



Creating the future of transport

TRL RESEARCH ALERT

SUMMARIES OF TRL PUBLICATIONS

December 2011

Reports Published – December 2011

PUBLISHED PROJECT REPORTS

- PPR392 Precautionary salting trials on the M62 at Goole by R W Jordan and M G Evans
(Price £35, code 3X)
- PPR447 Road safety priorities for high risk groups in Northern Ireland by S Charman, L Smith and R North
(Price £30, code 2X)
- PPR456 Road safety education best practice by D Divall
(Price £30, code 2X)
- PPR583 Vehicle rental: environmental and sustainability implications by S Cairns
(Price £35, code 3X)
- PPR590 A segmentation of novice drivers in Great Britain: Factors associated with intention to take advanced driver training by N Kinnear, S Helman and L Walter
(Price £35, code 3X)

Prices current at December 2011

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

Tel: 01344 770548 (*Searches of new additions (monthly) to the TRL database*)

Library Services (*Enquiries*)

Fax: 01344 770356

Tel: 01344 770203

Web: www.trl.co.uk

TRL titles are now published on behalf of TRL by IHS and may be obtained as follows:

- Write to IHS, Retail Department, Willoughby Road, Bracknell, Berks, RG12 8FB, with credit card details (VISA/MASTERCARD/AMEX/MAESTRO/DELTA), or
- Visit our website www.trl.co.uk, or
- Tel 01344 328039/328040 with credit card details if applicable and delivery address, or
- Fax 01344 328005 with credit card details if applicable and delivery address, or

Email: trl@ihs.com with credit card details if applicable and delivery address.

Summary**December 2011****Published Project Report PPR392**

Precautionary salting trials on the M62 at Goole

R W Jordan and M G Evans

Pages: 56, ISBN: 978-1-84608-990-9

Two salting trials were carried out on a three-lane section of the M62 near Goole. Trial 1 was with untreated dry 6.3mm rock salt and Trial 2 was with dry 6.3mm rock salt treated with an additive based on an agricultural by-product. The de-icer was spread with the trial site open to traffic. The site was closed to traffic 2 hours after spreading and the residual salt was collected from four 1m long strips. After the salt recovery, the site was reopened to traffic until 25 hours after spreading. The site was then again closed to traffic and the residual salt was collected from another four strips. It was estimated that 14.6g/m² of the untreated salt and 17.0g/m² of the treated salt was spread to Lanes 1 to 3. After 2 hours of trafficking, the salt loss in these lanes was estimated to be 59 per cent for the untreated salt and 51 per cent for the treated salt. After 25 hours, the loss of salt was estimated to be 73 per cent for both de-icers. Most of the residual salt that was present 25 hours after spreading was trapped in the surface voids of the negatively textured surfacing.

Copyright TRL, Transport Research Laboratory 2011

This report has been produced by TRL Limited, under/as part of a contract placed by the Highways Agency. Any views expressed are not necessarily those of the Highways Agency.

Summary**December 2011****Published Project Report PPR447**

Road safety priorities for high risk groups in Northern Ireland

S Charman, L Smith and R North

Pages: 57, ISBN: 978-1-84608-963-3

This report has been produced in order to support a review of the Road Safety Education Officer Service (RSEOS) in Northern Ireland. The report provides a review of documentation and published data alongside new analyses of collision data in order to clearly identify what should be the priorities for the RSEOS going forward.

Overall there are two main groups that are at 'high risk' of being involved in a road collision in Northern Ireland. These are:

- Young people (aged 16-24), particularly males and in rural areas (drivers and pedestrians)
- Older people aged over 65 years old

The involvement of young people in road traffic collisions is of great concern and significant importance, with those aged 16-24 accounting for one-third of all road fatalities in Northern Ireland. The majority of 16-24 year old casualties are male. A greater amount of resource needs to be focused on reaching this particular group, arguably over and above all other demographic groups in Northern Ireland.

Although children (aged 0-15 years) are not at high risk per se, their involvement in road traffic collisions is of significant concern, featuring prominently in the NI Road Safety Strategy. In particular those children most at risk of involvement in a road traffic collision are from deprived areas and are male.

Other high risk groups have been identified from the literature as being:

- Those driving for work
- Foreign nationals

In addition to the findings of the document and data review, new analyses identified key themes apparent in the Northern Ireland collision data.

Copyright TRL, Transport Research Laboratory 2011

This report has been produced by the Department of Environment, Northern Ireland (DoE). Any views expressed are not necessarily those of the DoE, Northern Ireland.

Summary**December 2011****Published Project Report PPR456**

Road safety education best practice

D Divall

Pages: 29, ISBN: 978-1-84608-964-0

This report has been produced in order to support a review of the Road Safety Education Officer Service (RSEOS) in Northern Ireland. The report provides expert advice and guidance on best practice in road safety education.

The review of best practice has been undertaken using a combination of UK and international literature assessments, telephone surveys with UK public sector and professional judgement. Professional judgement was required to compensate for the lack of robust quantitative evaluation in some areas of Road Safety Education (RSE), and the significantly reduced programme of RSE activity beyond that aimed at children and young people.

The following principles are discussed in detail:

- Evaluation of RSE schemes should, as far as possible, be quantitative and qualitative and based on more than end user opinion
- Campaigns and projects should be systematic in terms of their development (e.g. DfT's Think! campaign), targeted and based on evidence allowing for robust evaluation of effectiveness
- Evaluation should be planned before change is introduced as retrospective evaluation is challenging and limited conclusions can be drawn
- Messages and the media through which they are delivered need to be pre-tested on the target population
- Understanding the 'real' problems needs to be the first step – this will ensure that an appropriate amount of resource is dedicated to the correct target population and delivering critical messages
- Road Safety needs to find its way into the school curriculum otherwise it is likely that it will continue to be neglected and will not be addressed frequently enough
- Not all RSE should happen in schools: powered two-wheeler riders, work related road safety and older users all need to be addressed
- There are some key delivery partners for RSEOS and ensuring that there is a coordinated approach, sharing of materials and that partner's knowledge is accurate and current should be beneficial
- Cutting edge RSE now uses the internet and viral marketing to get messages across to key target groups

Copyright TRL, Transport Research Laboratory 2011

This report has been produced by the Department of Environment, Northern Ireland (DoE). Any views expressed are not necessarily those of the DoE, Northern Ireland.

Summary**December 2011****Published Project Report PPR583**

Vehicle rental: environmental and sustainability implications

S Cairns

Pages: 68, ISBN: 978-1-84608-988-6

This report describes a first phase of research to examine the environmental and sustainability implications of short-term self-drive vehicle rental. It is based on discussions with, and data from, five of the largest companies in the UK – namely, Avis, Enterprise, Europcar, Hertz and Thrifty. During the research, a number of positive features of rental emerged. Compared with private cars, on average, rental cars are relatively new and well-maintained; they spent more time in use (and less time parked); and have lower carbon dioxide emissions. For example, the average CO₂/km value of the car rental fleets surveyed was 12% lower than the average value for the British car fleet. Rental is used by a considerable number of people with disabilities, and the costs of rental mean that is likely to be cheaper than personal ownership for occasional car users. Rental may also play a key role in the adoption of new vehicle technologies – in particular, electric cars. Meanwhile, a number of priorities for future research remain – in particular, understanding what people would do were rental not available, and how the availability of rental interacts with car ownership decisions for certain groups. It is also clear that rental has been neglected by public policy makers, and requires more strategic assessment and integration in mainstream transport planning.

Copyright TRL, Transport Research Laboratory 2011

This report has been produced by TRL Limited, under/as part of a contract placed by the British Vehicle Renting and Leasing Association (BVRLA). Any views expressed are not necessarily those of the BVRLA.

Summary**December 2011****Published Project Report PPR590**

A segmentation of novice drivers in Great Britain: Factors associated with intention to take advanced driver training

N Kinnear, S Helman and L Walter

Pages: 64, ISBN: 978-1-84608-993-0

It is known that novice drivers find driving immediately after passing their practical driving test stressful, and that this presents an opportunity for those organisations who offer post-licence training. The Institute of Advanced Motorists commissioned TRL to carry out a segmentation of novice drivers in terms of their stated intentions to engage with post-test training. One thousand and seven novice drivers aged between 17 and 30 in Great Britain completed an online survey measuring various attitudinal, behavioural and demographic factors, as well as their stated intentions to engage in further training of three different types (training providing extra experience of a wide range of driving situations; training in vehicle control skills; training designed to encourage hazard anticipation skills and better attitudes). The analyses showed that compared to those novice drivers who have no intention to take further training, those who do are more nervous about driving, report more violations and general errors when driving, report positive attitudes towards the benefits and peer acceptance of training, and are more motivated by saving insurance costs through training. For 'experience' and 'anticipation and attitudes' training, those intending to engage had also driven less since passing their practical test; for 'experience' and 'vehicle control' training, those intending to engage had taken fewer attempts to pass their practical test. Recommendations made include changing the focus of marketing novice driver products to reducing nervousness, violations and errors, and reducing insurance costs (if possible). Ways of identifying likely customers are also recommended.

Copyright TRL, Transport Research Laboratory 2011

This report has been produced by TRL Limited, under/as part of a contract placed by the Institute of Advanced Motorists. Any views expressed are not necessarily those of the Institute of Advanced Motorists.