

## MOPUS - Mobility Patterns and Urban Structure

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Several authors argue that the sustainable development of urban mobility needs a holistic approach. The need to integrate land use and transport policies has been widely recognised as a more effective approach to meeting new mobility requirements, than traditional transport planning. Nevertheless these integrated policies have seldom seen turning into practice. Furthermore, policies dealing with personal behaviour and choice and taking into consideration socio-economic and demographic conditions are also being increasingly suggested.

This research project is based on two previous research projects concerned with complementary factors and motivations underlying urban passenger mobility patterns. One of these research projects, carried out in the Research Centre for Territory, Transport and Environment (CITTA), is focused on the concept of 'Structural Accessibility' and has been applied to the Metropolitan Area of Oporto. This methodology, the Structural Accessibility Layer (SAL), is designed to reveal the potentials of land use and transport systems to provide the necessary conditions (although not necessarily sufficient) for sustainable mobility. It is also able to provide a design-support tool for sustainable mobility policies.

The other research project developed a comprehensive study of urban structure and travel behaviour and has recently been applied to the Copenhagen Metropolitan Area. The aim of this methodology (the Aalborg University Methodology), focusing on behavioural aspects, is to identify the overall relationships as well as the more detailed mechanisms through which the location of residence influence travel behaviour. It goes into the complex relationships between urban land use and travel, including a comprehensive analysis of socioeconomic as well as of attitudinal characteristics of travellers.

The possibility to combine these two complementary research methodologies is the distinctive and innovative contribution of this project. This combination will involve the application of the SAL to the Copenhagen metropolitan area and the application of the Aalborg University methodology to the Oporto Metropolitan Area. In this way, the structural and behavioural aspects of mobility patterns will be analysed and compared in both case studies. In addition, this project is expected to provide clear evidence of the real importance of different metropolitan structures, since the Metropolitan Area of Oporto clearly is a polycentric urban structure, whereas the Metropolitan Area of Copenhagen is very much a typical monocentric metropolis.

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