

Sustainable travel for journeys to and from airports: a case study of Manchester Airport

T. Budd, T. Ryley, & S. Ison

Department of Civil and Building Engineering, Loughborough University, Leicestershire UK

Airports are major generators of surface traffic. In the UK, like the rest of Europe, the majority of journeys to airports are undertaken by private car.

As demand for air travel has grown, surface access at airports has become increasingly constrained. This has led to traffic congestion on surrounding road networks and severe environmental impacts associated with increased vehicle emissions. Airport managers are subsequently under pressure to reduce the share of private car journeys.

A key focus of surface access management is reducing private car travel, particularly where it could easily be transferred to alternative modes, such as bus, coach and rail. The travel behaviour issues for surface access are different from other transport contexts; for instance, when accessing airports individuals will often be carrying heavy luggage with them and choose not to use public transport.

The research presented is from a passenger questionnaire survey of 500 respondents at Manchester Airport, a large international airport in the UK. The questionnaire was initially informed by interviews with UK airport surface access managers.

Using the Theory of Planned Behaviour (Ajzen, 1991), scores on factor analysed attitude statements were used to segment a sample of air passengers into groups with the greatest potential to switch modes using cluster analysis. Several groups of passengers were identified, each with varying degrees of potential to switch modes. This has implications for airport managers formulating airport surface access strategies.

The Theory of Planned Behaviour has been extensively used to explain and predict a wide variety of different behaviours, including travel behaviour and mode choice (Bamberg et al, 2003). To date, however, it has not been applied in the context of airport surface access travel behaviour. Analysis of the Manchester Airport survey data will link the cluster groups generated to the Theory of Planned Behaviour framework aspects (attitudes to behaviour, subjective norms, perceived behavioural control and intentions).

The discord between generic environmental choices / attitudes and those related to air travel has been identified by Ryley & Davison (2010). Discord will also be discussed in this paper between surface access transport choices against air travel behaviour. Other aspects specific to the surface access trip made by respondents will be considered: passenger origin, public transport availability, passenger group size, and luggage taken. Finally, the applicability of psychological theories to surface access issues, and the airport policy implications of the survey findings, will be presented.

References

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