Explaining traffic flow efficiency subtleties

Problem description
In the Netherlands, as well as in many other developed countries, heavily utilised and busy road networks often operate at or over capacity. Many measures are focussed on optimising traffic flow in near capacity conditions and aim at increasing traffic efficiency and operational capacity. Interestingly, traffic efficiency and capacity per country shows large variations. Some of the causes for these variations can be easily explained, while others are far more subtle and require further research.

Therefore, data and simulation lab DiTTLab is interested in investigating what the extent is of differences in operational capacity and traffic flow efficiency is between countries and to investigate if the differences can be explained to aid traffic flow performance.

Objectives & Assignment
The objective of this project is to analyse traffic flow efficiency and operational traffic flow from a large number of different countries and to derive a list of general capacity values. This will require literature research and data analyses on acquired data sets from various sources. Presentation of the results in a performance table is foreseen. Furthermore, detailed analysis should be performed on data and other relevant variables to derive possible explanations for the differences and potential solutions for these reasons should be developed.

This Master thesis may include an internship, possibly with AMS in Amsterdam, ITS Edulab, or another partner

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External support
tbd

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