

Summary:

«I use my personal judgement...»

Background

This study is intended to shed light on the role of traffic modelling as part of urban transport planning in Norway. Under the national plan TP10, towns were given opportunities to intensify the use of traffic models as part of developing overall and long-term area and transport plans. The planning, which was to involve the relevant municipalities, counties and state and private actors in urban areas, was supposed to consider measures in the longer term and in a strategic perspective. These measures should be taken in light of national environmental objectives and explore alternatives to increased growth in private motorised transport. The process was also adapted to the need for short-term, underlying material for the Norwegian Plan for Roads and Road Traffic (NVVP) 1994-97.

As part of the local planning processes in the urban areas a significant proportion of work and effort has been put on the use of state of art traffic models. The study, therefore, considers how this emphasis on models may have influenced the local planning processes. As a starting point, relevant planning theory has been studied. This theoretical work has formed the background for a case study on the interaction between calculations and use of models, the planning process and decision-making in the city of Tromsø.

The role of modelling in planning - theoretical approaches

Planning aims to influence society by outlining paths of action and reducing uncertainty about the effects of actions. The characteristics of goals and measures will influence the planning, both its content and its results. In planning situations where there is a general agreement on goals and measures, planning processes may tend towards the rational planning ideal. The use of models may be extensive, favouring the professional role of the planners involved.

Complete agreement on both goals and measures seldom occurs. In practice, planners will have to assume supplementary roles, as mediators or as process managers, in order to explore and clarify goals and measures. This might lead to planning processes characterised by incrementalism, trial and error and negotiations among involved actors. In such situations, the use of models and the role of model experts must be adapted to the specific situation. Premature decisions on goals and measures may occur when planners wish to finalise model specification at an early stage in the planning process.

Different actors have different roles in planning. Variations in background and roles may affect the actors' views on planning and decision-making. Intensive use of models tends to isolate groups of actors lacking the necessary knowledge about models, for example politicians and public interest groups.

Political decisions in urban planning implies balancing different interests, measures and effects in a way that only partially have been described by traffic modelling. In such situations, the political decision-maker must take into account all revealed aspects in the situation using his judgement. Politicians in Tromsø referred to their «political judgement» when considering the transport plan. A person's judgement is closely coupled to characteristics of the individual through learning, knowledge, experience and intuition. In a political context, views and norms as societal norms will normally significantly affect the politician's utilisation of his or hers judgement.

The role of transport modelling in Tromsø

The transport plan in Tromsø was conducted through a preproject phase, a main project phase and a public hearing/decision-making phase. The process was organised with a project group, an administration steering group and a political reference group.

The planning documents produced in Tromsø were mainly the product of professional planners, with little input from politicians or interest groups. Transport modelling formed an important analytical tool for developing long-term scenarios for land-use and transport in Tromsø. The plan's recommendations with respect to reduced car use, local duties on transport and concentrated land use, were severely criticized by local actors.

An analysis of the debate following the presentation of the plan shows that politicians and interest groups present various arguments closely connected to modelling results, but without referring to these results. Politicians in Tromsø define their role as one of weighing between interests. Analytical input from modelling represents one such interest, but is not necessarily more legitimate than other interests and views. Politicians also tend to pay more attention to practical measures and problems of a more short-term nature.

Representatives of the local administration are concerned about how transport models function in a political context. They find that models often are too complex, and stress the importance of politicians being able to relate modelling results to their own perception of reality. Model intensive planning processes may easily become expert dominated and overly complex.

The local planners feel that they can present professional arguments with greater confidence when these are backed by results from modelling. They are, however, aware of the problem of communicating model results to politicians. Among planners, different backgrounds affect attitudes to modelling. Engineers and architects held different views on the role and suitability of models in planning.

Among interest groups the views on models are more heterogeneous, contingent on the degree of correspondence between model results and interest group views.

Improvements in the use of transport model as part of planning

The integrated land-use and transport planning (TP10) was in many ways a learning process for planners, politicians and other actors in Norway. The planning process introduced new goals, new ways of presenting planning products (scenarios) and new analytical tools (models). The experiences in Tromsø illustrates several challenges. A more participatory planning process should be adapted to a stepwise deliberative dialogue between planners and other actors.

The study reveals need for better dialogue between actors in politized transport planning processes. Several measures can serve to strengthen the dialogue as an integral part of transport planning:

- Model assumptions should be discussed with planning actors. What are the effects of changes in assumptions?
- A learning process should be included in the planning, explaining important aspects of the model to laypersons, interest groups and politicians.
- Model specific uncertainty should be discussed explicitly.
- Transport modelling should be related to current, wellknown problems in order to demonstrate the functioning of the models. This may increase laypersons' understanding of alternative future scenarios described by the models.
- When modelling future scenarios the choice of assumptions should be seen as normative and political questions, and presented as such.
- The need for knowledge is contingent on whether the planning is meant to produce action or not. Politicians have limited time and attention. Resource and the use of models should be adapted this fact. The process in Tromsø showed that, although highly complex modelling was utilised, it had little influence on the decision-making process.