



Creating the future of transport

TRL RESEARCH ALERT

SUMMARIES OF TRL PUBLICATIONS

September 2011

Reports Published – September 2011

PUBLISHED PROJECT REPORTS

- PPR560 Pilot-scale trial of *Advera*® WMA in asphalt mixtures for binder and surface course by J C Nicholls, M Wayman and P D Sanders
(Price £35, Code 3X)
- PPR568 Revision of the checklist for the assessment of in-vehicle information systems by A Stevens, S Cynk & R Beesley
(Price £30, Code 2X)
- PPR572 Linking offence histories to accident causation using OTS data by J Stannard, R Cookson and R Hutchins
(Price £45, Code 4X)

MISCELLANEOUS

- MIS005 Checklist for the assessment of in-vehicle information systems by A Stevens and S Cynk
(Price £10)

Prices current at September 2011

Review of Transport Research (*SDI/Current Awareness*)

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Summary**September 2011****Published Project Report PPR560**

Pilot-scale trial of *Advera*® WMA in asphalt mixtures for binder and surface course

J C Nicholls, M Wayman and P D Sanders

Pages: 96, ISBN: 978-1-84608-970-1

The increased emphasis on reducing the energy needed to manufacture products of all types, usually as part of a drive to reduce greenhouse gas emissions, has encouraged, amongst other things, a move towards asphalts that can be mixed and compacted successfully at lower temperatures. *Advera*® WMA, a product intended to allow a reduction in the mixing temperature from around 160°C to nearer 120°C, was trialled during the surfacing of an access road to the car park of a quarry near Shrewsbury. The construction of this pilot scale trial was monitored and the results are reported. The monitoring included the construction, the resulting material properties, the carbon dioxide equivalent emissions and the temperature changes with time after compaction.

The findings show that, whilst the modified asphalt at lower temperatures was not identical to the control mixture, a mixture could be laid at significantly lower temperature without significant adverse effects and with lower CO₂ emissions.

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Summary**September 2011****Published Project Report PPR568**

Revision of the checklist for the assessment of in-vehicle information systems

A Stevens, S Cynk & R Beesley

Pages: 44, ISBN: 978-1-84608-969-5

A Checklist for the assessment of In-Vehicle Information Systems (IVIS) was published in 1999 which provided a structured approach for assessing the interface design of an IVIS. Since the publication, there have been several advances in technology and a number of developments in ergonomics standards and road safety. An update of the Checklist was therefore necessary. The processes that were undertaken to adapt the Checklist, such as aligning it with the European Statement of Principles (ESoP), and subsequently evaluating it are described in this report. The process for developing an electronic version of the Checklist which can be filled in directly on devices such as PDAs and tablet PCs when assessing IVIS is also described. The 'paper' version of the updated Checklist is available for free on the TRL website and the electronic version can be requested from enquiries@trl.co.uk. The appropriateness of providing consumers with information gleaned from the checklist assessments to lead them to making informed choices on safety when purchasing IVIS was investigated as part of the project. During this task, five existing rating schemes were reviewed, the requirements of consumer product rating schemes for IVIS and the role of the Checklist were considered. An example process was recorded to show how a consumer rating could be implemented in the future.

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Summary**September 2011****Published Project Report PPR572**

Linking offence histories to accident causation using OTS data

J Stannard, R Cookson and R Hutchins

Pages: 88, ISBN: 978-1-84608-968-8

This research project explores the links between offence histories and accident involvement of over 2000 active road users (ARUs) whose accident data were collected by TRL On The Spot (OTS) researchers between October 2003 and March 2010. The first part of the research matched ARUs from the OTS database onto the DVLA, PNC or Voters' databases. Matches were found for 87% of ARUs, with 47% of these having a previous offence on either the DVLA or PNC database (or both). The most common general offence type found was for summary motoring and the most common motoring offence type was for speed limit offences. Of the matched ARUs, 40% who were considered to be at fault in the OTS recorded accident were found to have an offence history compared to 31% of those who were not considered to be at fault. Similarly, those ARUs who had drink and drug driving offences were more likely to be at fault in the accident, as were those who had a drugs related general offence. This suggests that more work could be done to target individuals who engage in drink and/or drug driving, perhaps through Think! campaigns. HGV drivers had the highest percentage of both DVLA and PNC offences, followed by LGV drivers. The results related to road user type suggest that work could be done with fleet managers from companies to monitor and manage offence histories of their HGV and LGV drivers. Examples of ways in which this could be done might include advising on whether adequate checks are made at the recruitment stage and setting up a system for regular licence checking. Comparison of the results in the Thames Valley region to a parallel report written by VSRC on the Nottinghamshire region generally found similar trends in offending.

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Summary

September 2011

Miscellaneous Report MI S005

Checklist for the assessment of in-vehicle information systems

A Stevens and S Cynk

Pages: 78, ISBN: 978-1-84608-971-8

A Checklist for the assessment of In-Vehicle Information Systems (IVIS) was published in 1999 which provided a structured approach for assessing the interface design of an IVIS. Since the publication, there have been several advances in technology and a number of developments in ergonomics standards and road safety. This publication has updated the Checklist to include such developments and advances.

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