The influence of roads on improving safety using lane support technologies

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ABSTRACT

Lane support technologies such as Lane Departure Warning (LDW) and Lane Keep Assist systems (LKA), which use sensors in the car to monitor lane positioning, are becoming more widely available on UK cars. LDW systems use warnings to make the driver aware that the car is in danger of crossing the line, whereas Lane-Keep Assist systems also proactively steer the car back into the lane. Lane support systems rely on distinct lane markings; their effectiveness is reduced if lines cannot be clearly distinguished. Some systems need a line only on one side of the vehicle while other systems rely on having a distinct marking on either side. This paper sets out the different lane support system types, and using analysis of the coverage of lane markings also demonstrates their dependence on road infrastructure. The paper also describes the latest developments in car safety test programs that are designed to encourage fitment of these potentially life-saving technologies.

Please see presentation relating to this paper: http://www.saferroads.org.uk/conference-presentations.asp