

Head:	Dr. Anastasios Kouvelas
Topic:	Value of Time For Taxi Trips
Assistant:	Kevin Riehl
Registration:	www.ivt.ethz.ch/en/studies/downloads/assignments.html#registration
<p>Taxis are a valuable addition to public transportation, and complement with a on-demand service. Extensive datasets covering taxi trips for various cities exist, and these would allow to better understand the incentives for operating taxi drivers. What is the value of time for taxi drivers? Does it pay off for them to complete trips faster or slower (based on their route choice and driving behaviour)?</p> <p>In this assignment, we would like to explore the value of time (VOT) for taxi trips.</p> <p>The tasks may include:</p> <ul style="list-style-type: none"> • Retrieve taxi trip data sets, and prepare a realistic microsimulation for traffic redirection. • Study delay distributions and costs, and estimate value of time. • Analyze the incentives of taxi drivers. 	
Links:	Chicago https://data.cityofchicago.org/Transportation/Taxi-Trips-2013-2023-wrvz-psew/about_data Porto https://www.kaggle.com/datasets/crailtap/taxi-trajectory New York City https://www.nyc.gov/site/tlc/about/tlc-trip-record-data.page ...
Additional remarks:	Group work possible, can also be divided into multiple projects Please contact the head and assistant at least one month before the start date if interested.
Minimum credits:	9 / 11 or 24 ECTS (depending on project/thesis)
Recommended lectures:	Road Transport Systems (Verkehr 3), Transport Systems, Traffic Engineering, Microscopic Modelling and Simulation of Traffic Operations
Additional information:	Good skills in programming language are required for algorithm implementation and data analysis.