SAFE DRIVING FOR OLDER PEOPLE: 
HOW IN-VEHICLE TECHNOLOGY CAN KEEP PEOPLE ON THE ROAD

Driving plays an important role in maintaining older people’s mobility and independent living, enabling them to participate in their usual social activities and carry out practical day-to-day needs. From a psychological perspective, driving enhances confidence and independence, whilst the mobility it brings increases feelings of control, self-esteem and status, enabling participation in work, education or social events.

In the UK, the ageing segment of the population is growing more rapidly than other age groups. The proportion of people aged 65 years and over is projected to increase from 16% in 2008 to 23% by 2033 and the number of people over 85 years is projected to more than double over the next 25 years. In Europe, the number of elderly people has tripled over the last 50 years and will more than triple again over the next 50 year period. The demand for driving amongst older people is set to rise.

According to studies in Europe, Asia and North America, older drivers represent a threat to themselves rather than putting other road users at risk. However, they are more likely to be involved in and responsible for traffic accidents, and are over-represented in traffic fatalities.

This paper reviews factors involved in the functional decline of older drivers. It goes on to assess the feedback and support capabilities of in-vehicle technology systems with the potential to assist older people to drive safely for longer and maintain their quality of life: driver feedback offers information on older drivers’ driving performance and helps raise their awareness of misjudgements or errors; driver support provides older drivers with timely and constructive advice, alerts, warnings or even active intervention to avoid accidents.

This paper also describes (and includes early findings from) a newly funded project, Social inclusion through the Digital Economy (SiDE), which will demonstrate an innovative application of driving simulator technology to test and evaluate the impact on older drivers of emerging in-vehicle technology systems. SiDE will deliver a sound understanding of the impacts of different systems on older drivers and the scope for adopting individual systems or combinations of systems.

The paper concludes that in-vehicle systems providing feedback and support to older drivers have the potential to help them recognise their weakness and vulnerability as road users and improve their driving performance through the use of advice, alerts, warnings or active interventions.