Smart Commuting? A Case Study in Switzerland

Raphael Hoerler*, Fabian Haerri*, Merja Hoppe*

*Institute for Sustainable Development, ZHAW, raphael.hoerler@zhaw.ch

1. Introduction

Today, transportation is responsible for 32% of Switzerland’s CO₂ emissions, making it the biggest CO₂ emitter, even ahead of the industrial sector (20%) [1]. The motivation of the Smart Commuting project was to increase the share of public transport as well as active mobility and decrease private car usage in order to reduce CO₂ emissions from transportation.

Our aim was to understand:
- The needs and characteristics of commuters as well as transport-related stakeholders
- Current trends affecting the mobility sector and its implications for sustainable commuting with a special focus on new mobility concepts like car-ridesharing or mobility as a service.

Research questions:
- What are the reasons for commuting by private car? A
- What factors could motivate a change? A/B
- Which stakeholders and trends are relevant in this process? B/C

2. Methods

- Survey with 550 commuters in Basel (Switzerland) and 117 stakeholders from Switzerland (n=39), Austria (n=14) and Finland (n=64).
- The data was investigated using ordinal logistic regression and two-step cluster analysis with SPSS version 24. A comprehensive literature analysis revealed relevant trends in sustainable commuting.

3. Results

3.1 Reasons for commuting

3.2 Satisfaction with commuting and openness to sharing

3.3 One fits all solutions don’t exist!

4. Conclusions

High potential in reducing greenhouse gas emissions, lowering traffic jams and enabling access to mobility in rural regions is expected from new forms of mobility solutions like mobility as a service, including all sorts of transport options such as slow modes, public transport, carsharing or ridesharing. Generally, the openness of society to use such options is low, yet younger commuters and low-income groups may be more open towards such mobility offers. Interestingly, stakeholders in the mobility sector are quite open towards these transport services. To close this gap, it is thus encouraged to specifically target commuters that are open towards the new options in order to facilitate the spreading of awareness to other groups and enabling a paradigm shift to more sustainable commuting.

Starting points for smart commuting:

5. Acknowledgments

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