

Smart Commuting? A Case Study in Switzerland

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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**.

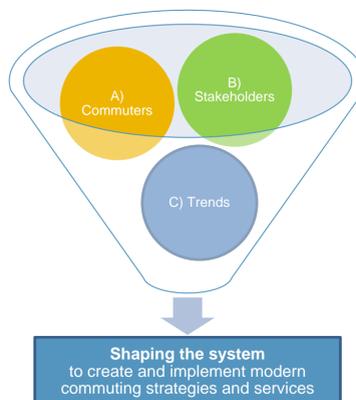
Research questions:

- 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**

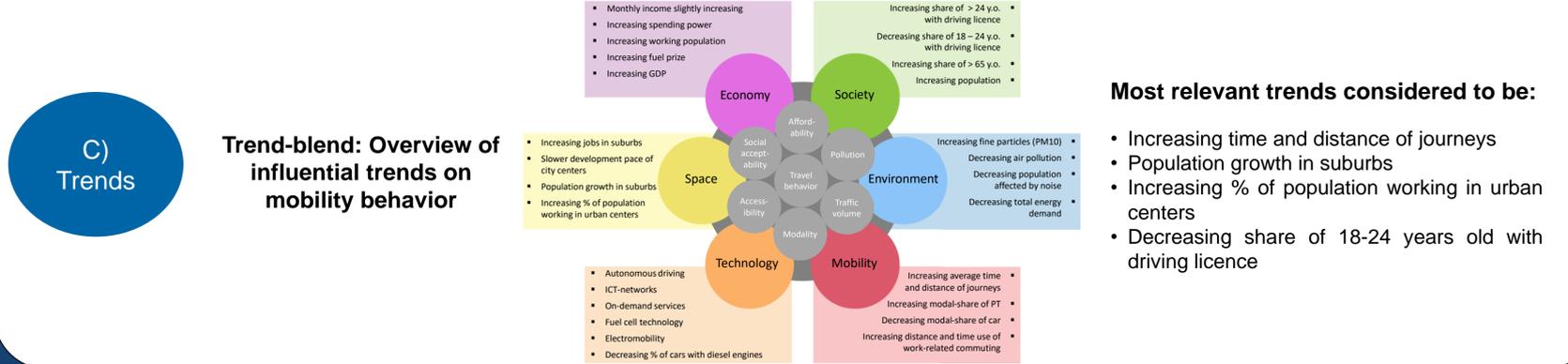
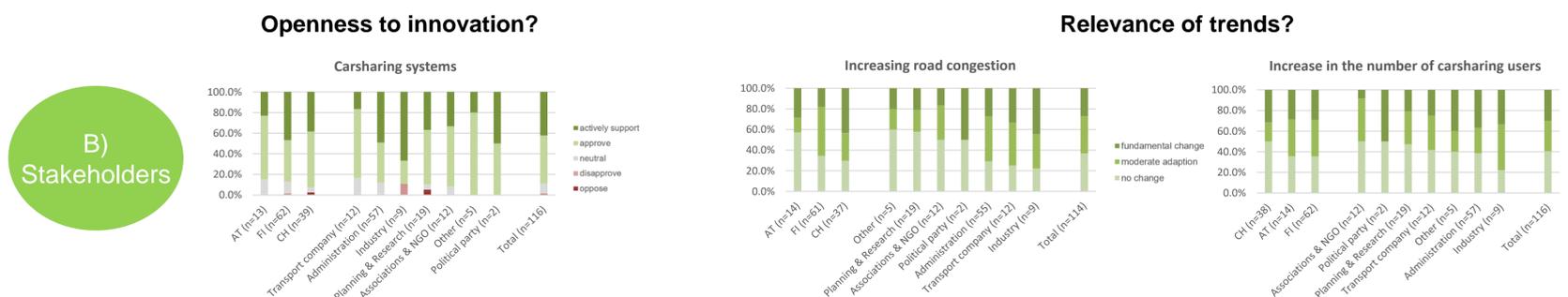
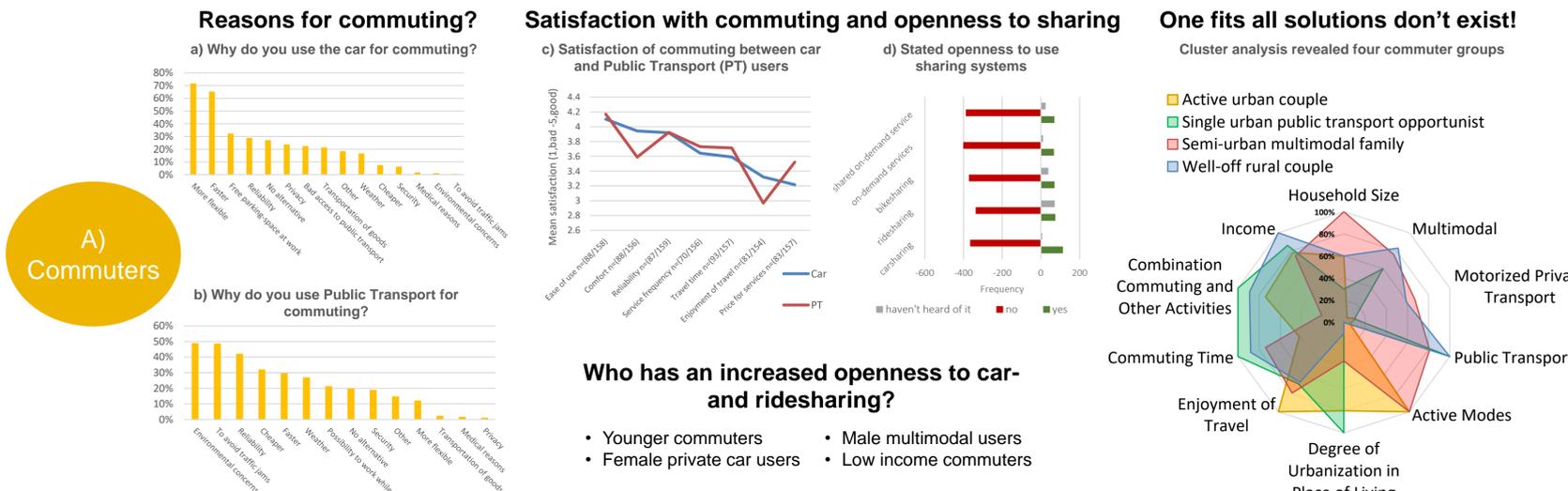
2. Methods

- 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.



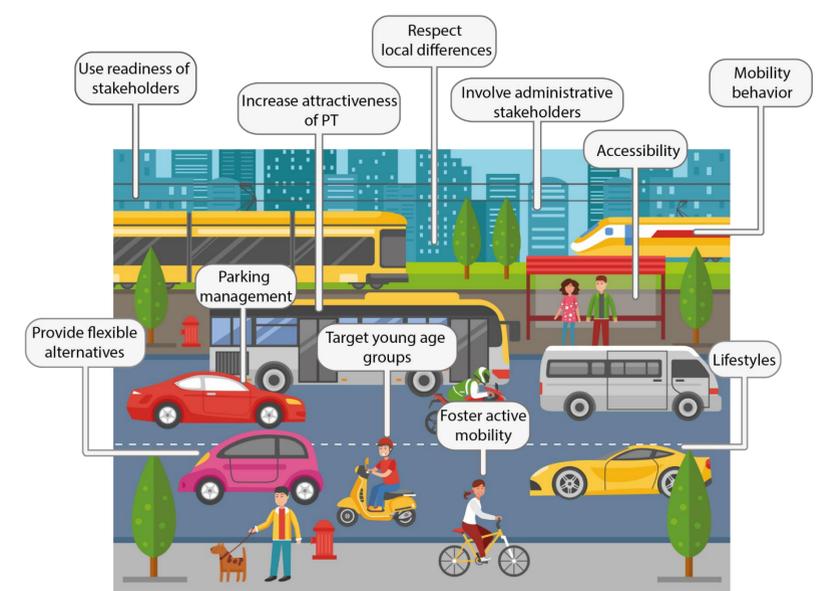
3. Results



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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[1] BAFU (2017). Emissionen von Treibhausgasen nach revidiertem CO₂-Gesetz und Kyoto-Protokoll, 2. Verpflichtungsperiode (2013–2020) (S. 21). Bundesamt für Umwelt BAFU.