Early assessment of trends in transportation planning and road construction (SVI 2000/378)

Früherkennung von Entwicklungstrends zum Verkehrsanbiet

Funding: National (Switzerland)
Duration: Jan 2004 - Dec 2006
Status: Complete with results

Background & policy context:

The time required for the planning and realisation of road infrastructure projects has been on the rise for some time. This is due to the marked acceleration of social change as well as the increasing complexity of political processes. Planning processes have to take into account new social needs emerging at increasingly short intervals. As a result, the lifespan of the road infrastructure regarding operation, equipment and design is increasingly often artificially cut short, which can easily lead to cost-intensive adjustments even for relatively new facilities.

Objectives:

Against this background, this research project pursues the following goals:

- First, it aims at providing systematic support for the stakeholders involved in order for them to recognise pertinent social developments. What is at issue is not the expected developments per se, but the ability to recognise new developments in general.
- Second and beyond that, this study aims at presenting state-of-the-art research on traffic-related social developments expected to occur in the future.

Methodology:

These goals will be achieved by following steps:

- Step one: In an effort to provide a conceptual foundation, the general findings of current innovation research and historical science will be presented as they contribute to explaining traffic-related social developments.
- Step two: The most pertinent social developments will be elaborated in the context of the current literature, whereupon the developments’ effects on traffic and traffic planning will be discussed.
- Step three: Four case studies will be conducted to provide an in-depth look at the way development trends are responded to today.
- Step four: The intermediate results obtained up to this point will be examined and tested by means of an expert focus group in terms of the results’ practical relevance. The most useful form of communicating the research results will then be discussed with practitioners.
- Step five: Finally, by way of synthesising the various research results, recommendations will be formulated addressing how the different stakeholders may respond to development trends in practice.

Parent Programmes:
SVI - Swiss Association of Transportation Engineers (various projects)

Institute type: Private foundation
Institute name: Association of Transportation Engineers
Funding type: Public (national/regional/local)

Partners:

Switzerland
EFFECTS OF SOCIAL DEVELOPMENT TRENDS ON TRAFFIC AND PLANNING

The social developments expected to occur according to the current literature may affect traffic particularly in the following areas:

- On the whole, the increase in pressure on the infrastructure due to individual motorised users as well as public transport is expected to level off in comparison to the last few decades. In certain narrowly focused areas there will be strong growth and bottlenecks in capacity, especially on the outer edges of suburban areas and in highly-frequented commercial areas.
- Tolerance among the various stakeholder groups toward each other is expected to diminish. The fragmentation of society will continue to rise, as is a pronounced self-referential individualism ("ego society").
- The significance of and variety of functions served by central public spaces will increase. Public life's orientation toward the outside will rise too. In the future, centrally located spaces, roads and streets will be used more intensively for purposes other than traffic.
- The security needs of many social groups are on the rise. Women, people with disabilities and the elderly are less prepared to make compromises in this area, thus presenting their needs with greater confidence.
- Leisure time is spent more and more outside of people’s homes in artificially created worlds of experience.
- A considerable share of the population values the introduction of sustainable development also in traffic.

From the above findings the following varied effects on traffic planning in the near future can be deduced:

- The negotiation of compromises in traffic issues (coexistence) will be more complex in the future and possibly (even) more conflictual than in the past.
- This is one reason that appropriate forms of communication and participation will be highly relevant.
- Questions of design concerning road space and outdoor space in general will acquire more significance, both regarding centers and commercial zones. Design will have to consider the necessary flexible use of road and street space more and more. The technology available to future traffic management will make it possible to change the way road and street space is used within short periods of time for both traffic and non-traffic purposes.
- At the same time security issues will affect planning issues more intens...