



# Vision and Driving Studies under Day and Night-time Conditions

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While it seems obvious that good vision is critical for safe driving, there is still much debate regarding which specific visual functions are important for safe driving, the level of visual function at which driving performance and safety are affected, and how different visual impairments impact upon driving performance and safety. Related questions include identifying evidence-based vision standards for driving and determining whether these should be the same for day and night-time driving.

These issues have been addressed in ongoing studies which have used a series of experimental approaches that involve measures of real-world driving performance undertaken on a closed circuit driving course and under on-road in-traffic conditions. Specific areas of research include understanding how visual impairment and age impact on driving performance, quantifying the effect of distracters on driving, and identifying visual predictors of driving performance and safety. Studies have also assessed driving performance under night-time driving conditions to determine how the age and visual status of the driver impact on night-time driving ability and to identify ways in which to improve the visibility, and hence safety, of vulnerable road users including pedestrians and cyclists through the use of innovative clothing configurations. An overview of some of these studies will be presented.

**Date:** Friday 5<sup>th</sup> June

**Time:** 10:00am—12 noon

**Venue:** Seminar Room 3, Technology Park Bentley—Conference & Business Function Centre

**Address:** 2 Brodie Hall Drive, Bentley.

Parking is available at the Function Centre with overflow on the grassed area.

Refreshments will be served after the seminar.

**RSVP by 29/05/2015 to**  
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Professor Joanne Wood is from the School of Optometry and Vision Science, QUT, Brisbane. Her research focuses on the impact of visual impairment and ageing on functional outcomes, including understanding how visual impairment affects driving performance, on the factors affecting night-time pedestrian visibility and identifying risk factors for unsafe older drivers.