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## **TRL RESEARCH ALERT**

### **SUMMARIES OF TRL PUBLICATIONS**

**June 2012**

## Reports Published – June 2012

### REPORTS

ARR2011 Annual Research Review 2011 by TRL  
(Price £50)

### PUBLISHED PROJECT REPORTS

- PPR608 Trials of farside pedestrian signals at a Puffin crossing  
by A Maxwell, C Smyth, R Hutchins and M R Crabtree  
(Price £45, code 4X)
- PPR611 Carplus annual survey of car clubs 2011/2012 England and Wales,  
excluding London by C Harmer and S Cairns  
(Price £35, code 3X)
- PPR612 Carplus annual survey of car clubs 2011/2012 London by C Harmer  
and S Cairns  
(Price £35, code 3X)
- PPR613 Carplus annual survey of car clubs 2011/2012 Scotland by C Harmer  
and S Cairns  
(Price £35, code 3X)
- PPR615 Development of a video measure of hazard perception skill and a  
group-discussion-based hazard perception training package for  
motorcyclists by S Helman, N Palmer, E Delmonte and S Buttress  
(Price £30, code 2X)

*Prices current at June 2012*

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## **Summary June 2012**

### **Annual Research Review ARR2011**

TRL

Pages: 126, ISBN: 978-1-84608-998-5

The TRL Annual Research Review 2011 contains a summary of the year's activities and achievements. It includes an overview of TRL's main research and consultancy highlights and a comprehensive listing of the reports and papers published in 2011. Included in this year's Review is a section devoted to the fundamental research that TRL is undertaking, which is primarily aimed at developing the core skills, knowledge and processes that TRL anticipates will be needed in the future. This research work is pursued through both internal and external funding.

Some selected full papers are also included as follows:

- Carbon aware travel choice for sustainable mobility  
Anne Binsted, Anna Clark, Erel Avineri and Owen Waygood
- Managing motorways from the roadside: investigating the feasibility of using verge-mounted variable message signs to implement Managed Motorways  
Katharine Boddington, Paul Blakeman and Cyriel Diels
- The influence of car registration year on driver casualty rates in Great Britain  
Jeremy Broughton
- Durability of thin surfacing systems after nine years' monitoring  
Cliff Nicholls, Ian Carswell and Donna James
- The effects of increased police enforcement along a route in London  
Louise Walter, Jeremy Broughton and Jackie Knowles

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## **Summary June 2012**

### **Published Project Report PPR608**

Trials of farside pedestrian signals at a Puffin crossing

A Maxwell, C Smyth, R Hutchins and M R Crabtree

Pages: 116, ISBN: 978-1-908855-11-4

Puffin facilities were devised to increase pedestrian convenience and safety, reduce the number of unnecessary stops for drivers, and provide clearer and consistent signals to road-users by eliminating the flashing sequence at mid-block crossings and the pedestrian signal blackout at junctions. A feature of Puffin crossings is nearside pedestrian signals, the benefits being improved pedestrian compliance, comprehension and observation. However, concern has been expressed on the masking of the nearside signal and the absence of a visible signal once on the crossing.

An on-street trial was commissioned by Transport Scotland at a Puffin crossing in Edinburgh fitted with both nearside and farside pedestrian aspects. The study sought to provide recommendations on the standard form of signalised pedestrian crossings in the Disability Discrimination Act: Good Practice Guide for Roads (Transport Scotland, 2009). Overall, the effects of the introduction of the farside signal were neutral or negative, except for the pedestrians' stated preference for the modified arrangement.

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## Summary June 2012

### Published Project Report PPR611

Carplus annual survey of car clubs 2011/2012 England and Wales, excluding London

C Harmer and S Cairns

Pages: 58, ISBN: 978-1-908855-10-7

Car clubs - a form of neighbourhood car rental - offer an alternative to private car ownership. Carplus, the environmental NGO promoting car clubs and car sharing, has conducted annual surveys of people belonging to car clubs since 2007. This year, the results have been analysed for separate geographical areas - specifically, London, England & Wales (excluding London) and Scotland. This report outlines the results for England & Wales (excluding London). As in previous years, the survey results show that car clubs have a significant effect on personal car ownership. From a sample of 1125 respondents from England & Wales (excluding London), after becoming a car club member, 33% report that they have reduced the number of cars in their household. Of members getting rid of a car, 61% report that joining the car club has been the main, or a major, factor in their decision, whilst only 19% report that it has not had any effect. In addition, 26% of respondents report that they would otherwise have bought a car, and 63% report that their likelihood of buying a car in the next few years has reduced (compared with only 5% who report that their likelihood has increased). Compared to the average household with at least one full license holder in England & Wales (excluding London), car club members make relatively frequent trips by means other than the car, and drive relatively low mileages. Specifically, their households drive an average of between 3,567 and 4,422 miles a year (the average figures for 95% and 99% members, respectively), whilst, according to the National Travel Survey, the average household with at least one full license holder in England & Wales (excluding London) drives a total of 10,481 miles a year. After joining a club, 41% members report that their mileage stays the same, 22% report that it increases, whilst 37% report that it decreases - however, whilst the average reported increase is a relatively modest 1,194 miles p.a., the average reported decrease is much greater, at 3,556 miles p.a.. Given the low mileages driven, and the fact that car club vehicles are typically considerably less polluting than the average British car, on average, car club member households are likely to be generating less than half of the carbon dioxide emissions and local air pollutants from car use compared with the average household with at least one full car license holder in England & Wales (excluding London).

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## Summary June 2012

### Published Project Report PPR612

Carplus annual survey of car clubs 2011/2012 London

C Harmer and S Cairns

Pages: 58, ISBN: 978-1-908855-08-4

Car clubs - a form of neighbourhood car rental - offer an alternative to private car ownership. Carplus, the environmental NGO promoting car clubs and car sharing, has conducted annual surveys of people belonging to car clubs since 2007. This year, the results have been analysed for separate geographical areas - specifically, London, England & Wales (excluding London) and Scotland. This report outlines the results for London. As in previous years, the survey results show that car clubs have a significant effect on personal car ownership. From a sample of 7,486 London respondents, after becoming a car club member, 28% report that they have reduced the number of cars in their household. Of members getting rid of a car, 46% report that joining the car club has been the main, or a major, factor in their decision, whilst only 29% report that it has not had any effect. In addition, 25% of respondents report that they would otherwise have bought a car, and 62% report that their likelihood of buying a car in the next few years has reduced (compared with only 7% who report that their likelihood has increased). Compared to the average London household with at least one full license holder, car club members make relatively frequent trips by means other than the car, and drive relatively low mileages. Specifically, their households drive an average of between 1,816 and 2,464 miles a year (the average figures for 95% and 99% members, respectively), whilst, according to the National Travel Survey, the average London household with at least one full license holder drives a total of 5,012 miles a year. After joining a club, 40% members report that their mileage stays the same, 30% report that it increases, whilst 30% report that it decreases - however, whilst the average reported increase is a relatively modest 784 miles p.a., the average reported decrease is much greater, at 3,013 miles p.a.. Given the low mileages driven, and the fact that car club vehicles are typically considerably less polluting than the average British car, on average, car club member households are likely to be generating less than half of the carbon dioxide emissions and local air pollutants from car use compared with the average London household with at least one full car license holder.

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## Summary June 2012

### Published Project Report PPR613

Carplus annual survey of car clubs 2011/2012 Scotland

C Harmer and S Cairns

Pages: 58, ISBN: 978-1-908855-09-1

Car clubs - a form of neighbourhood car rental - offer an alternative to private car ownership. Carplus, the environmental NGO promoting car clubs and car sharing, has conducted annual surveys of people belonging to car clubs since 2007. This year, the results have been analysed for separate geographical areas - specifically, London, England & Wales (excluding London) and Scotland. This report outlines the results for Scotland. As in previous years, the survey results show that car clubs have a significant effect on personal car ownership. From a sample of 366 Scottish respondents, after becoming a car club member, 33% report that they have reduced the number of cars in their household. Of members getting rid of a car, 63% report that joining the car club has been the main, or a major, factor in their decision, whilst only 15% report that it has not had any effect. In addition, 31% of respondents report that they would otherwise have bought a car, and 66% report that their likelihood of buying a car in the next few years has reduced (compared with only 4% who report that their likelihood has increased). Compared to the average Scottish household with at least one full license holder, car club members make relatively frequent trips by means other than the car, and drive relatively low mileages. Specifically, their households drive an average of between 1,864 and 2,629 miles a year (the average figures for 95% and 99% members, respectively), whilst, according to the National Travel Survey, the average Scottish household with at least one full license holder drives a total of 9,688 miles a year. After joining a club, 40% members report that their mileage stays the same, 24% report that it increases, whilst 36% report that it decreases - however, whilst the average increase is a relatively modest 930 miles p.a., the average decrease is much greater, at 3,424 miles p.a.. Given the low mileages driven, and the fact that car club vehicles are typically considerably less polluting than the average British car, on average, car club member households are likely to be generating considerably less than half of the carbon dioxide emissions and local air pollutants from car use compared with the average Scottish household with at least one full car license holder.

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## Summary June 2012

### Published Project Report PPR615

Development of a video measure of hazard perception skill and a group-discussion-based hazard perception training package for motorcyclists

S Helman, N Palmer, E Delmonte and S Buttress

Pages: 26, ISBN: 978-1-908855-12-1

Hazard perception skill is an important skill for road safety. There is a reasonable body of evidence that drivers with better hazard perception skill have fewer accidents, and also that the skill can be trained and may be especially beneficial to inexperienced road users (see e.g. Wells et al., 2008). Despite the great deal of work in hazard perception generally, there has been very little looking at this skill specifically in motorcyclists. This project sought to develop a measure of hazard perception skill and a training package to address this gap. The measure was based on the speed choice method used by McKenna, Horswill and Alexander (2006) and the training package based on having small groups of either experienced or novice motorcyclists engage in commentary and discussion using video clips filmed from a motorcycle. Results showed that both experienced and novice groups showed a sensitivity to the hazards in the test (through choosing lower speeds in those clips with hazards than in those without), but that experienced riders were more sensitive to the presence of hazards than novices were. The training intervention made novice riders reduce their speed choice but did not have any impact on those of experienced riders. The findings are discussed and next steps for the measure and the training package are outlined.

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