



*Mobility is freedom*

**Mind-Sets FINAL CONFERENCE**

**Brussels, 22 May 2017**

**Laurent Francks**



*This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 640401.*

## Economic approach to mobility

- Assumption of rationality
- User of transport system:
  - Chooses car(s) that best satisfy his needs (with given budget)
  - Chooses transport mode and route that minimize generalized cost of transport (financial cost + opportunity cost of time)
- Policy implications:
  - Equilibrium concept: transport demand will be distributed over network so that no one can gain by deviating from route
  - People's observed behaviour as basis for social cost-benefit analysis
  - Reaction to policy instruments



## Criticisms

- Activity-based modelling shifts focus from models that are trip-based, to models that build on activities that generate trips
- Hybrid Choice Models: identify observable variables that correlate attitudes, beliefs and social norms with impact on travel behaviour
- More fundamental questioning of economic approach:
  - real humans cannot consider all possible alternatives and corresponding outcomes => bounded rationality
  - enrich economic models with more realistic behavioural assumptions (“behavioural economics”)

## Policy issues in transport

- externalities are exacerbated because people make choices against their own interest (“status quo bias”, unrealistic assessment of life cycle costs of cars, health impacts of mode choices)
- behavioural biases may hinder effectiveness of price instruments
- improve effectiveness of so-called “soft” policy measures



## Examples of potential

- Increasing salience of variable costs of cars
- Route planners could propose “sustainable” travel modes as **default** option.
- Express information so that people can translate it in benefits and costs
- Use of social networking (for instance in combination with car sharing, workplace and school travel plans) and “collaborative filtering” could encourage modal shift



## What about ICT?

- Several cognitive processes that underpin travel decisions are now delegated to ICT => obsolescence of much of existing research
- New research questions:
  - choices are affected by defaults or by valence framing
  - central role in social learning, in building virtual communities and in development of collaborative filtering.
  - overcome one of the main shortcomings of existing behavioural research:
    - *focus on small scale laboratory settings with small stakes, with questionable generalisability*
    - *absence of large scale, randomized field experiments in real life circumstances*





*Mobility is freedom*



*This project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 640401.*