## **Summary**

## Cycling in the city of Trondheim

TØI Report 1604/2017

Authors: Erik Bjørnson Lunke, Jørgen Aarhaug, Aslak Fyhri, Nina Hulleberg, Rikke Ingebriktsen, Tineke De\_Jong, Hanne Beate Sundfør, Grétar Ævarsson, Christian Weber Oslo 2017, 51 pages Norwegian language

The analysis of cycling behaviour show that Trondheim has the highest cycling share among the cities studied in the project. Men ride more than women, while women are the most frequent users of electric bicycles. Most cyclists in Trondheim use bicycles for travelling to and from work or school.

Trondheim is a rather compact city where most cycling commutes cover short distances, which is a reason why Trondheim is well suited for cycling. At the same time, respondents state that there are several areas where they feel unsafe in traffic. This is especially the case in areas with high volumes of car traffic such as the main bridges and roads towards Midthyen. Measures to improve cycling conditions in these places can make Trondheim an even better city to cycle in.

## **Cycling in Trondheim**

Figures from the NTS 2013/14 show that the cycling share in Trondheim is higher than in the other cities in the project *Telledugnaden* (Figure S-1).

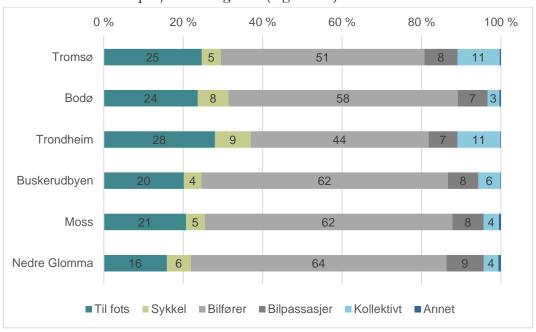


Figure S-1 Mode of transport<sup>1</sup>, share, (N=7806, 5416, 10332, 4980, 756, 4753) (NTS 2013/14).

As part of the *Telledugnaden* project, a questionnaire about cycling habits was carried out. In addition, some of the respondents to the questionnaire also used the travel mapping mobile

<sup>&</sup>lt;sup>1</sup> Til fots=By foot, Sykkel=Bike, Bilfører=Car driver, Bilpassasjer=Car passenger, Kollektivt=Public Transport, Annet=Other

app Sense.Dat. The data from the app has been used to map where and when people ride and at what speed.

The results from the questionnaire confirm the findings from the NTS that the cycling share in Trondheim, in addition to Tromsø and Bodø, is high (Figure S-2). We find similar results based on the app data as well.

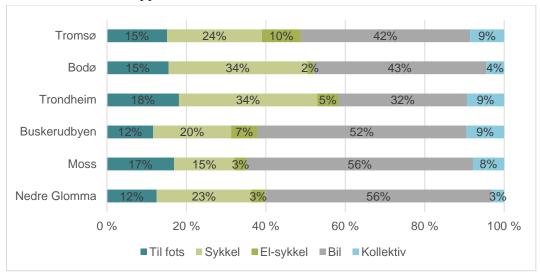


Figure S-2 Mode of transport shares, survey (N=375, 237, 646, 510, 210, 286)

At the same time, the cycling share we measure in *Telledugnaden* is significantly higher than in the NTS for all six cities. This is as expected, as the questionnaire predominantly targeted cyclists and not a representative sample of the population. This is due to, among other things, recruitment mainly through Falck's bicycle register. By comparing data from *Telledugnaden* with the NTS, we can still attempt to make general claims about cycling in Trondheim.

By studying when the cycling trips have taken place and looking at the answers in the questionnaire, we have discovered that much of the cycling in Trondheim is linked with travel to and from work or school (Figure S-3).

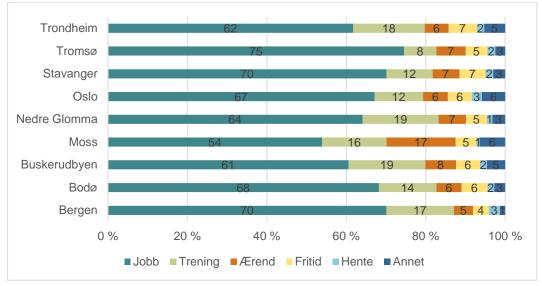


Figure S-3 Travel purposes as share of total km by cycle (Percent)

Furthermore, we have found that many respondents have quite short work trips in Trondheim. The compact footprint of the city makes it easier to use bicycles as a mode of transport.

Using data from the travel mapping app, we have investigated where cycling trips in Trondheim take place (Figure S-4).

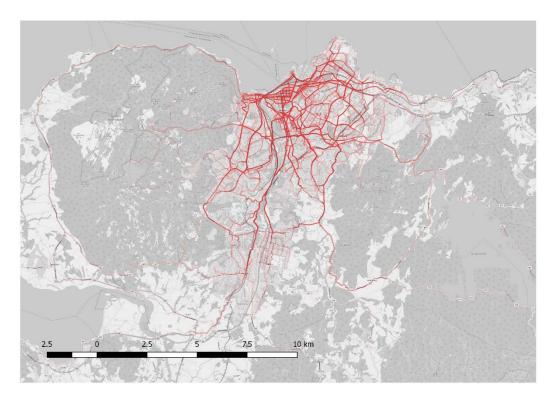


Figure S-4 Registered cycling trips in Trondheim

Figure S-4 shows that most of the cycling in Trondheim takes place in and around the city centre. The most widely used roads to the city centre are Elgseter bru and Gamle bybru, while there is a somewhat less traffic on Verftsbrua and in Kongensgate. These places are also considered to be problematic by the cyclists, partly because there are many cars and the bike infrastructure is not optimal. In order to improve the cycling conditions in Trondheim, it will, therefore, be useful to take action in these places.

A study of cycle speeds shows that electric cyclists ride somewhat faster than cyclists with regular bicycles, and that men cycle faster than women.