Institute of Transport Economics
Norwegian Centre for Transport Research

Summary

Land Use Projections: Organising of and Collaboration for Development, Operationalisation and Use

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In this report we suggest how to organise cooperation between the state and local level regarding land use and transport analysis. Based on sub tasks defined for the report, it is suggested that the responsibility for a land use projection tool is placed at the transport agencies and the National Transport Plan collaboration. This will ensure a strong connection to the transport models. Alternatively, the responsibility can be placed in a separate entity run by the planning authorities to safeguard a stronger land use focus as well as a wider use of the projection tool . The land use projection tool will be used at the local level, and the collaboration entails both land use projections and data bases for the transport models. Through a continuous collaboration where local land use and transport actors participate in permanent working groups and steering committees, the aim is to secure increased and appropriate use of transport models, that land use is taken into stronger consideration in the transport modelling and that the actors experience predictability and efficiency. At the local level, we suggest that the responsibility for coordinating the land use projections is given to the regional authorities and that the local responsibility for the transport models is still within the Norwegian Public Roads Administration.

The purpose of the task

The main purpose of this report has been to arrive at an explicit and holistic suggestion for how to organise cooperation and exchange of information between the state and the local level connected to land use projections. Six sub tasks defined by the contracting entity, The Norwegian Association of Local and Regional Authorities (KS), have been the starting point of the work. The sub tasks concern organising and collaboration for use of transport models and land use projections, increased use of transport models and predictability for the participating actors and measures that lead to more knowledge both at state and local level. There has as well been focus on how to organise the collaboration on development and operationalisation of a new projection tool for land use, where the tool should contribute to consensual land use projections that can be used in the regional transport models.

Methods

To arrive at suggestions for how to organise cooperation between the state and local level regarding land use and transport analysis, we have gathered data and experiences from the current use of transport models and how land use is treated in these. Based on this we defined challenges that should be met, and important goals and assessment criteria for future collaboration. The assessment criteria have been used to discuss achievement of objectives for different alternatives for the organisation and collaboration, and the analysis of the alternatives is the foundation for the final suggestion.

We have gathered empirical data through four workshops and 18 interviews. The interviews were performed with actors that recently have been participating in an investigative process (based on a template made by the Norwegian Public Roads Administration) that will lead to urban agreements for Norwegian cities or city regions, focusing on participants from municipalities, counties, and the Norwegian Public Roads Administration (project managers and transport modellers). A group interview with the modellers in PROSAM was also made, as an example of a long-term collaboration around transport models in the Oslo region, as well as an interview with representatives from the Directorate of Public Roads. Through the four workshops we brought together participants from state, regional and local level to discuss experiences and possible alternatives for further collaboration.

The current situation and future challenges

Through the gathering of empirical data, we wanted to make visible how the different actors competencies influence the use of transport models in planning practice. The results from both interviews and earlier experiences are that many planners in the municipalities and counties have little knowledge on transport models. Several of the interviewed are skeptical to the use of models and to the results from the modelling. There seems to be a knowledge gap between land use and transport planners where these communicate in separate "languages" that the other does not completely understand. The lack of knowledge among the municipalities seems to be a barrier resulting in the municipalities not being competent actors in the processes where transport models are used or could be used, and the municipalities points out that they are reliant on the Norwegian Public Roads Administration if they are to use or order use of transport models in planning practice.

We wanted to explore how existing forms of cooperation in the urban areas influences the use of transport models. Through the cooperation in the processes towards urban growth agreements, several practitioners focus on that they in the dialogue between the actors have gained knowledge about the transport models. At the same time, many sees the need for increased skills. The investigations done as part of the urban growth agreements represent a change in how land use is considered in the regional transport models. The municipalities and partly the counties have been active contributors in defining land use scenarios that together with various transport measures will be part of the policy packaging. The results of the transport modelling show that land use have large impacts for achieving the objective of zero growth in personal car traffic that the state has defined for the cities. We believe that both the results from the transport modelling and the increased skills several of the actors have gained through the cooperation can lead to more frequent use of transport models in planning practice. This is emphasised by PROSAM as well.

Based on the empirical data we have been able to define a set of challenges that a committing and formalised cooperation between government agencies and the municipalities should solve, and we have used these to define three goals that the organising and collaboration should result in:

- Increased and proper use of transport models
- Land use should be seriously addressed in the transport models
- Predictability and efficiency in the work with transport models

Organising and cooperation at state and local level

The projection tool for land use is made and developed through several projects. The land use projections are supposed to work as a basis for the regional transport models, but in addition they should work as input for other analysis and tasks. A prerequisite for the discussions has been that the development and operationalisation of a projection tool takes place at state level, while the projection tool primarily will be used at local level.

At state level, there should be developed common tools and methods that can be used in all regions and municipalities, as well as offered training in relation to this. First, we considered that it would be appropriate that the responsibility of development and operationalisation of the projection tool will be given to the national authorities. We then discussed if the transport agencies or the planning authorities should be in charge of the projection tool. With the transport agencies in charge, the development of the tool and the operationalisation can be given to the National Transport Plan group for transport analysis, who also develops and operationalises the regional transport models. Connecting a projection tool to this group, led by the Norwegian Public Roads Administration, could ensure a swift progress and strong connection to the transport models. An important prerequisite, however, is that the planning authorities gets involved in the work. An alternative solution is to establish a new multidisciplinary project within the National Transport Plans, for example as a group called National Transport Plan land use projections, and that the responsibility for a projection tool is given to this new group. This would to a larger extent ensure independence from the transport models. Independent from where the projection tool is placed within the National Transport Plan system, funds must be allocated, and planning expertise must be part of both a working group and steering committee.

If the responsibility for the projection tool is given to the planning authorities, a larger independence from the transport models is possible as well as a stronger connection to the planning milieu and other user groups. There is not a current organisation that could be given the responsibility, and we suggest that an association is established, were central actors collaborate around development and operationalisation. The organisational model here is inspired by PANDA Analyse, an economic-demographic model system developed to be used in regional analyses and planning in counties and municipalities. Such an association could be led by the Ministry for Modernisation and Local Government, but also the Norwegian Environment Agency or The Norwegian Association of Local and Regional Authorities (KS) could be candidates. A clear link to the National Transport Plan group for transport analysis would still be needed so that the land use projections would be compatible for use in the regional transport models. The local actors, that will be the primary users of a projection tool, will be allowed as members of such an association. This could lead to a strong connection between state level and local actors.

If the responsibility of the tool is organised through an association, the members will have to finance the work through a member's fee. This will lead to a dependency of yearly contributions that could result in uncertainties for the budget and priorities. The state will be expected to contribute to the funding, especially to development of the projection tool but also to allow for predictability. A projection tool organised within the National Transport Plan system would probably have lower financial uncertainty.

To give the responsibility either to the transport agencies or the planning authorities represents two different alternatives on the state level. When considering the need for connection to the transport models it is suitable that the projection tool is organised under the National Transport Plan system, either under a current or a new group. If the ambitions for the projection tool is more extensive than the transport models, it is more

suitable that the projection tool is placed in an organisation outside the National Transport system and is organised independently, for example in an association lead by the planning authorities. That the responsibility for the land use projection tool will be placed at the National Transport Plan system is, based on the criteria given in this project considered the best solution.

At local level, the organisation and collaboration should include use of a projection tool, establishing forecasts for both land use and transport measures, and access to updated data for the transport models. Through the cooperation it should be possible to get more efficient use of resources given that local actors will be able to use the same data for different tasks and projects. The cooperation should be binding and involve a range of actors. We have discussed if a project based or continuous cooperation is the best solution to reach the defined objectives as well as the roles and responsibility among the actors. Even if both alternatives will lead to increased competency around transport models, it is the continuous collaboration that leads to learning over time and a strong network of actors that can cause increased and more appropriate use of the models. Our suggestion is that the continuous solution will contribute more to ownership and focus over time and continuity in the work. Predictability and efficiency can be secured in both solutions, but a continuous cooperation ensures greater continuity and certainty that land use projections and the reference data will be available. A continuous collaboration will have openings for ongoing maintenance outside project-based needs and tasks. A continuous and fixed collaboration is thus assessed as the best solution based on the criteria given.

The local collaboration should include representatives from the local and regional land use and transport actors, the local public transport agencies, the Norwegian Public Roads Administration (regional offices) and the Rail Road Directorate. The organisation should contain a working group with permanent members that coordinate, implements and procure after a given mandate. A steering committee should ensure that the necessary resources are given to the working group and anchor the work within the participating organisations. The actors must be given time to participate and may be expected to help fund some of the work.

In the working group one person should oversee the land use projections and coordinate the data given from the municipalities. We suggest that the counties are given this responsibility. Access to regional transport models requires updated basis for analyses so that the actors can use the latest data and projections, and that the start-up costs can be spread over several projects. We suggest that in the local collaboration one person oversees the transport model. Here the current practice with regional contacts in the Norwegian Public Roads Administration can be continued. In addition, it could be necessary to hire consultants with model competency when needed.

Competency measures

Even if many actors might increase their knowledge through local and central cooperation, a centralised offer in training in both use of the projection tool for land use and transport modelling will be necessary to ensure both procurement and user knowledge. Training for using transport models is suggested to be continued as it is today, where both seminars and courses are available. These offers should be supplemented with courses that give transport modellers increased competence in land use and use of land use data based on the projection tool. This is especially important when it comes to what kind of effects changed land use mean for the results from the transport modelling, and knowledge on what land use changes that are relevant to model with the regional transport models.

In addition, it should be offered courses that gives procurement competency, which includes general knowledge of transport models, what is the strengths and possible uses of different models and conditions for use. Procurement knowledge will contribute that actors within local government will be able to order model calculations from consultants as well as understand the results and be able to communicate the results further.

For projection tool training we suggest that both generic and advanced courses for different type of users is offered. In addition, there is the need for support services, and user network to share experiences. There should also be offered seminars where practitioners and users of projection tools as well as transport models can share experiences.