

Summary

Developing route planning in integrated land use and transport planning

Proposal for organisation and routines

TØI Report 1710/2019

Authors: Marianne Knapskog, Chi Kwan Kwong, Eva-Gurine Skartland
Oslo 2019 56 pages Norwegian language

In this report we present a suggestion for how to organise a permanent knowledge-based cooperation on public transport between municipalities, counties, the Norwegian Public Roads Administration, the Norwegian Railway Directorate, the public transport companies and providers, can be established. Based on the organisation and development on working with land use projections in the National Transport Plan, we suggest extending this collaboration to include public transport by adding a Public transport coordinator backed by a Public transport group. We suggest that the regional contact for public transport is given the responsibility for route planning and leads a public transport group. Central topics for a public transport group will include when and how the baseline for public transport is made, how public transport is treated in the transport models and what kind of analysis is appropriate when discussing systemic changes.

The project has been conducted on behalf of the Norwegian Railway Directorate. The task has been to suggest how to organise knowledge-based cooperation between municipalities, counties, the Norwegian Public Roads Administration, the Norwegian Railway Directorate, the public transport companies and public transport providers. We suggest the collaboration to be permanent and responsible to deliver a coordinated route structure for all types of public transport. The aim with creating a knowledge-based cooperation is to establish a workflow that can see the connections between infrastructure, land use and public transport. The collaboration will be able to ensure a better product that can be used to code new or changing public transport routes into the transport models.

In an earlier project on behalf of The Norwegian Association of Local and Regional Authorities (KS) in 2018 we completed a comprehensive mapping and assessment of how land use projections are incorporated into the transport models as part of assessments of urban areas made for the larger cities and conurbations in Norway in 2017 (Hagen et al. 2018). Based on our mapping we suggested to organize the work with assessments on central and local level so that work with land use projections and transport models is strengthened. TØI's solution for the current project can be seen as a natural extension of the work with land use projections.

We have mapped how the public transport is handled in the assessments of urban areas made for the larger cities and conurbations in Norway in 2017 through mapping and interviews with relevant actors. Based on this we chose three cases; Grenland, Trondheim and Bodø. Bodø has not been part of the assessment process but has made significant changes to their public transport system the last few years. Founded on this, in addition to our knowledge on transport models, we suggest how a collaboration on public transport can be organised regarding relevant actors and allocation of responsibilities. We suggest routines for knowledge production and possible types of analysis a collaboration can be expected to produce for a knowledgebase for public transport. Our solution has been discussed with relevant actors in a workshop to get input and secure the relevance. The suggestion includes both:

- A suggestion for how to organise the work, and
- A suggestion for routines for how a public transport group can make a knowledgebase

Organisation

Based on what we found our conclusion is that collaboration should be formalised and rooted at local level of government. Our starting point is the suggestion we made for collaborating making land use projections expanding the collaboration to also include a regional contact for public transport (and public transport projections) at local level like the regional contacts for land use (to be established) and modelling (already existing). The mandate for the collaboration must be given at national level and be rooted at local level both economically and professionally. For now, the counties have the responsibility for buses, the Norwegian Railway Directorate is responsible for trains and the the Norwegian Public Road Administration is responsible for roads and roads traffic. The ongoing reorganisation and regionalisation in the counties and within the Norwegian Public Road Administration can result in a bigger responsibility for the counties, which can be advantageous for the public transport planning and to integrate public transport better with land use depending on the outcome of this large reorganisation process, but we have not investigated this here. Our suggestion can be introduced independent of the result of the larger process. We emphasize the role and tasks connected with route planning rather than where a person works. This might also be influenced by the local context and competence.

The Public transport coordinators that today work at the Norwegian Public Road Administration should be given a more formal role that includes route planning and the role as the Regional contact for public transport described above unless the local situation requires a different solution. The Regional contact for public transport should head a group consisting of the local actors that have a stake in public transport planning and that could contribute to the work done at local level.

Both land use projections and public transport projections are represented in the regional transport models in Norway. It is particularly important that land use and public transport are aligned before the modelling. This will be the task of the regional contacts for public transport and land use before the results are coded into the model by the regional contact for the regional transport model. The knowledgebase used for these in the modelling are still not comprehensive enough as well as the knowledgebase for both land use and public transport can then benefit from the results of modelling. The knowledge bases can also be used in planning processes where the transport models are not used.

Routines

We suggest that routines for updating a knowledge base for public transport that will be the base for the work on projections are coordinated and described in a guide in the same way the guidance material made for the assessments of the urban areas in 2017 and the criteria given to the material to be delivered to the national transport plan process. Data and statistics collected by the the Norwegian Railway Directorate should also be included.

Important tasks for the public transport group will include to use the knowledge and use the tools the different actors have access to through their place of employment. Examples of what could be included in a local knowledge base is:

- Define how to improve the main public transport network in the transport model
- Discuss land use plans and suggestions that will influence public transport and future route planning
- When new infrastructure for public transport is introduced, the role of the infrastructure must be defined. Route planning for the new infrastructure should be defined.

- Gather experiences from other places and measure/discuss the effect of local actions and new forms of mobility measures that can be linked to the first and the last mile of the trip, and that can improve the public transport planning
- Define important nodes that secures transfer between high frequent routes and other routes that influences coverage in a larger area. In central areas where the density of buses to and from the main bus station can be a challenge, the discussion should include terminating the buses in other nodes
- Prepare bus timetables for modelling and choose the necessary selection of routes for coding into the models based on local knowledge

It is also important that to form a public transport group that by composition increases the participants' personal knowledge as well in addition as a group, to be able to make better tendering, achieve a common language and a solid knowledge base.