On-demand mobility (FLEX) – Stated preference datasets

Data description
• Two SP experiments on the preferences towards on-demand mobility (more info on both datasets on the next page):
  • SP1 context: single mode urban trip (~5km), commute or leisure trip
  • SP2 context: access mode and train station choice
• Responses for both surveys were obtained in February 2020
• Survey was carried out with the MPN
• Both surveys have additional attitudinal statements and can be linked to the MPN for further socio-demographic and attitudinal information

Thesis research ideas
• Are there any regional differences (in NL) in traveller preferences towards FLEX (SP1 & SP2)
• Clustering respondents based on their attitudes towards FLEX services (SP1 & SP2)
• Are on-demand services perceived like shared modes (public transport) or private modes (car, bike)? (SP1 & SP2)
• Do people choose to maximise utility or minimise regret when choosing the access mode and train station (SP1)
• Analysing the impact of train station proximity on access and station choice (SP2)
• Access mode or train station? What do travellers choose first? (SP2)
• How does train usage frequency affect access mode choice? (SP2)

Candidate
• Should have taken the Statistical Analysis of Choice Behaviour (SEN1221) course or the Travel behaviour research (SEN1721) course or have experience with choice analysis and experiment design otherwise

Information
• Do you have your own ideas for a research topic?
• Have more questions about the datasets?
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MSc. Thesis Project

Transport & Planning

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Both datasets
- Attitudinal statements on the use of technology, mobility, sharing a ride and the sharing economy
- Familiarity with sharing economy (home rent, on-demand services and bike/car sharing)

SP experiment 1: Urban mobility
- Single mode trip within an urban area (~5km long) for a commute or leisure trip purpose
- Choice between bicycle, car, public transport and FLEX (on-demand service)
- Blocked orthogonal design (12 blocks) with 6 choice tasks per block
- Each respondent was allocated 2 different blocks, one for the commute and one for the leisure trip purpose
- Respondents without an access to car did not have the option to choose car for their trip (it was also not shown in the choice set)
- 1,200 total responses, 1,063 after filtering the data

SP experiment 2: Train station access
- Three-step sequential SP survey design
  - Joint access-mode-and-train-station choice
  - Step 1 and 2: access mode choice for 2 different stations
    - choice between bicycle, car, public transport and FLEX
  - Step 3: choice between the 2 stations, given the access mode choice
  - Efficient design of 6 choice tasks (each task made of 3 steps/choices)
- 1,193 total responses, 1,076 after filtering the data