

D-BAUG Lighthouse Project: E-Bike City Subproject G

Policy implementation of an e-Bike-City

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1 Summary

Subproject G aims to understand attitudes towards the policy implementation of an e-Bike-City from a citizen perspective. We will study how an e-Bike-City might win the public acceptance needed for its implementation and how public opinion might be affected by several aspects. How do the perceived environmental and societal impacts of different transport modes affect public opinion? Can ancillary measures (e.g. public transportation discounts or participatory planning) or information about the projected project affect public opinion? The research relies on longitudinal survey data, including several survey experiments. We will run a panel study among urban citizens and capture their attitudes and mobility behavior regarding an e-Bike-City and how these change under different scenarios and with additionally provided information regarding the effect of an e-Bike-City.

2 Panel survey

In order to systematically gather information from a sample of the population of the city of Zurich, we will conduct a panel survey based on a random population sample (see Fig. 1). A broad range of survey designs will be applied – ranging from general survey questions to survey experiments such as framing and stated choice tasks.

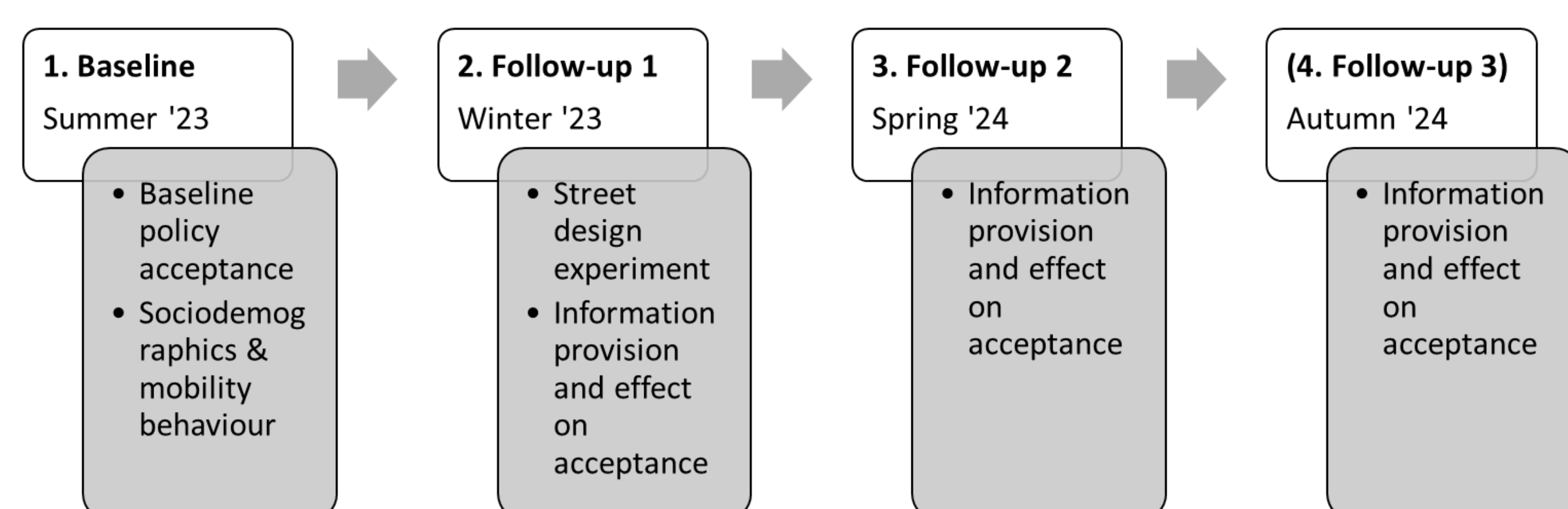


Fig. 1 Overview on planned panel survey waves

The subproject focuses on how an e-Bike-City could be implemented and financed and what can enhance the acceptance of the infrastructural change to the urban fabric. It will include smaller survey experiments throughout the four panel waves to assess acceptance of different scenarios and with additionally provided information on the implementation from other subprojects. Specifically, the surveys will be designed as follows (see Fig. 1):

1. First survey to assess baseline acceptance and individual characteristics
- 2.-4. Follow-up surveys 1-3 to capture how further elaborated policy scenarios from the other work packages as well as demonstrated effects depending on the assessed individual-behaviour affect individual assessment.

The baseline will ask behavioral questions to find out what infrastructure supply development and policy measures could be implemented. The findings of the other subprojects and existing literature (see, for example, Drews & Van den Bergh 2016) will inform the planned follow-up survey waves and the configuration of the survey experiments including, but not limited to:

- (1) Information provision on new **proposed infrastructure** (e.g. bike lanes) in Zürich and their implementation;
- (2) information provision on **access** to future e-Bike infrastructure;
- (3) Information provision about **environmental impacts** of proposed e-Bike City (Subproject F)
- (4) Information provision about **equity impacts** of proposed e-Bike City (Subproject H)
- (5) Information provision about **cost impacts** of proposed e-Bike City (Subproject I)
- (6) Stated choice survey on **street design** (see Fig. 2)

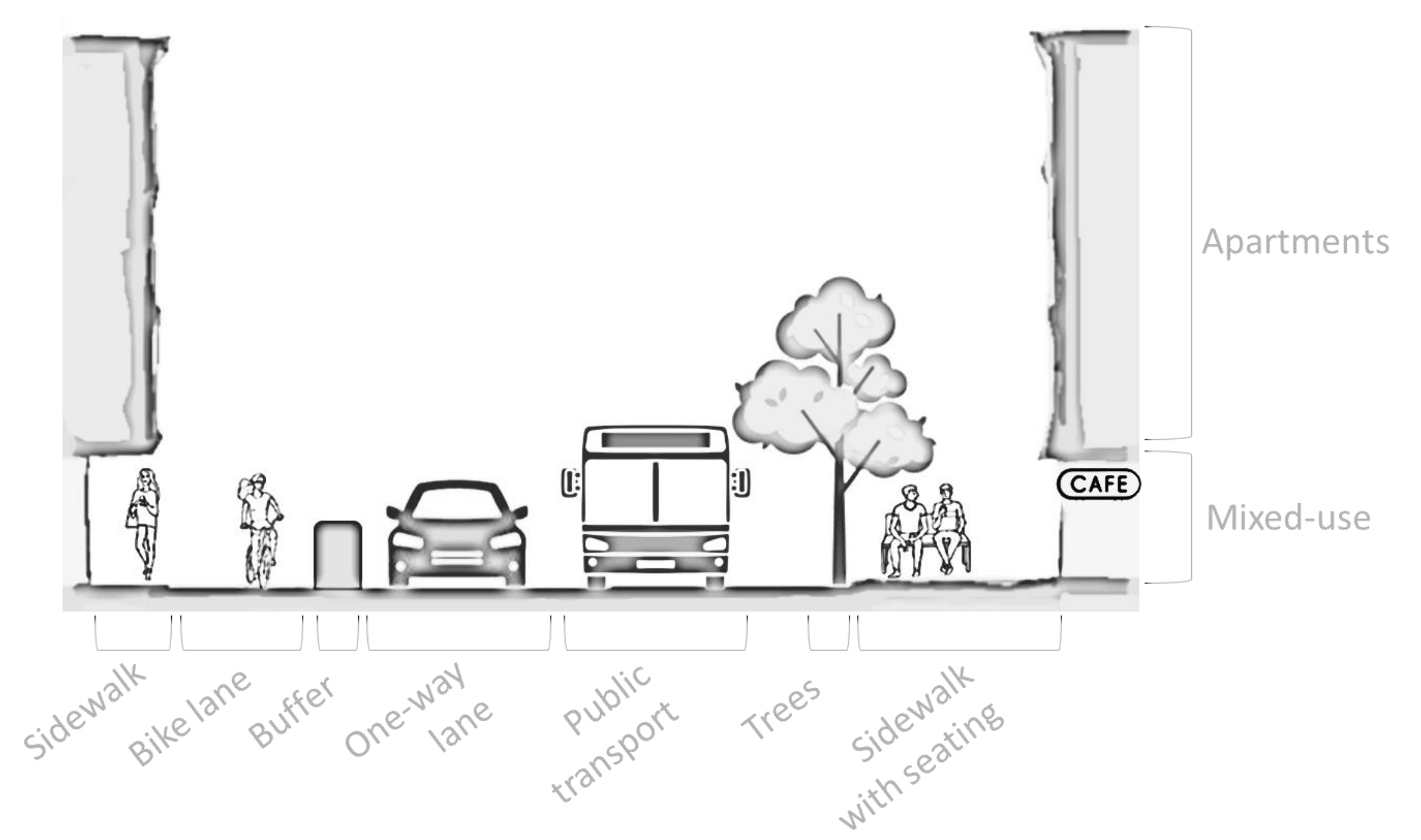


Fig. 2 Example of a possible illustration for a stated-choice experiment on street design. Displayed attributes will be randomized to assess their effect on acceptance. The specific survey design and implementation is currently ongoing.

The main aim of this subproject is to assess acceptance of an e-Bike-City policy implementation. To do so, each of the survey waves will include similar conjoint experiments assessing the acceptance of an e-Bike-City policy proposal (see Fig. 3 for an illustrative example) – but with varying scenarios and cumulative information provision. The scenarios and information provided will – on a rolling basis – build on findings of the other work packages and thus determine how the public will accept the proposed solutions. For example, we will study the general acceptance of (large-scale) infrastructure change (Brown & Glanz 2018; Wicki & Kaufmann 2022), how ancillary policies and different financing mechanisms may influence public opinion (Taeihagh 2017; Thaller et al. 2021; Wicki et al. 2020), and how the framing of differently communicated visions and plans affects individual assessment (Drews & Van den Bergh 2016). The sampling will be focused on a random population sample across the whole city of Zürich.

What are your views on the two proposals for the e-Bike City?		
2 proposals	Proposal 1	Proposal 2
Share of street reallocation from motorized private transport	30%	60%
Reallocation towards	80% bike infrastructure 20% public transportation	50% bike infrastructure 50% public transportation
Implementation Costs	Some money	More money
Financing	City budget	Corporate income tax
E-Bike-Sharing	City-wide, free of charge	No
...

Which of the two proposals would you prefer if implemented?

Proposal 1 Proposal 2

Would you accept proposal 1?

Yes No

Would you accept proposal 2?

Yes No

Fig. 3 Illustrative example of a possible conjoint task on the acceptance of an e-Bike-City policy proposal. The choice and design of included attributes and their characteristics are currently ongoing.

3 References

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