

The Influence of Non-Transport Variables on the Choice of Means of Transport

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Project Description

The choice of means of transport is determined by various transport related variables, such as the characteristics of the available transport and the route (including the distance travelled). In transport planning and in transport policy, the effects of non-transport variables - namely those qualitative and cognitive emotional characteristics of households and individuals that are not directly measurable - on the choice of transport have so far hardly been considered.

However, if the effects of non-transport variables were better known in practice, more targeted and efficient measures (e.g. behavioral interventions) to promote the use of environmentally friendly means of transport could be designed, helping to further a more sustainable transport policy. In Switzerland there is a lack of up-to-date information tailored to local circumstances that would support in understanding of the influence of non-transport variables on the choice of transport. This research project aims to close this gap.

The aim of the project is to investigate the influence of non-transport variables on the choice of means of transport in everyday transport behavior. Of primary interest are the qualitative, often not directly measurable variables such as phase of life, lifestyle, habits, social networks, context and cognitively emotional (psychological) factors that have not or barely been considered in transport planning practice. Because the place of residence and access to transport significantly influence the choice of means of transport in everyday life, the non-transport variables' influence on the choice of residence and access to vehicles should also be examined.

International research shows that place of residence (a non-transport variable) and the access to vehicles (also influenced by non-transport variables) have an impact on the choice of transport in everyday mobility choices. In order to create effective transport and residential policy measures to influence the choice of means of transport, it is therefore important to understand the behavior of households when choosing a place of residence and purchasing vehicles. In a first step, models will be created to explain these long-term mobility decisions, considering the attributes of the available transport and the non-transport attributes of the spatial structure, the household and the individuals.

In order to investigate the influence of non-transport variables on the choice of means of transport, in a second step, information regarding the transport behavior, as well as the situational (spatial structure and transport availability) and personal influencing variables (social demographics, life cycle, lifestyle, habits, attitudes, preferences, subjectively perceived norms, locus of control, etc.) will be collected in a representative sample and based on this, hybrid explanatory models for the choice of means of transport will be estimated.

As a preliminary work for the empirical studies, the findings from the international literature on the influence of non-transport variables on the choice of means of transport will be compiled and

commented on. Regarding the empirical investigations to be carried out, the instruments used to survey cognitive emotional influencing factors are of particular interest.

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