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Co-Designing Participation Processes for Regional Multimodal Transport: An Untapped Potential?

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This work addresses the following topic(s) from the Call for Contributions:
(Please check at least one box)

- Placemaking to integrate urban spaces and mobility
- Promoting sustainable mobility choices in metropolitan regions
- Governing responsible mobility innovations
- Shaping the transition towards mobility justice
- System analysis, design, and evaluation
- other: _____

Extended Abstract

From here 700-1000 words, grouped by the following sections:

Problem statement

Sustainability and carbon reduction in mobility and transport planning have become increasingly more prominent issues in both research and policy agenda in the last decade. However, complex mobility governance and top-down approaches often exclude citizens from the decision-making processes or participation extends only to what is legally required, remaining limited in most cases (Nared, 2019). Meanwhile local communities should be considered as valuable holders of local knowledge which makes their involvement in mobility planning of crucial importance.

The importance of hearing the users' voice in transport planning importantly emanates from the concept of transport justice which argues that governments have the obligation to plan for a mobility system that enables everyone access to adequate transportation (Martens, 2017). Nevertheless, a public transport system alone has limited potential to satisfy everyone's mobility needs. The challenge is especially related to low-density areas where public transport is more difficult to organise than in cities. Instead, a multimodal transportation system that aims to complement public transport with the use of personal and shared mobility options for the first and last mile can improve transport accessibility to meet specific public preferences and reduce social inequality in low-density areas but potentially also in higher density cores. However, what is a working solution for diverse needs requires elaboration together with citizens to understand the existing practices and the complex expectations.

Estonia, and more specifically its Tallinn capital region, show examples of failing in multimodal mobility planning as automobile dependency remains high. This could be considered somewhat surprising as the city of Tallinn offers free public transport to its citizens and public transport is also free of charge on various municipal

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lines in the Tallinn Urban Region. Meanwhile, efforts to increase multimodal mobility remain limited thus far - available shared (micro)mobility tends to rather replace public transport trips and the lack of a common ticketing system across transport modes and localities seems to enforce the use of a single transportation mode. This might be the result of the lack of an understanding of the residents' needs and preferences and the ways in which a multimodal mobility system could become appealing to and usable by residents. On one hand, the current transportation system might not serve the diverse needs of residents while on the other hand, embedded practices enforced by long-term car-oriented developments might be difficult to change even when feasible multimodal travel options are available.

Research objectives

This study aims to unpack the potential of participatory approaches and co-design in mobility and transport planning on a regional level through setting up a co-creation process with residents, local planners, regional mobility experts, researchers, and other interest groups. The interaction with local communities, experimentation and capacity building are at the core of the study with the aim to gather knowledge about the benefits and drawbacks of an approach where the process is not designed for the participants, but instead designed together with the participants.

While the co-designing process lays at the centre of the study, the aim is to also seek how such an approach can guide the discussion around mobility and transport planning further from technical solutions and traffic efficiency, but also contribute to the planning of multimodal transportation systems which includes elements of social sustainability, such as accessibility to daily activities and quality of life.

Methodological approach

A case study in the form of an Urban Living Lab (ULL) is carried out at a rural municipality in the Tallinn Urban Region as part of international project CARIN-PT (Capacities for Resilient and Inclusive Public Transport). The municipality in question is drawing up a new comprehensive plan for part of its territory wherein mobility and transport planning is one of the core elements of the plan. In a timeline of approximately one year, a series of multidisciplinary workshops are organised, each involving a different set of local inhabitants and interest groups, municipal planners, regional and national transport and spatial planners, and researchers. In these workshops, problems and opportunities in daily mobility will be mapped and solutions will be co-designed. Importantly, the workshops also create space for co-designing the participatory approach itself which helps to understand the co-design process itself. Expectations to and reflections from participants on the co-design process will be collected through short surveys before and after each workshop. An important element of the co-design process will be a two-week experiment where inhabitants will be nudged to make use of the available sustainable transportation modes and travel multimodal. Such an approach has the potential to increase their knowledge on available mobility options and help them make a more meaningful contribution to the process and the new comprehensive plan.

Expected results

The co-design process will provide insights into the benefits and drawbacks of co-designing the participatory process in transport and mobility planning together with various interest groups, including citizens. The pros and cons of the process will be stressed and discussed from various perspectives, such as local planners and the citizens, but also regional transport planners. Furthermore, the study will highlight if and how the co-design process helped to contribute to the comprehensive planning with measures that go beyond the typical infrastructure and traffic approach, but also include more focus designing a more multimodal mobility system that addresses people's needs, preferences, and accessibility hurdles.