

7 Road Safety

The road safety analysis for the Basin Reserve is based on the data from NZTA's Crash Analysis System (CAS) for the two year period between the 1st of April 2007 and the 1st of April 2009¹.

7.1 Crash Trends

A total 103 crashes have been recorded over the two year period. 21 of these crashes have resulted in injury, including 2 serious injuries. There have been no fatalities within the Basin Reserve area. Pedestrians and cyclists only make up 7 percent of the road users who have been involved in crashes in this area. This is lower than the CBD as a whole where they make up 15 percent of road users involved in crashes. The majority of crashes have occurred at intersections with 62 percent of the injury crashes occurring at intersections. This percentage is the same for accidents throughout the CBD.

7.2 Considerations for Option Development

Based on our analysis of the crash history of the roads surrounding the Basin Reserve, the following trends should be considered when developing improvement options:

- Crashes occurring within the gyratory are unlikely to involve serious injury. The urban speed environment means that the majority of crashes are typically non-injury and are of the rear end / obstruction crash type.
- Pedestrian and cyclists account for only 7 percent of all road users involved in crashes within the last two years. Any Basin Reserve option should look to either maintain or improve this characteristic by introducing improved pedestrian / cyclist facilities and reducing vehicular conflict.
- Collisions involving cyclists seem to have been caused by driver error, either on the part of the cyclist or vehicle, rather than a lack of facilities. However, improved facilities would reduce the potential for conflict which could reduce the number of crashes.
- A number of the pedestrian crashes, especially those on the western side of the Basin Reserve, are caused by a lack of suitable safe crossing points for pedestrians. Improved facilities would reduce the potential for these crashes.
- Crashes are most likely to occur within the gyratory during the weekday morning and evening peak periods. These times coincide with the peak movement of people between the suburbs and the CBD. An additional crash peak exists during the early hours of the weekend. On closer inspection these crashes are related to excessive speed. These speed related crashes are particularly evident in the vicinity of Sussex Street.
- In general, environmental conditions are not significant factor in the Basin's crash history. However, as previously mentioned, crashes associated with excessive speed occur at night on weekends near Sussex Street.
- The majority of crashes are related to the operation of the signalised intersections situated around the Basin Reserve. Conflict occurs between a variety of transport modes and desired movements on a daily basis at these locations.

¹ Standard practice is to use five years worth of crash data to undertake a complete analysis. However, in this instance a five year analysis period is not possible due to the construction of the Wellington Inner City By-pass (ICB). The completion of the ICB in March 2007 saw major changes to the Wellington road network including the installation of traffic signals at the Adelaide Road / Rugby Street intersection. With traffic patterns having since adjusted; the most recent two year post ICB crash history has been used as the basis for this crash assessment.



Figure 7.1: Traffic on Ellice Street

