

# **UNDERSTANDING INDIVIDUALS' VALUATIONS OF TRAVEL TIME: THE ROLE OF STATED CHOICE DESIGN VARIABLES**

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## **ABSTRACT**

Stated choice (SC) experiments are frequently used in a variety of applied fields of economics to investigate valuation of goods. In transport economics, stated choice experiments constitute the most popular method to estimate the value of travel time changes (VTTC) of a population. Acknowledging that the valuation of a good is likely to vary across individuals and even for the same individual under different circumstances, many studies try to obtain a set of VTTC estimates based on some relevant factors: e.g. income, journey length, size of the travel time changes. These include several national studies, aimed at providing VTTC for official guidance in appraisal. This paper investigates the role of the variables used in the SC experiment on the estimation of the set of VTTC (i.e. mean and covariates). In the simplest VTTC experiment, the design variables are time and cost changes. For this purpose, partial data analysis is applied. Ideally, one would like to observe the same group of individuals completing different SC experiments. With the data currently available, an alternative approach is to use a large dataset of responses, and split it according to different levels of the variable of interest. The estimation of the same model on each sub-sample provides insights into potential effects of the variable of interest. This approach is applied in relation to three design variables on the data for the last national VTTC study in the UK, using state-of-the-art model specifications. The results show some ways in which the set of VTTC can be affected by the levels of SC design variables. It is not possible to determine to what extent the effect of the SC design variables is or not part of individuals' true preferences. The aim is to increase our understanding of the reality of the distribution of the VTTC across and within individuals.