Summary

E-scooters in Norway: Main results from two web-surveys autumn 2021

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Two major studies on e-scooters show new findings in terms of usage patterns, preferences, accidents and parking.

Background and methods

This report documents main findings and descriptive statistics from two web surveys about e-scooters, carried out in October-November 2021. One survey among registered users with e-scooter rental companies in Norway, with 2585 respondents. A second survey with a representative sample of 10 000 citizens of Oslo, with 2308 respondents. The sample in the user survey consists of slightly more men than women, and is clearly younger than the Norwegian population. The sample in the Oslo-survey, on the other hand, consists of slightly more women than men, and the respondents are a little older than the age composition in Oslo would suggest. Non-users are considerably older than users.

Usage

The most frequently reported trip purposes for respondents' last e-scooter trip, were to/from work/education (app. 40 percent), followed by errands (17 percent) and leisure activities (14 percent). Joyrides or trips without a stated purpose account for about five percent of the trips. On average, e-scooter trips are fairly short. Four out of five trips take less than 15 minutes.

E-scooters' competitive advantages are that they are quick, flexible and available. Even if escooter trips in many instances are cheaper than a single ticket on public transport, only 13 percent of the users state that they chose e-scooter over alternatives because it was the cheapest alternative.

E-scooters and other transport modes

In just over 20 percent of the e-scooter trips, scooters are used in combination with other transport modes, and mostly with public transport (bus, train, metro, tramway or ferry). Walking is the most common alternative to e-scooters. Whether e-scooters replace car and taxi, depends on the circumstances:

- Among users who used the e-scooter to/from another transport mode, 19 percent would have made the entire combined trip differently, of whom 30 percent would have traveled by car or taxi.
- Among those who used e-scooter as the main transport mode, eight percent would have used a car and five percent would have taken a taxi.

• Two-thirds of the respondents in the user survey have used an e-scooter at night. Among them, 33 percent state that they would have taken a taxi and five percent would have used a car (as driver or passenger) had the e-scooter not been available.

E-scooters affect respondents' or their household's need for car ownership. Five percent state that they have got rid of their car due to their access to e-scooters. Another seven percent state that they consider getting rid of their car, while 14 percent state that e-scooters reduce the need for an extra car.

Preferences and regulation

Accessibility – the ease of finding an e-scooter nearby – is the most important factor when users decide to rent an e-scooter. This is a likely the main reason why Oslo's e-scooter supply and regulations were considered to be poor relative to other Norwegian cities. At the time of the survey, the regulation in Oslo limited the total e-scooter fleet to 8,000 and split this equally between 12 e-scooter companies. Consequently they were each allowed to offer 667 vehicles in the city. According to users, this resulted in a too limited supply of e-scooter, and too many e-scooter companies/apps.

Traffic safety and accidents

After rental services of e-scooters started in 2019, they immediately became very popular and widespread, which also led to many accidents and injuries. This was systematically registered and published by the Oslo Emergency Ward every month and the figures showed a clear tendency for the accident figures to follow the scope of use, with higher figures in the summer. There is also an increase in accidents and injuries from 2019 to 2020, and on to 2021.

The user survey shows that the distribution of accidents and injuries by gender and age largely corresponds with the figures registered in the emergency room. Men have more accidents and injuries than women, and young people have more injuries than older people. Closer analyzes show that the gender difference is due to men using electric scooters more than women, so when you take into account the mileage, there is no longer any difference. Young people are more likely to have accidents than older groups, also when driving distances are taken into account. This is because young people have more risky behavior, i.e. they drive more often under the influence of alcohol and in an intoxicated state, and break the regulations more often than older riders.

Parking

Previous research has shown that riders and non-riders experience parked electric scooters as obstacles to varying degrees. Non-riders in Oslo, compared to riders, agree less with the statement that most people park well, they experience parked electric scooters to a greater extent as an obstacle, and a larger proportion of non-riders than riders have fallen because they have stumbled over a parked e-scooters.

Respondents were shown pictures of three differently parked e-scooters, and were asked to rate how good the parking was. Users are less critical of parked e-scooters than non-users. The difference in ratings is largest for the best parking and smallest for the worst parking. The results also show that most of the respondents, regardless of user status, have moved parked e-scooters so that they are not impeding access for others.

Several Norwegian cities have taken action to improve parking, for instance by offering dedicated parking spaces and using geofencing to limit parking. The users in Oslo differ from users renting in other cities, in that many believe that the municipality does not facilitate parking well. Users in Oslo also disagree that it is easy to find an e-scooter when starting a trip.

Otherwise, there are few differences between users who rent e-scooters in the different cities. Overall, they find it relatively easy to find, use and park e-scooters in the area, and don't think that parked e-scooters impede accessibility. Non-users from the Oslo population survey, however, don't think that most users park neatly, and think that e-scooters make it somewhat more difficult to move around in the area.