

SESSION 6: Solent future transport (2/2)

Environmental and health information effects on travel behaviour in the Solent region, UK

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The Solent Future Transport Zone, a trial programme funded by the Department for Transport (DfT), runs numerous trials of innovative mobility services across the Solent region to help make journeys easier, smarter, and greener. Mobility as a Service (MaaS) is a recently developed concept that provides multimodal journey planning, booking, and payment services through a single platform, i.e., a so-called MaaS app. The Solent MaaS app aims to help Solent residents change their travel behaviour towards the use of sustainable modes of transport (and away from the private car). In addition to providing users with timetabling, mapping, and journey duration information, the MaaS app has the potential to include information regarding the environmental impact of different travel options offered for a given journey, including multimodal options such as e-scooter and bus, or walking and shared car. Similarly, it is also possible to provide users with an indication of the calories they are likely to burn with each travel option. These types of personal and environmental health information are not typically included in existing MaaS apps, yet have the potential to enable MaaS users to make more informed decisions about their journey and its impacts. Given the lack of work in this area, the extent to which these types of information influence behaviour is currently unknown. The current research, therefore, addresses this gap, exploring how environmental and health information might influence self-reported travel behaviours of Solent residents. To explore this, a joint revealed and stated preference survey has been developed. The questionnaire will be disseminated among staff and students at the Portsmouth and Southampton universities before wider dissemination across the Solent region. Resulting data will help shed light on travel behaviour in the Solent region, with the analysis informing app (and wider intervention) design, with a goal to foster more sustainable travel habits.

Mobility as a service, interface design requirements with a focus on gender differences

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Mobility as a Service (MaaS) is an innovative transport solution that aims to provide seamless travel options offered by mobility service providers. It proposes alternatives to private vehicle use and encourages more sustainable travel choices. It is implemented through a single interface, typically a MaaS mobile application (app). Although gender is one of the major factors predicting adoption of new technology, gender differences in interface use have rarely been addressed in designing a MaaS app. Therefore, this study identifies key criteria for gender differences in interface use and investigates design requirements based on the criteria for developing a MaaS app that better suits gender-specific needs. The criteria were defined through a literature review on gender differences in interface usage behaviours. Three main differences were defined as 1) attitudes towards interface use, 2) information processing behaviours and 3) needs for support. Design recommendations using the criteria are suggested as follows. First, females show lower confidence and