
HOUSEHOLD CAR OWNERSHIP DECISIONS – UNDERSTANDING A TRANSITION POINT IN TRAVEL BEHAVIOUR

This briefing sheet describes a three and a half year PhD study co-funded by the Engineering and Physical Science Research Council ([EPSRC](#)) and [Ito World Ltd.](#) The study is seeking to deepen understanding of the factors that influence household car ownership decisions over the life course and to explore to what extent and why households within local areas share common car ownership preferences.



The research aims to support the development of the methods used by planners to forecast how car ownership levels may alter in the future in response to changing social and economic conditions and new land use developments. It also sets out to provide insights into how geographically targeted initiatives such as car clubs or local public transport schemes might be successfully located and marketed.

Background and rationale

The study of household car ownership has traditionally been dominated by the statistical analysis of cross-sectional, quantitative data sets. Whilst these provide valuable insights into the associations between car ownership levels, socio-economic attributes, land use characteristics and more recently attitudes, they reveal less about how and why these associations have arisen and (may) change over time. This study aims to apply a mix of

both qualitative and quantitative techniques to deepen understanding around two key areas which have emerged as important knowledge gaps from the year 1 literature review:

First, there is a need to generate qualitative insights into how car ownership changes over time at the household level – A key starting point for the study is that the household car ownership decision reflects an ongoing process of evaluation and action and non-action, rather than an impulsive judgement to change travel behaviour. Life-events (expected and unexpected) such as moving house, the birth of a child or experiencing illness inevitably require households to adapt and change their travel patterns over the life-course. A search for an alternative car ownership state may be triggered following a period in which the current car ownership position has become and is recognised as being unsatisfactory (which may be associated with a combination of instrumental and affective factors). However, few studies have investigated when and why these car ownership transition points arise and how they go on to influence household car ownership preferences over the longer term.

Second, whilst it is well established that the propensity to own cars increases with distance from urban centres, the degree to which the local built and social environments influence (and are influenced by) car ownership attitudes and intentions is less well understood. For instance, with respect to the local built environment, parking constraints or congestion may reduce the appetite for car ownership. In relation to the social environment, particular life-style preferences in an area may exert a social influence on car ownership intentions, which may further be reflected in changes to the built environment. For example, it has been anecdotally observed that the paving over of front gardens to accommodate additional parking can spread as a social trend across residential areas.

Research objectives

The direction of the study is guided by the following 3 objectives:

1. To identify the key factors that influence household car ownership decisions over the life-course;
2. To explore the relationship between household car ownership preferences and residential location; and
3. To provide policy relevant insights concerning the propensity for car ownership status to change.

Research design

Given the exploratory nature of the study, a flexible research design was developed, involving 2 stages of data generation and analysis, which could be adapted in response to emerging findings.

In stage 1, 15 in-depth interviews were undertaken with driving license holders from 0, 1 and 2 car households. The interviews were primarily concerned with addressing objective 1, openly exploring how alternative car ownership states have arisen over time. Each discussion began by guiding the respondent through a visually recorded retrospective account of when car ownership transitions have occurred relative to wider life events (e.g. moving house or changing jobs). This provided the context for more focused discussions around the motivations for specific car ownership transitions, a deliberative assessment of satisfaction with their current car ownership status and the potential for the household to change their car ownership state in the future.

In stage 2, efforts have been made to expand the sample and to investigate the relationship between locale and household car ownership preferences (objective 2). Two neighbourhoods in Bristol containing 125 households each, have been selected for household survey. The neighbourhoods are demographically similar according to the 2001 census, but differ in their geographic location relative to the city centre: one being an outer suburb with fewer local amenities, while the other is within walking distance of the city centre. This allows the researcher to probe the extent to which differing residential location choices have influenced the household car ownership trajectory.

The neighbourhoods will be surveyed using a self-completion questionnaire. The questionnaire has been designed to elicit the length of time the current household unit has existed; the number of cars available at the point of household formation; the most recent car ownership level change (if there has been one); and the most likely next car ownership change. Given the small sample size, and the intention to generate the highest possible response rate, the survey is being administered using a call out and collect technique. This involves the researcher making personal contact with each household when delivering the questionnaire and then collecting the completed questionnaire in person the following week. The questionnaire is then followed up by a brief telephone discussion to firstly validate the self completion responses and secondly, to generate deeper qualitative insights into the household's car ownership history.

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