Effectiveness of Motorway Traffic Management

Problem description
The Netherlands has long led the way in Dynamic Traffic Management (DTM). A key instrument in the DTM arsenal is the Motorway Traffic Management (MTM) system. This system, characterised by the matrix boards above the road, is aimed at improving traffic safety and increasing traffic flow performance. It is generally believed that it is effective in doing so, despite being a relatively expensive system to maintain. However, real quantitative evidence for the extent of this effectiveness lacks and has long been desired by the road authority Rijkswaterstaat, despite numerous attempts to quantify the effectiveness.

For this reason, there is a desire to develop a new methodology that will allow the effectiveness of MTM for traffic throughout to be evaluated and for this method to be applied to give a quantitative evaluation of the current system.

Objectives & Assignment
The objective of this project is therefore to develop such a methodology using all available data sources within (or external to) Rijkswaterstaat. This will involve gaining an understanding of the reasons that previous attempts to solve this problem have failed and to come up with an unique and effective new approach that can be applied. Conceptual thinking as well as the ability to link data sources and perform data analysis will be required during the project.

This Master thesis can also include an internship with Rijkswaterstaat (such as with the ITS Edulab).

External support
Rijkswaterstaat

Information
Simeon Calvert - s.c.calvert@tudelft.nl
Prof. Hans van Lint – j.w.c.vanlint@tudelft.nl