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LRSSB project scoops safety award

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The world's first comprehensive safety study of driver monitoring technology has won sector-wide recognition, capturing top honours for the year's Significant Safety Initiative at the Global Light Rail Awards.

LRSSB, the organisation responsible for driving light rail safety, commissioned the study from Ian Rowe Associates and they were jointly awarded the honour in the face of tough international competition.

The accolade follows a year of rigorous tests on safety systems designed to monitor driver vigilance and speed management.

LRSSB Chief Executive Carl Williams said: "While light rail remains one of the safest forms of public transport, we are determined to do everything in our power to make it even safer in future, so it's wonderful to have this pioneering work recognised at the Global Light Rail Awards.

"This research will do a great deal to help tram operators to raise standards even higher, and it means they have a body of evidence readily available which will help them to choose and implement the most effective system for their network."



The wide-ranging research was commissioned in response to a report by the Rail Accident Investigation Branch into the 2016 Croydon derailment and tested four Percentage of Eye Closure (PERCLOS) systems in laboratory conditions. It used simulators operated by sleep-deprived drivers during eight-hour night shifts, analysing and recording all the data uncovered.

Ian Rowe explained: "A great deal of rigorous research and testing went into our study, including recreating 5,740 individual scenarios and taking into account heights, head positions, lighting levels, so naturally we are thrilled to win this award.

"The findings of the research were presented to interested stakeholders in a series of face-to-face meetings and in a final report. Officials from the Office of Rail and Road (ORR) as well as operators and owners have been engaged with the process throughout to ensure that the project would meet their needs."

The research into speed management focused on the experience of London Trams with their implementation of a trackside, Physical Prevention of Overspeed (PPOS) system, plus a pilot study set up in Manchester to implement the Simove augmented GPS system developed by Metro Tenerife.

After a review of the Simove system's development and installation process, issues were identified ahead of the installation of the hardware and the creation of the speed restriction topology information.

"Live trials were conducted to establish the accuracy of the system, which was then monitored with the tram in passenger service for a further 30 days. The outputs from the system were analysed and verified against the On-Tram Monitoring and Recording (OTMR) system," Mr Rowe added.

Photo credit: LRSSB

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