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TRL RESEARCH ALERT

SUMMARIES OF TRL PUBLICATIONS

August 2010

Reports Published – August 2010

TRANSPORT RESEARCH FOUNDATION FELLOWSHIP LECTURES

TRF004 25+ years of marketisation and institutional change: are we getting a better deal from transport? by Dr David Quarmby, Imperial College London
(Price £35, code E)

PUBLISHED PROJECT REPORTS

PPR470 UK eCall impact assessment by A Stevens, J Hopkin
(Price £35, code 3X)

PPR485 The performance of quieter surfaces over time by M Muirhead, L Morris (TRL), R E Stait (Halcrow)
(Price £35, code 3X)

PPR494 Bend treatments on the A377 between Cowley and Bishops Tawton: final report by S Helman, J Kennedy, A Gallagher
(Price £35, code 3X)

CURRENT TOPICS IN TRANSPORT

(A selection of abstracts added to the TRL Library Database during a specified period)

CT77.4 Driver training – update (2007–2010)
(Price £30)

CT85.4 Traffic modelling – update (2009–2010)
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CT128.3 Bridge assessment and testing – update (2009–2010)
(Price £30)

Prices current at August 2010

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Summary **August 2010**

Transport Research Foundation Fellowship Lecture TRF004

25+ years of marketisation and institutional change: are we getting a better deal from transport?

Dr David Quarmby, Imperial College London

Pages: 20, ISBN: 978-1-84608-781-3

Of all countries in Europe, Great Britain has seen in the last 25 or so years the most radical changes in the regulatory and institutional arrangements for public transport – bus, tram, metro and rail. But the underlying thrusts of deregulation, privatisation and marketisation have been applied differently in London, in buses outside London, in tram development and in the national rail network. And the institutional arrangements have evolved differently, as between London, the metropolitan areas, counties and unitaries, and at national level in England, Wales and Scotland. How successful has this all been? Indeed what are the measures of success for our local, metropolitan and national transport systems? What objectives should they be trying to satisfy? Financial? Efficiency? Commercial? Economic? Public interest? Urban development and quality of life? Environmental? Are they in conflict?

David Quarmby offers a critical examination of how well today's transport regulatory and institutional arrangements score against these different objectives, and puts up for discussion some reforms which he argues would enable transport to do a better job for our economy, our cities, the environment we live in and our quality of life. He also looks at whether reforming the way our roads are provided, managed, improved and funded can offer similar benefits. In tackling this topic, Dr Quarmby brings to bear his long and varied experience in transport, from running London's buses, running Sainsbury's supply logistics, advising the Department for Transport (DfT), chairing the Docklands Light Railway (DLR) and the Strategic Rail Authority (SRA), being a director of a railway and bus company, carrying out transport and economic consultancy on policy and strategy for public and private sector clients, and chairing transport research and policy organisations.

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Summary **August** **2010**

Published Project Report PPR470

UK eCall impact assessment

A Stevens, J Hopkin

Pages: 66, ISBN: 978-1-84608-874-2

eCall is an in-vehicle safety device which manually or automatically generates a call in the event of an accident, establishing a voice link to the emergency services and transmitting data that specifies the vehicle's details and location. This has the potential to reduce the response time of emergency services, which may in turn reduce casualties and reduce disruption to other traffic.

This study is intended to support the evidence base that will feed into policy development in the UK. Evidence is available from a UK study in 2006, work for the Highways Agency on the implications of eCall for their operations, and a European study on the potential impact of eCall which was completed for the European Commission in 2009 and included a UK case study.

These studies provide information on the status of the eCall service chain, institutional issues associated with implementation and assessments of the costs and benefits under a range of scenarios which represent different potential options for the roll-out of eCall and the timescales over which the 'fleet' of vehicles on the roads would be equipped with eCall devices.

This report reviews the evidence, summarises the current status of eCall implementation in the UK and the costs and benefits for the UK, and discusses implementation issues and risks and the implications of the various European policy options. On the basis of the conclusions drawn from this analysis, a series of recommendations are made for further eCall activities in the UK.

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Summary **August** **2010**

Published Project Report PPR485

The performance of quieter surfaces over time

M Muirhead, L Morris (TRL), R E Stait (Halcrow)

Pages: 64, ISBN: 978-1-84608-882-7

The Highways Agency implements the Government's noise policy of mitigating the effects of noise, where practicable, arising from traffic on the Strategic Road Network (SRN). Quieter surfaces have been one of the key measures used by the Agency in order to manage and reduce noise impacts where possible. However, very little is known about the long term acoustic performance of these surfaces, which is essential when considering the sustainability of this type of mitigation. This work focuses on this need through the collection and analysis of appropriate long term data.

As well as providing information on which to form appropriate long term surfacing corrections to be used in noise assessments, the data are designed to assist the Agency's response to the Environmental Noise Directive. In addition the feasibility and practicality of using the principles of the acoustic classification system, defined as part of the European SILVIA programme, on the SRN have been investigated.

The acoustic performance of low noise surfaces (together with a Hot Rolled Asphalt and an Exposed Aggregate Concrete surface) have been assessed over a three year measurement programme through the collection of data from Statistical Pass-By, Close Proximity and traffic noise surveys. These data have been analysed in conjunction with historical data to provide recommendations on the classification and performance of low noise surfaces over time.

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Summary **August** **2010**

Published Project Report PPR494

Bend treatments on the A377 between Cowley and Bishops Tawton: final report

S Helman, J Kennedy, A Gallagher

Pages: 82, ISBN: 978-1-84608-879-7

An approach to making bend treatments (signing and marking) consistent on a rural route was evaluated using behavioural data. Risk scores were assigned to bends on the A377 in Devon, on the basis of geometric and cross-fall information from the SCANNER road survey system, and collision data. Bends with tighter radii, low cross-fall values, and more collisions during a defined period, were assigned higher risk scores. A sample of drivers who regularly use the A377 drove a section of the route with 25 bends of varying risk score. The drives were managed by an accompanying driving instructor who attempted to ensure that drivers were free to choose their own speeds throughout. Mean speeds driven through the bends were negatively correlated (moderately to strongly) with risk score, suggesting that the risk scores possessed validity with respect to real driving behaviour (i.e. drivers moderated their speed in a way that suggests they are sensitive to the risk/difficulty of bends, as represented by the risk score). A short questionnaire study elicited speed estimates from drivers in response to picture mock-ups showing different levels of treatments on bends, corresponding to a six-level hierarchy of signing and marking. This showed that drivers lowered their speed estimates as the level of treatment depicted increased. The findings are discussed in relation to the use of the general approach being taken on the A377, and how it might apply to assigning risk, and treatment options, on other rural roads.

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Current Topics in Transport Alert

Current Topics Published – August 2010

CT77.4 Driver training – update (2007–2010)

Over 70 abstracts of reports, conference papers, books and journal articles which focus on the training, testing and licensing of drivers in the United Kingdom and abroad. Driver training for all types of vehicle, including motorcycles, is covered. Abstracts concerning specialist courses on hazard perception, rehabilitation, refresher courses and ecodriving are included.

Price £30

CT85.4 Traffic modelling – update (2009–2010)

Over 70 abstracts of reports, conference papers, books and journal articles which focus on the modelling and simulation of traffic. Some of the specific topics covered include traffic assignment models, modelling of traffic on intelligent highway systems, modelling the effects of various traffic measures and modelling emergency evacuations. Models of vehicle and driver behaviour are also included.

Price £30

CT128.3 Bridge assessment and testing – update (2009–2010)

Over 85 abstracts of reports, conference papers, books and journal articles which focus on test methods, assessment, evaluation, monitoring and modelling of bridge damage caused by traffic, wind and earthquakes. As well as case studies, abstracts are included on the detection and evaluation of corrosion fatigue, cracking, and lowered bearing capacity in wood, steel, concrete and masonry bridges. Non-destructive methods of testing and computer assessment programs are included.

Price £30

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CURRENT TOPICS IN TRANSPORT

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