



Cyclists' Safety on Urban Roundabouts in the Netherlands

Problem description

Roundabouts are known to be a safer design type of intersections because of the lower speeds, lower number of conflicts and the smaller impact angles compared to a conventional intersection. Earlier studies using a before and after approach indeed have shown that converting intersections into roundabouts have led to a reduction in traffic injuries. However, few recent studies have shown contradicting results, indicating that more traffic injuries of cyclists occur at roundabout and that the crash risk for cyclists is higher compared to traditional intersections. Therefore, further research is needed to understand better whether this is the case or not, and which factors (e.g., road design elements, road user behaviour), contribute to this increased risk.

Assignment

- Review of the state-of-the-art with respect to cyclists' safety on different types of roundabouts inside urban areas and at priority intersections;
- Collect data on traffic intensities, crash risks, roundabout road design characteristics, and if available behavioral variables;
- Investigate which factors affect the crash risk at roundabouts;
- Writing a thesis report.

Research group

Transport & Planning department

Thesis supervisor: Dr.ir. Haneen Farah

Daily supervisor: Dr. ir. Maria Salomons

External support

Suitable internship possibilities can be investigated

Information

For more information contact: Haneen Farah (H.Farah@tudelft.nl)