MSc. Thesis Project



Crowdedness on the cycling paths

Problem description

Cycling paths in many cities are becoming increasingly crowded. Furthermore, cycling paths are being used not only by ordinary bicycles, but also by different types of vehicles, such as pedelecs, light mopeds, and cargo bikes. These different types of vehicles have sometimes large differences in speeds, mass and demand for space requirements. This phenomena increases the heterogeneity on our bicycle tracks and might affect cyclists' perception of the level of crowdedness on the cycling paths, and as well their safety perception and comfort. In this study you will investigate how crowding is perceived by different groups of cyclists (e.g., by demographic, type of bicycle used), and what factors (e.g., density on the cycling route, diversity of bikes) affect this perception?

Assignment

- Review of the state-of-the-art with respect to definitions and measures of crowdedness on the cycling paths;
- Develop a survey to understand the factors that affect crowdedness and how different cyclists perceive crowdedness; Investigate the relationship between the perception of crowdedness and the objective measure of crowdedness;
- Distribute the survey and collect data
- Investigating the relationship between traffic intensity, diversity, and safety proximity measures.
- Writing a thesis report (and potentially a scientific paper).

Research group

Transport & Planning department Thesis supervisor: Dr.ir. Haneen Farah External supervisor: Dr. Teun Uijtdewilligen (SWOV – Institute for Road Safety Research)

External support

Internship at SWOV – Institute for Road Safety Research.

Information

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