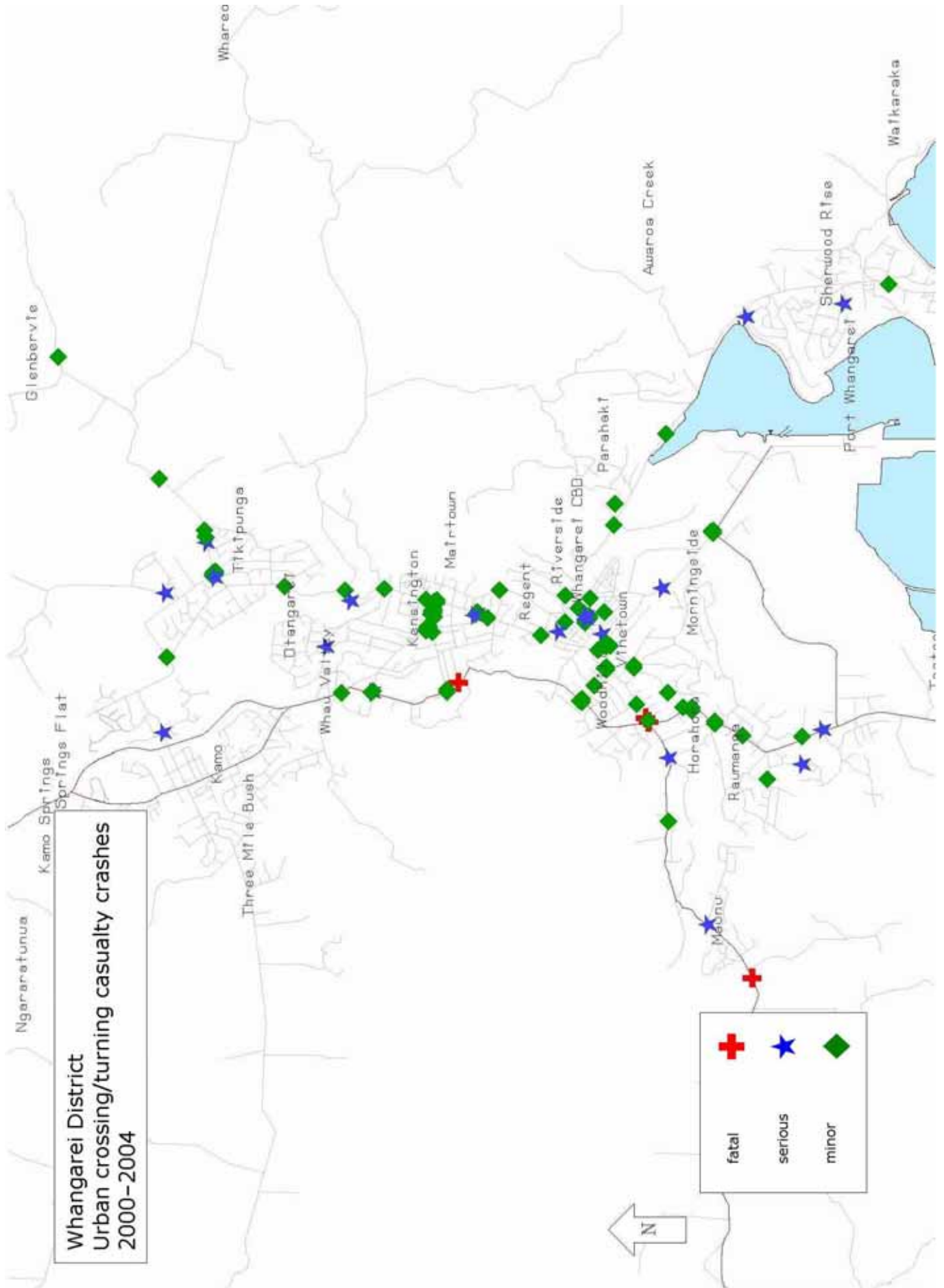
Poor observation was recorded in 42 percent of urban crashes, while failing to stop or give way was a factor in 26 percent of urban crashes.

The frequency of intersection crashes rose rapidly from 8 am, with a strong peak from 3 pm to 6 pm. These times also coincided with the times that pedestrians were most at risk. Intersection-related crashes occurred mainly on weekdays and increased to a peak on Friday. Therefore Friday afternoons at 3 pm would be a time to be especially vigilant.

Some intersection sites where crossing and turning crashes were common include a series of intersections spaced along the lengths of Walton Street, Robert Street and Nixon Street and the junction of Kiripaka Road/Corks Road. State highway sites include Marsden Point Road, Kioreroa Road and Percy Street.

Some common sites for rear-end collisions are Kamo Road at both the Kensington Avenue and the Western Hills Drive intersections, Bank Street at both the Grey Street and Aubrey Street intersections, the Robert/Rathbone Streets intersection, the Walton Street roundabout and the Mill Road/Nixon Street intersection. State highway sites for rear-end crashes include Kensington Avenue, Maunu Road and Selwyn Avenue.





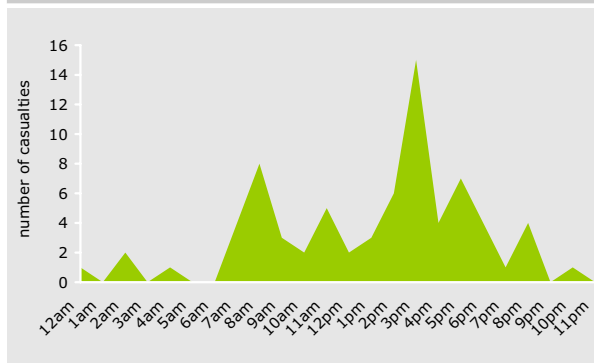
Pedestrians

Over the five-year period from 2000 to 2004, there was a total of 1,121 people injured in crashes in the Whangarei District. This figure includes 98 children under 15 years old. Most of the injured were drivers and passengers of cars/vans. However, there were also 77 pedestrians injured, of which 33 were children under 15 years old.

Pedestrians were injured in a high number of crashes in the Whangarei District compared with similar local authorities during this period. Pedestrians were involved in 17 percent of the injury crashes on urban streets. Most of the pedestrian casualties were aged 10 to 14 years but 15 to 19 year olds also featured.

Pedestrians were mainly injured during the day with peaks between 8 am and 9 am and 3 pm and 4 pm. Crashes occurred throughout the year but particularly during the school terms.

Pedestrian casualties by hour 2000–2004



Areas where pedestrians were injured included the central shopping area of Whangarei itself, particularly along Bank Street, Rathbone Street and Walton Street. Crashes also occurred in Kamo (on Kamo Road), and in Tikipunga, Kensington (both SH 1 and Kamo Road), Regent (Bank Street), Otaika (SH 1) and Riverside (Riverside Drive).

The Whangarei District has a number of busy routes running through residential areas and also past schools. The needs of local users can conflict with those of through traffic. Pedestrians often have difficulty crossing busy arterial roads, especially if they are young, elderly or disabled. Many children walk or take a school bus to school and may have to cross some of these busy roads.

If vehicles are not travelling at a constant speed, it becomes difficult to judge appropriate gaps. If they are travelling over the speed limit, there is a significantly increased likelihood of serious injury for pedestrians in the event of a crash.

Pedestrians will often cross the road at unsuitable places and put themselves at risk. Child pedestrians are likely to suddenly run across the road, giving little opportunity for drivers to avoid them. For drivers, excessive speed in urban areas, failing to stop at orange or red signals, following too closely and failing to stop at pedestrian crossings are all dangerous behaviours that increase the risk of harm to pedestrians.

Speed

Speeding was a contributing factor in both urban and rural crashes in the Whangarei District and contributed considerably to the other issues raised in this report. Excessive speed contributed to 15 percent of urban and 27 percent of open road crashes between 2000 and 2004.

Across the Northland Region, 13 percent of vehicles travel over 60 km/h in urban areas and five percent travel over 100 km/h on rural roads. However, appropriate speed will often be less than the speed limit, especially in situations such as poor weather or limited visibility, heavy traffic flow, presence of pedestrians or cyclists, tight alignment or uneven road surface. There are often situations where 50 km/h would be too fast in an urban environment and where 100 km/h is too fast on a rural road.

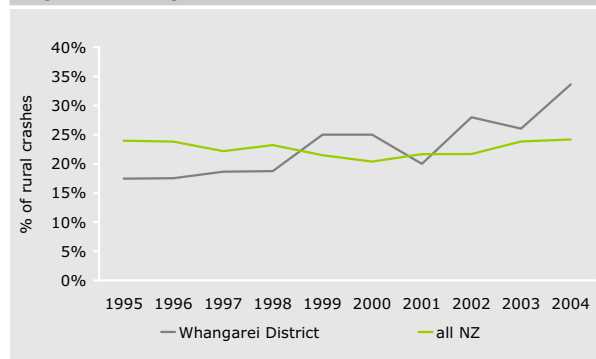
Higher speeds, especially in unsuitable conditions, can lead to loss of control on curves, less chance of regaining control if the vehicle skids and a higher severity of injury to the vehicle occupants if the vehicle hits a roadside object or collides with another vehicle.

In urban areas, higher speeds make it difficult to judge distances of approaching vehicles which can lead to collisions at intersections and driveways. High speeds with close following distances contribute to rear-end crashes.

High speeds on wet road surfaces mean that the distance required to stop increases significantly.

If vehicles are travelling at similar speeds, the traffic flow is smoother, it is easier for drivers to judge gaps and to predict vehicle movements.

Open road speed-related crashes 1995–2004



Road environment

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 specific blackspot study sites. A 50 percent reduction has been measured for the Whangarei District (54 percent at state highway sites and 45 percent at local road sites).

Outstanding recommendations from recent studies should be implemented 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 should be re-examined if no improvement has occurred. Regular crash reduction studies should be undertaken to continue the reduction of crashes.

Where to get more information

For more specific information relating to road crashes in Whangarei District, 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.

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