Roundabouts and Speed

Introduction

Roundabouts manage the traffic flow at intersections and better aligns with safe system principles than other forms of intersections^[1]. The construction of roundabouts has been found to reduce the number of injury accidents between 45-87% in Australia^[2].

Encourage Safe Behaviour

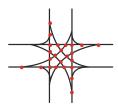
Roundabouts encourage safe behaviour in several ways^[3,4]:



Road users reduce their speed to navigate the circulatory roadway



As a result of a reduced speed, drivers have more time to react and respond to potentially dangerous situations





24 conflict points

4 conflict points

They reduce the number of conflict points compared to four-way intersections

The Dangers

Despite the proven safety benefits of roundabouts, crashes can and do occur.



Drivers are required to remain alert and perform several driving tasks in a complex environment with many rules^[5].



Research shows that, compared to signalled intersections, driver stress levels more than double when navigating a roundabout^[6].

Speed in Roundabouts

Unsafe speeds are one of the top contributing factors to incidents on roundabouts^[7].



Entry collisions have been found to be one of the most frequent type of incident on roundabouts, with a high speed of approach contributing to a substantial portion of these incidents^[4,8,9].

High vehicle speed at also poses a significant risk to cyclists, particularly for entry and exit points^[10].



Safety Tips

While engineering solutions can encourage lower speeds^[8,14], drivers can take simple steps to ensure they keep themselves and others safe whilst navigating roundabouts^[15,16]:



Always stay alert to upcoming roundabouts to allow sufficient time to respond.



Reduce your speed in anticipation of the roundabout.



Slow down or stop when approaching a roundabout, ensuring you give way.



Wait at the entry to a roundabout until you can safely merge with the traffic.



Never stop or change lanes in a roundabout.