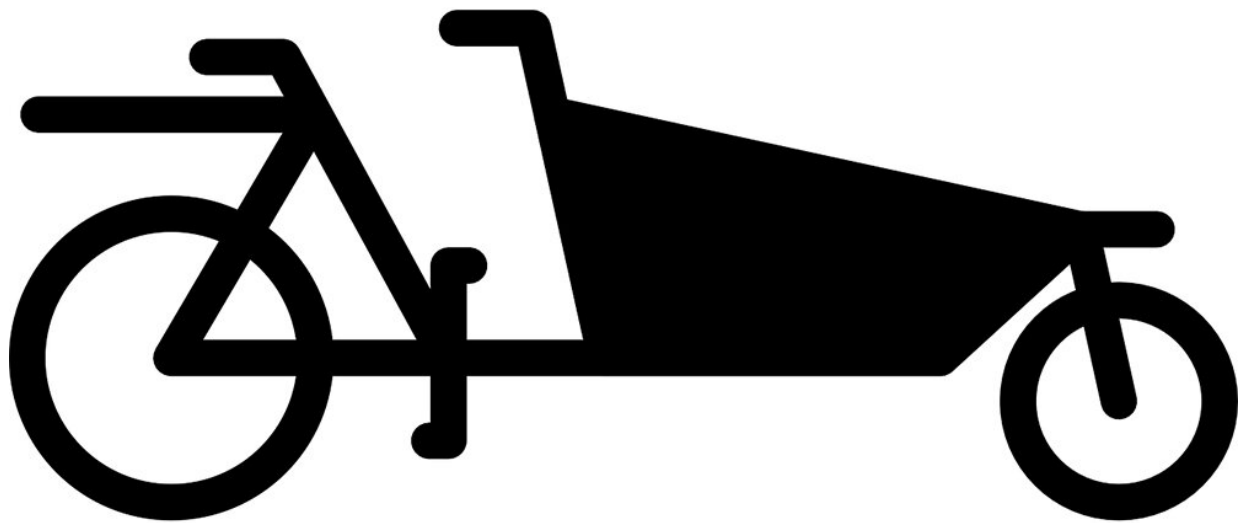


# Shared e-cargo bikes: Boom and barriers in Basel

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Since the introduction of carvelo2go in Basel, the number of users has doubled each year. There are currently 2,192 registered members in Basel and surrounding municipalities. A total of 26 cargo bikes are available for hire at 23 host sites. Credit: Pixabay | CC0

Sustainable means of mobility are becoming ever more popular. In Switzerland, around 15,000 people have registered with the online platform carvelo2go, which hires out electric cargo bikes. The use of this sharing service in the Basel area is now the subject of scientific

investigation. Despite strong growth in member numbers, there are still fundamental barriers. The study by the University of Basel indicates ways that sharing providers and public authorities can promote the use of environmentally friendly cargo bikes.

The diesel scandal and the climate protection movement "Fridays for Future" have fueled debate around sustainable forms of transportation. Currently, electric scooters are attracting widespread attention and the hope is that they can make a contribution to the issue of environmentally friendly mobility. E-cargo bikes are proving highly popular for the transport of purchased goods, children and even moving crates. They have plenty of storage space, and their electric motor makes it easy to transport loads of up to 100 kg for local trips.

Since 2016, the city of Basel has been cooperating with the carvelo2go initiative, which offers electric cargo bikes for rental. This service is currently used by more than 2,000 people in Basel and adjoining municipalities. But who are these users?

## **Main users: "Generation Sharing"**

In 2017, the University of Basel's Sustainability Research Group carried out an online survey of all users in the Basel area in cooperation with carvelo2go. The [control group](#) consisted of non-members. The final sample comprised about 300 subjects belonging to four groups: active, inactive, potential users and people who could not imagine renting a cargo bike.

"Our survey shows that the active users often ride bikes day-to-day as well," says Ann-Kathrin Hess, first author of the study. "The average age is 39.6 and they are 60% male. What's more, a large number of carvelo2go members do not own a car and already use a car-sharing service." Hess adds: "Familiarity with the sharing principle seems to be a

key factor in switching to e-cargo bike sharing."

## **Reservations and barriers**

Meanwhile, the inactive members do not (yet) or no longer use the service because they have access to comparable means of transportation. Either they own their own cargo bike or bike trailer, or they use other rental options. Potential members do not use carvelo2go yet, but can imagine themselves doing so in the future. This group contains a balanced mix of men and women.

In addition, the study analyzed people who could not imagine renting a cargo bike. "These individuals are afraid to cycle because of the many cars in the city and believe that bike paths are too unsafe," says co-author Dr. Iljana Schubert. "They're also concerned by the speed of the electric drive support. In comparison with the other three groups, these people primarily use cars and public transport for day-to-day mobility."

## **Structural support**

The study indicates ways in which e-cargo bike sharing could be made even more user-friendly: more stations, more cargo bikes at busy locations and a more flexible pick-up and return structure. The study found that the city could help to counter concerns and reservations by investing more in bicycle infrastructure. Wider, safer bike paths and special parking spots for cargo bikes would provide more room for this means of transport.

## **Carvelo2go**

Carvelo2go is the first e-cargo bike sharing project in the world. The initiative was launched in 2015 by the TCS Mobility Academy and the

Engagement Migros fund. The rental works in the same way as the Mobility car-sharing service: cargo bikes can be hired by the hour or the day. Pick-up and return is arranged through "hosts," who include small businesses and post offices. Hosts manage the keys and charge the batteries. In return, they can advertise on the cargo box and use the bike for their own purposes for 25 hours each month.

Since the introduction of carvelo2go in Basel, the number of users has strongly increased each year. There are currently 2,192 registered members in Basel and surrounding municipalities. A total of 26 [cargo](#) bikes are available for hire at 23 host sites.

**More information:** Ann-Kathrin Hess et al. Functional perceptions, barriers, and demographics concerning e-cargo bike sharing in Switzerland, *Transportation Research Part D: Transport and Environment* (2019). [DOI: 10.1016/j.trd.2018.12.013](https://doi.org/10.1016/j.trd.2018.12.013)

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