

Motivating the use of sustainable mobility to Utrecht University's Science Park de Uithof

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Project description

Innovations in transportation and communications technology are uniquely interrelated. For example, for the users of public transit systems, real-time information related to vehicle location and crowding provide information about the status of the transport services they interact with. New mobility schemes such as car-share, ride-share, and bike-share systems also rely on communications technology, usually in the form of mobile applications, to connect users (and potential users) to their preferred modes of transportation.

The purpose of this study is to explore how mobile mobility applications can be used to motivate sustainable travel behavior to Utrecht University's Science Park (USP). Utrecht University (UU), like many universities, is dedicated to promoting environmental and social sustainability on its campus. The transportation choices made by faculty and staff are important contributions to the overall environmental impact of the university, and efforts have been made to motivate employees to commute using sustainable modes. While many commuters use their preferred mode of transportation, it is likely that this is not the case for all people travelling to the USP. For example, a 'mismatch' could exist between (a) the mode choices that individuals would like to make, (b) the mode choices they are able to make (often related to cost, availability and access), and (c) the mode choices they end up making (often related to their established habits). This 'mismatch' could thus result in individual's mode choices not being as optimally sustainable as they could potentially be.

The goal of the research is to develop policy recommendations on how mobile technology can be used to motivate increased adoption of sustainable modes to Utrecht Science Park. In the first phase of the research, survey data will be analyzed quantitatively. The data used for this phase of the study will be obtained from an online commuter survey targeting UU staff and faculty which was carried out in Spring 2019 in collaboration with the UU Green Office. The survey has been designed to collect information about respondents' commutes including mode, travel time, and trip satisfaction. Information related to how commuters use mobile technology related to trip planning is also captured, as are respondents' thoughts and opinions about various aspects of travel. The survey data will be used to investigate whether mobile technologies can be used as a tool to overcome the above mentioned mismatch. In the second phase of the research, qualitative analysis, such as in-person interviews will be held to follow-up and supplement the findings derived from the survey data analysis.

Based on the results of the quantitative and qualitative analyses, comprehensive policy suggestions will be made as to how the UU can use technology to motivate sustainable travel to the USP in both the short and long-term.

The research assistant will be involved in and provide support with:

- the development of the research questions and hypotheses
- the design and execution of quantitative analyses
- the design and execution of in-person interviews
- the development of sustainable mobility policy recommendations and report writing

Job requirements

The following skills are considered beneficial for the project:

- knowledge of a statistical software such as SPSS or R
- knowledge of Geographic Information System software (ArchMap or QGIS)
- experience conducting quantitative and/or qualitative research

In addition, this position also requires individuals to:

- demonstrate a strong interest in sustainable mobility
- be open to learning new techniques and methods
- be prepared to work as a team player and actively contribute ideas