URBAN MOBILITY IN EMERGING MARKETS

Active Transportation (Area 3)

The area/ subtopic "Active Transportation Research". part of the research being undertaken under area 3 of the newly established research group "Urban Mobility in Emerging Markets" based in the Department of Transport and Supply Chain Management at the University of Johannesburg.

Like many other emerging markets and developing countries, especially those located in Africa, the characteristics and barriers of active transportation modes have been less investigated in South Africa. The objective of the current thesis is to provide empirical research results about the barriers of active mobility, the perceptions of walking, and the association between the built environment and walking. The research questions are as follows: (1) Are there any significant differences between the levels of walking and cycling in different urban forms? (2) What are the barriers of walking and cycling in large South African cities? and (3) How associated are the subjective and objective walking distances? To answer the research questions, Johannesburg is taken as case study area, in which two districts in different parts of the city, one with compact and dense form near the central parts and one with sprawled and low-density form on the urban edge will be investigated. The data collection method is direct questioning (interviewing). The overall sample size is 600 respondents, half of which resides in each district. Different variables such as personal, household, socioeconomic, mobility-related perceptions about mobility and the urban environment, will be generated by the questionnaire. For quantifying the perceived and objective walking distances, each respondent is asked about his/her idea of the nearest walking distance to three destinations in his/her neighbourhood, which the respondent knows well. The answers are written on the questionnaire and after the interview, the interviewer measures the objective distance by Google Maps and writes it down on the questionnaire. Then after calibration of the dataset, two sets of distances, one subjective and one objective, will be compared (900 + 900). The research questions will be answered by hypothesis testing methods including T-Test, Analysis of Variance (ANOVA), and Kruskal-Wallis Test for continuous variables and Chi-square and Proportional Reduction in Error (PRE) for categorical variables. The results will be published in an international peer-reviewed journal.