



Car-bicycle mixed traffic: Effect on traffic operations

Problem description

Bike traffic is increasing in Dutch cities. This causes problems for the cyclists (bikers are queuing) as well as for the car drivers, since the cyclists limit the road capacity for car drivers.

Assignment

The goal of this study is to describe to which extent the mixed traffic can be described by a traffic model. Adaptation of car-focussed models lead to approaches with “passenger car equivalents”. Are these approaches suitable for bikes as well. A part of the study could be data collection. Apart from the model development, there are interesting tasks in calibration and validation (methodology)

Related assignments

This is a very relevant, but scientifically unstudied area. Other assignments are also possible within this field. Think for instance of the effect of mode-specific measures.

Required skills and interests:

- Interests: traffic flow theory
- Good programming skills
- Good analytic skills

Supervision

Supervisor: Prof.dr.ir. Serge Hoogendoorn (Transport & Planning)
Daily supervisor: dr. Victor L. Knoop, v.l.knoop@tudelft.nl