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**10 November 2016**

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## Peer Review of Sustainable Travel Report

To the Department for Transport,

I have pleasure in providing a peer review below of the report entitled 'Evaluation of Low Cost Workplace-Based Interventions to Encourage Use of Sustainable Transport'.

### Summary

The interventions trialled represent creative applications of behavioural insights in transport and the robust evaluation carried out of their effects provides a valuable new contribution to knowledge of the potential of such applications. The report is very well presented and written so that it is accessible to the policy and practice community. It is also technically rigorous. The learnings from the evaluation will allow further carefully conceived interventions to be tested in future. The report should be made widely available and recommended to the transport profession.

### Assessment of overall robustness of findings

A systematic approach was used to design the interventions based on context-specific (Heathrow staff) data on potential behavioural change and factors preventing change and based on reference to the wider theory and evidence from behavioural sciences in order to come up with worthwhile experiments. It is valuable that the trials were embedded within the ongoing work of the Heathrow Commuter Team which helped ensure that they were the type of interventions that might be applied in future elsewhere.

The reporting of the trial evaluations is of very high quality with the main results being clear to follow (Table 2 is especially useful) and providing sufficient information for it to be apparent that they are proportionate and rigorous. The additional material in Appendices is available for those interested to scrutinise further and gain more reassurance of the rigour of analysis.

There are a number of examples of good practice in the research designs used and the evaluations performed. Improvements in these have been recommended in previous work (including the Research Report and Practitioners' Guide produced from DfT's Making Personal Travel Planning Work project which was also written up as a journal paper by Chatterjee (2009)<sup>1</sup>). It is excellent that randomisation was applied to assign research participants to treatment and control groups, objective measures were collected (car share database registrations, etc.) and rigorous statistical tests were used.

When interpreting the findings it needs to be recognised that the trials followed on from the work of the Heathrow Commuter Team which has been on-going since 2008 (this is acknowledged in Conclusions on p54). The 'products on offer' (car sharing database, etc.) during the trials were no different, but new methods of communicating them were tested. Hence it was important not to expect large effect sizes. Power calculations were used to ensure that survey sample sizes were adequate to measure modest effect sizes (for example, 5% increase in registrations on car share website) which seems a reasonable decision. Results reported focus on difference between treatment and control groups. In one case positive outcomes occurred for both treatment and control groups (new registrations for travelcard in the free bus trial) and it is helpful that there is discussion of why this might have been the case.

One observation about the four trials is that they were not entirely independent with the same people potentially being contacted or participating in more than one of them over the duration of the project. The outcome of the PCP trial (which took place later than other trials) may have been affected by the targeted participants having been contacted for earlier trials (especially car sharing trial).

### **Overall reflection upon the contribution**

There has been much interest and discussion of small-scale (nudge) measures for influencing transport choices since the publication of DfT's Behavioural Insights Toolkit in 2011. However, there have not been rigorous studies undertaken in the UK to assess their effectiveness (and few rigorous studies worldwide). It is invaluable that this study has been undertaken to a high degree of quality and reported effectively.

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<sup>1</sup> Chatterjee, K. (2009) A comparative evaluation of large-scale personal travel planning projects in England. *Transport Policy*, 16, 293-305.

The study (as written up in the report) contributes in three major ways.

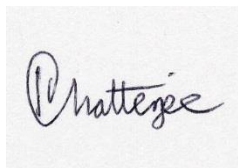
1. It provides an excellent example of using context-specific evidence (for Heathrow) along with wider behavioural science theory and evidence to inform the selection and design of light touch marketing measures. It reflects thoughtfully on the limitations of the initial 'stated preference-type' evidence and what this means for future intervention design.
2. Its findings that that there was very little engagement with the light touch measures and negligible behavioural change demonstrate that in a stable context where sustainable transport options have been promoted previously (albeit more diffusely) there is limited prospect for these light touch measures to be effective. This implies the value of such measures is likely to be larger in situations where there is a changing contextual situation (improvements being made to options or turnover in population). This is well articulated in the report.
3. The study exemplifies how more rigorous evaluations can be conducted than previously has been the case by taking various steps including power calculations, randomisation of assignment to treatment and control groups and utilising objective data on travel behaviour.

### **Recommendations for any future evaluations**

The evaluation sets an appropriate benchmark for future work in this area and it is important that this report is disseminated and advocated to the transport profession.

The report acknowledges that qualitative research would have been of additional benefit in interpreting the results of the trials (p55). As mentioned in the report, qualitative research offers the potential to explain how measures are received by participants and why they respond as they do (which can help in design improvements). The qualitative insights on the temporary free cycle trial were informative about motivations to participate in the trial.

Yours sincerely,

A handwritten signature in black ink that reads "K Chatterjee". The signature is written in a cursive style with a large initial 'K'.

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