

Research stay at Harvard University, Boston, USA

Research in children's cycling behaviour based on innovative data sources

Motivation

The share of citizens in Denmark who uses the bicycle on an average day is decreasing and the trend is particularly evident among children. At Technical University of Denmark (DTU), we have several activities that deal with cycling behaviour, but we do not have projects that specifically address children's cycling behaviour. It is relevant to study the development in cycling in an international context in order to compare developments in cycling among children and the reason for these.

Purpose

During this project I will collaborate with Professor Voulgaris at the Department of Urban Planning and Design, Harvard Graduate School of Design in order to initiate projects and prepare project applications regarding children's bicycle behaviour in USA and Denmark. Professor Voulgaris has previously participated in government papers on the subject, including analyses for the U.S. Safe Routes to School program and she has a number of research papers on transportation to school and accessibility to cycling for population segments.

Method

The project will work with methods based on innovative data sources, including both passive data sources based on tracking as well as active data sources based on focus groups and interactive questionnaires that more qualitatively measure how children's cycling behaviour and safety perception is affected by the road network and other surroundings as well as their parents' considerations about these factors. We will likely contact school classes in the area and use them as focus groups in the developing work of the project. We will also include data from The National Household Survey (US), the American Time Use Survey as well as The Danish National Travel Survey.

Impact

Welfare calculations in Denmark show that society achieves a beneficial effect equal to DKK 7-8 for every extra km citizen's ride on a bicycle. As transport habits are often founded as a child or youth, it is important that children have the most optimal framework for cycling to obtain these benefit for many years. This project will contribute with survey methodology and accessibility analyses if it is possible to obtain relevant data for this. These activities should result in a larger joint project and several joint research articles, which should form the basis for further development of methods and analyses on children's cycling behaviour and ultimately inspire and guide municipalities and urban planners to build better cycling infrastructure centred on children's cycling behaviour in those areas where this is optimal