Project

The impact of technological changes on mobility and transportation

The bold aim of the SVI research project known as "Transportation in 2060" is to anticipate the future development of transportation. In the context of the overall project, EBP has been commissioned to complete a subproject centering on an examination of the purely technological aspects of the anticipated development in the transportation sector.

Technological changes are expected to have a major impact on the development of the future transportation system. Up until now, the technological development of transportation has largely been a matter of small, incremental steps. While trains and cars have been made faster, safer, more efficient and more affordable, they have essentially remained trains and cars. Despite all of the technological changes, our transportation infrastructure and system still functions roughly the way it did 100 years ago.

Future forms of transportation

The future development of transportation, however, is expected to be fundamentally different, as incremental developments on the hardware side give way to very rapid developments on the software side. As a driving force, information and communications technology (ICT) is expected to both accelerate the development of transportation and, in contrast to past technologies, fundamentally change the nature of transportation. The digital transformation induced by technological changes in the ICT sector is expected to have a more pervasive and profound impact on our daily lives. In the

Client

Swiss Association of Transportation Engineers and Experts (SVI)

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Project Country	Switzerland

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area of transportation, digitalization will enable novel business models, services, forms of supply and patterns of behavior, thereby also leading to brand new forms of transportation. Digitization may result in disruptive transformations of traditional business processes – for instance, on the order of ride sharing in the new sharing economy. Beyond this, increased automation, Industry 4.0, affordable sensor technology, real-time data and big data can also be expected to play significant roles in the reinvention of our transportation systems.

Services provided by EBP

The aim of the subproject "The Impact of Technological Change on Mobility and Transportation" is to sketch a comprehensive picture of future technologies and identify the technologies that will be of special significance. In approaching these tasks, EBP is first drafting a list of future technologies that is as complete as possible. This list is then to be used as a basis for selecting the key technologies that can be expected to have a decisive impact on the nature of future transportation. We will then seek to identify the drivers and hinderers of the selected technologies before going on to research the impact of the key technologies on the nature of transportation supply and demand. The entire project is to be buttressed by a careful examination of the relevant literature, interviews with experts and the use of various models.
The subproject "The Impact of Technological Change on Mobility and Transportation" is one of seven subprojects that are to be completed in the context of the "Transportation in 2060" project sponsored by the Swiss Association of Transportation Engineers and Experts (SVI). EBP is undertaking the subproject together with Rapp Trans AG.