

Summary

Cycling and cycling goals

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A stated goal in the Norwegian National Transport Plan is that the modal share for cycling in Norway shall increase to eight percent by 2023. To reach this goal, a secondary goal has been defined, that the cycling share in the largest metropolitan areas shall increase to 20 percent. We have investigated the relationship between these two goals and have found that it is probably easier to achieve the national goal of eight percent modal share for cycling than to achieve 20 percent in the metropolitan areas. We have also investigated the relationship between these two cycling goals and the Government's "zero growth objective" (Nullvekstmålet) regarding car use in metropolitan areas.

The background for this report is a desire from the National Transport Plan Secretariat to investigate the goal of a 20 percent cycling share in the nine largest metropolitan areas in Norway. We have conducted elementary analyses looking at the relationship between this goal and two related goals: The goal of eight percent modal share for cycling in Norway, and the Government's "zero growth objective" (Nullvekstmålet), which states that expected increases in transportation demand in the nine largest metropolitan areas will be met by walking, cycling and public transit. In addition, we have investigated the goal that eight out of ten school children should walk or cycle to school.

We have used data from The Norwegian National Travel Survey 2013/14 (NTS) and population statistics from Statistics Norway (SSB).

Equal goals, unequal metropolitan areas

The nine largest metropolitan areas in Norway, as defined in this project, are quite varied in geographic extent, population and density. The largest metropolitan area is the Oslo region, which consists of all municipalities in Oslo and Akershus counties, with a population of 1,2 million in 2014. The smallest area is Tromsø, with only 72 000 inhabitants in 2014.

The metropolitan areas are also quite dissimilar with regards to cycle use. In Kristiansand, the cycle share is ten percent, while it is only three percent in Bergen and Buskerudbyen (see figure S-1).

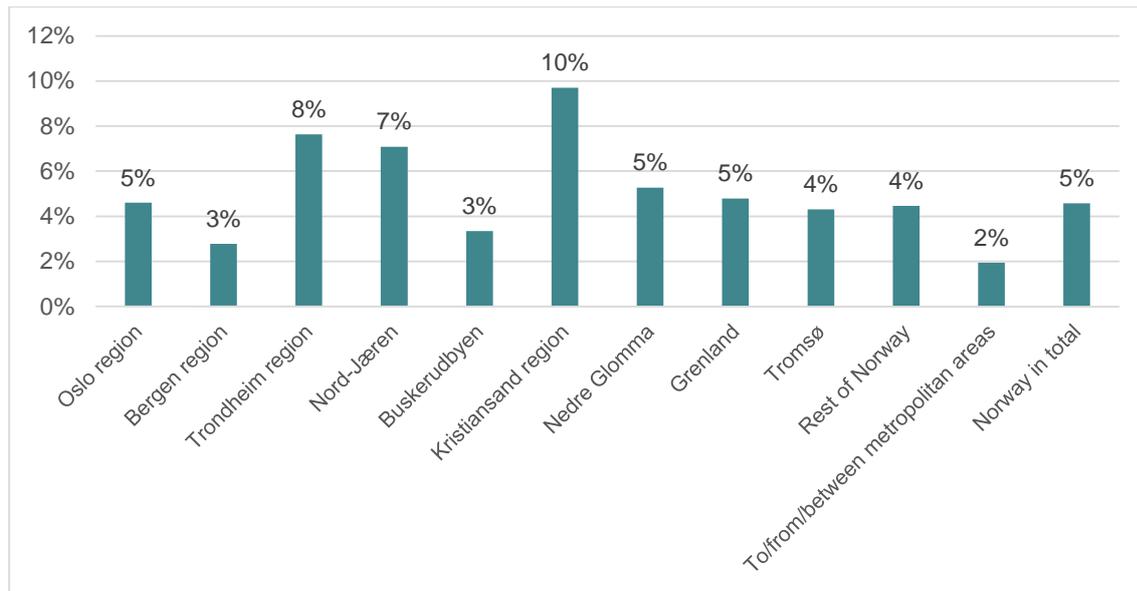


Figure S-1: Cycling share in and outside of metropolitan areas, NTS 2013/14. Percent.

Despite these differences, the same goal of 20 percent modal share for cycling has been set for all nine metropolitan areas.

The relationship between the metropolitan areas and the country as a whole

We have investigated different scenarios on increased cycling in the metropolitan areas in order to reach the national goal (Figure S-2). Two of the scenarios are shown in the figure below: Firstly, a scenario where the Oslo region reaches 20 percent modal share for cycling, and secondly, one where the next three areas reaches 20 percent modal share for cycling. In both scenarios, the modal share in the rest of the country is kept unchanged.

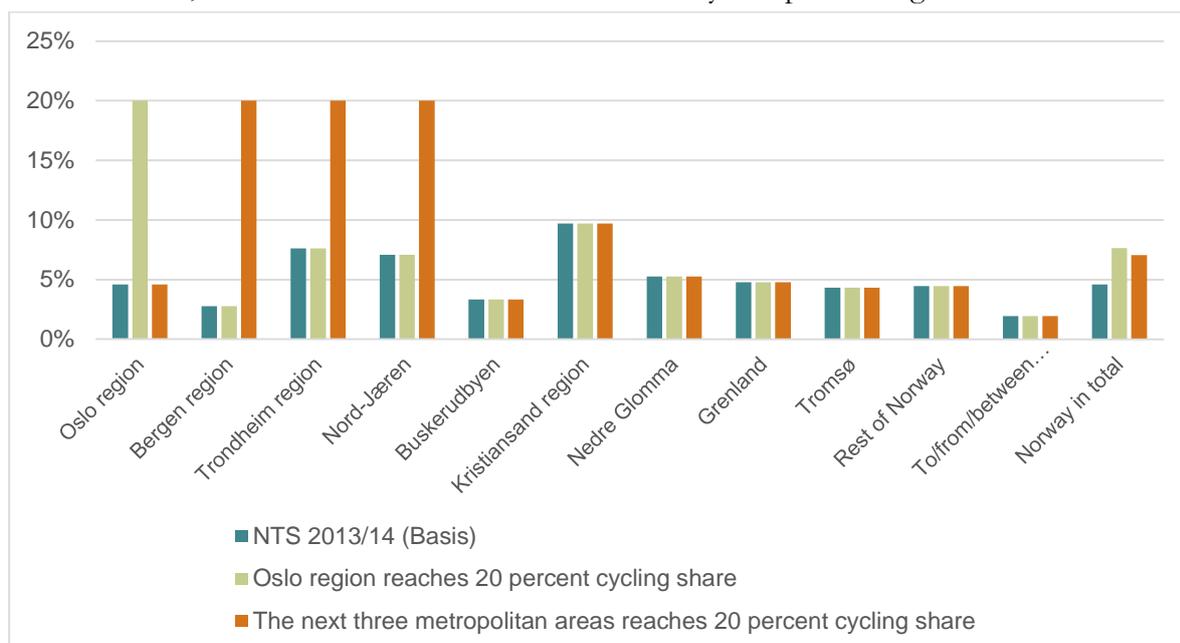


Figure S-2: The Oslo region and the next three regions reach the cycling goal

Because of the large population of the Oslo region, an increase to 18 percent cycling share here will lead to an achievement of the national goal of eight percent, even if the cycling share elsewhere remains unchanged.

If the cycling share in the next three metropolitan areas (Bergen, Trondheim and Nord-Jæren) is 20 percent – while the rest of the country is unchanged – the national goal will also be achieved.

This analysis shows that there is little connection between the two goals. If all the metropolitan areas reach the goal of 20 percent cycling share, then the national cycling share would be much larger than the goal of eight percent.

The zero growth objective

A particular challenge with comparing the cycling goals with the zero growth objective, is that the former is measured in number of trips, while the latter is measured in kilometres travelled. To accommodate this, we have compared the two goals with both indicators. The conclusion is the same: The metropolitan areas where car use is most dominant today – such as Nedre Glomma, Buskerudbyden, Grenland and Nord-Jæren – requires the largest restructuring in order to achieve the zero growth objective. In these areas it is unlikely that an increase in cycling will be sufficient, and there is also need for an increase in walking and public transport use, in order to reach the zero growth objective.

Narrowing of the goal of 20 percent cycling share

As we have seen, the goal of 20 percent cycling share will be quite challenging to reach in all of the metropolitan areas. Therefore, we have investigated different ways to narrow this goal to see how much closer we get to goal achievement. We have considered the following ways to redefine the goal:

- By travel purpose: Looking only at work and school trips
- By season: Looking only at travel behaviour from April to September
- By distance: Looking only at shorter trips
- By geography: Looking only at trips within the most urban municipalities

None of the redefinitions lead to an achievement of the 20 percent goal. However, they get us closer to it, especially when narrowing by travel purpose. When we look at only work and school trips, the Kristiansand region reaches a 20 percent cycling share. However, the cycling share in Bergen and Buskerudbyen is still far below, at six percent.

The goal that eight out of ten school children should walk or cycle to school

A similar goal, that eight out of ten school children should walk or cycle to school, relates, in part, to the fact that many school children have the right to free school transport. There are especially many students living far from their school who have this right. based on their distance from home to school, around ten percent of primary school children are entitled to free transport, while over 40 percent have this right in secondary school and high school. Our research shows that in order to reach this goal, one should exclude the students with a right to free transport.