



Lane changing strategies

Problem description

Lane changes are disruptive in the traffic flow on motorways. Therefore, the understanding of lane changes is key to the understanding of traffic stability, and the formation of queues.

Assignment

The goal of this study is to get an overview of the strategies currently being used by drivers. Methods to find out are interviews, test drives with an equipped vehicle, a driving simulator, or a combination thereof. The student has a freedom to choose the method of his liking.

Required skills and interests:

- Interests: traffic flow theory
- Good analytic skills
- Organisation (for the experiments or interviews)

Skills furthermore depend on the chosen approach: it can be more towards interviews, in which case organisation and human interaction play an important role. If the student chooses a more modelling perspective (implementation of the strategies), programming and interpretation of traffic comes into play.

Supervision

Supervisor: Prof.dr.ir. Serge Hoogendoorn (Transport & Planning)

Daily supervisor: dr. Victor L. Knoop, v.l.knoop@tudelft.nl

dr. Mehdi Keyvan-Ekbatani, m.ekbatani@tudelft.nl