“Hypothesis-driven data analysis in Transport” within the lecture “Applied Statistics in Transport”, M.Sc. in 'Transportation Systems, TU Munich, WS 2011/2012

Exercise 1 „Research questions and hypotheses“

Research is an organised and systematic way of finding answers to questions. Thus the very first step is to formulate relevant research questions and the expected answers to these questions (hypotheses).

Please complete the following tasks in preparation of the guest lecture by Tina Gehlert on 2/3 February. This is an exercise for you. Similar tasks and questions might be included in the exam. This is the basis for the discussion on 2/3 February. Tina Gehlert will provide an individual feedback to those students who submit a written summary of their answers by **27th January 2012** to **Tina.Gehlert@gmx.de** (max. 2 pages).

- Read the literature provided.
- Identify the 3 most important indicators of individual travel behaviour.
- Extract relevant factors (max. 3) that influence individual travel behaviour.
- Describe their impact on relevant indicators of travel behaviour.
- Identify and write down 1 question for further research.
- Formulate your expected answer to that question.

Literature:

Mokhtarian, P.L., Chen , C. (2004). TTB or not TTB, that is the Question: A Review and Analysis of the Empirical Literature on Travel Time (and Money) Budgets. In: Transportation Research Part A: Policy and Practice, Jg. 38 (9-10), 643-675.

van Wee, Bert; Rietveld, Piet; Meurs, Henk (2006): Is average daily travel time expenditure constant? In search of explanations for an increase in average travel time. In: Journal of Transport Geography, Jg. 14, H. 2, p. 109–122. vanWee2006.pdf.

Exercise 2 “Data needs and availability”

- Get familiar with the documentation the dataset MID 2008.
- Identify and write down for each research question variables from MID that may answer that research question.

Case study material:

MID Documentation, see Material_Case_Study.zip.