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## Bringing Smarter Choices into Multi-Modal Models

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This briefing sheet describes a three year PhD study funded by a UWE Faculty of the Environment and Technology Studentship. The study intends to explore methods to incorporate the modelling of smarter choices into a consistent and integrated approach to the modelling of transport demand by all modes.

'Smarter choices' is the name given to measures, apart from solely providing new infrastructure or changing costs, which encourage people to use more sustainable travel modes such as public transport, walk and cycling. A smarter choices programme for an area could include residential, educational and workplace travel plans and other measures to encourage travel behaviour change such as marketing campaigns, teleworking and car share schemes.

### Background and rationale

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There is a growing awareness that transport problems often need to be tackled by a multi-modal response. The emphasis now in transport appraisal is to analyse the problems facing an area and to set out a selection of possible solutions, drawing on potential contributions from all modes and smarter choices measures.

For example, if the problem is a congested town centre, the first response is no longer to produce a highway model to forecast demand for a by-pass but rather an examination of whether a package of targeted junction capacity improvements, improved public transport provision, walking and cycling infrastructure and a selection of smarter choices initiatives could provide a more cost-effective solution.

### Research objectives

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The aim of the study is to consider approaches to producing demand forecasts which are consistent across modes for package solutions.

Emerging approaches will be assessed for several areas in the UK in order to provide evidence of the practical issues of applying these methods in order to complement the theoretical consideration of the proposed solutions.

### Research Programme

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The intention is to adopt an action research methodology. The first stage of the research project is to conduct a literature review of the issues involved in the demand forecasting and appraisal of multi-modal transport packages. A set of semi-structured interviews will be also be carried out with practitioners in the UK and overseas.

The study will then apply one or more emerging methods for the appraisal of transport packages which include bus rapid transit and smarter choices measures in the UK context and evaluate the process.

### Contact details

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