

## **Investigating the likely behavioural responses to alternative congestion charge schemes in London**

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Transport for London implemented the Central London Congestion Charging Scheme in February 2003. The scheme has had a major impact on travel patterns in Central London with substantial reductions in flow within the charging zone. In July 2005, the initial £5 charge was increased to £8 per day, and subsequent reductions in flow were observed. The zone has now been extended in February 2007 into an area including Kensington and Chelsea. This area is termed the Western Extension Zone.

This research considers a number of alternative configurations for the congestion charge. At present the London congestion charge is an area charge, with a 90% discount offered to residents. Possible alternative configurations could include cordon or time of day based charges, changes to the level of resident discounts, and/or differential charges by vehicle emissions. In addition, a number of alternative payment mechanisms could be considered. The research investigates these with the intention of assisting TfL in the development of new charging response models which will be used to assist in the evaluation of road user charging options.

This paper discusses the design and analysis of a series of choice experiments to elicit the switching behaviour of existing road users within London. In terms of study design this raises a number of challenges in both the behaviour to investigate, and the practicalities of identifying and interviewing appropriate road users. The data collection included a travel diary of a recent day of travel within London, and included exercises to explore the value of travel time, the propensity for time of day switching, and the response to combinations of cordon/area and emissions based charging. The reporting of the modelling goes on to illustrate some of the potential responses identified to a range of different charging schemes.

The paper is intended to provide the reader with an overview of the research undertaken into the responses of road users and provides transferable lessons regarding the evaluation of the potential impacts of other road user or emissions charging schemes that may look to manage the demand for road space.

### **Summary**

This paper provides an overview of a study undertaken to investigate road users' responses to a number of alternative congestion charge options for London. From this research we draw transferable lessons for future studies looking at the potential impact of road user or emissions charging schemes.