Preliminary data of cycling from a natural experiment – Førde Active Transport Study (FACT)

Nordengen, S[1], Solbraa, AK[1], Riiser, A[1], Andersen LB[1,2]
[1]Western Norway University of Applied Sciences, Sogndal, Norway [2]Norwegian School of Sport Sciences, Oslo, Norway

Purpose

The Norwegian government supports an extensive programme for transport infrastructure in Førde city (population ≈10000) (fig. 1). To solve further traffic challenges, and make the town attractive to both citizens and transient travels, 108 million EUR will be spent on new infrastructure for cycling and walking (fig.1). Construction takes place from 2016 to 2024. As the impact of such changes has rarely been exanimated[1], the aim of this study is to describe the baseline values of commuter cycling before any new cycling infrastructures are built and to compare with national data seasonal data[2].

Figure 1. The planned cycling main road in the city of Førde   Photo: Førde Municipality

Methods

The number of cycling trips are assessed by stationary electric counters (SECs). The counters are built in the asphalt and registers cyclists in both directions. Cycling trips is presented as Σ(three SECs) 24hours average per season (24HAS) with standard deviation (SD).
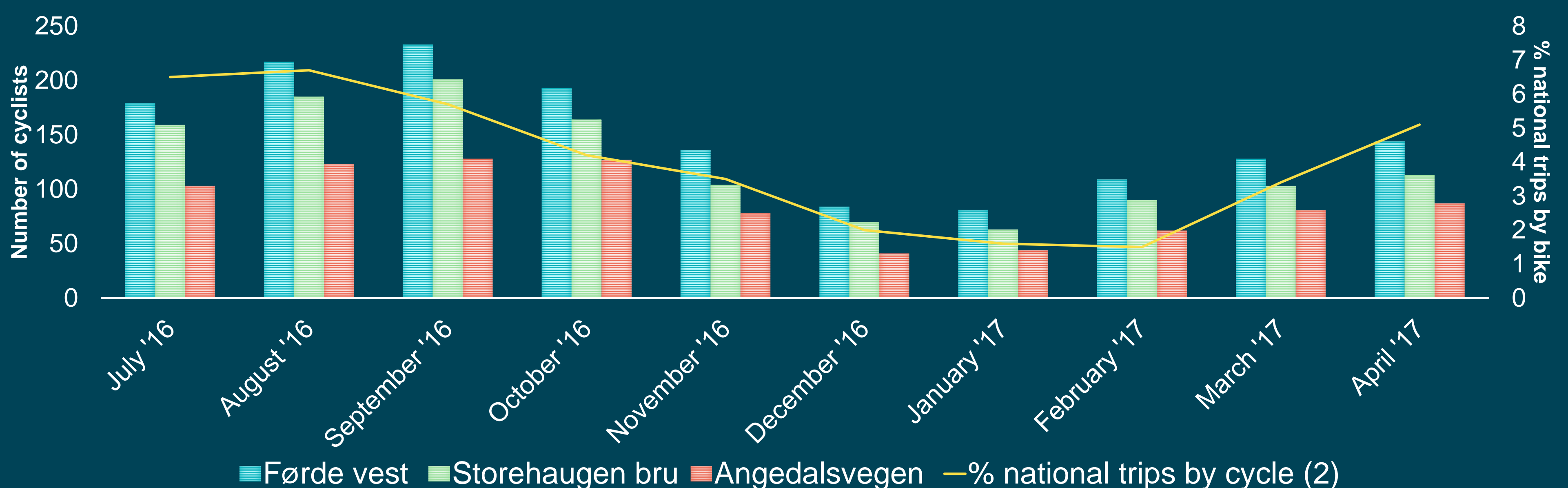

Figure 2. Monthly counts of cycling trips per SEC, with nationally monthly trend line.

Results

Since July 2016, 483 (59.4), 455 (124.6), 195 (40.3), and 328 (22.6) 24HAS trips are counted, during summer, autumn, winter and spring respectively. Monthly counts are presented in figure 2.

Conclusions

This study provide baseline measures of counted cycling trips before any construction take place. The difference in counted cyclist tend to follow the national trend of seasonal variance in use of cycle as mode of transportation.

References
1 Stewart, et al. (2015). What interventions increase commuter cycling? A systematic review. *BMJ open*, *5*(8), e007945.
2 Hjorthol, R., et al. (2014). 2013/14 National travel survey. Institute of Transport Economics.

Western Norway University of Applied Sciences

FACT

NIH NORWEGIAN SCHOOL OF SPORT SCIENCES