



JAMES MANNING

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Principal Consultant
Investigations Group

James Manning is the leading simulation and visualisation consultant within the Investigations Group at TRL. With a degree in Mechanical Engineering from the University of Liverpool, and nine years of crash testing research expertise, James combines strong vehicle safety experience with impact modelling and simulation.

James's role at TRL involves the investigation and reconstruction of incidents, including the inspection of vehicles, attending incident sites and providing expert advice for police forces, MOD, British Transport Police, insurance companies and solicitors.

James has developed a method to map the visibility available to a driver and passenger, and thus also the blind spots around a vehicle; this method has been used and accepted for Court. He also performs camera matching techniques, mapping vehicle and pedestrian movements from CCTV and photographic images and specialises in forensic vehicle identification from events captured on CCTV. James has undertaken training in Forensic Video Analysis to LEVA Level 4. He has experience in testing and analysis of telematics data and is certified to collect and interpret data from Event Data Recorders.

James has conducted considerable research into vehicle safety with respect to vehicle crash, occupant dynamics, restraint analysis, impact energy management and pedestrian impact. He has performed and analysed many full-scale vehicle crash tests and component sled-tests for vehicle manufacturers and UK and European governments. His considerable experience as a research engineer involves specific expertise in developing and performing tests on different vehicle components and conducting in-depth analysis of the results. James has written and presented research at the most prestigious vehicle safety conferences.

Having supported case conferences and completed numerous Joint Expert Statements, James is experienced in providing advice and expert opinion to both insurers and legal representatives. He has considerable experience presenting evidence for Court both in Civil and Criminal cases.

Notable publications:

2017 *A Comparative Analysis of LGV Visibility Mapping* Proceedings of the Institute of Traffic Accident Investigators (ITAI) Annual Conference

2017 *Driving a Car with a Body Wedged Underneath* Technical Paper 2017-01-1410; Society of Automotive Engineers

2016 *Definition of Direct Vision Standards for Heavy Goods Vehicles (HGVs)* TRL CPR3680

2014 *Are they there to be seen? Assessing and modelling visibility in three dimensions* Proceedings of the ITAI Annual Conference

2009 *A review of the causes of fatal pedestrian injuries resulting from collisions with car fronts* Proceedings of the International Research Council on Biomechanics of Injury (IRCOBI) Annual Conference