Final report

Evaluation of Carsharing in Bremen 2025

for the

Free Hanseatic City of Bremen

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Key German Terminology

The following key German terminology is used throughout this report. Explanations and definitions are provided here for clarity and for reference.

A ***mobil.punkt*** is a carsharing station/mobility hub in public street space where several carsharing vehicles (and sometimes other mobility services such as bikesharing or bike parking) have permanently reserved space. Standardised branding is used at all *mobil.punkte* in Bremen to increase recognisability.

A ***mobil.pünktchen*** is a small version of a *mobil.punkt*, generally located in residential neighbourhoods close to users. A *mobil.pünktchen* hosts one or two carsharing cars and uses the same branding as a *mobil.punkt*.

System repräsentativer Verkehrserhebungen (SrV) – The German System of Representative Traffic Surveys has been continuously monitored by the Technical University of Dresden since 1972. Since 1998, the survey has been conducted regularly every five years and has been expanded to include "Mobility in Cities". The 2023 SrV survey covered a total of 134 study areas, comprising almost 500 towns, municipalities and administrative associations across Germany.

Bundesverband Carsharing (bcs), the German national carsharing association, is the umbrella organisation for German carsharing providers. The stated aim of the association and its members is to reduce the number of cars on the road, thereby reducing car traffic and the environmental impact caused by private cars.

Mobilitäts-Bau-Ortsgesetz Stadt Bremen – The "Bylaw on Project-Specific Parking Spaces for Motor Vehicles, Bicycle Parking Spaces and Mobility Management for Construction Projects in the City of Bremen" (Mobility Construction Bylaw – MobBauOG HB) sets out binding requirements for car and bicycle parking spaces, as well as measures for mobility management in new building construction and changes of use. The aim is to promote sustainable mobility.

The ***Deutschlandticket*** is a subscription-based monthly public transport ticket that can be used in almost all regional public transport modes across Germany, including local and regional buses, trams and trains. At the time this study was carried out, the *Deutschlandticket* cost €58/month.

Foreword

Cities face challenges that carsharing can help address: more affordable housing requires more space, and more urban greenery, which helps cool the city, also requires more space. Carsharing frees up space that previously had to be used for parking cars. And carsharing also has a social dimension: rising car costs are placing an increasing burden on socially disadvantaged households in particular, increasingly excluding them from mobility options. Carsharing creates a new, inexpensive, and practical way to access car mobility in combination with bicycles and public transport. I am therefore convinced that **a carsharing service that is available as widely as possible will help the urban community master the key challenges of the future.**

For many years, the City of Bremen has been a pioneer and role model for how to use carsharing as a tool of municipal transport policy. As early as 2003, the first carsharing stations in public spaces were established in Bremen on the basis of a legal solution that was later incorporated into the German Federal Carsharing Law (CsgG). In 2009, a Carsharing Action Plan was adopted in Bremen, the first such strategy in any German state. Bremen was also the first city in Germany to attempt to find out whether carsharing really does what is expected of it, i.e., relieve parking pressure and promote environmentally friendly mobility behaviour. In 2018, the first evaluation of carsharing in Bremen was carried out. Just under six years later, the results of the second evaluation are now available.

As the publisher of the evaluation standard "Measuring the traffic-reducing effect of carsharing", the *Bundesverband Carsharing* welcomes the fact that the key figures in the present Bremen study were determined in accordance with that standard. **This means that the results are realistic and comparable with other studies.** The City, its citizens, and carsharing providers in Bremen need such realistic information to enable a fact-based discussion about what has been achieved and what is yet to come.

The results are impressive: one carsharing vehicle in Bremen replaces an average of 18.8 private cars, thereby reducing the need for parking space in its immediate vicinity. In Bremen households that use carsharing, the number of private cars is 60 percent lower than in other households. And although there is a well-developed range of carsharing vehicles, the annual mileage of carsharing households is 65 percent lower than that of other households. Buses, trams and bicycles, on the other hand, are used much more frequently.

The successes evident in the evaluation are the result of years of good cooperation between the City and the carsharing companies. By setting up carsharing stations in public spaces, the City of Bremen has created the conditions for carsharing to move out of backyards and private parking lots and onto the streets. **The *mobil.punkt* concept also emphasised that carsharing is considered and positioned as part of public transport**. Carsharing providers seized the opportunity. They have continuously invested in service, apps, and processes and, based on the *mobil.punkte* and additional spaces rented by the providers, have built up an offer in more and more districts that is a real alternative to owning a car.

Bremen's citizens are very satisfied with the carsharing service. Ninety-three percent of users are satisfied or very satisfied with the service, and 64 percent feel they have more freedom in their mobility decisions thanks to carsharing. **This shows that carsharing households do not drive less because they have no other choice – but because they can.** Unlike households that own cars, they are not financially tied to a car. They take advantage of this freedom by choosing environmentally friendly alternatives to cars more often.

While many other sustainable mobility services have to be created and maintained with taxpayer money, carsharing is self-sustaining. The cooperation between the City of Bremen and the carsharing providers is a win-win situation.

One of the great merits of the new Bremen carsharing study is that it does not rest on what has already been accomplished. Parts of the new study deal with the question of what needs to be improved. One thing is particularly striking: people with a migrant background, people without academic qualifications and people with lower incomes are less likely to use carsharing than would be expected given their share of the total population. **Important questions for the future are therefore: How can a broader target group be reached? How can the advantages of carsharing be applied even more broadly to the city and its citizens?** I am certain that the City's administration and carsharing providers in Bremen will find an answer to this, seize new opportunities, and once again become a role model for all of Germany.

Gunnar Nehrke

Managing Director, *Bundesverband Carsharing* e.V. (bcs)

1 Background and key issues

Over the past 30 years, **carsharing in Bremen has developed into a professional, market-based service** that plays an important role in reducing traffic and parking and promoting sustainable mobility in the city. Bremen has **over 28,000 carsharing users** (at the time of the survey in July 2025) who use (at least) one of the three carsharing providers currently active in the City of Bremen:

- cambio CarSharing Bremen: combined offer (station-based and free-floating vehicles from a single source) with around 660 vehicles (including approx. 120 in the free-floating system under the name *smumo*) and approx. 160 stations (at the time of the survey in July 2025). cambio is certified with the Blue Angel eco-label (DE-ZU 100).
- Personal Mobility Center (PMC): station-based offer with two electric cars at one station in Bremen (booking via the Flinkster app).
- Flinkster: station-based service with one station at Bremen train station and approximately three vehicles.

Of the approximately 160 carsharing stations in Bremen, more than 50 are currently located on public streets. Since 2018, the Bremen State Carsharing Law (BremLCsgG) has regulated the establishment of carsharing stations in public spaces, the responsibilities, and the award procedure for the operation of stations in public spaces.

A comprehensive study, *The Impact of Carsharing in Bremen*, was conducted in 2018, which provided valuable insights into mobility and consumer behaviour, customer needs, and the satisfaction of carsharing users, and drew comparisons with non-carsharing users in Bremen. In addition to the significant increase in the number of people registered with a carsharing service since 2018, the free-floating service *smumo*, introduced in 2020, is a major development in the carsharing services available.

The City of Bremen intends to conduct surveys at regular intervals to track developments and changes in mobility behaviour and needs over time. The current study was designed to reassess the use and mobility behaviour of carsharing customers and non-customers in Bremen since the 2018 study. This study both supports the further tracking of the effects of carsharing and also improves the understanding of the needs of carsharing users with regard to factors relevant to a city (e.g., station locations) and requirements for carsharing providers. The City of Bremen commissioned the Institute Schreier to conduct the study.

The central questions of the evaluation are:

- What **effect** do the carsharing services available in Bremen have on **reducing pressure** on parking and on road traffic?
- What **contribution** does the **free-floating *smumo* service**, introduced in 2020 as part of a combined carsharing service offered by cambio Bremen, make to this?
- What is the relationship between carsharing and **car ownership**?
- How do carsharing users differ from non-users in terms of their **choice of transport modes**?
- What **are the reasons for using carsharing in general**? What motivates people to sign up, and what are the barriers to use?
- For what **purposes** is carsharing used? How do station-based carsharing and cambio's free-floating service, *smumo*, differ in this respect?
- How **do private and corporate users differ** in terms of usage types, needs, and effects achieved?
- What **modes of transport** are used to reach carsharing vehicles?
- Can the **differences** in shopping behaviour observed in the 2018 study be confirmed?

- How **satisfied are carsharing users in Bremen with the service**? Which factors are particularly important in this regard? Which of these can be influenced by the public sector?
- What is **the demographic structure** of **carsharing users**?
- What are **the needs** of users that could be helpful in **improving the service**?
- How **important** are **electric vehicles**? What are the reasons for their use or barriers to their use?
- What **role** do the ***mobil.punkte*** play?
- What is **the potential** for current non-users to use carsharing in the future? What prevents them from using carsharing today?
- Are there **differences in potential use** depending on current life situation, gender or cultural background?

These questions were investigated in an evaluation carried out from May to July 2025 using available data and surveys developed for this purpose. The most important results of the evaluation are presented in chapter 2. The recommendations for action derived from this are presented and explained in chapter 3.

For readers interested in further details, chapter 4 provides an in-depth look at the methodology of the evaluation while chapters 5 to 9 present the results of the evaluations and the analyses carried out. A concluding summary of the findings is provided in chapter 10.

2 Key findings

The carsharing service in Bremen has a lasting effect on reducing car-use and car-ownership.

According to the calculation standard of the *Bundesverband Carsharing* (German National Carsharing Association), **each carsharing vehicle in Bremen replaces 18.8 privately owned vehicles**. The number of users has more than doubled from 12,500 in 2018 to over 28,000 at the time of the survey in 2025. As of today, the carsharing fleet comprises 650 vehicles at the time of the study. Taking into account the vehicles reserved for corporate use and several household members per carsharing membership, it can be assumed **that there are more than 11,000 fewer cars from private households on the roads of Bremen**.

The lasting traffic-reducing effect encompasses not only parked cars, but also the **annual kilometres driven** by carsharing users. While the average household in Bremen has 0.9 cars and travels an average of around 10,000 km per year, households that use carsharing have an average of only 0.4 cars, which travel around 3,500 km per year. Correspondingly, **64% of carsharing households** are **car free**, i.e., there is no private or company car in the household. Among non-members, this is only the case in 22% of households.

High satisfaction among carsharing users with the existing offer in Bremen

Overall satisfaction with the carsharing service is high among carsharing members, with 93% being "very satisfied" or "satisfied."

Important aspects of carsharing for users include uncomplicated booking, availability of vehicles at the desired time, reserved parking spaces at a carsharing station, simple self-explanatory operation of the vehicles, and short distances to the nearest station. User satisfaction is high in most of these areas: more than 80% of carsharing users surveyed are "very satisfied" or "satisfied" with the distance to the nearest station and with the reserved parking spaces. They also praise the uncomplicated booking process, the ease of use of the app and the vehicles, and the ease of parking at the station.

Carsharing users behave more sustainably in terms of mobility and purchase behaviour

In addition to lower car mileage, there are other differences in mobility behaviour between carsharing users and non-users. The significantly lower proportion of journeys made by car is accompanied by a **significantly higher use of bicycles, e-bikes and (e-)cargo bikes among carsharing users**, based on a comparatively high share of cycling in the modal split in Bremen. According to data from the German System of Representative Traffic Surveys (SrV), the total length of journeys made by members from households with carsharing is also shorter than that of members from households without carsharing.

An interesting additional finding is that the most popular forms of transport for carsharing users *and* non-users are walking (80% and 74%, respectively) and cycling (85% and 66%, respectively).

But differences are evident not only in mobility behaviour, but also in **purchase behaviour**: carsharing members tend to shop locally (nearby retailers, weekly markets), thereby strengthening trade in their respective neighbourhoods, while non-members head for larger shopping centres comparatively often – and generally by car.

***mobil.punkte* make an important contribution to the awareness and attractiveness of carsharing**

High awareness and positive ratings can also be observed for the *mobil.punkte* available in Bremen. It is striking that younger respondents are less familiar with them than older respondents. Users rate these stations on public street space more positively than stations on private property, particularly in terms of their proximity to their own homes. As in the 2018 study, users attach the highest importance to proximity. Accordingly, ***mobil.punkte*** fulfil an **important and indispensable function** for the success of the carsharing service in Bremen.

High awareness of the carsharing service among all Bremen residents

Carsharing also enjoys a **high level of awareness** and a **predominantly positive image** among (current) non-users in the population. Two-thirds consider carsharing a good idea in principle. There is certainly potential for new memberships: almost one in three of those who have not used carsharing to date can imagine using it in the future. One in five can also imagine giving up their own car in principle.

Frequently cited barriers to use among non-users are the belief that it is "important to own a car," uncertainty about "the actual costs associated with carsharing," and the assumption that carsharing is too inflexible because you have to commit to a schedule in advance.

Free-floating service *smumo* a useful addition to station-based carsharing

Around 25% of carsharing users surveyed use *smumo*, cambio's free-floating service launched in 2020, which complements cambio's station-based service. The flexibility gained through this service is viewed positively, with users particularly appreciating the fact that they do not have to specify an end time for their booking or a drop-off location. With regard to the reduction of vehicle ownership of the users surveyed, there are no differences depending on whether only the station-based cambio or *smumo* or both types of service are used together. The *smumo* service is therefore seen as a useful addition to the existing service.

Interest in and use of e-carsharing is growing

30% of the carsharing users (34% of men) surveyed have already used an electric carsharing car at some point. Of those who have not yet used an electric car, 38% plan to test one in the next 12 months, with more men than women among them. In addition, electric cars are significantly more attractive to younger people than to older people.

Respondents who have already tried electric carsharing cite curiosity as well as climate and environmental protection as the main reasons for using an electric car. The main reasons for not having driven an electric carsharing vehicle to date are the lack of availability of electric carsharing vehicles, a lack of knowledge about the charging process, fear about range problems and a general concern that using electric cars is too complicated.

For business customers, carsharing is an alternative to owning a company fleet

This study also examined the effects of carsharing on business customers for the first time. It is striking here that, in addition to larger companies/institutions, carsharing services are used by a wide range of self-employed people and small businesses. Self-employed people and companies from the arts, health services, construction, and real estate sectors are particularly well represented.

The most important motivation for the business use of carsharing is the availability of vehicles while simultaneously reducing the financial costs of car mobility. It is interesting to note that around 60% of the companies surveyed do not have their own vehicle for business use. Corresponding to this, more than a

third of the companies surveyed stated that they had decided against purchasing new or replacement vehicles because of carsharing. Similarly, one in ten companies stated that they had reduced the size of their fleet as a result of using carsharing.

3 Recommendations for action

3.1 Overview of recommendations

The recommendations for action derived from the survey are summarised below. The relevant stakeholders for each recommendation are also identified. The individual areas for action are explained in more detail in the subsequent detailed description.

	Recommendation	Content	Actors
1	**Continue to promote carsharing in general**	Carsharing has positive effects on the common good. This positive development should be supported by targeted promotion by the City of Bremen.	**City:** Support for local carsharing services through, for example, a comprehensive carsharing action plan with specific measures, financial relief and subsidies, and the integration of carsharing into parking regulations.
2	**Expansion of *mobil.punkte* / *mobil.pünktchen***	Short distances to stations are crucial to the success of the service. In addition to private parking spaces, additional spots should be created in public space.	**City:** Expansion of *mobil.punkte* and, in particular, *mobil.pünktchen*
3	**Continue the *smumo* service**	This tried-and-tested service supplements station-based carsharing with a free-floating service that users particularly appreciate for its flexibility (especially in terms of time); no negative effects have been observed.	**City:** Stabilisation of the legal framework for free-floating carsharing, especially in the combined system. **Providers:** Continue and optimise the service.
4	**Promote walking and cycling**	Walking and cycling are important means of transport to the stations. The bicycle is the most important replacement for car journeys.	**City:** Further expand walking and cycling infrastructure (especially near *mobil.punkte*), improve accessibility. Offer bicycle courses, including for adults.
5	**Promotional work and addressing (new/non-traditional) target groups**	Break down barriers for non-users; specifically address topics such as cost transparency, flexibility, e-mobility, etc. Targeting groups such as people with lower socioeconomic status, people at transition points in their lives, people with a migrant background and younger people could open up new opportunities for carsharing growth.	**City:** Further consolidation and expansion of public relations work, development and implementation of targeted public relations campaigns **Providers:** Review public relations content, examine opportunities for targeted outreach.
6	**Cooperation with local retailers**	Carsharing users tend to shop more frequently at local retailers and weekly markets. Close cooperation between carsharing and local retailers creates a win-win situation.	**City:** Examine opportunities to "reward" retailers for providing parking space. **Providers:** Seek targeted cooperation **Retailers:** Make space available for shared mobility.
7	**Continue integration of electric vehicles**	Add more e-vehicles to the fleet based on demand.	**City:** Promote/facilitate the installation of charging infrastructure at *mobil.punkte*, e.g., by providing connections to the electricity grid.

			Providers: Continue to add electric vehicles to fleets.
8	**Promote corporate carsharing use**	Carsharing also has positive effects on the common good for business users. This existing positive development should be supported and strengthened by targeted promotion on the part of the City of Bremen.	**City:** Communication of the carsharing offer to business customers via the Bremen Economic Development Agency and other actors such as the Chamber of Industry and Commerce or the Chamber of Trades. Targeted consultation for commercial construction projects. **Providers:** Provision of information, e.g., for start-up consultations, webinars for founders and self-employed people**,** targeted approach to companies/institutions with large vehicle fleets.

Table 1: Overview of recommended actions

3.2 Description of recommendations

3.2.1 Further promote carsharing in general

This study demonstrates the **positive effects of carsharing on the common good**. **Carsharing is an important building block for the realisation of the mobility transition**. The strengthening of cycling and walking, the positive effects on health and quality of life, the improved traffic and emergency vehicle safety achieved through the reduction in parking, and a strengthening of the local economy can be expected for society as a whole. With the accompanying reduction in "parent taxis", carsharing also contributes to a car-free socialisation of the younger generation.

It is therefore in the public interest to further promote carsharing and support it in general. The City can contribute directly to its promotion through the recommended measures. In addition, further indirect support measures are possible, such as the continued integration of carsharing into the city's own vehicle fleet and into the applicable parking regulations for new construction projects (mobility construction by law of the City of Bremen), or through supportive measures such as the expansion of parking space management and effective monitoring of parking.

Providers are called upon to continue to cooperate closely with public authorities, to identify specific support needs, and to contribute constructively to their implementation, taking into account the scope for action of the actors involved.

3.2.2 Expansion of *mobil.punkte* / *mobil.pünktchen*

Short distances to the nearest station are crucial for the use of carsharing. The provision of public space is a key factor, especially in neighbourhoods where it is difficult for providers to rent private – and ideally – easily visible spaces.

To further strengthen carsharing in Bremen, it is therefore recommended that the City continues its efforts to plan and implement *mobil.punkte* and *mobil.pünktchen* in order to realise more locations in public spaces at a faster pace in the future. Providers should support this by identifying as concretely as possible suitable locations that make sense from an operational perspective.

3.2.3 Continue the *smumo* service

smumo, cambio's free-floating carsharing service, has been well received by users and is a useful addition to the station-based service. **The most important aspect is the introduction of greater flexibility**, particularly because there is no requirement to specify a time for the end of use.

Flexible services are often associated with the fear that they could lead to a shift in travel patterns – away from eco-friendly modes of transport and toward more car use. The data collected for this evaluation does not support this conclusion. Users of *smumo* do not show any deviation from the rate of use of users of the station-based service alone.

It is therefore recommended that the *smumo* service be continued. The City of Bremen should create a reliable regulatory framework for this purpose, and the provider should continue the service, taking into account the customer feedback collected during the evaluation.

3.2.4 Promoting walking and cycling

Walking is the most popular form of transportation for both users and non-users of carsharing (see 5.5 Basic attitudes toward mobility). **Users of the carsharing service in Bremen use bicycles significantly more often** than is already the case in Bremen. **Almost without exception, customers in Bremen reach the carsharing vehicle either on foot or by bicycle**. Thus, the interaction between carsharing and walking and cycling not only has important effects on the mobility transition, but the two forms of mobility also reinforce each other.

To further promote this mutual reinforcement, **measures to further expand walking and cycling** are recommended. In addition to **infrastructural measures** such as bicycle parking facilities at *mobil.punkte* and good accessibility of carsharing stations on foot and by bike, the (barrier-free) expansion of footpaths and cycle paths, the establishment **of** additional **cycle lanes**, and the consistent prevention of cars parking on **sidewalks,** this should also include communication measures or, for example, cycling courses for adults (including those with a migrant background, if applicable).

3.2.5 Public relations and addressing (new/non-traditional) target groups

Carsharing is already **well known** in Bremen. This can be attributed to the wide range of services already clearly visible in the city area and to the long-standing, provider-neutral public relations work of the City itself. However, in addition to the (lack of) proximity of stations, it is above all the lack of information about carsharing, e.g., regarding operation and the actual costs of carsharing use, that deters those who are generally interested in using carsharing. It is recommended that this be counteracted through **communication measures**.

Bremen already has an excellent foundation for this in the form of the short films ***Udo prefers to chill out***. It should be examined whether further communication elements can be implemented on this basis, such as information brochures in citizen service centres, large-scale poster advertising in the Bremen city area, or the use of new communication channels (e.g., social media).

As in many other studies on shared mobility services, it was possible to show based on the evaluations carried out, that the services have so far been used primarily by groups of people with higher education and/or higher incomes. However, the SrV data also showed that use rates are higher in households with a "very low" socioeconomic status than in households with a "low" socioeconomic status.

The City should examine whether it can establish targeted campaigns, e.g., in vocational schools, counselling centres (e.g., consumer counselling centres or debt counselling centres). Providers should also examine how financially less privileged groups can be better addressed and won over to carsharing.

Addressing other target groups that have been reached only to a limited extent could also be promising. These could include occasional drivers, younger people, older people, and/or citizens with a migrant background.

3.2.6 Cooperation with local retailers

Carsharing users are more likely to shop at local retailers and weekly markets than non-users. Close cooperation between carsharing and local retailers creates a win-win situation.

To reinforce this effect, it is recommended that carsharing providers seek out specific cooperation with local retailers. By providing space, retailers open up opportunities to retain existing customers and attract new ones. In order to accelerate the observed "learning effect," the City could also examine whether new carsharing customers could be motivated to shift their shopping to retailers in proximity to their homes by offering shopping vouchers for nearby retailers.

The City should also examine whether it can support or promote the provision of private parking spaces for shared mobility.

3.2.7 Continue integration of electric vehicles

The proportion of electric vehicles in carsharing fleets is already higher than in the overall German vehicle fleet. The study shows that while there is still a certain amount of scepticism toward electric vehicles among carsharing users, there are also signs that there is a certain amount of interest in electric vehicles and **that carsharing offers ideal opportunities to use electric vehicles (for the first time)**.

It is therefore recommended that the proportion of electric vehicles in the carsharing fleet be increased moderately but continually. It is recommended that the City specifically promote the expansion of the necessary charging infrastructure. On the provider side, the proportion of electric vehicles in the fleet should be increased, taking into account the economic possibilities.

3.2.8 Promoting business carsharing

This study shows for the first time that carsharing also has a significant effect on corporate users in terms of reducing the size of their vehicle fleets and the associated adjustment of their choice of transport for business purposes. A distinction must be made here between two clearly different target groups: solo self-employed persons and companies with a small number of employees on the one hand, and larger companies on the other.

Various measures are conceivable to promote carsharing among these two target groups. For self-employed persons, the advantages of carsharing should be communicated early on in the start-up process, for example in the course of start-up consultations typically offered by chambers of commerce and industry, chambers of trades, or local economic development agencies. Here, with the support of the City, the topic of cost-efficient vehicle fleets should be integrated into the relevant advisory processes as an information component of the local carsharing provider. Separate webinars, such as those regularly offered by the Association of Founders and Self-Employed Persons, are also conceivable here. It should be examined whether such a webinar could be offered, for example, in cooperation with the German National Carsharing Association.

Larger companies should be contacted specifically about opportunities to integrate carsharing into their fleets. The City should examine whether and how it can support the local carsharing provider in targeting these companies. It should also examine how measures of corporate mobility management can be established as an attractive alternative to the construction of parking spaces, for example through instruments of the Mobility Construction Bylaw in large construction projects, and how the use of shared mobility, including carsharing, can be promoted in larger companies.

4 Methodology

4.1 Overview of data sources

The following data sources were used to conduct the study:

- Data from the 2023 SrV (representative traffic survey) for Bremen
- Backend data from carsharing providers
- Data from the survey conducted
- Marginal distribution of the representative sample drawn by the resident registration office

The bcs evaluation standard was used to determine comparative key figures. In addition, the calculation method used in the final report of the 2018 evaluation was also taken into account[1].

The data sources used are described in more detail in the following subchapters.

4.2 SrV data

The SrV research project *Mobility in Cities* led by the Technical University of Dresden collects, among other things, information on mobility services available and used in households, as well as the distances travelled by household members on specified reference dates. The SrV data collected for Bremen in 2023 was made available for the evaluation. In total, information is available from 2,993 individuals from 1,327 households who recorded a total of 10,102 journeys.

The data is available in three separate data sets. The information can be linked using the key variables "sequential number of the household" (variable HHNR) and "sequential number of the person in the household" (variable PNR).

For the evaluations, the data is weighted using the weighting variable for standard evaluations already available in the data set (variables Gewicht[2]_HH, Gewicht_P, and Gewicht_W).

Regarding the data collected, there are some methodological limitations in terms of the issue under investigation. The surveys were conducted exclusively on working days from Tuesday to Thursday. Trips such as weekend excursions or major shopping trips at the weekend are therefore not included in the trip logs collected. Furthermore, the available trip logs only include 23 trips in which carsharing was used by drivers and one additional trip in which carsharing was used as a ridesharing option. This number of cases is too small to further evaluate trips made using carsharing in comparison to other trips.

The personal data set does not contain any information on whether a person is registered with a carsharing service provider. However, data was collected at the individual level on how often different modes of transport were used in the past twelve months. The frequency of use of a carsharing vehicle was recorded (variable V_NUTZH_CARSHARE), but no distinction was made between use as a driver and use as a passenger.

[1] See team red (2018): Analysis of the effects of car sharing in Bremen, p. 51, available at https://bau.bremen.de/sixcms/media.php/13/2017-Analyse-zur-Auswirkung-des-Car-Sharing-in-Bremen_Team-Red-Endbericht.pdf
[2] weighting

The data therefore also includes frequency of carsharing use reported for minors, whose proportion is higher than that in the age group 65+. The information itself cannot therefore be used to directly identify registered carsharing users with certainty.

For the analyses, the data was therefore processed in such a way that, based on the frequency of use by household members, a household was categorised as a "carsharing household" if information was available for at least one household member that carsharing had been used at least one to two days per quarter in the past twelve months. The usage frequency "less frequent" was not used for categorisation as a carsharing household, as otherwise the number of users extrapolated to the population would have significantly exceeded the actual value.

4.3 Backend data from carsharing providers

In preparation for the evaluation study, Bremen's Mobility Ministry contacted all carsharing providers active in Bremen and asked for their support in conducting the study. This request was answered positively by the provider cambio. The other two providers did not respond positively, citing the small size of their fleets.

The participating provider, cambio, operates a fleet of around 650 vehicles in Bremen. At the start of the survey in May 2025, around 28,000 users were registered in Bremen. To weight the data, the number of registered users per use frequency group was reported in accordance with the bcs standard.

cambio also provided a list of the stations currently in operation, including additional information on station size, availability of electric vehicles, and location on public space or private property.

4.4 Survey data

In order to enable comparison of the study with the results from 2018, the questionnaire used at that time was largely adopted. The survey was conducted online and targeted three groups:

- Private individuals who are registered with a carsharing provider
- People who are self-employed or in a position of responsibility (for mobility) for a company/institution/authority and are carsharing users
- Representative population sample as a comparison group

Selected individuals from the population were contacted by mail based on a sample from the resident registration office (single-stage random sample) and asked to participate in the survey. Carsharing users were grouped according to frequency of use in the past twelve months and contacted by email by the carsharing operator. All registered users were contacted, provided they had agreed to be.

To increase participation, respondents had the opportunity to take part in a prize draw. Carsharing users also received a reminder by email. The survey was conducted between May 22 and June 23, 2025.

4.4.1 Samples taken

cambio contacted a total of 25,457 users who had agreed to receive newsletters and mailings. For the representative population survey, 7,000 people were randomly selected from the resident register and contacted.

A total of 4,408 people took part in the two surveys. With 3,176 completed questionnaires, the majority of the data sets come from private carsharing users. A further 188 data sets come from carsharing corporate customers.

In addition, 1,044 completed questionnaires from the representative population survey are available. This means that a response rate of 13% was achieved in the user survey, while the response rate in the population survey was around 15% based on the adjusted gross sample (approx. 500 letters could not be delivered).

Figure 1 shows participation in the survey over time. The sharp increase following the reminder email to carsharing users on 10 June 2025 is clearly visible.

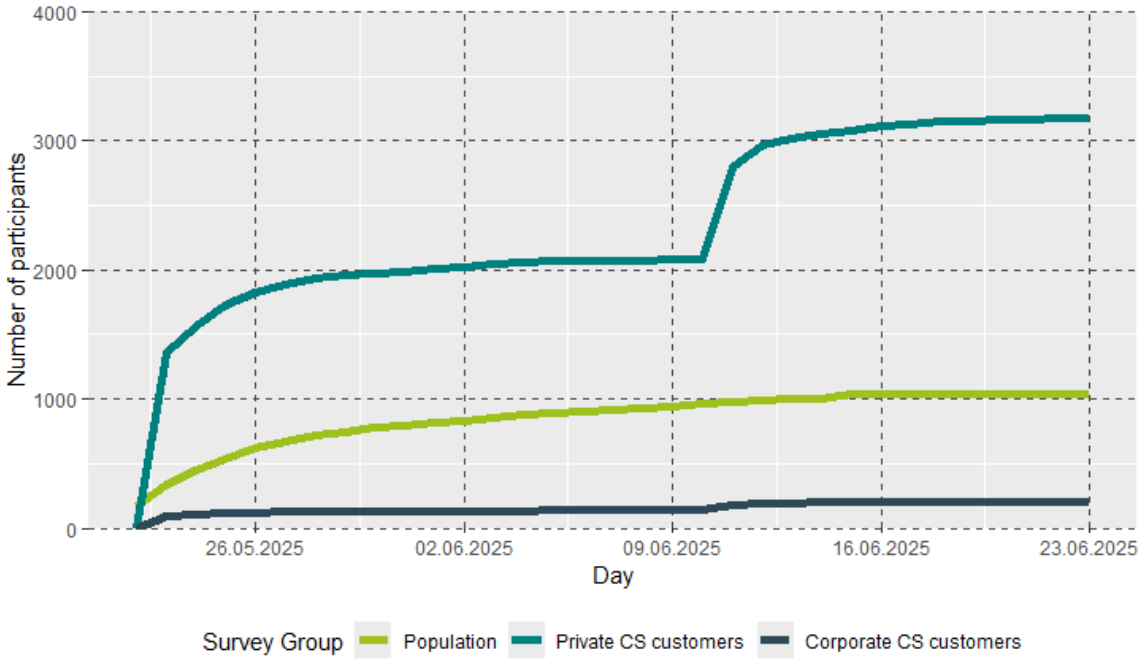

Figure 1: Survey participation over time

The average completion time for the population survey was 9.7 minutes. Private carsharing users took an average of 16.6 minutes and corporate customers 6.1 minutes.

4.4.2 Weighting of data

The proportions of socio-demographic groups realised in surveys (= actual structure) generally deviate from the actual proportions (= target structure). Although the marginal distributions from the sample taken from the resident registration office were already well represented in the sample taken in the population survey, typical biases (a slightly higher willingness to participate among men and older people) were observed. To align the distribution of the sample with the known population distribution, the data was weighted by age, gender and district.

As with many comparable surveys, it can be seen from surveys of carsharing users that willingness to participate in the survey correlates with the frequency of carsharing use. When conducting the study, the access links were sent out differentiated according to frequency of use categories, so that the survey link used could be used to identify the category to which the respondent belonged. The proportions of users by frequency of use category were provided by the participating carsharing provider. With the help of this information, the data from the user survey could be weighted to at least approximate the structure of the population.

4.5 Assignment of data to overarching questions

The available data sources were used as follows to answer the overarching questions:

- SrV data:
  - Determination of effects on vehicle stock
  - Determination of effects on mileage and use of transportation
  - Socio-economic background of carsharing usage
- Backend data from carsharing providers
  - Determination of ratios
  - Weighted projection of effects
- Data from the resident registration office and population survey, among others
  - Weighting of survey data from the population survey
  - Determination of awareness and use of services
  - Inhibiting and motivating factors for carsharing use
- User survey, among other things
  - Effects on corporate customers
  - Data basis for determining ratios
  - Determination of displacement effects
  - Evaluation of stations
  - Evaluation of other service features, including *smumo*

4.6 Calculation of ratios for car fleet

The traffic-reducing effect with regard to the car fleet is measured using ratios that compare the number of vehicles got rid of and avoided acquisitions with the number of vehicles used for the carsharing service being evaluated. Since the last evaluation of the carsharing service in Bremen in 2018, the German Car-Sharing Association (bcs) has developed an evaluation standard for calculating such ratios[3]. Since this differs in some calculation steps from the calculations performed for Bremen in 2018, but the calculations performed in this report should be comparable both to the results at that time and to other evaluations performed according to the bcs standard, the ratios are calculated both according to the calculation method used in 2018 and according to the bcs standard.

4.6.1 Significance of the ratios

The following terms have been established for the evaluation of carsharing services:

Reduction ratio: The number of vehicles currently in a household is measured. The number of vehicles available in the household twelve months prior to registering with a carsharing provider is used as a comparison value. Extrapolated to all registered users, the difference between the two values is used to calculate the total number of vehicles reduced, and this is compared to the number of carsharing vehicles in use. For example, if 1,000 vehicles are got rid of and the carsharing provider uses 100 vehicles, this results in a reduction ratio of 1:10.

Avoidance ratio: The number of vehicles currently in a household is measured. The hypothetical number of vehicles that would be available in the household if the carsharing provider(s) no longer existed is used as a comparison value. Extrapolated to all registered users, the difference between the two values is

[3] Bundesverband Carsharing e.V. "Measuring the traffic-reducing effect of car sharing"; https://www.carsharing.de/sites/default/files/download/2025-04/Evaluationsstandard%20Verkehrsentlastende%20Wirkung%20von%20Carsharing%20messen_2025_V1.2.1_0.pdf

used to calculate the number of vehicle acquisitions avoided, and this is compared to the number of carsharing vehicles in use. For example, if 1,000 vehicles acquisitions are avoided and the carsharing provider uses 100 vehicles, this results in a reduction ratio of 1:10.

Replacement ratio: The replacement ratio combines the reduction and avoidance ratios. In earlier studies, the number of vehicles got rid of and the avoided vehicle acquisitions were added together and compared to the number of vehicles used. In the bcs standard, however, the replacement ratio calculation takes into account whether a vehicle has already been "reduced", so that vehicles that were first reduced and then hypothetically reacquired are not included twice in the calculation. The replacement ratio therefore states that "per carsharing vehicle, X private cars were got rid of or not replaced in the participating households."

Table 2 lists the differences in the calculations of the ratios in the 2018 evaluation and the bcs standard developed in the meantime.

	2018 study	bcs standard
Data basis	Non-business users who have opted in to be contacted by email	Non-business users who have opted in to be contacted by email
Survey methodology	Online survey	Online survey
Calculation of reduction ratio	Difference in number of cars in household twelve months prior to registration compared to today	Difference in number of cars in household twelve months prior to registration compared to today
Calculation of avoidance ratio	Difference in number of cars in household today compared to hypothetical number without carsharing	Not reported
Calculation of replacement ratio	Sum of reduced and avoided numbers in relation to the number of vehicles used	Total of reduced vehicles and additionally avoided vehicles.
Weighting of data	Based on usage in the past twelve months (yes/no) from backend data	According to frequency of use in the past twelve months in five classes. Frequency of use through query or from backend data
Correction factor for business use	No correction of the number of vehicles used	Correction of the number of vehicles in use for the proportion of use periods attributable to company rates
Correction factor for multiple carsharing users in the household	Correction for the number of people in the household who use carsharing	No correction
Correction factor for share of carsharing in reduction/avoidance	Calculation in different scenarios depending on the proportion of carsharing attributed to reduction/avoidance	No correction

Table 2: Comparison of calculations from the 2018 study with the bcs standard

4.6.2 Comparison with ratios from the 2018 evaluation

The ratios were calculated in the same way as in 2018. First, the difference between the number of cars currently in the household and the number of cars twelve months before registration (reduction) was calculated, as well as the difference between the current number and the hypothetical number of vehicles in the household if carsharing were no longer available (avoidance). The number was then adjusted for the number of people in the household who use carsharing, as a car can only be eliminated once from the household, even if several people use carsharing.

Four variants were then calculated to derive the total number of cars taken off the road, depending on the proportion of carsharing involved in each case, as determined by a separate survey:

- *Unrestricted*: The number of vehicles is not restricted in terms of the proportion of vehicles got rid of as stated by the respondents.
- *Low*: Vehicles that were taken off the road are only counted if, according to the respondents, carsharing played a "very large" role.
- *Medium:* Vehicles that were taken off the road are only counted if, according to the respondents, carsharing played at least a "rather large" role.
- *High:* Vehicles that were got taken off the road are only counted if, according to the respondents, carsharing was at least "partly decisive" in the decision to do so.

The totals were calculated using the weighted data (see chapter 4.4.2) and then extrapolated to the total number of registered users reported by the carsharing provider.

In general, the number of vehicles taken off the road is therefore derived using the following formula:

$$N_{reduced\ cars} = \sum_{TN} \frac{N_{(reduction|share\ CS)}}{N_{carsharing\ members\ in\ household}} \times weight_{extrapolation}$$

The number of vehicles taken off the road is added up for each survey participant. Depending on the variant, a vehicle is only counted if carsharing has a corresponding share, i.e., in the "low" variant, only if carsharing has a very high share, and in the unrestricted variant for all vehicles mentioned. A similar approach was taken to determine the number of vehicle acquisitions avoided, whereby the estimated values of 100%, 80%, 60%, and 40% were used for the variants for the share of carsharing in purchase avoidance, as the corresponding additional question was not asked due to the length of the questionnaire.

4.6.3 Ratios according to the bcs standard

Ratios according to the bcs standard are calculated explicitly only for private users of the carsharing service. For this purpose, the useable vehicle fleet is also reduced mathematically by the proportion of use time booked by corporate customers (see section A.3 of the bcs evaluation standard).

For the current study, there are no corresponding values available for calculating the number of users adjusted for corporate customers or for the fleet size reduction based on corporate use. The results of the survey were used to estimate these figures. In this survey, around 6% of participants could be identified as corporate users. The number of private users was therefore reduced by 6% to 26,489 persons for the calculations of the ratios according to the bcs standard.

At the same time, corporate customers in the survey reported an average usage level that was almost twice as high as that of private users. The calculated number of vehicles was therefore reduced by 9% to 592.

The ratios are then calculated using these key data in accordance with the method defined in chapter A.7 of the evaluation standard version 1.2, which we summarise and reproduce here in essence:

Calculation of replacement ratio:

Formation of two groups:

All respondents (data sets) are sorted into two different groups:

- Group A contains all respondents who now own the same number of cars or more than before participating in carsharing.
- Group B contains all respondents who now own fewer cars than before participating in carsharing.

For group A:

Determination of the number of vehicle acquisitions avoided based on the difference between the hypothetical number of cars in the household without carsharing and the current number of cars in the household. If respondents in individual data records stated that without the carsharing offer(s) there would be fewer cars in the household than at the time of the survey (number of additional cars without carsharing < 0), the number of additional cars without carsharing is set to 0 for the present calculation.

For group B:

The calculation of avoided new acquisitions in group B is initially carried out in the same way as for group A. However, the number of cars already taken off the road is then deducted from the resulting value for each data record.

Merging and extrapolation:

The (weighted) values of both groups are added together. The quotient of registered private customers and the number of cases included in the calculation from the survey is then used to extrapolate the carsharing offer under investigation.

Calculation of the reduction ratio

The calculation of the number of cars eliminated is based on information about cars in the household twelve months prior to registration and the current number of cars. Similar to the replacement ratio, the weighted values are added together. The extrapolation is performed in the same way as for the replacement ratio, using the quotient of registered private customers and the number of cases included in the calculation from the survey.

5 Carsharing users and non-users: structure, attitudes, and behaviour

5.1 Target groups reached

The following statistical indicators refer to the socio-demographically weighted results of the representative survey. Unweighted detailed results for private carsharing customers follow in subchapter 5.2.

According to the representative survey, 18% of driving license holders in the city use cambio's station-based service, 4% also use *smumo*, cambio's free-floating service, and 1% use Flinkster[4].

The representative population survey reveals comparatively large differences in carsharing users by age cohort: while the **middle age groups** are **overrepresented**, those under 26 and especially those over 70 are underrepresented.

These two groups offer potential for attracting new customers in the future. Younger people – especially those who do not yet own a car – are likely to be more easily convinced of the advantages of carsharing.

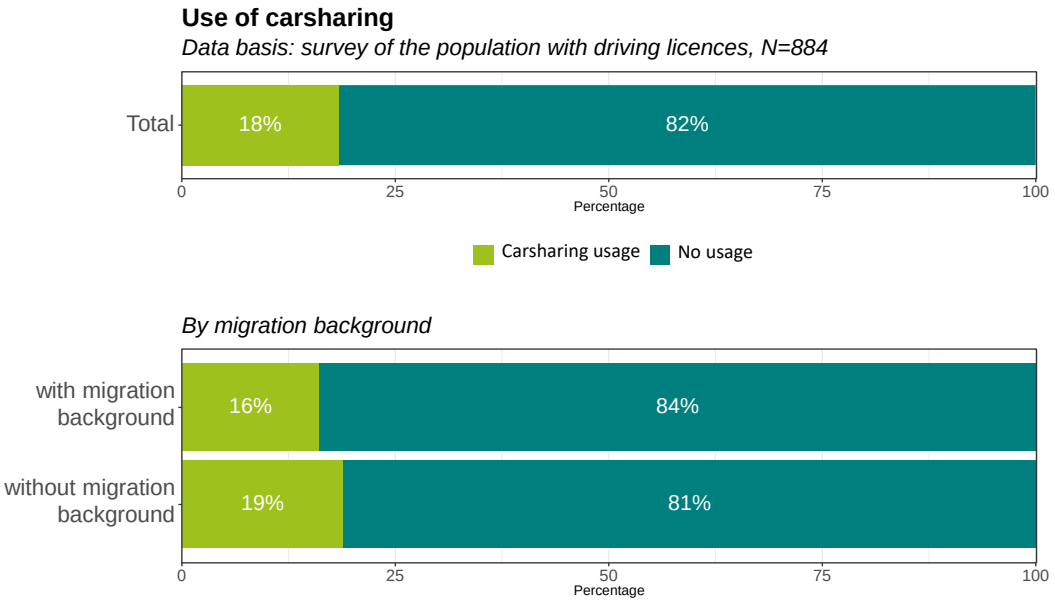

Figure 2: Carsharing use by age

The distribution of driving licence holders by gender is similar: **while 23% of men use carsharing in Bremen, this is only true for 13% of women**.

[4] In general, surveys often show higher percentages for carsharing usage than would be expected based on the actual number of registered users. This is also the case in the present study.

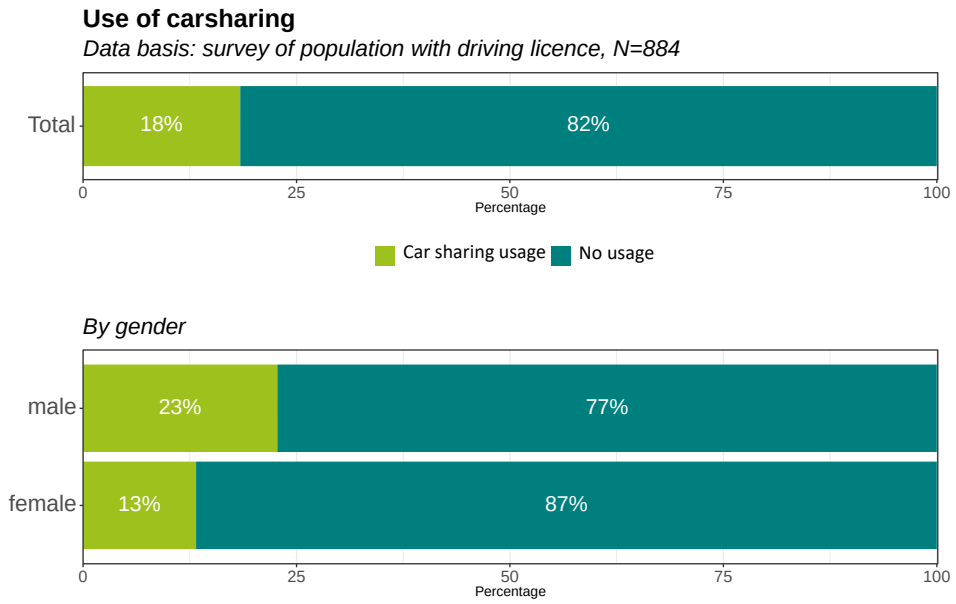

Figure 3: Carsharing use by gender

As has been established in many studies, there are clear differences between carsharing users and non-users in terms of **education levels**: while people without a school-leaving certificate or with a basic qualification are underrepresented among carsharing users, the service is used particularly by people with a college or university degree. **Around two-thirds of the users surveyed have an academic degree**.

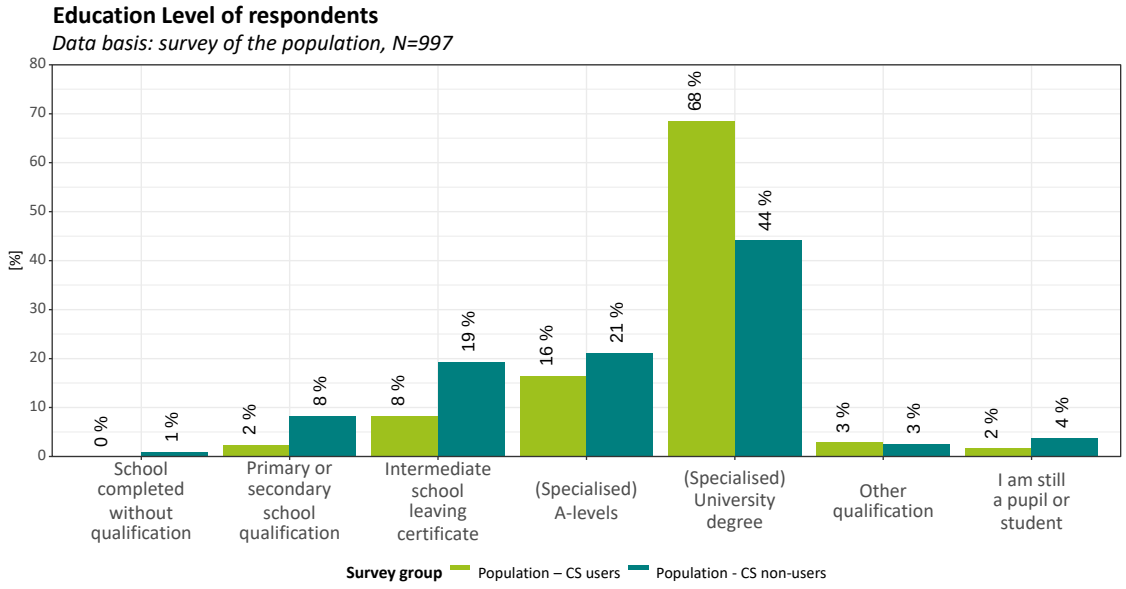

Figure 4: Education levels of respondents who are carsharing users and non-users

The clear differences in education levels are also reflected in a comparison of net household income. **Higher income groups predominate among carsharing users**.

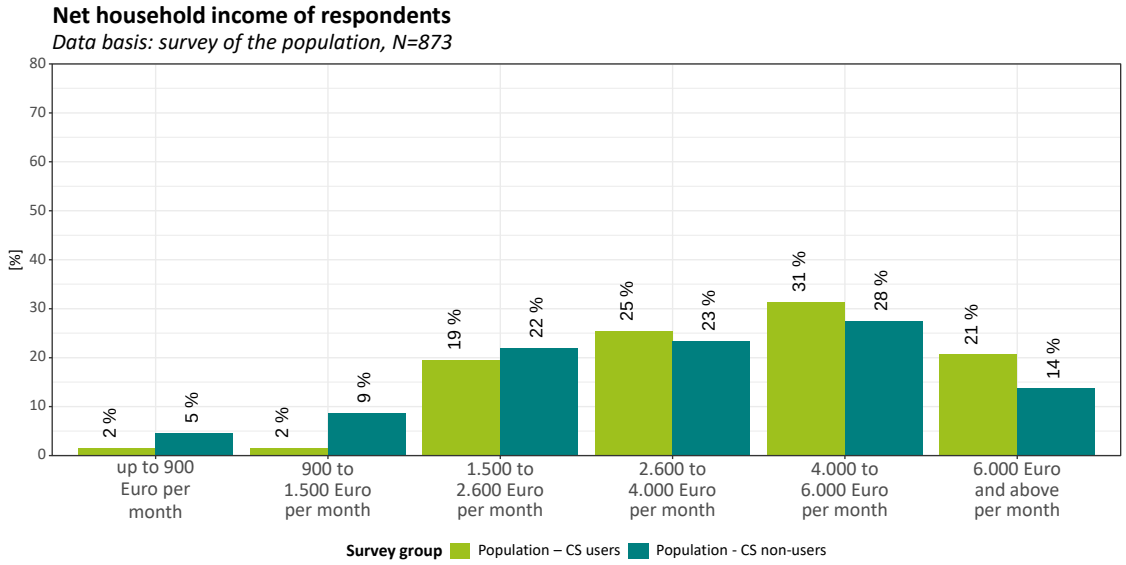

Figure 5: Net household income of respondents who are carsharing users and non-users

The fact that carsharing users mainly belong to the middle generations is also reflected in their employment status and professional position: while 44% of the total population is not employed, this applies to only 17% of carsharing customers in Bremen. **Two-thirds of carsharing members are salaried employees or civil servants**.

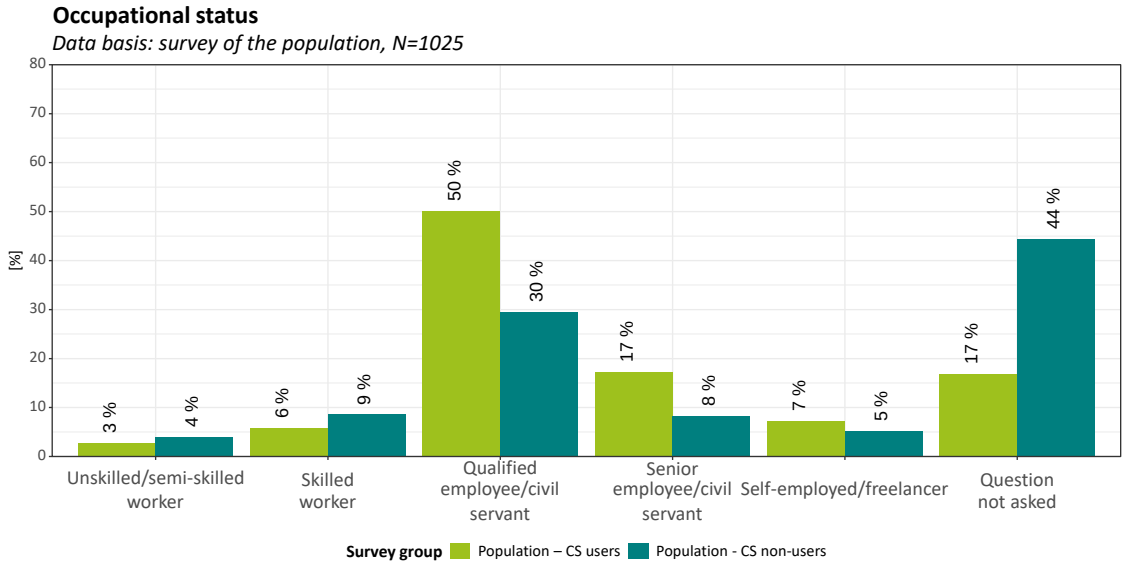

Figure 6: Occupational status of respondents who are carsharing users and non-users

Furthermore, 19% of driving licence holders with no migrant background and 16% of those with a migrant background use carsharing.

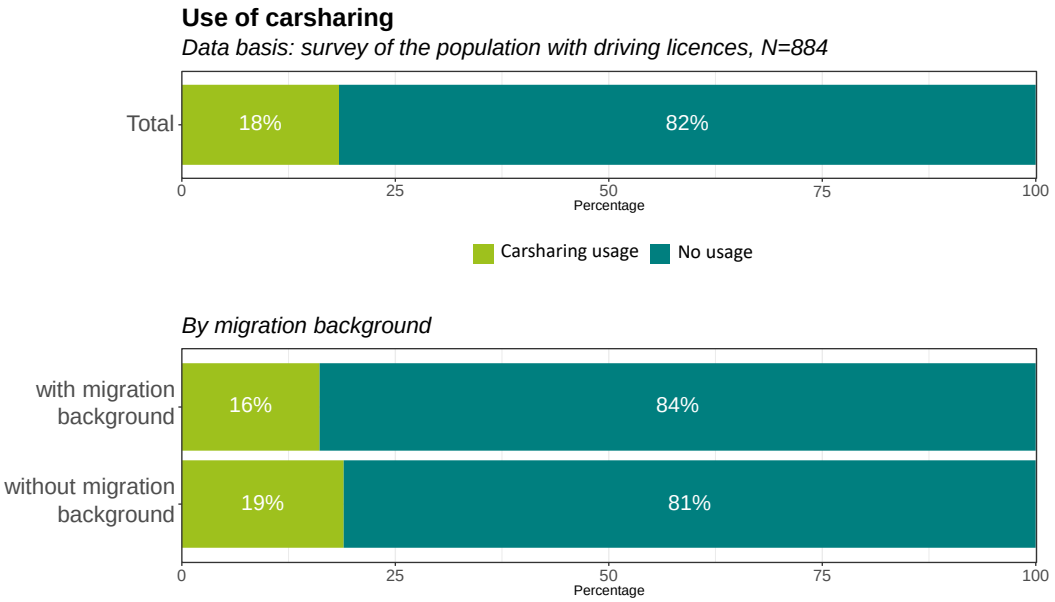

Figure 7: Carsharing use by migrant background

5.2 Membership structure

The following results in this subchapter refer to the results of the carsharing user survey (private customers) and serve primarily to deepen the findings of the previous subchapter. Strictly speaking, the results are not representative, as the population of carsharing users is not known in detail (due to the lack of statistical characteristics such as age and gender), the participation rates may contain distortions, and the data is not weighted for sociodemographic factors.

While approximately 12,500 people were registered with a carsharing service in Bremen at the time of the evaluation published in 2018, more than **28,000 registered customers** were reported for the present study. Their number has thus more than doubled since the last study was conducted.

The data collected from user surveys reflects this trend. Around one-third of the 3,176 carsharing members surveyed have been customers for more than eight years, while one in ten are new customers (less than one year).

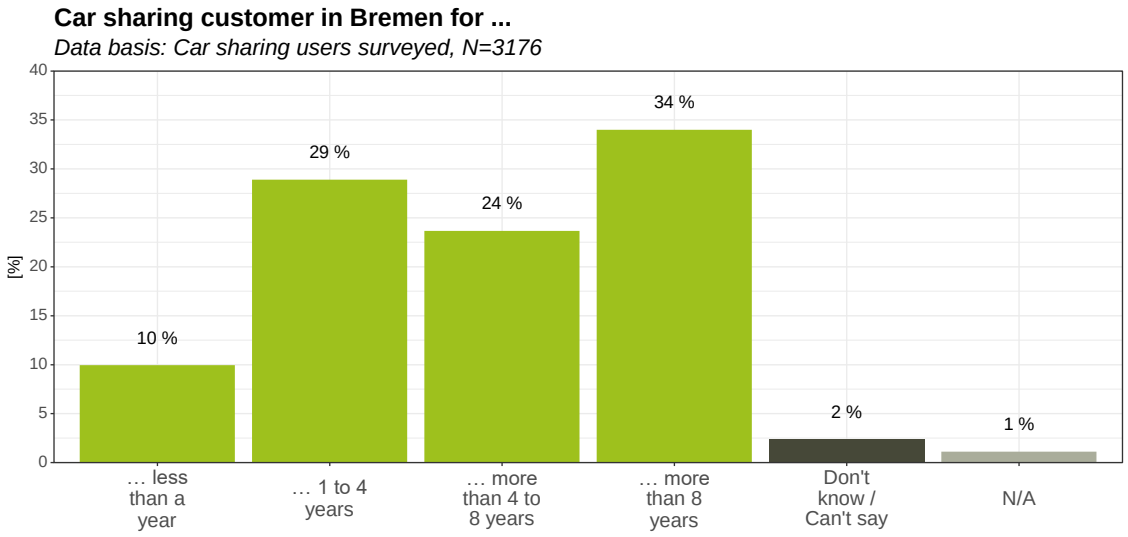

Figure 8: Length of carsharing membership

Most members belong to the middle age groups. The members differ in terms of **length of membership primarily in terms of age structure**: while 32% of new members are 35 or younger, this applies to only 3% of long-term members. Here, the over-50 age group predominates (74%). By comparison, only 41% of new members are over 50 years old.

Age structure
Data basis: Survey of carsharing users, N=3,176

	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
18 to 25	**3**	**11**	4	1	-
26 to 35	12	**21**	20	13	3
36 to 50	25	26	25	31	22
51 to 60	26	20	23	22	**32**
61 to 70	22	15	18	22	**28**
Over 70	11	6	9	11	**14**
No information provided	1	1	1	0	1

Table 3: Socio-demographics of carsharing members by length of membership

However, there has been little change in the **gender distribution of members.** The male surplus remains largely unchanged regardless of the length of membership.

Gender structure Data basis: Survey of carsharing users, N=3,176	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
Male	51	54	53	50	52
Female	46	42	43	48	46
Non-binary	0	1	1	0	0
No information provided	3	2	4	2	2

Table 4: Socio-demographics of carsharing members by length of membership

The proportion of members with **a migrant background** is gradually increasing: When broken down background, a disproportionately high number of new customers are found to have a migrant background. This suggests that carsharing is increasingly appealing to new target groups.

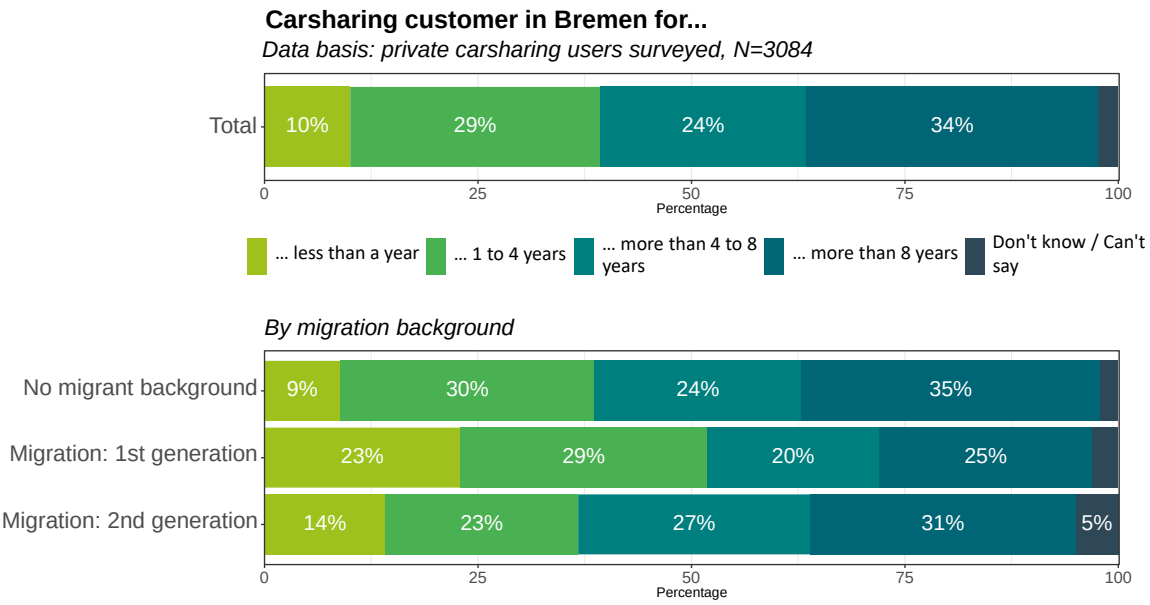

Figure 9: Length of membership by migrant background

Spatially, a comparison of the proportion of users in the surveys conducted with the proportion of the resident population in the individual districts according to official statistics shows that the **central districts of Neustadt, Östliche Vorstadt, and Schwachhausen** are **disproportionately** represented **among carsharing users**: While 8% of the total population lives in Neustadt, the proportion of Bremen's carsharing users there is 18%. Östliche Vorstadt is home to 5% of the city's residents, but 17% of its carsharing users. Schwachhausen is home to 7% of the population, but 15% of carsharing customers.

In contrast, the districts in the northern part of the city are significantly underrepresented.

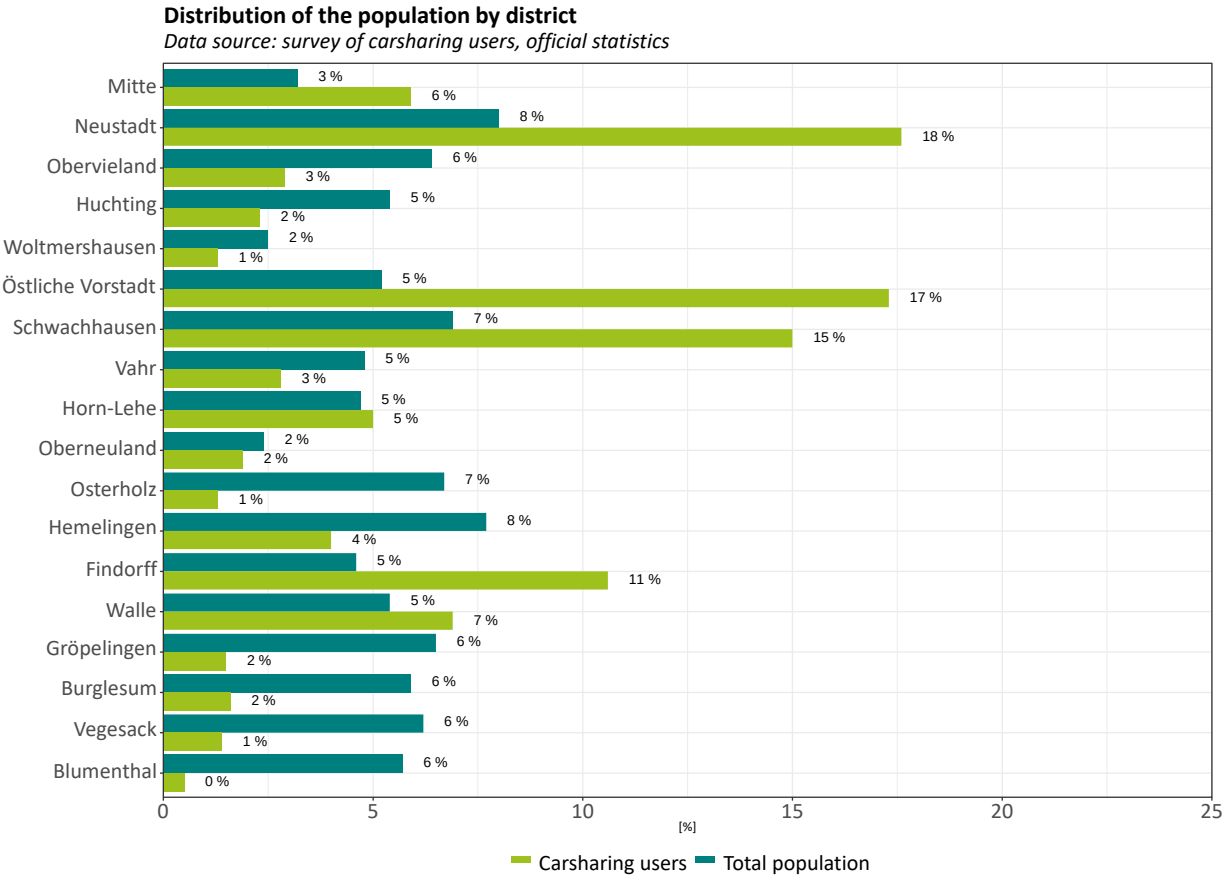

Figure 10: District comparison – percentage of Bremen's total population vs. percentage of carsharing users in Bremen

Carsharing in Bremen continues to be predominantly popular among the educated classes. However, with regard to economic status[5], the SrV data shows that carsharing is used more frequently in households with a "very low" economic status than in households with a "low" economic status. Thus, carsharing also gives households that presumably cannot afford their own car access to one.

[5] This is calculated in the SrV on the basis of the monthly net income of the household and the weighted household size according to the new OECD scale (see https://tu-dresden.de/bu/verkehr/ivs/srv/ressourcen/dateien/SrV2023_Methodenbericht.pdf?lang=de p. 17f).

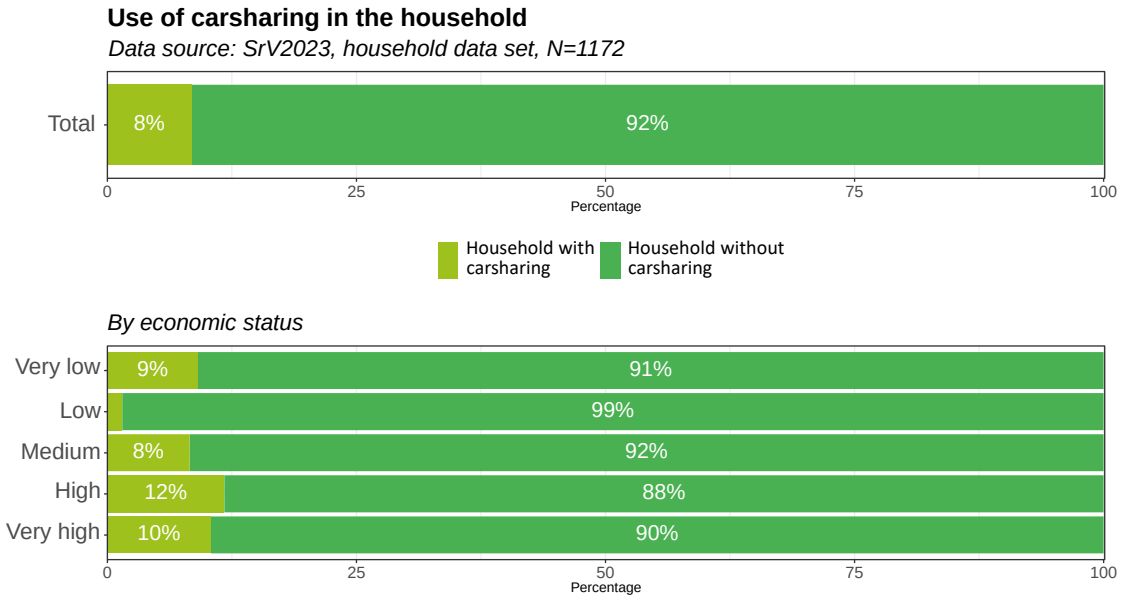

Figure 11: Household use of carsharing by economic status

5.3 Reasons for using carsharing

Due to the length of the questionnaire, individual questions were only shown to a randomly selected portion of the respondents in a so-called "split procedure." This included the question about the "decisive" reasons for using a carsharing vehicle.

The most frequently cited reason was the lack of or **lack of convenient access of the destination by public transport** (75%), followed by **the need to transport luggage** (73%) and the fact that **no private car** was **available** (71%). 52% cite the **spontaneous availability of the vehicle** as a reason for using a carsharing vehicle, 45% cite **convenience**, 45% cite **cost**, and 42% **cite multiple destinations to be visited in succession**.

Other reasons are cited less frequently. These include: unreliable rail transport (30%), travelling with other people (29%), and current weather conditions (20%).

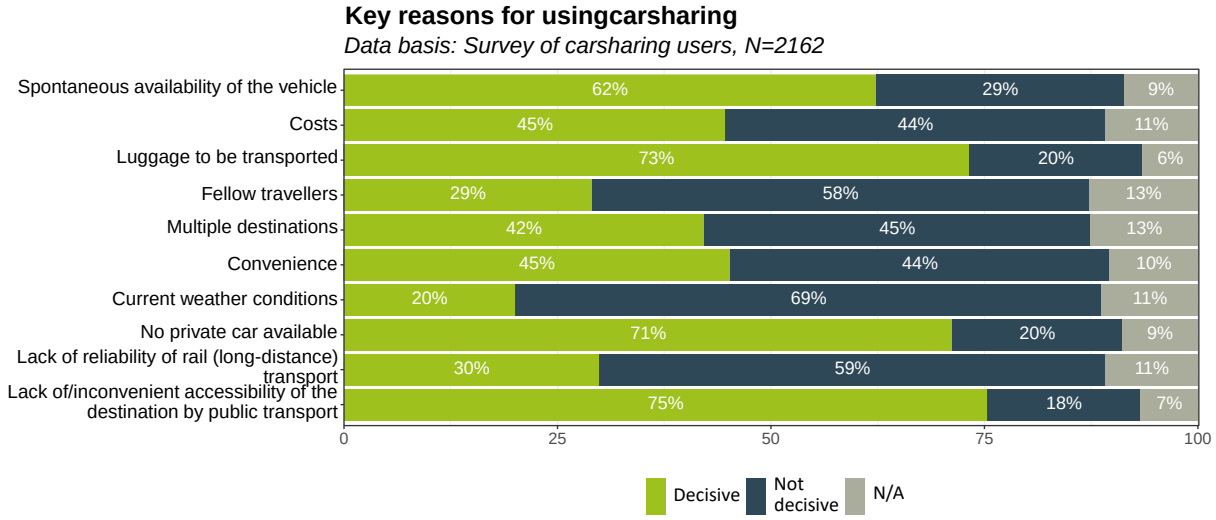

Figure 12: Key reasons for carsharing use

Sociodemographic characteristics: On average, women cite more reasons (5.3) than men (4.7). The most frequently cited reasons for using a carsharing car are the lack of convenient access to the destination by public transport (women: 84%, men: 69%), the current weather conditions (25%:16%), the lack of availability of a private car (75%:69%), the spontaneous availability of a vehicle (66%:59%), convenience (49%:43%), and the fact that the trips involve multiple destinations (45%:39%).

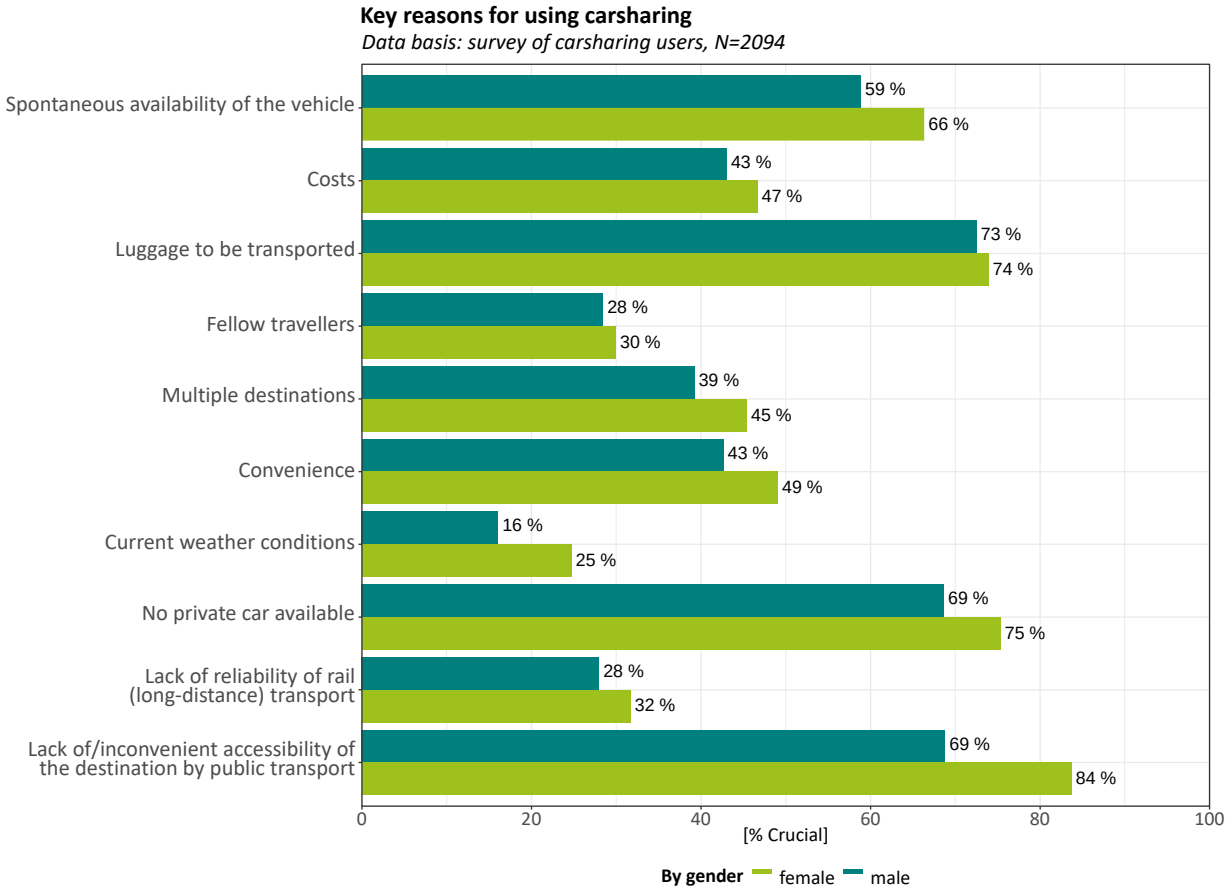

Figure 13: Key reasons for carsharing use by gender

Looking at the key reasons for carsharing use by member age, the following picture emerges: For younger users, the main reasons are luggage to be transported (under 35: 89%, 35-60 years: 77%, over 60 years: 62%), the fact that they do not have their own car (82%:73%:65%) and the (assumed lower) costs (58%:47%:37%) play a decisive role. Furthermore, younger people are almost twice as likely to cite travelling with other people as a reason (37%) than those over 60 (21%).

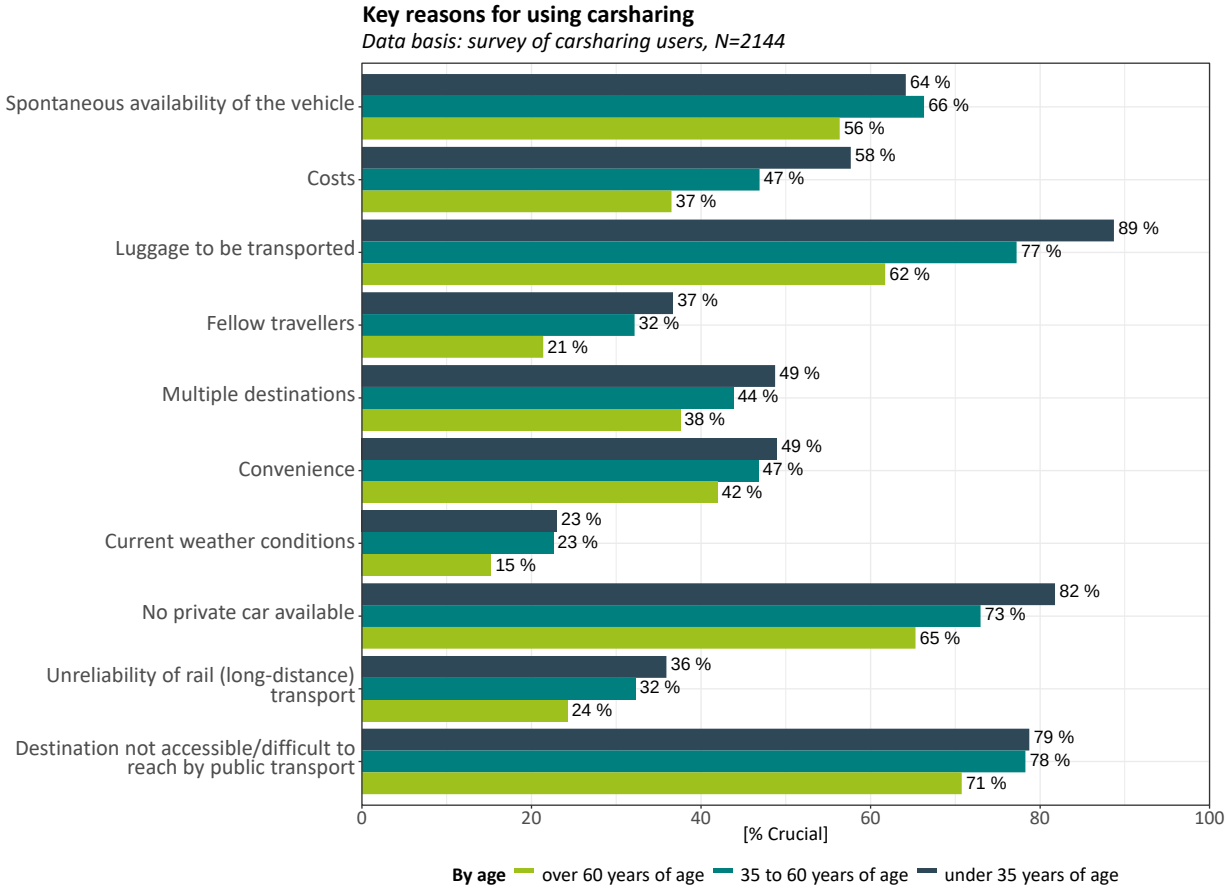

Figure 14: Key reasons for carsharing use by age

Additional finding: For 53% of new customers, but only 39% of long-term customers, cost is a decisive factor in their decision to use carsharing.

5.4 Motivations for initial registration

When asked, **"What was the reason/were the reasons for you to become a carsharing customer?"**, carsharing users responded as follows:

The most important reason for 59% was the realisation that **they did not own a car** but still needed one from time to time. For 49%**, climate and environmental protection reasons** played an important role, followed by the associated intentions of wanting to contribute to **the mobility transition** (45%) and **a live-able city** (44%). For 43%, the main deciding factor was being able to choose **the type of car that matched their needs at any time**, while for 42% it was the **elimination of expenses** associated with owning a car (repairs, inspections, tire changes).

This was followed at some distance by financial reasons (28%), the short-term solution to a car that was broken down or no longer roadworthy as an alternative to buying a new one (20%), and the expectation of always being able to drive a new and well-maintained car with carsharing (17%).

Less frequently cited reasons include not needing a second car (14%), lack of parking space (9%), and an inexpensive way to drive electric (7%). Other reasons were mentioned only very occasionally.

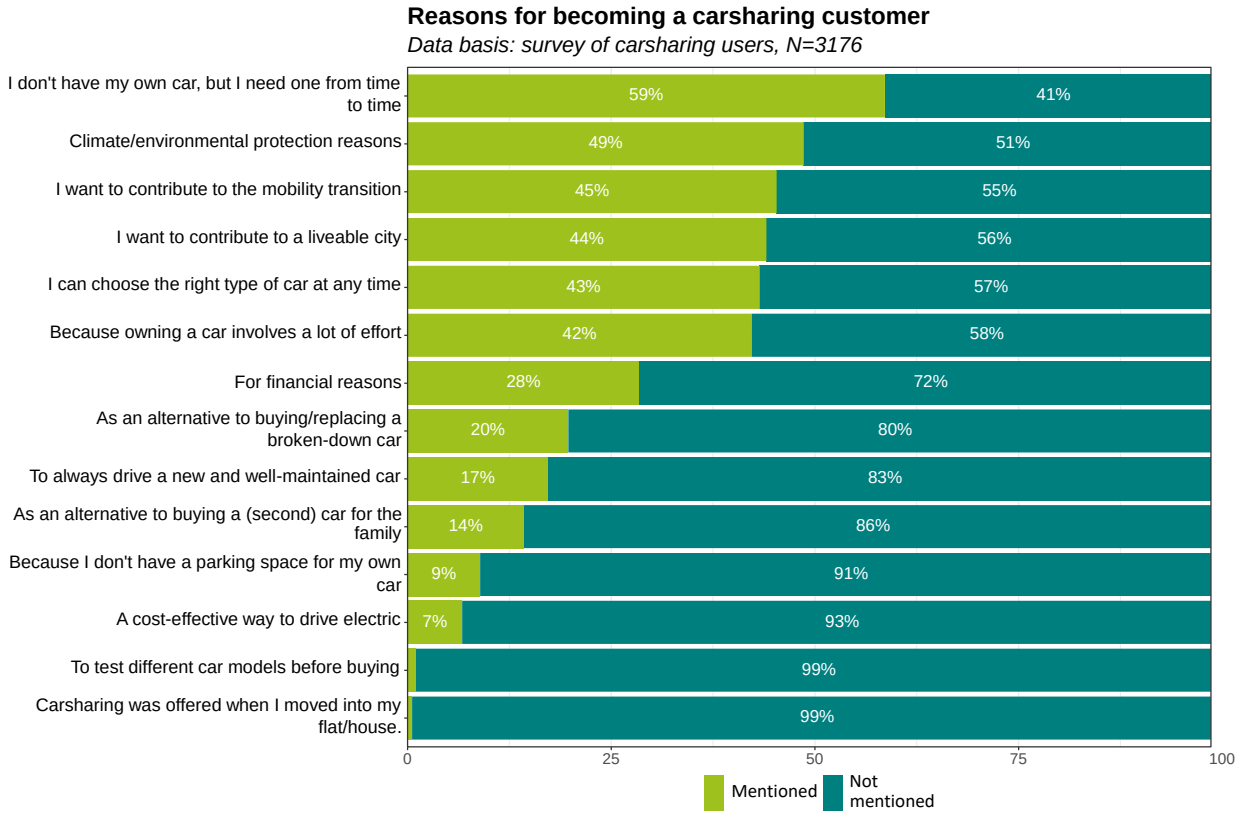

Figure 15: Reasons given by carsharing users for becoming a carsharing customer

For women, the fact that they do not own a car (62%) played a comparatively important role in their decision to use carsharing (men: 55%). Women also cite climate and environmental protection reasons (52%) more often than men (46%). On the other hand, the argument that carsharing allows you to choose the right type of car at any time was more prevalent among men (48%) than women (38%). This is also more important to customers without a migrant background than to customers with a migrant background.

Other notable findings: Carsharing customers without a migrant background cite climate and environmental protection reasons as well as contributions to the mobility transition and a liveable city as reasons more often than customers with a migrant background. For this target group, other aspects seem to be the motivating factors for using carsharing.

Looking at the reasons for membership according to the duration of membership, it is particularly striking that long-term customers (carsharing customers for more than eight years) mention climate and environmental protection comparatively often. Similarly, the longer the membership, the more likely people are to want to contribute to the mobility transition and a liveable city. However, practical reasons also play a greater role for long-term customers than for new members, including: being able to choose a suitable car type at any time, less effort than with a private car, and the possibility of always being able to drive a new and well-maintained vehicle. New customers, on the other hand, cite carsharing as an alternative to buying a new car as a relatively common reason for joining.

What was the reason/were the reasons why you became a customer? Data basis: survey of carsharing users, N=3,176	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
Climate/environmental protection	49	34	45	47	**57**
Contribution to the mobility transition	45	30	43	45	**53**
Contribution to a liveable city	44	34	39%	45	**52**
I can choose the right type of car at any time	43	28	40	42	**52**
Because owning a car involves a lot of effort	42	40	38	39	**49**
Always driving a new and well-maintained car	17	12	12	15	**25**
Alternative to buying a new car	20	**26**	18	21	20

Table 5: Motivation for initial carsharing registration by length of membership

5.5 Basic attitudes toward mobility

The majority of carsharing members are hardly more critical of cars than non-members. A comparison of basic attitudes toward different modes of transportation yielded the following results for the survey groups:

52% of carsharing members and 58% of non-members in the population survey agree completely or somewhat with the statement "I enjoy driving." The differences in attitudes toward other modes of transportation are greater. 85% of carsharers and 66% of non-car sharers agree with the statement "I enjoy cycling." 41% of carsharing members enjoy using public transport, but only 28% of non-members do. The results for "I enjoy walking" are largely consistent: 80% of carsharers and 74% of non-car sharers agree with this statement.

In other words, **both carsharing users and non-users prefer to walk or cycle**.

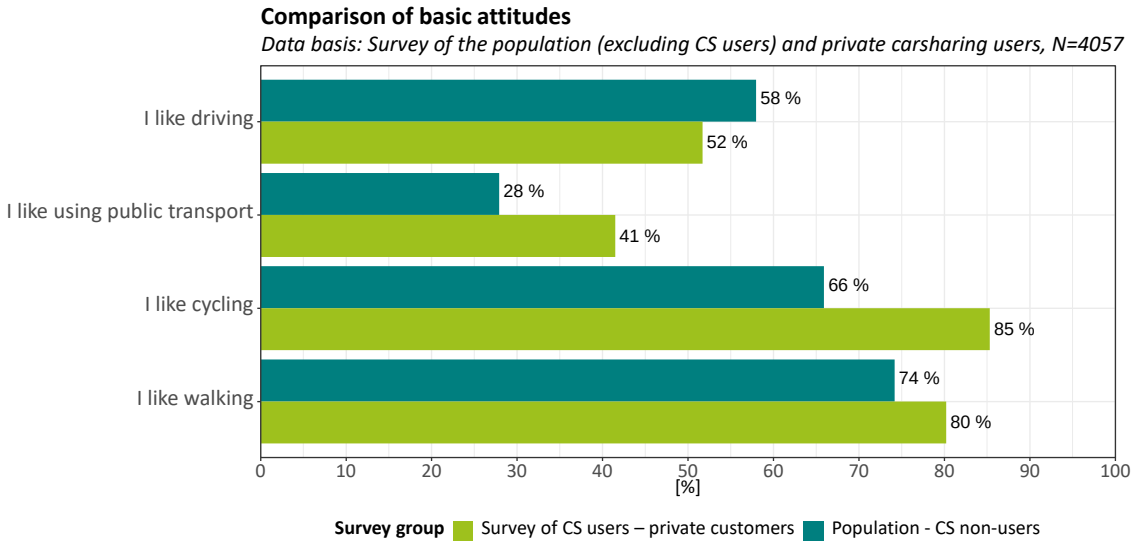

Figure 16: Comparison of basic mobility attitudes of carsharing users and non-users

When the length of membership is taken into account, shifts emerge within the group of carsharing members: while 65% of new customers agree with the statement that they like to drive, this is only true for 49% of long-term customers. Meanwhile, 89% of long-term customers and 77% of new customers like to ride their bikes. These shifts mean that the attitudes of the general population and carsharing members are becoming increasingly similar – which in turn is closely linked to the significant increase in carsharing membership numbers.

To what extent do you agree with the following statements? Data basis: survey of carsharing users, N=3,176, *excerpt: "Agree completely / tend to agree"*					
	Total	**Carsharing member for...**			
		< 1 year	***1-4 years***	**4-8 years**	**> 8 years**
I like driving	52	**65**	52	49	49
I like cycling	85	77	84	86	**89**

Table 6: Basic attitudes toward mobility according to length of membership

5.6 Awareness and evaluation of carsharing and barriers to use for non-users

The **carsharing service offered by cambio is widely known among the population of Bremen**: 85% of driving license holders are familiar with cambio, and a further 36% know about *smumo*, cambio's additional free-floating service. Flinkster is known to 11%, while Drivy, Snappcar, and Tamyca are each known to only 1%.

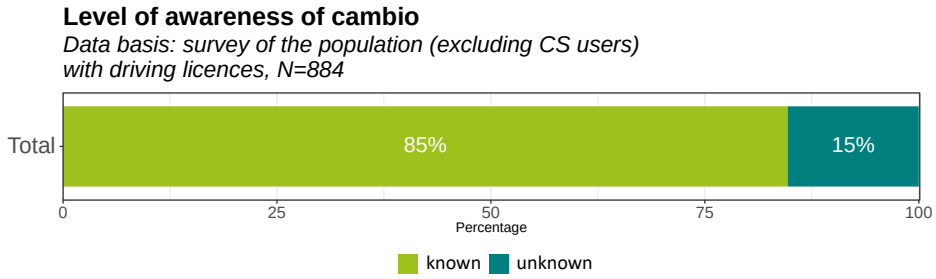

Figure 17: Level of awareness of cambio among non-users

Carsharing also has a predominantly positive image among (current) non-users in the population: **68% consider carsharing to be a good idea in principle** ("strongly agree": 44%, "somewhat agree": 24%), and 58% have already noticed a carsharing station in their neighbourhood. What's more, **30% of non-users can definitely see themselves using carsharing,** and 17% have even looked into carsharing options in their area. Another finding: **20% of non-users can definitely imagine giving up their own car.**

However, 59% also consider it "important to own a car." Other **obstacles** include the fact that 45% are unclear about the actual costs associated with carsharing, and 40% feel that carsharing is too inflexible because they have to commit to a schedule in advance. Other obstacles play a rather minor role: according to the survey, 25% of respondents' friends consider owning a car "a must," 23% find it difficult to use a "strange, unfamiliar car," 19% consider carsharing too expensive, 18% consider it too complicated, and 8% say there are no carsharing services available in their area.

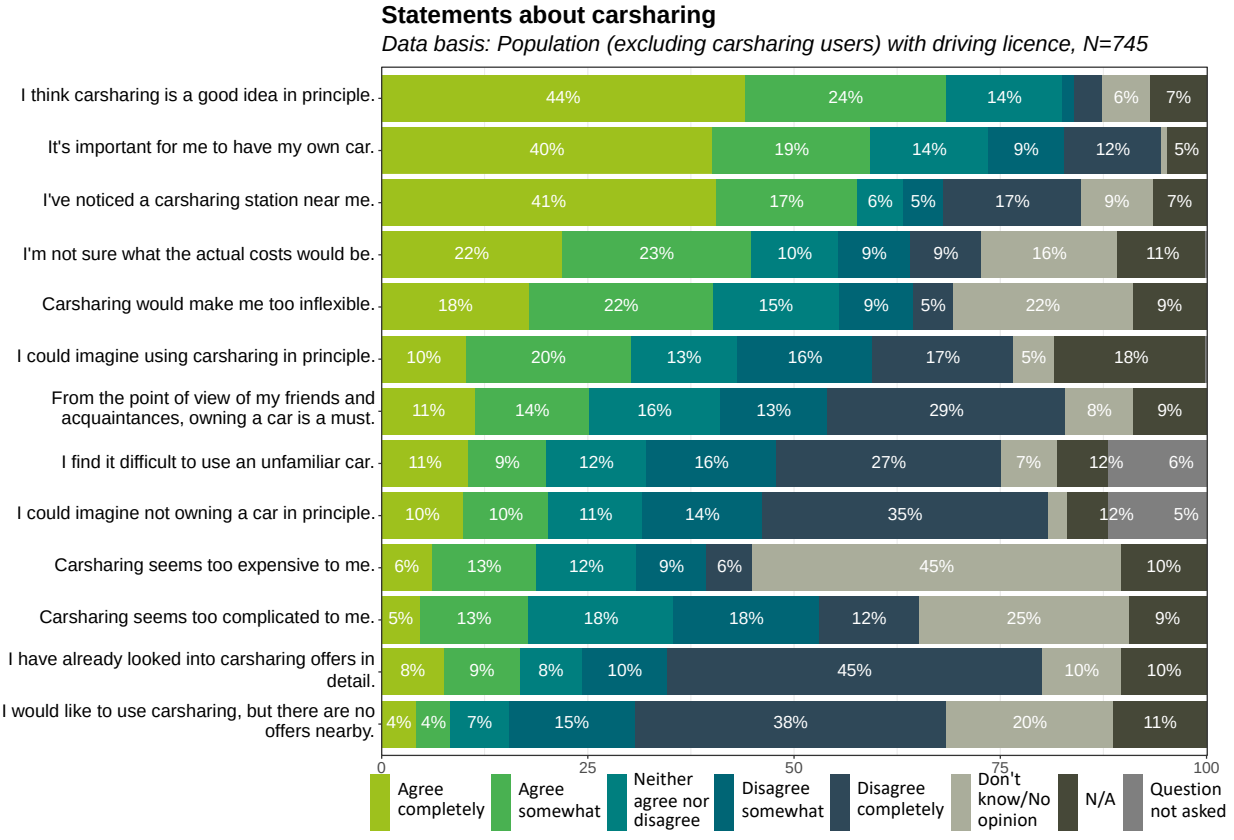

Figure 18: Statements about carsharing by non-users

Noteworthy: 62% of men and 75% of women view carsharing positively in principle. However, 64% of men but "only" 56% of women consider it important to own their own car.

The open-ended question (without suggested answers) about the **main obstacles** largely coincides with the findings of the closed questions (with suggested answers):

Most responses (N=89) refer to the fact that **there is no need for carsharing because people** have **their own car (in the household)**. However, only 15 respondents explicitly state that the car is mainly used for commuting to work. In about half of the cases, no specific reason for use is given. Apparently, the mere feeling of having a car available (at any time) offers a subjective sense of security – even if it is not used most of the time. According to the German Federal Environment Agency: "(...) a private car is only driven for an average of one hour per day. This means that the car stands unused for an average of 23 hours per day, taking up valuable space, especially in cities. (...)"[6].

Other barriers to carsharing include: the perception that the distance to the carsharing vehicle is too long and the perception that carsharing is too inflexible (30 mentions each), as well as the issue of cost (17 mentions).

"What is the biggest barrier to you using carsharing?" (Open question; 168 responses)	Frequency (N=)
No need, as I have my own vehicle, of which...	89
... hobbies & holidays, as well as other trips for excursions and visiting relatives, require car ownership	*16*
...necessary for commuting to work	*15*
…family requires car ownership	*10*
...necessary for business trips	*6*
…company car available	*3*
Distance too great for carsharing	30
Car sharing is too inflexible	30
Cost	17
Get around by walking, cycling and public transport	11
Convenience	6
Lack of information	6
Free-floating would be interesting	5
Not suitable for people with disabilities	4
Concern about high costs if they damage the car, get it dirty or have a collision	3
Access not customer-friendly	3
Vehicle selection too limited	2
I don't like driving	2

Table 7: Reasons for not using carsharing

At first glance, additional carsharing stations in Bremen would have a seemingly minor effect on activating non-users as potential carsharing customers: only 13% of non-users would "definitely" (3%) or "probably"

[6] Source: https://www.umweltbundesamt.de/themen/verkehr/nachhaltige-mobilitaet/carsharing#umweltvorteile-von-carsharing

(10%) use carsharing in the future in this scenario. However, if this figure is extrapolated to the population of Bremen aged 18 and over, between 15,000 and 60,000 additional carsharing users could be gained. This could exceed the already significant growth in the period from 2017 to 2025. It can therefore be concluded that further intensive expansion and densification of the existing offer would be conducive to the continued growth of carsharing in Bremen.

The effect would be smaller if there were different providers at the existing carsharing stations in Bremen ("definitely": 3%, "probably yes": 6%).

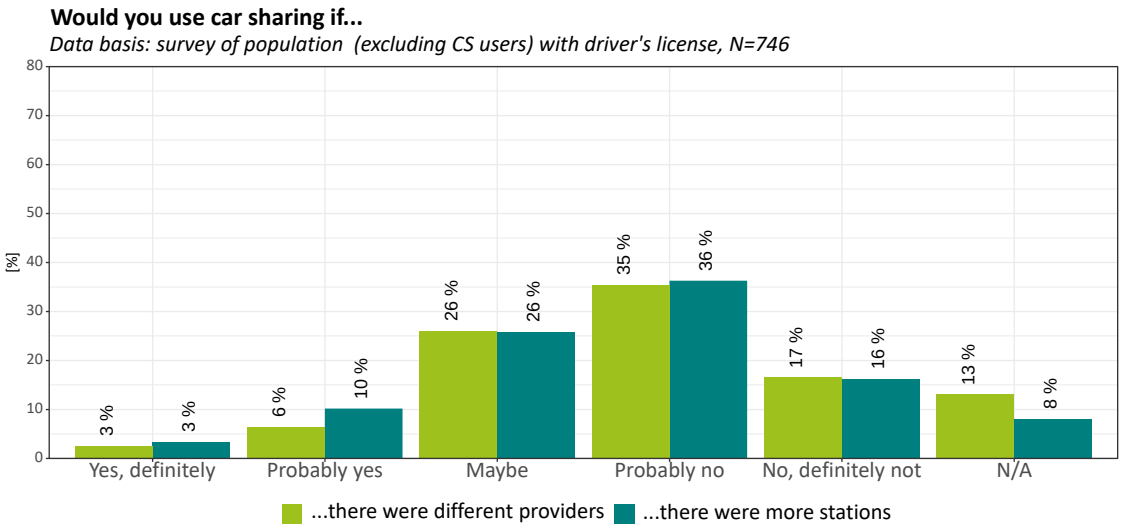

Figure 19: Self-assessment of the chances of a change of opinion about carsharing by non-users

5.7 *mobil.punkte*: Awareness and evaluation among the population

In the general population, 9% of driving licence holders say they have already used *mobil.punkte*, another 35% have at least noticed them, but half (51%) are not familiar with these stations. It is striking that younger people in particular are not familiar with *mobil.punkte* (66%).

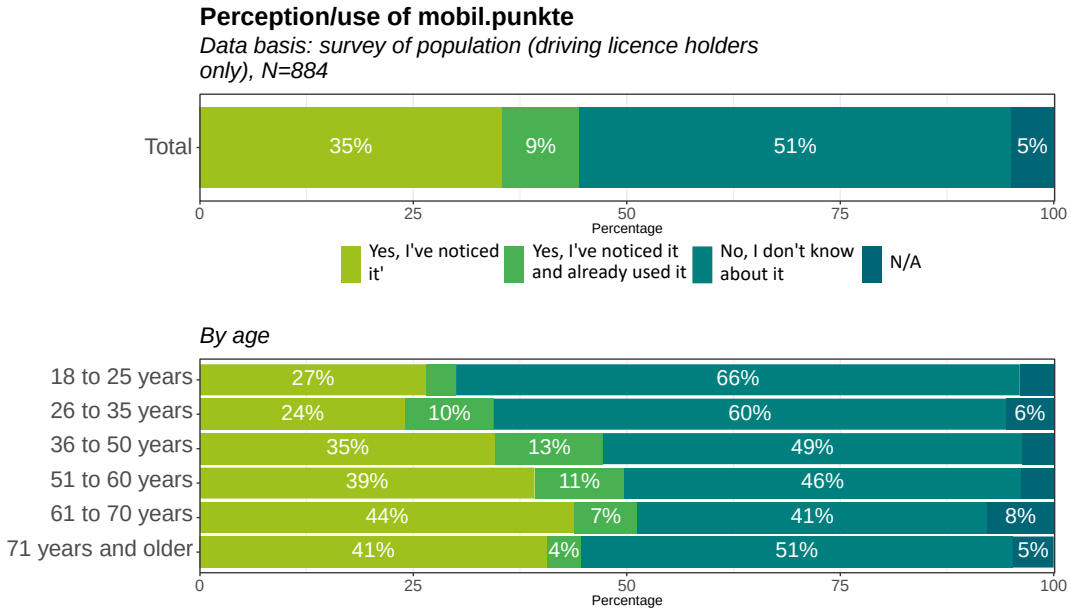

Figure 20: Awareness/use of *mobil.punkte*

Those who have at least noticed *mobil.punkt* stations rate the concept positively (57%), with only 3% expressing the opposite view. However, four out of ten respondents are unable or unwilling to answer the question.

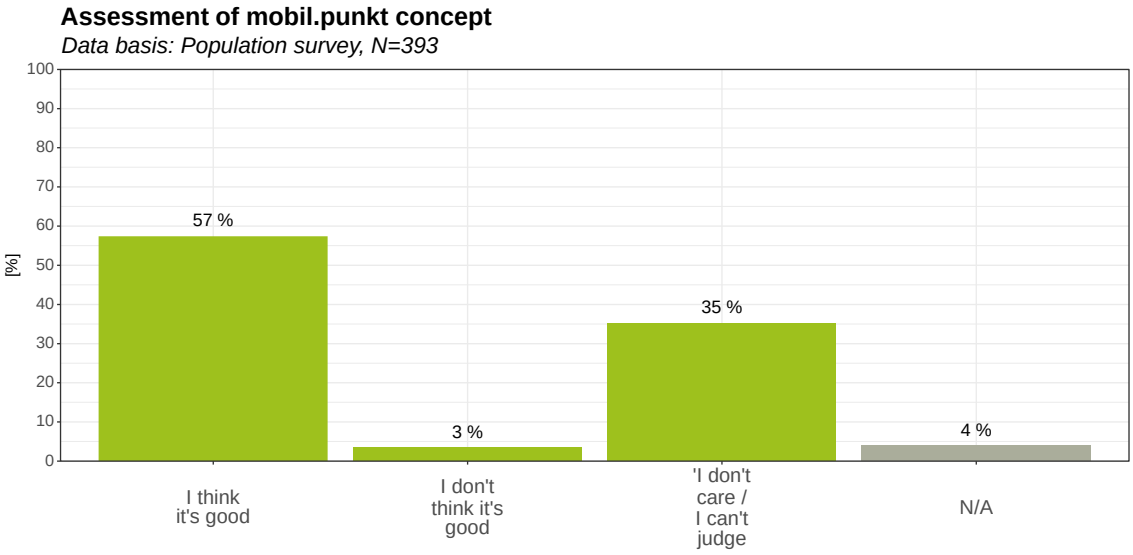

Figure 21: Assessment of the *mobil.punkt* concept (population survey)

5.8 Shopping behaviour

Differences between carsharing members and non-members are evident not only in mobility behaviour, but also in **shopping behaviour**, **at least in some areas**: Two-thirds of carsharing users surveyed, but only about half of non-carsharers in the general population, say they shop at least once a week at **retailers "nearby."**

25% of carsharing members also shop at weekly **markets**, but only 17% of non-members do so. On the other hand, non-members visit **larger shopping centres** at least once a week (15%) more often than carsharing members (11%).

No differences in shopping behaviour were found for nearby supermarkets, online orders, local delivery services, and visits to hardware stores, garden centres, and furniture stores.

The differences between carsharing members and non-users were more pronounced in the 2018 study than they are today; a levelling off has taken place. On the one hand, this is likely due to changes in shopping behaviour as a result of the coronavirus pandemic. Above all, however, it is due to the significant increase in carsharing membership numbers. While carsharing was still more of a "niche product" in 2018, despite having a considerable number of customers (12,500 members) at that time, this is definitely no longer the case with currently around 28,000 members. **Carsharing in Bremen is on its way to becoming part of "mainstream society"**.

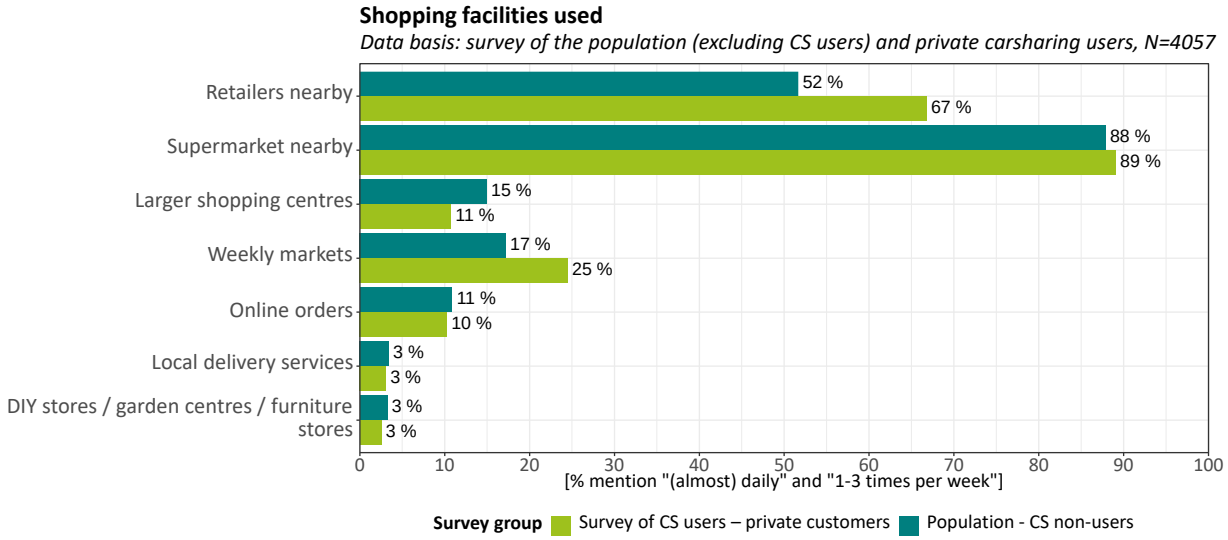

Figure 22: Shopping behaviour of carsharing users and non-users

6 Evaluation of carsharing services by private customers

6.1 General importance of carsharing for users

Due to the length of the questionnaire, only some of the carsharing members surveyed received the question block "general statements on the topic of carsharing" via a questionnaire split, in order to rate them on a scale of agreement from "strongly agree" to "strongly disagree." Carsharing members are almost unanimous in their **belief** that it is an **advantage not to have to worry about vehicle maintenance**: 91% "strongly agree" or "somewhat agree" with this statement. Almost as many (86%) share the view that another important advantage is that there are **no additional costs for repairs, maintenance, taxes and insurance –** including more women (90%) than men (82%) – and 65% feel **freer in their choice of transport mode**.

37% report **lower mobility expenses through carsharing**, and one in four people in carsharing households with a car say they now use one of the cars in their household less often – slightly more men (27%) than women (21%).

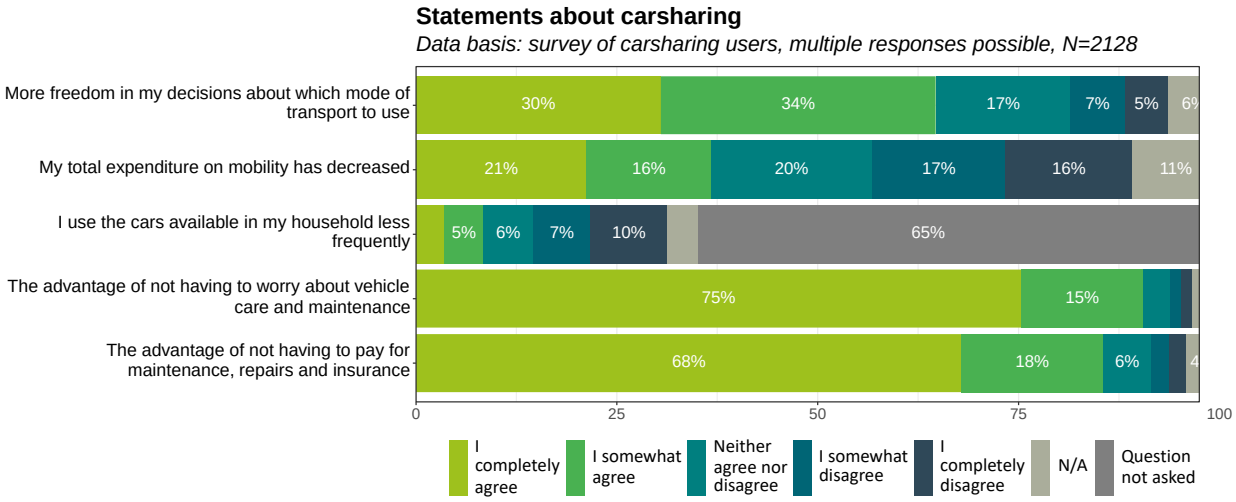

Figure 23: Statements on carsharing

6.2 What would discontinuing the service mean?

If the provider with which they are registered were to discontinue its service, two-thirds of carsharing members would **lose** an **important means of transportation** ("strongly agree/agree"). For 58%, this would mean a **loss of quality of life,** and 46% would **no longer** be able **to reach destinations and places that are important** to them – with women (52%) significantly more likely to be affected than men (41%).

If this scenario were to occur, 28% would probably use **public transport more often** and 27% would consider **buying their own car**. One in three said they would no longer be able to make certain journeys.

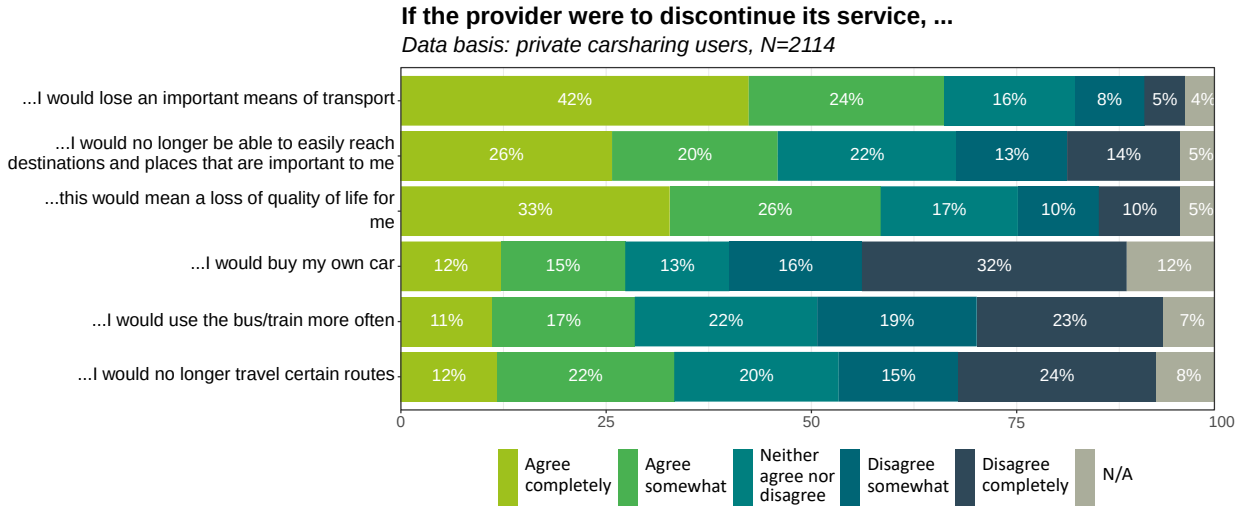

Figure 24: Statements of reaction to a possible discontinuation of the carsharing service

Long-term members in particular would lament the loss of an important means of transport (75%). Of the new members, 40% would consider buying a car.

If the provider were to discontinue its service...
Data basis: survey of carsharing users, N=2,115 (questionnaire split), *excerpt: "Agree completely / somewhat agree"*

	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
...would mean losing an important means of transportation for me	66	66	60	62	**75**
...I would buy my own car	27	**40**	26	29	24

Table 8: Reactions to offer discontinuation by length of membership

6.3 Potential reactions to changes in the service provided

Due to the length of the questionnaire, some of the carsharing members surveyed were presented with various scenarios via a questionnaire split and asked whether these would have an impact on their personal carsharing behaviour.

It should be noted that planned behaviour cannot be translated 1:1 into actual behaviour or changes in use. In reality, "inertia" is much greater, and changes occur much less frequently than claimed. Nevertheless, the following results should be taken into account for future planning, as they signal **risks of both growth and loss**.

In most scenarios, the potential positive or negative changes are minor, but there are exceptions: if there were "more carsharing stations in Bremen," on balance, there would be a 29-percentage point jump in those using the service “very much” or “somewhat”. Assuming a joint mobility app for carsharing and other modes of transport (e.g., public transport, bikesharing, e-scooters, taxis), the net balance is +21 percentage points. However, the survey did not differentiate between types of use of an app (information

or booking or both). Minor effects would also be expected if there were more carsharing providers available throughout the city (+8 percentage points) and if more vehicles were electric (+7 percentage points).

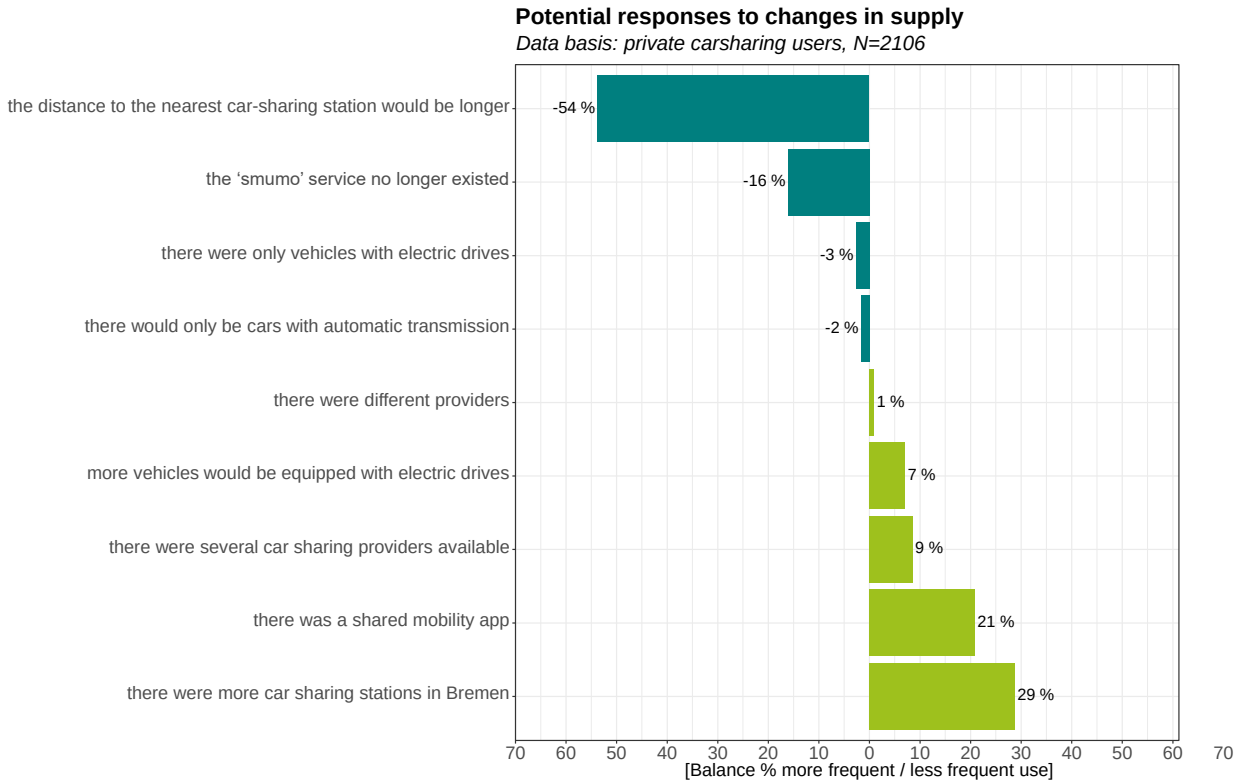

Figure 25: Potential reactions to changes in carsharing service provided

However, there are also scenarios that would have predominantly negative effects: **if the distance to the nearest carsharing station were longer, the users surveyed would use carsharing 54% less often on balance**. If *smumo,* the free-floating service offered by cambio, were no longer available, this would have a total effect of -16%.

An increase in carsharing stations would have a positive impact, especially among the under-35 age group (net balance: +43 points), while the impact would be smaller among the over-60s (+18 points). The impact of introducing a joint mobility app for carsharing and other modes of transport would be similar (under 35s: +34 percentage points, over 60s: +15 percentage points), an increase in the number of electric vehicles (under 35s: +20 percentage points, over 60s: -1 percentage point) or an increase in the number of carsharing providers available (under 35s: +17 percentage points, over 60s: +4 percentage points).

On the negative side, the discontinuation of *smumo* would lead to a behavioural reaction among younger people (-30 percentage points), less so among older people (-11 percentage points).

6.4 Connection between carsharing and car ownership

On average, the households of **carsharing members** owned **0.7 cars 12 months before registering with the carsharing provider. After registration, this figure fell to the current 0.4**. The proportion of "car-free" households rose from 40% to 64%, with a total of 34% of households reducing their car ownership.

In the **hypothetical case that carsharing no longer existed in Bremen**, this would have a massive impact on those affected and on the number of cars in the city: the proportion of car-free households of carsharing members would halve from 64% to 32%. While only 35% of households of carsharing members currently own one or more cars, this would rise to 56%. **As a result, average car ownership would double from 0.4 cars to 0.8 cars per household, corresponding to an increase of around 11,800 vehicles.**

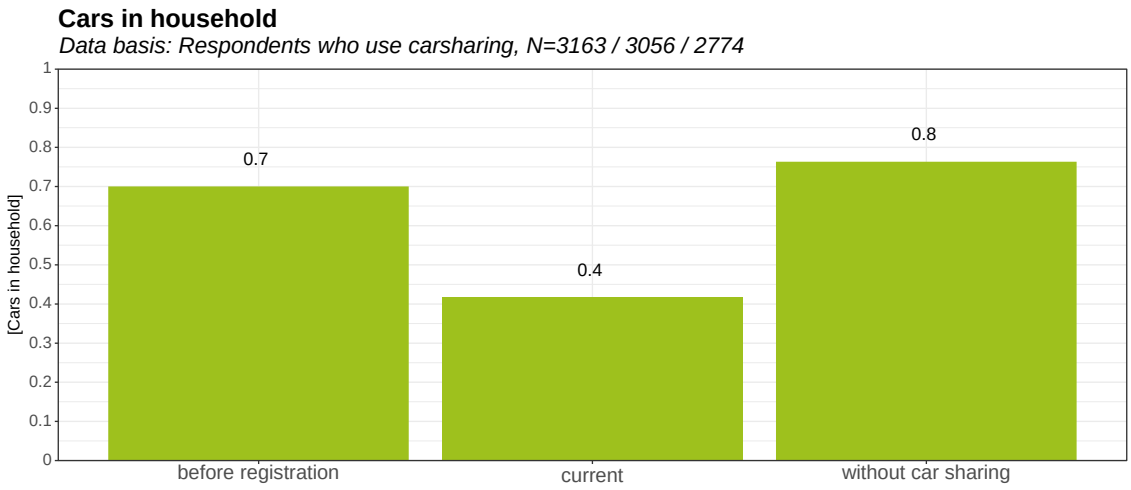

Figure 26: Cars in household at different points in time

When asked what **proportion of this change** was due to **the use of carsharing**, 40% of households that currently have fewer cars available than they had 12 months before registration selected the answer "very large." A further 19% estimated the proportion to be "rather large," and another 19% estimated it to be "partly decisive." Only 8% estimated the proportion to be "rather small" and 10% estimated it to be "very small." Carsharing therefore plays a significant role for the majority of respondents in their decision to live without their own car or it even makes it possible.

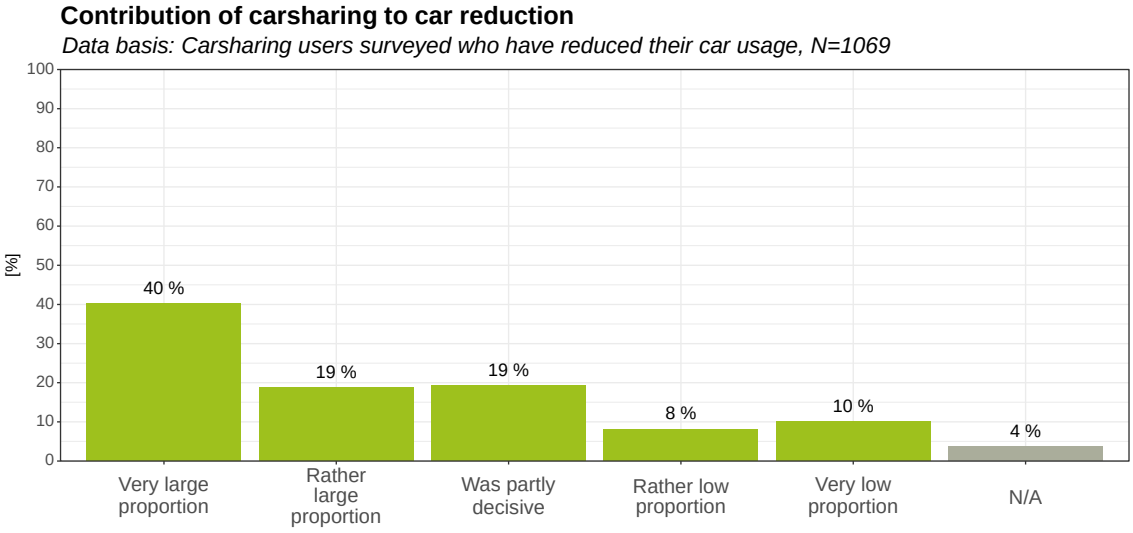

Figure 27: Contribution of carsharing to car reduction

It is striking that long-term customers were significantly more likely to say that registration had played a "very large part" in the change (50%) than customers who had been members for a year or less (26%). For the group of new customers, the use of carsharing was more often "partly decisive."

You stated that there are fewer cars available in your household today than 12 months before you registered for carsharing. How much did the use of carsharing contribute to this change? Data basis: Survey of carsharing users with reduced vehicle ownership, N=1,069	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
Very large share	40	26	32	41	**50**
Rather large proportion	19	14	21	21	18
Was decisive	19	**28**	23	19	15
Rather low proportion	8	8	10	7	7
Very low proportion	10	19	11	9	8
No information provided	4	5	3	4	3

Table 9 : Effects of carsharing on car ownership by length of membership

76% of carsharing users who no longer own a car say they now **do these journeys by bike, 65% use public transport more often, 45% use carsharing, and 34% now walk more often**. 9% use another car from their household instead of the car they got rid of, 5% stated that they no longer make the journey, and 3% mentioned other means of transport.

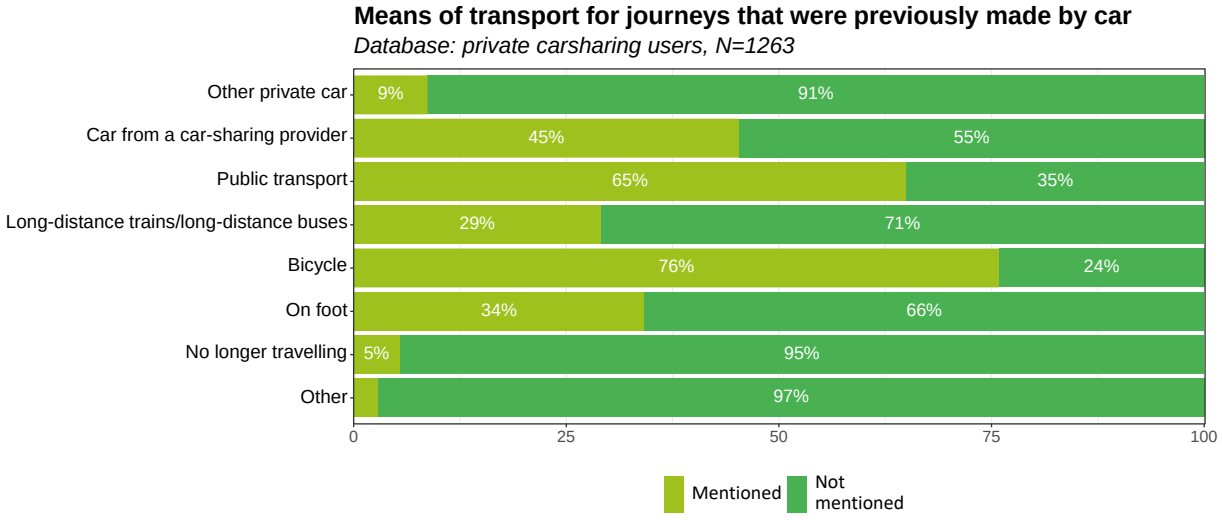

Figure 28: Means of transport used for journeys previously made using a car that is no longer in the household

6.5 Overall satisfaction with the service in Bremen

Overall satisfaction with the carsharing service is high among carsharing members: 93% are "very satisfied" (56%) or "somewhat satisfied" (37%). Only 4% are "less satisfied" and 1% are "very dissatisfied."

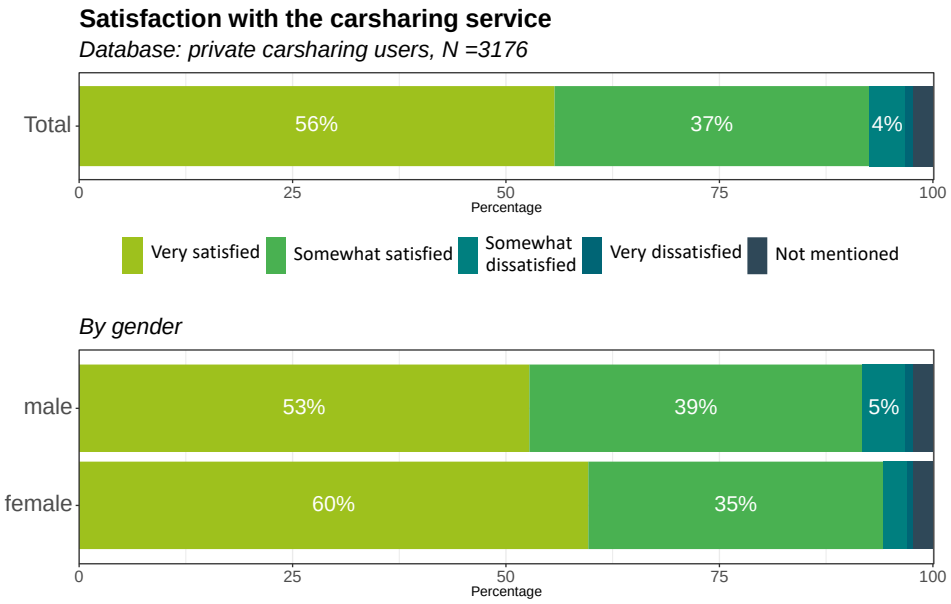

Figure 29: Satisfaction with carsharing service by gender

It is striking that 60% of women are completely satisfied with the service (men: 53%). While only 45% of those under 36 (men and women combined) are "very satisfied" with the carsharing service, 51% of those aged 36 to 60 are “very satisfied” and among those over 60, the figure is 68%.

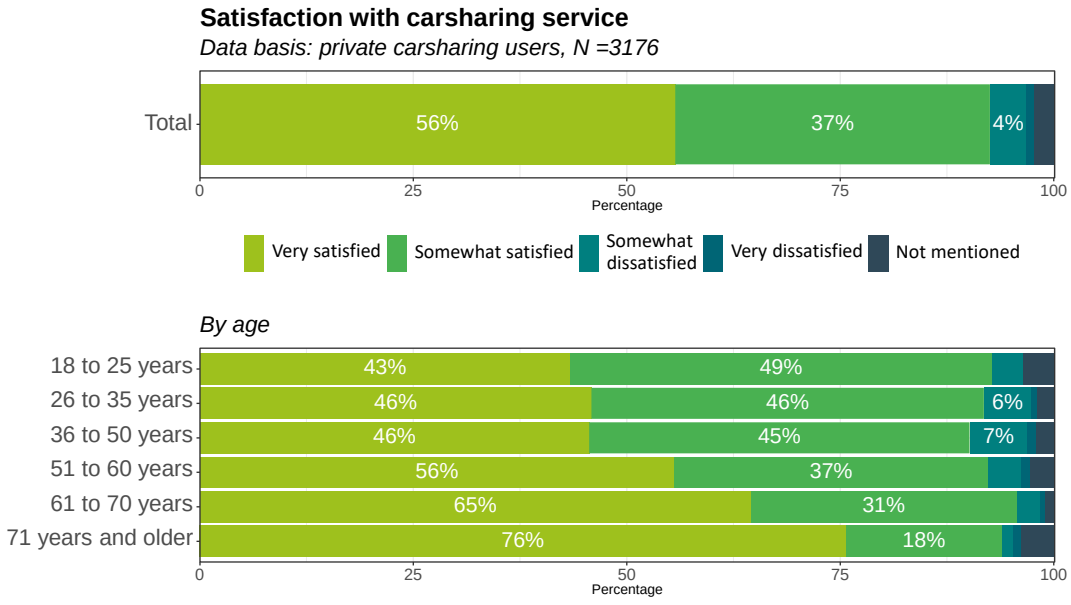

Figure 30: Satisfaction with carsharing service by age

Another interesting finding is that 44% of carsharing users with a migrant background are completely satisfied, compared to 58% of those without a migrant background.

Long-term members in particular are completely satisfied (65%) with the carsharing service overall, while new members are comparatively often "somewhat satisfied."

How satisfied are you overall with the carsharing service in Bremen? Data basis: survey of carsharing users, N=3,176	Total	Carsharing member for...			
		< 1 year	*1-4 years*	4-8 years	> 8 years
Very satisfied	56	47	48	55	**65**
Somewhat satisfied	37	40	44	37	30
Somewhat dissatisfied	4	6	4	5	3
Very dissatisfied	1	1	1	1	1
No information provided	2	6	3	2	1

Table 10: Overall satisfaction with the carshare offer in Bremen by length of membership

6.6 Importance of, and satisfaction with, service features

Similar to 2018, **the importance of the aspects** of the carsharing service used can be summarised in three categories: **Of crucial importance** (i.e. "very important" for more than half of carsharing users) are **uncomplicated booking** (73%), **availability of vehicles at the desired time** (54%), **fixed parking spaces at a carsharing station** (53%), **simple, self-explanatory operation of the vehicles** (52%), and **short distances to the nearest station** (51%).

Criteria of **medium relevance** ("very important" for more than a quarter of users) are: 24/7 telephone availability of the provider (41%), feeling of safety at carsharing stations (even in the evening hours) (36%), easy parking at the station (36%), the availability of vans (25%), wide selection of models (25%), clearly visible parking spaces in public space (24%), and open-ended booking options (23%).

All other aspects surveyed are of **lower importance**. These include: access to vehicles with a physical customer card (18%), public transport connections (16%), the availability of electric vehicles (15%), the availability of child seats (11%), and other (sharing) offers at carsharing stations (9%). As in 2018, only a few respondents mentioned design and appearance of the vehicle (2%).

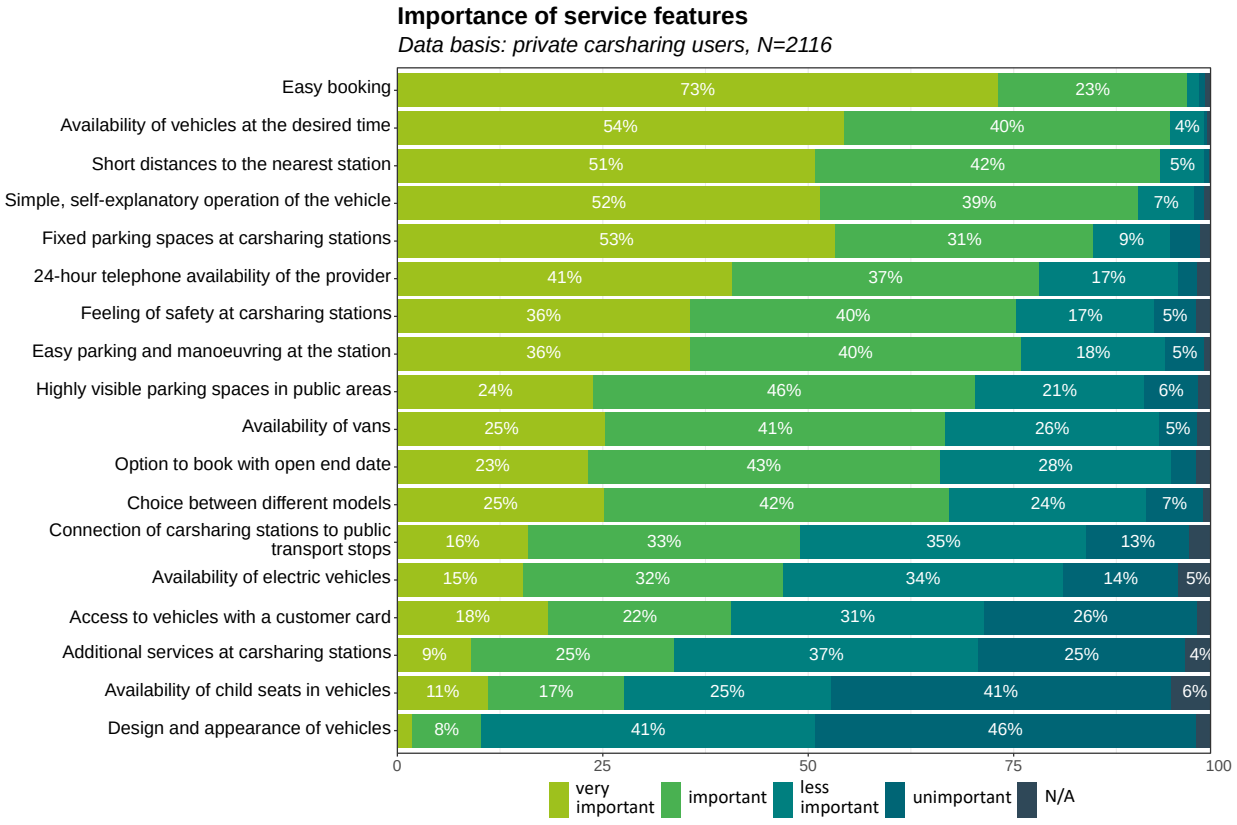

Figure 31: Importance of different service features

Sociodemographic characteristics: Most of the aspects surveyed are of a higher priority for women than for men. This is particularly true for uncomplicated booking ("very important": women: 77%, men: 69%) and simple, self-explanatory use ("very important": women: 66%, men: 37%), a feeling of security (49%: 23%), easy parking (47%: 25%), clearly visible parking spaces (30%: 19%), and 24-hour telephone availability (44%: 37%).

On the other hand, only the availability of vans ("very important": men: 37%, women: 23%) is of comparatively greater importance to men than to women.

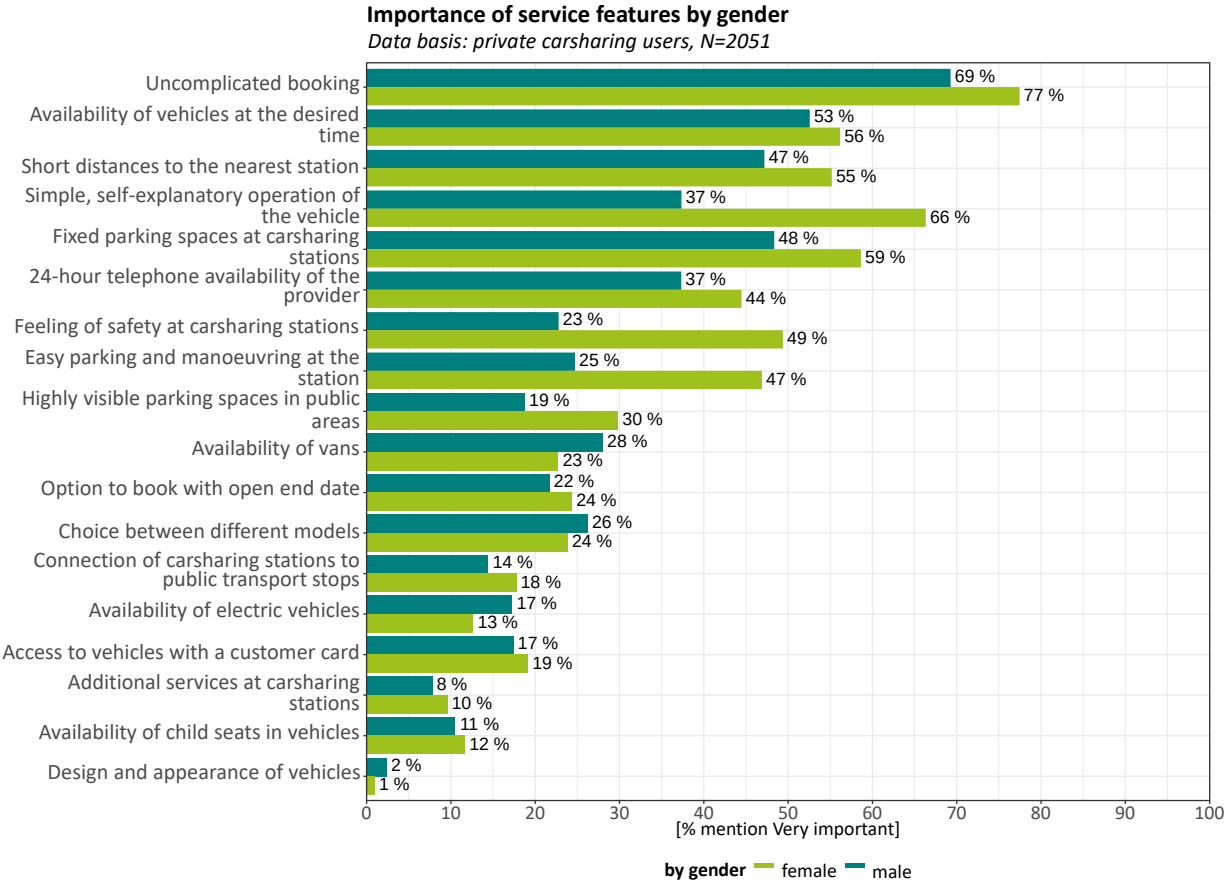

Figure 32: Importance of different service features by gender

The differences between the age groups analysed are largely insignificant. The only striking difference is that older people are significantly more likely to prioritise access with a customer card ("very important": over 60s: 30%, under 35s: 9%), while younger people prioritise the availability of vans (over 60s: 18%, under 35s: 37%) and additional services at carsharing stations (over 60s: 5%, under 35s: 16%:).

Similar to the 2018 study results, **user satisfaction is high for the most important aspects of carsharing**: A total of 83% are "very satisfied" or "satisfied" with the distance to the nearest station and with the reserved parking spaces. 81% praise the uncomplicated booking process and ease of use of the app, while 80% appreciate the simple, self-explanatory operation of the vehicles and the ease of parking at the station. 77% are satisfied with the availability of vehicles and the visibility of parking spaces, while 74% are satisfied with the feeling of safety at the station and with the choice of models available.

Only a few aspects are rated as "less satisfied" or "dissatisfied" by more than 10% of users. In particular, 20% are critical of the (in their view presumably non-existent) option of open-ended booking, 16% criticise the (lack of) additional (sharing) offers at carsharing stations, 14% criticise the availability of vehicles in general and of electric vehicles in particular, and 10% criticise the distance to stations, useability and availability of vans.

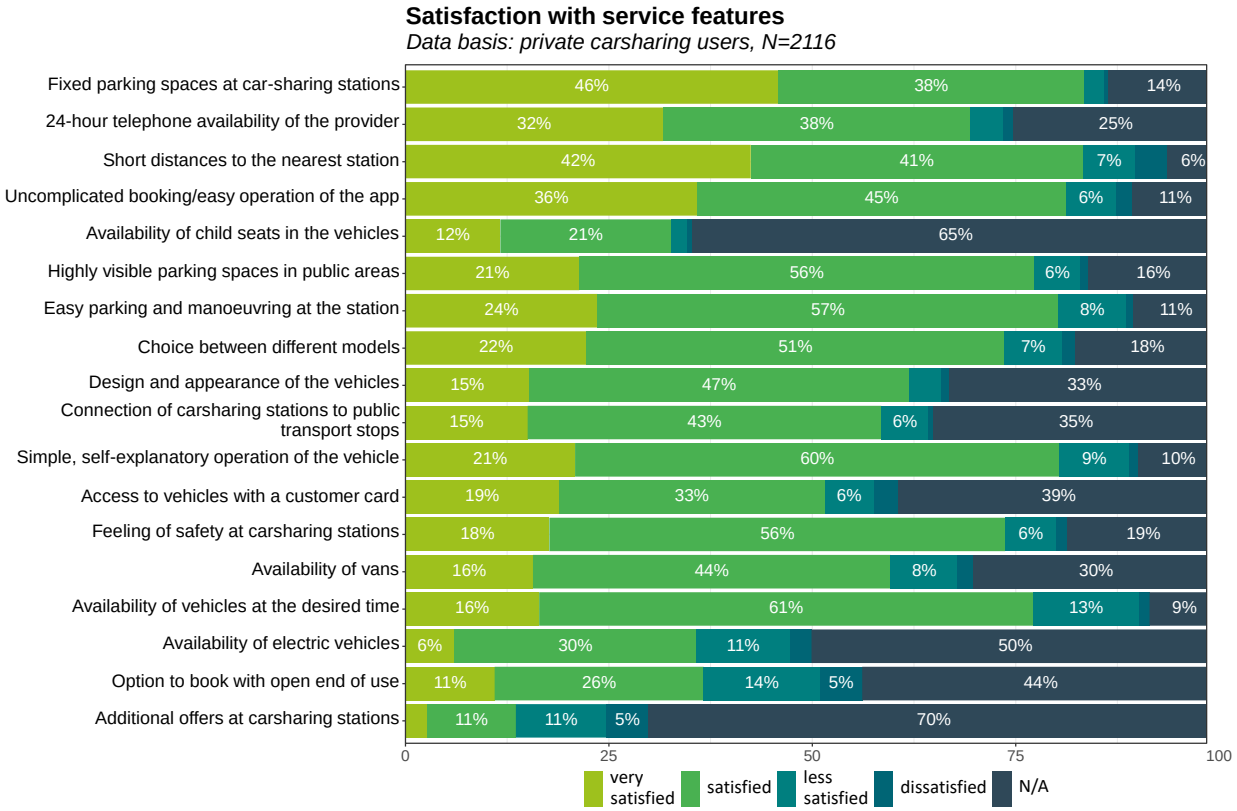

Figure 33: Satisfaction with service features

In Table 11, the priorities shown in Figure 31 are compared with the satisfaction and dissatisfaction values listed in Figure 33. The table lists the responses falling under the combined response categories "very important" and "important," as well as the combined categories "very satisfied" and "satisfied" and " dissatisfied" and "very dissatisfied."

In order to derive a possible need for action, the proportion of dissatisfaction was multiplied by the importance, thus calculating an index for the relevance of action. The minimum value of the index is 0 (e.g., if an aspect were completely unimportant and/or if no one were dissatisfied with the aspect), while the theoretical maximum value of 100 would be reached if all respondents considered this aspect to be (very) important and, at the same time, all users surveyed were (very) dissatisfied with this aspect. The analogously calculated index values from 2018 are also listed for reference when the characteristics surveyed were also surveyed at that time.

As can be seen in Table 11, all index values are in the lower range of the theoretical value spectrum. Accordingly, there is no urgent need for action with regard to the aspects evaluated.

The feature "open-ended booking option" (not collected in 2018) as well as the features "availability of desired vehicles at the desired time" and "short distance to the nearest station" achieved the highest index values. It should be noted that the majority of respondents did not provide any information for the feature "open-ended booking option". The importance of the feature “open-ended booking option” in the current study may be influenced by the cambio *smumo* offer, which includes open-ended booking, resulting in a wish for this to also be offered in the station-based model.

However, the two features "availability of desired vehicles at the desired time" and "short distance to the nearest station" still achieve very high satisfaction levels of 77% and 83% respectively. Nevertheless, the

analysis underscores the results from 2018 and the relevance of continuing to create carsharing parking spaces close to home, thereby increasing the availability of vehicles.

Table 11 shows the action-required index values calculated as described above, indicated as shown in the following legend:

Label	Rating	Description
↑	Very high need for action	The current situation is unsatisfactory. Urgent improvements are needed immediately.
↗	High need for action	The current situation is not satisfactory. Improvements are advisable in the near future.
→	Medium need for action	The current situation is generally acceptable, but improvements could be made.
↘	Low need for action	The current situation is acceptable; improvements would be desirable, although they are not a top priority.
↓	No action required	The current situation is acceptable and should be maintained; improvements are not necessary.

Feature	Importance (in %)	Satisfied (in %)	Dissatisfied (in %)	Index need for action	Index values 2018 study
Open-ended booking option	66	37	20	**13.2**→	-
Availability of desired vehicles	94	77	14	**13.2**→	13.7
Short distance to the nearest station	93	83	10	**9.3**→	10.6
Simple, self-explanatory use	90	80	10	**9.0**→	3.6
Easy parking at the station	76	80	9	**6.8**↘	-
Availability of vans	67	60	10	**6.7**↘	-
Availability of electric vehicles	47	36	14	**6.6**↘	-
Selection of models	67	74	9	**6.0**↘	7.4
Feeling of security	75	74	8	**6.0**↘	-
Easy booking	96	81	6	**5.8**↘	2
Highly visible parking spaces	70	77	7	**4.9**↘	1.3

Feature	Importance (in %)	Satisfied (in %)	Dissatis-fied (in %)	Index need for action	Index val-ues 2018 study
Telephone access to the provider	78	69	5	**3.9** ↓	0.8
Vehicle access with a customer card	41	52	9	**3.7** ↓	-
Connection of carsharing stations to public transport	49	58	6	**2.9** ↓	2.8
Reserved parking spaces at car-sharing stations	85	83	3	**2.6** ↓	1.6
Other services offered at carsharing stations	34	14	5	**1.7** ↓	-
Availability of child seats	28	33	3	**0.8** ↓	0.8
Design and appearance of the vehi-cles	10	62	5	**0.5** ↓	0.7

Table 11: Action-required index by equipment feature

An interesting comparison with 2018: While most of the features included in both surveys achieved very similar index values, there was a significant increase in the index value for the feature "Simple, self-explanatory useability." This could reflect the increasingly complex design of vehicle controls.

Most of the areas for action with the highest index values are the responsibility of the carsharing provider **in terms of** service design. **However, improvements for the action "Short distance to the nearest station" require support from the local authority. By providing carsharing spaces close to residential areas, the City can contribute to improving the service.**

6.7 Significance and evaluation of electric vehicles

30% of the carsharing users surveyed have used an **electric carsharing car** at some point, while 68% have not.

While 34% of male customers have already used an electric carsharing car, the figure for women is 24%.

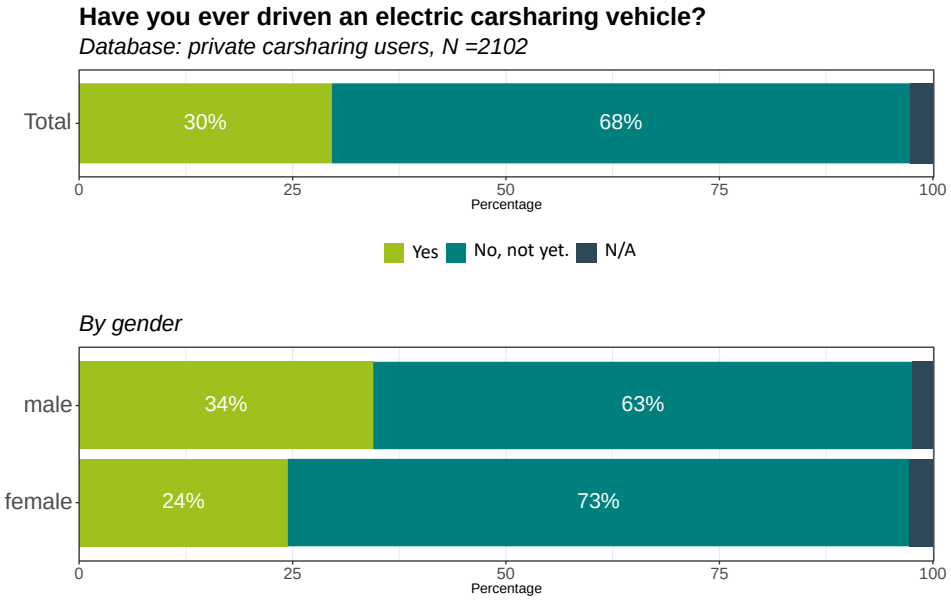

Figure 34: Use of electric carsharing vehicles by gender

Of those who have not yet used an electric car, 38% plan to test one in the next 12 months, including 45% of men and 33% of women. **Electric carsharing is therefore currently much more popular among men than among women.**

In addition, electric cars are significantly more attractive to younger people than to older people: 36% of carsharing members under the age of 36 have already used an electric carsharing vehicle. For those over 60, the figure is only 20%.

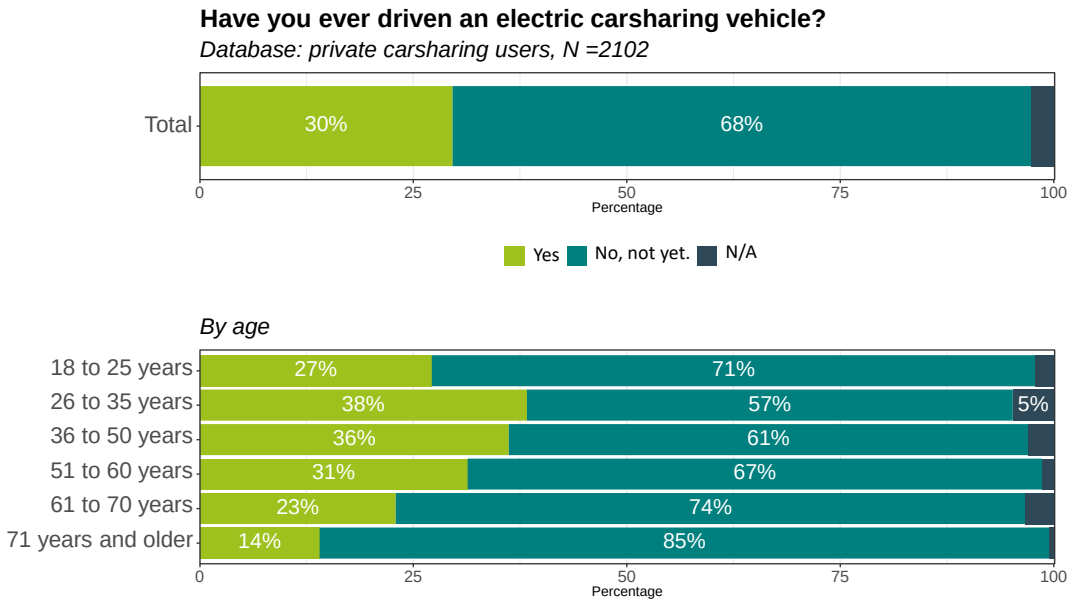

Figure 35: Use of electric vehicles in carsharing by age

In the survey, 40% cited the lack of **availability of electric cars** as the main reason for **not having driven an electric carsharing vehicle** to date. Other obstacles cited by 31% were **a lack of knowledge about the charging process**, while 28% expressed **range concerns**, and 27% **found** the **use of electric cars too complicated**. Around one in five of those without experience of electric cars were put off by the requirement to specify the distance to be travelled when booking.

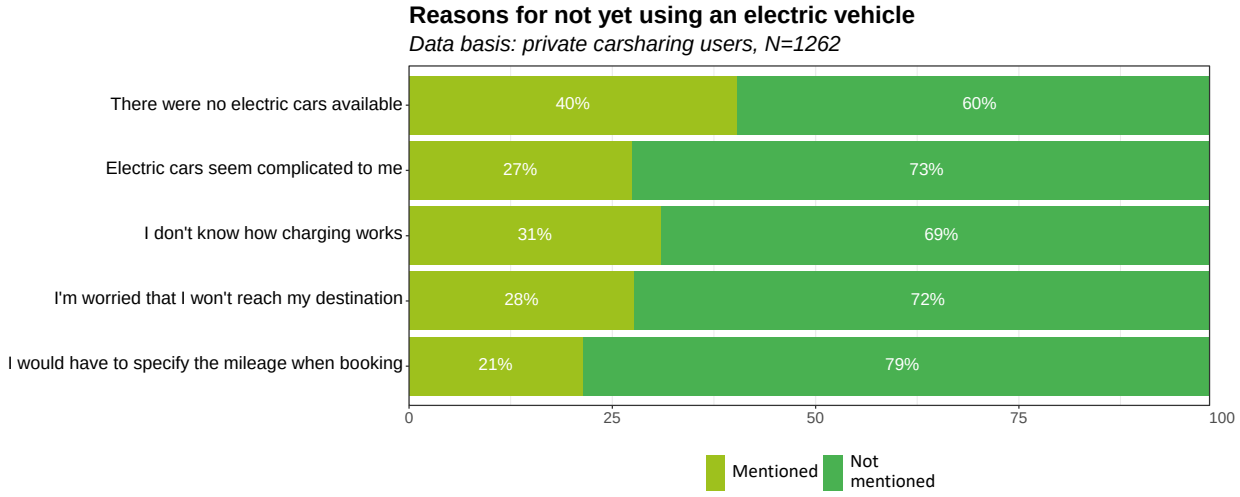

Figure 36: Reasons for not using e-carsharing to date

While men primarily cite the lack of availability of electric cars as the reason for not yet using them (50%), the following reasons are most prominent among women: 41% agree with the statement that they do not know how charging works, and 32% find the use too complicated. These differences indicate a greater affinity for technology and a greater willingness to take risks among men, while female users tend to prioritise reliability and functionality.

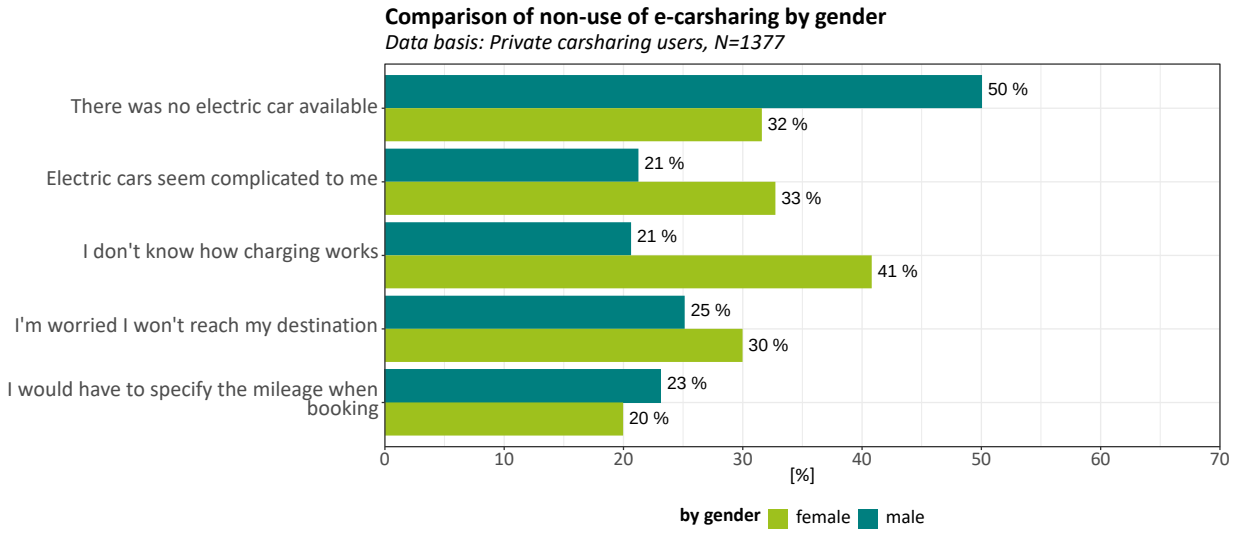

Figure 37: Reasons for not using e-carsharing by gender

The reasons given by respondents who have experience with electric carsharing **for using an electric car** are primarily curiosity (56%) and climate and environmental protection (53%), followed by the general statement "I like driving an electric car" (45%) – with a strikingly high proportion of under-36s (54%) among this group.

The fact that no (fully fuelled) petrol-powered car was available was a distant second reason for use (21%), 17% used the electric car because they knew it was sufficiently charged, and only 10% wanted to "test drive" an electric car to help them decide if they wanted to purchase one.

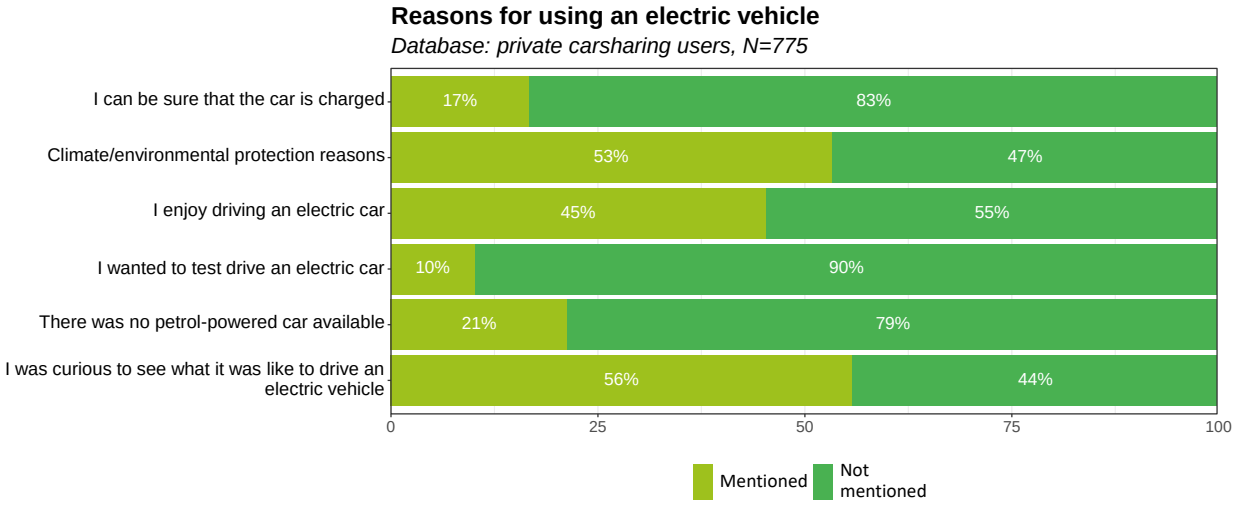

Figure 38: Reasons for using e-carsharing

6.8 Carsharing users' evaluation of station-related aspects

As already demonstrated in chapter 6.6, **proximity to stations** is **important to carsharing users** and satisfaction with this aspect is high. Data from the user survey was used to evaluate station-related aspects, with respondents indicating that they *regularly* use the station they most recently used. For these respondents, satisfaction with various aspects of the carsharing service was evaluated.

Figure 39, carsharing users surveyed are more satisfied with the distance to the nearest station if the station they use regularly is located on public land.

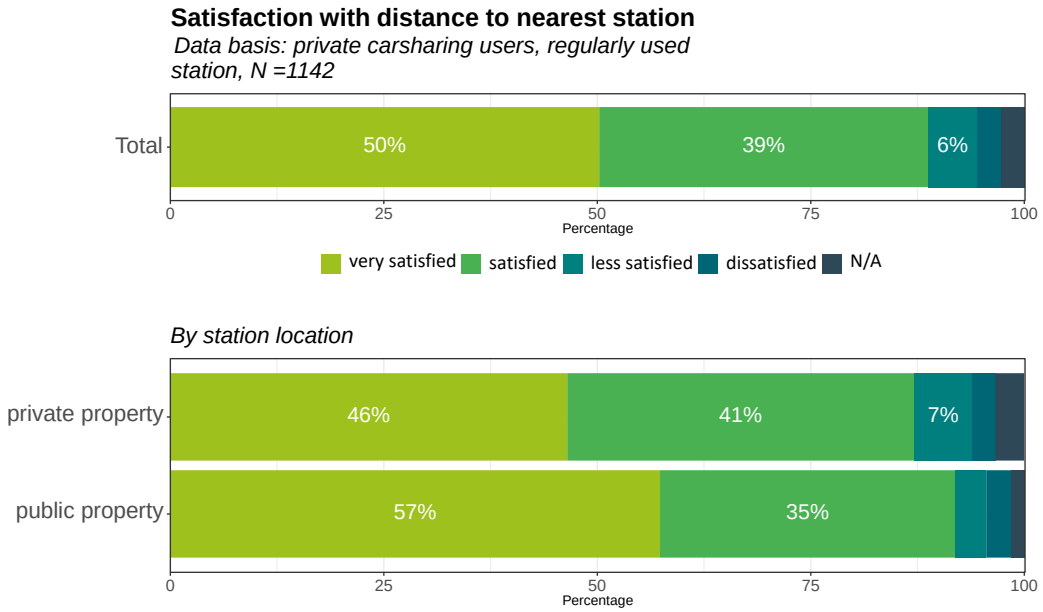

Figure 39: Satisfaction with distance to the nearest station by station location

There are no differences in satisfaction between stations on public and private land with regard to the question of ease of parking. Stations on public land are only rated slightly better in terms of satisfaction with good visibility of the carsharing parking spaces. The same applies to the subjective feeling of safety (see Figure 40: Satisfaction with subjective sense of security by station location).

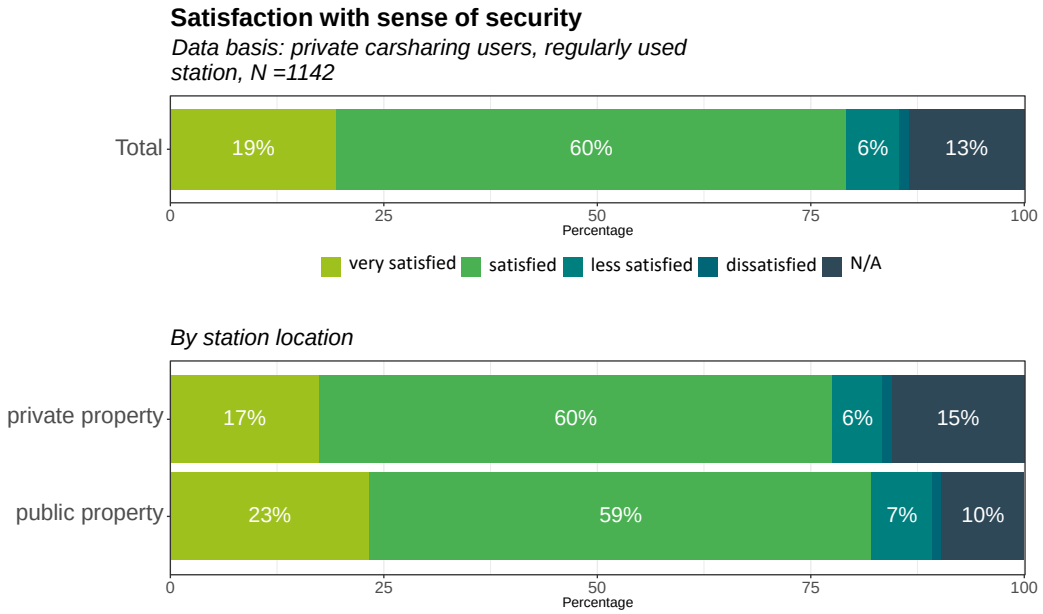

Figure 40: Satisfaction with subjective sense of security by station location

While no correlations can be established between station size and the selection of vehicles or the availability of desired vehicles, as expected, satisfaction with the availability of electric vehicles is rated signifi-

cantly higher by users who regularly start trips at stations where electric vehicles are available (see Figure 41). However, it is also apparent that a high proportion of people are unable or unwilling to answer this question.

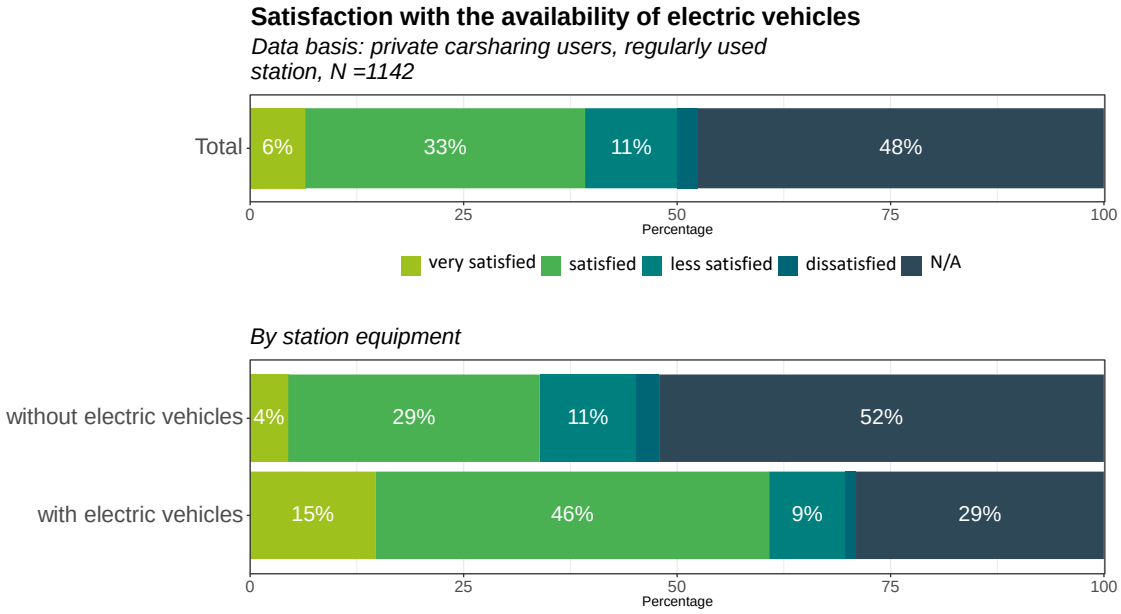

Figure 41: Satisfaction with the availability of electric vehicles

6.9 Evaluation of the *smumo* carsharing service

6.9.1 Shares of carsharing use

69% of carsharing members use only the station-based service offered by cambio, 2% use only *smumo*, the free-floating service offered by cambio, and another 26% use both types of service. This applies to a large extent to both men and women.

Among younger carsharing members, there is a clear shift towards dual use: 33% of those under 36 use both cambio and *smumo*, compared to only 20% of those over 60.

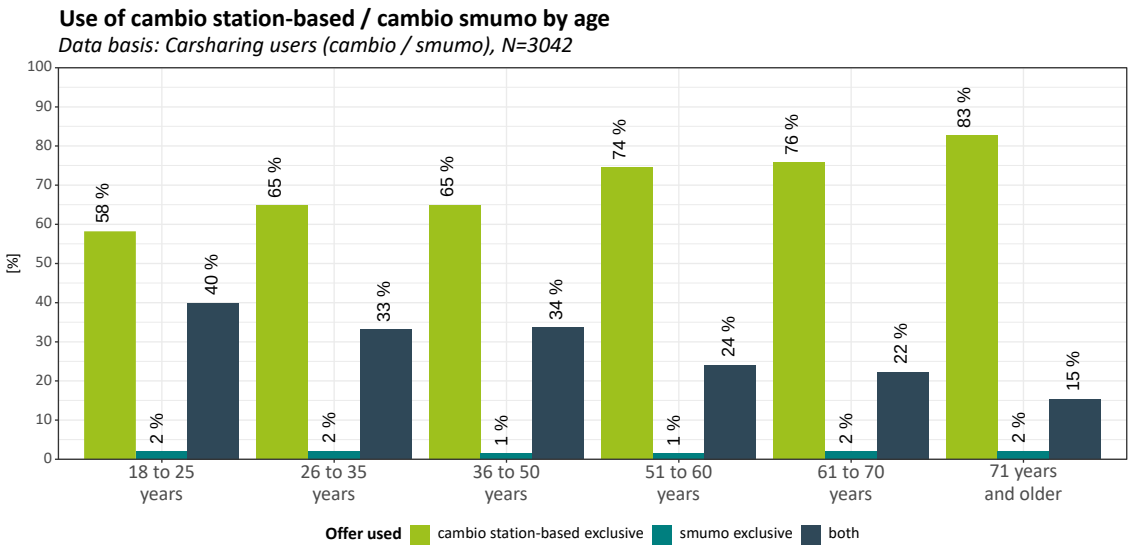

Figure 42: Use of cambio and *smumo* services by age

6.9.2 Perceived advantages and disadvantages of the services offered

During the survey, participants were also asked to name advantages and disadvantages in an open-ended question (without suggested answers). 1,064 people named advantages and 904 named disadvantages. These were first categorised during data analysis.

Some respondents answered the questions about advantages or disadvantages of *smumo* not in comparison to station-based carsharing, but in comparison to having their own vehicle. This was the case, for example, with parking fees, but it was also evident in isolated cases with one-way trips.

Flexibility was the most frequently cited advantage – often in general terms without specifics.

> *"As flexible as a scooter, but not as embarrassing. Perfect for picking something up, dropping something off, or getting to a destination dry."*
> *"I use* Smumo *when I'm undecided and don't want to commit. Either there's a car nearby or I do something else."*

However, spatial and temporal flexibility were mentioned most often.

Spatial flexibility refers to the fact that the vehicle can be parked anywhere in the *smumo* operating area and does not have to be returned to the location from which it was booked.[7]

Above all, however, some respondents explained that spatial flexibility meant that after arriving and unloading at home, for example, the car did not have to be taken to a station but could be parked in front of the house or near the apartment.

> *"As a woman, I can park the car in front of my door at night, which is safer."*
> *"Often available right outside the front door and can be left there after the trip. Very practical for larger purchases."*

Others clearly stated that the free-floating service meant they only had to use and pay for a car for the outward or return journey.[8] Only one person mentioned the ecological aspect of one-way bookings, although many combined one-way bookings with public transport. Another person pointed out that this way, more people benefit from the vehicles.

Two aspects of **time flexibility** were particularly clear: the ability to book spontaneously, but above all not having to estimate the end time in advance. Here in particular, some people pointed out that this made it more relaxed and meant there was no pressure, especially in traffic jams.

> *"With smumo, I am more flexible in terms of time, don't have to constantly check the clock, and don't get stressed if I get stuck in traffic."*

This quote reflects what came through in many of the statements, namely that people compared *smumo* to cambio's station-based carsharing.

[7] If the respondent emphasised that a vehicle was often available nearby, this was recorded as good availability.
[8] If the respondent only mentioned that it could be parked wherever desired, this was not coded as explicit one-way use, as it could also have been a matter of saving the walk from the station.

"smumo is not station-based, a great addition."

The issue of availability should also be viewed in this context: it was often a matter of having a vehicle available spontaneously in relative proximity – especially when a station-based car was no longer bookable.

When it came to *costs*, the main factor emphasised was that downtime did not have to be paid for.

"Because I can park it anywhere, it's cheaper because I can simply drop it off again when visiting friends, for example, instead of continuing to rent it for the duration of the visit and then returning it to the station after the appointment."

In addition, there were also general statements about fair pricing, which emphasised accurate billing and good prices for short distances.

Where good accessibility was specified, this referred to the ease of use of the app and the booking process. One person praised the ease of finding the vehicles due to their high visibility in the city, while others praised the app.

In isolated cases, however, the service was also praised in general terms:

"Modern mobility without time constraints."

Mention	Frequency (N=)
Flexibility...	100
... of which explicitly time flexibility	*58*
... of which explicitly spontaneity	*121*
... of which explicitly spatial flexibility	*511*
... of which explicitly one-way trips	166
... of which explicitly the option to park it at your own front door	87
Good availability	11
More cost-effective thanks to one-way option	14
Fair pricing	13
Good vehicles	8
Good technical accessibility	7
Easy to find vehicles	3
No need to pay parking fees	2

Table12: Categorised mentions of advantages of *smumo*. Total = 1064

In addition to the advantages mentioned, various **disadvantages** were also cited by 904 people. These were also systematically categorised during the data analysis. They were significantly more heterogeneous than the advantages mentioned.

Mention	Frequency (N=)
Availability within walking distance too low (only within operating area)	27
... especially on weekends/holidays	*4*
Operating area too small	27
Difficult to find parking	193
There are no disadvantages	*112*
More vehicle types desired	87
Not plannable	86
...of which: Booking lead time too short for travel to the vehicle	*10*
Vehicles too small	61
Vehicles not good in terms of handling	50
...of which: clutch is not working properly	*8*
Pric structure is not good	40
Lack of electric vehicles	25
Vehicles are not well maintained	23
Unfavourable concentration of vehicles within the operating area on	23
Uncertainties/problems due to the boundaries of the operating area	11
Automatic transmission desired	10
The service will result in even more cars (and car trips)	9
Difficult to find the vehicle – sometimes despite being shown in the app	9
App difficult to use or uses too much data	5
Ideal: ability to park beyond city limits	5
Vehicles too large	3
Not being allowed to transport pets	3

Table 13: Categorised mentions of disadvantages of *smumo*. Total = 1016

When asked "And what are the disadvantages of *smumo* in your opinion?", 112 respondents explicitly stated that they saw no disadvantages.

"None in combination with [the station-based service offered by] cambio."

But even where disadvantages are perceived, the criticism is predominantly objective. The aspects mentioned are merely described as "minor disadvantages" or "nice-to-have." Analysis of the main topics shows that the issue **of vehicle operation** is frequently mentioned and discussed in detail.

Rank	Topic	Example
1.	**Technology/operation**	"Stupid cars." "The C1s have a terrible clutch." "Neither car is particularly appealing and they are terribly uncomfortable to drive."
2.	**Booking lead time too short**	"The limited operating area and the lack of predictability. I first have to take the train to the operating area to pick up a car. This means that during my journey, I have to constantly check where there is a car parked nearby."
3.	**Searching for parking**	"In some parts of town, finding a parking space takes longer than the actual drive." "The search drives me crazy, and the long walk back is no fun."
4.	**Condition of the vehicle**	"The 'throughput' is higher than at stations, so the cars are more often dirty, there is trash left behind by the previous user, or the tank is empty."
5.	**Difficulties recognising operating area boundaries**	"When returning the car, the return area is not visible in the app." "It might be useful to get a clear indication in the app before completing the booking as to whether you are in the operating area or not."
6.	**Unnecessary increase in number of cars**	"A lot of very careless people use free-floating carsharing even for very short distances that they would previously have done on foot, by bike, or by public transport." "There are more cars on the road." "Use of public space as parking space for a car."
7.	**Operating area size**	"In addition, the zone does not extend to some districts (e.g., Gröpelingen), which I find rather bad and even somewhat discriminatory."
8.	**Vehicle size & more vehicle types**	"Limited selection of car types (the common Citroen C3 is just too small for a stroller/pram)." "The clutch engagement point is somewhere beyond the moon. Really exhausting, especially for tall people like me. The *smumo* with folding roofs are the worst, so I try to avoid them."
9.	**Availability & concentration of vehicles**	"Unfortunately, since the expansion of the operating area in Bremen, there are hardly any *smumo* available in my area. They are concentrated in the outskirts and there are none left in the centre. This has developed very negatively."
10.	**Pricing**	"Despite the flexibility, you always have to book at least an hour. I would prefer more flexibility in terms of time, less than an hour, because I often only use *smumo* for 20-30-minute trips." "The C1 and C3 are listed in the same car class. The Aygo, which is almost identical in design, is listed as an XS, unlike the C1."
11.	**Predictability**	"No planning security, as it cannot be booked in advance. This is the main reason why we don't use it often." "The start of the journey must be planned spontaneously depending on availability. This makes it difficult to organise fixed appointments."

Table 14: Heat map mentions of disadvantages of *smumo*

One criticism that could be hidden behind statements about a lack of predictability is that users often have to travel longer distances to the vehicle, but the vehicle can only be pre-booked for a short period of time. This creates uncertainty as to whether the vehicle will even be available. Station-based carsharing has the advantage of reliability and (long-term) predictability, as well as eliminating the need to search for a parking space. The free-floating service offered by cambio offers flexibility for spontaneous trips (in one

direction) and open-ended booking. Thus, the two types of services complement each other perfectly and counteract the criticisms of both types of services.

When it comes to pricing, some users would like to see more precise billing, billing for less than an hour, different prices for different vehicle sizes, etc.

6.9.3 Reasons for non-use

Respondents who stated that they did not use *smumo* had the opportunity to state their reasons for this in the survey, and 1648 people took advantage of this opportunity. These are categorised in Table 15:

Mention	Frequency
No need	62
... of which with the restriction "yet"	*450*
Not available where needed, of which...	378
... Bremen-Nord	*33*
Sufficient stations nearby	249
Unfamiliar to me so far / not enough information available	199
Want to save myself the hassle of looking for a parking space	14
Wrong vehicle type, of which...	78
... vehicles too small	*58*
... vehicles too large	*2*
It is not reliable/plannable enough for me	42
Only want to drive automatic vehicles	37
App/smartphone not desired	32
Only walk, cycle or use public transport within the operating area	31
Too few vehicles available	29
Handling seems too complicated	21
Habit	21
I don't like it (ranging from impractical to stupid)	17
Only want electric vehicles	14
Perceived higher price	12
Opposed to additional cars in the city centre	12
Use carsharing only for longer journeys	11
Own vehicle available	9
Vehicles not good enough	5
Advertising on the car and the colour too conspicuous	3
Lacks child seat	3
App is unreliable	2

Table 15: Categorised reasons for not using *smumo*, total = 1,648 people

7 Statements and findings on most recent carsharing use

7.1 Type of use for most recent trip

85% of customers registered with cambio made their most recent trip using cambio's station-based service, 10% used *smumo*, cambio's free-floating service. Other providers were only mentioned in very isolated cases. 5% were unable or unwilling to provide any information.

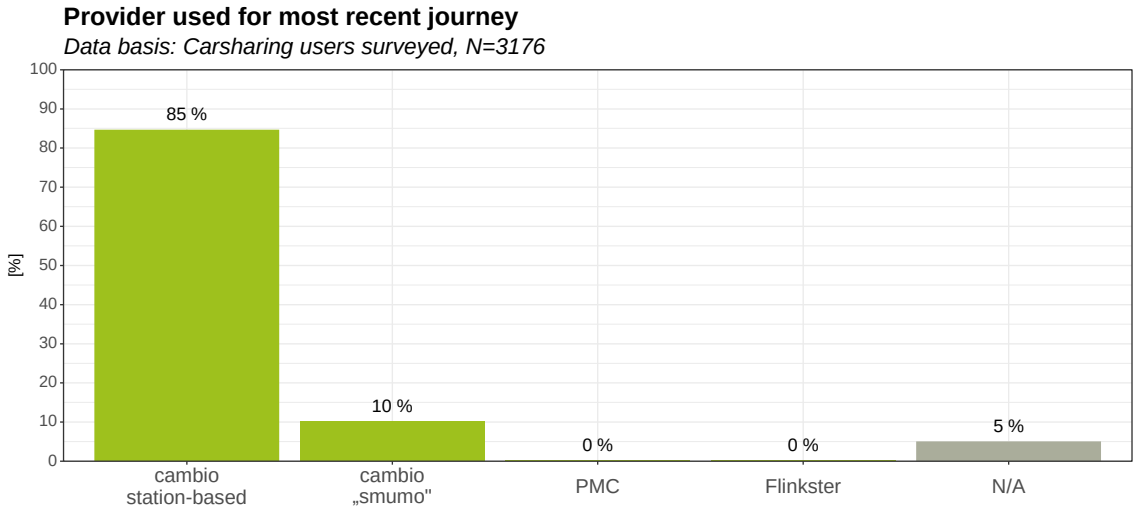

Figure 43: Provider used for most recent journey

7.2 Means of transport used to get to the carsharing vehicle

The vast majority of users reached the carsharing vehicle **on foot** during their most recent use (71%), another 22% got there **by bicycle or e-bike**, 8% by public transport, and 3% by another car. Other modes of transport, including Bre.Bike[9] and e-scooters, did not (yet) play a role (multiple uses were permitted).

[9] Bre.Bike is Bremen's public bikesharing system. It was established in 2025 and includes 1,450 bikes and 60 cargo bikes.

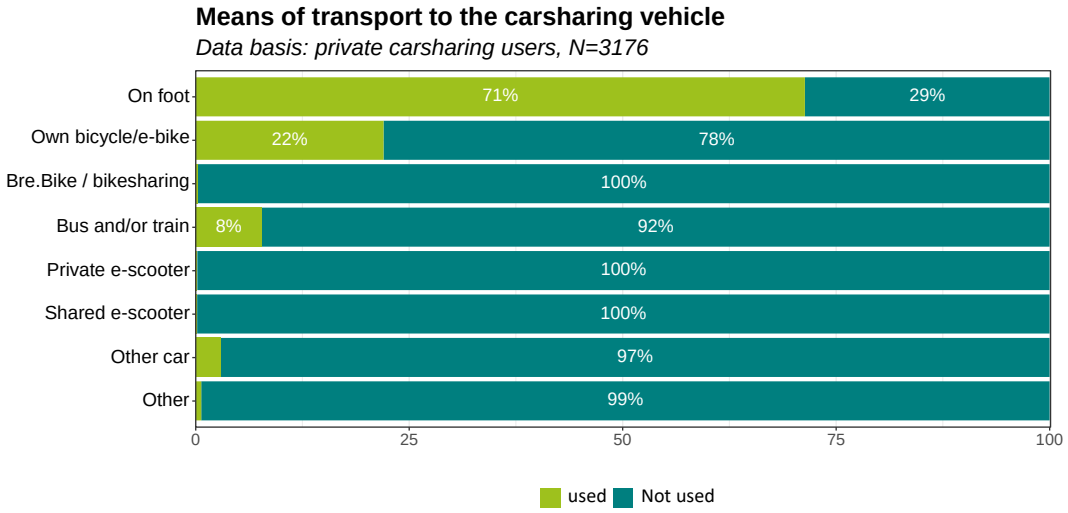

Figure 44: Means of transport to the carsharing vehicle

The following questions about the most recent trip were **asked separately** for **users of cambio's station-based service and for carsharing members who used *smumo*, cambio's free-floating service.**

7.3 Starting station of users of cambio's station-based service

Users of the station-based cambio service indicated the starting station used for their most recent trip, and a range of additional background information from the provider cambio was provided:

- 64% of the stations used are located on private property, 31% on public street space (no information provided: 5%)
- 39% of the stations used belong to the "small" category, a further 27% to the "medium" category and 30% to the "large" category (no information provided: 5%)
- Electric vehicles are available at 18% of the stations used, but not at 77% (no information provided: 5%).

Most trips started in the Neustadt (19%), followed by trips starting in Schwachhausen (14%) and Findorff (10%).

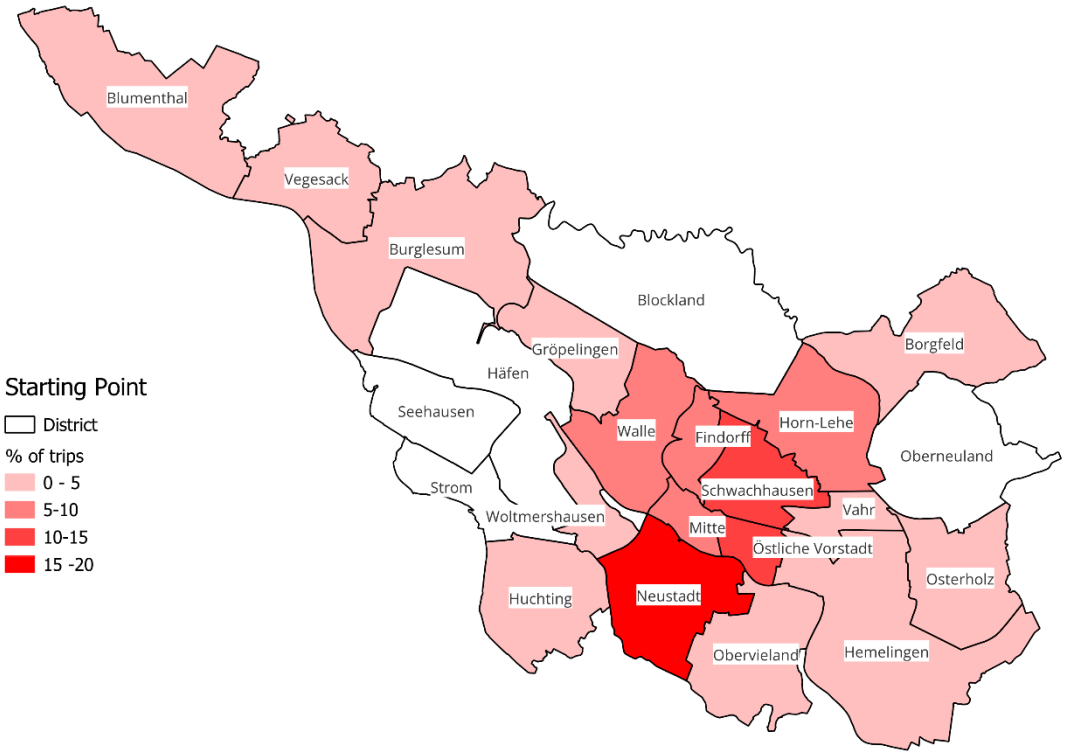

Figure 45: Starting point of trips (station-based cambio service)

Two-thirds of respondents use the station used for their most recent trip regularly or frequently, while 26% use it only occasionally.

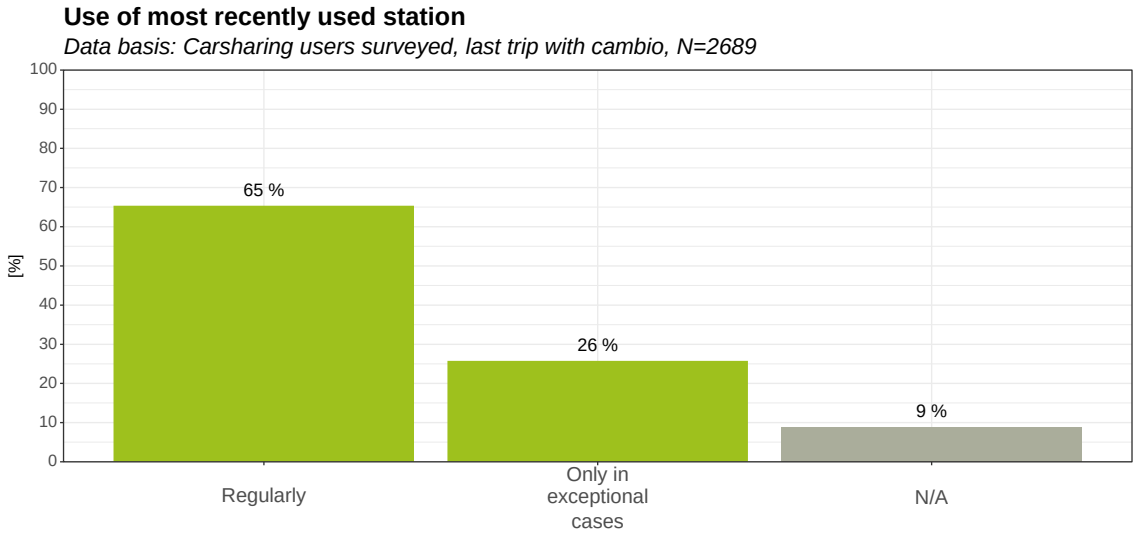

Figure 46: Regular/occasional use of the station most recently used

7.4 Starting point and destination of users of *smumo*, cambio's free-floating service

For around two-thirds of ***smumo* users**, the starting point and destination of their most recent trip were identical. In around 30% of cases, these were in different locations within the city.

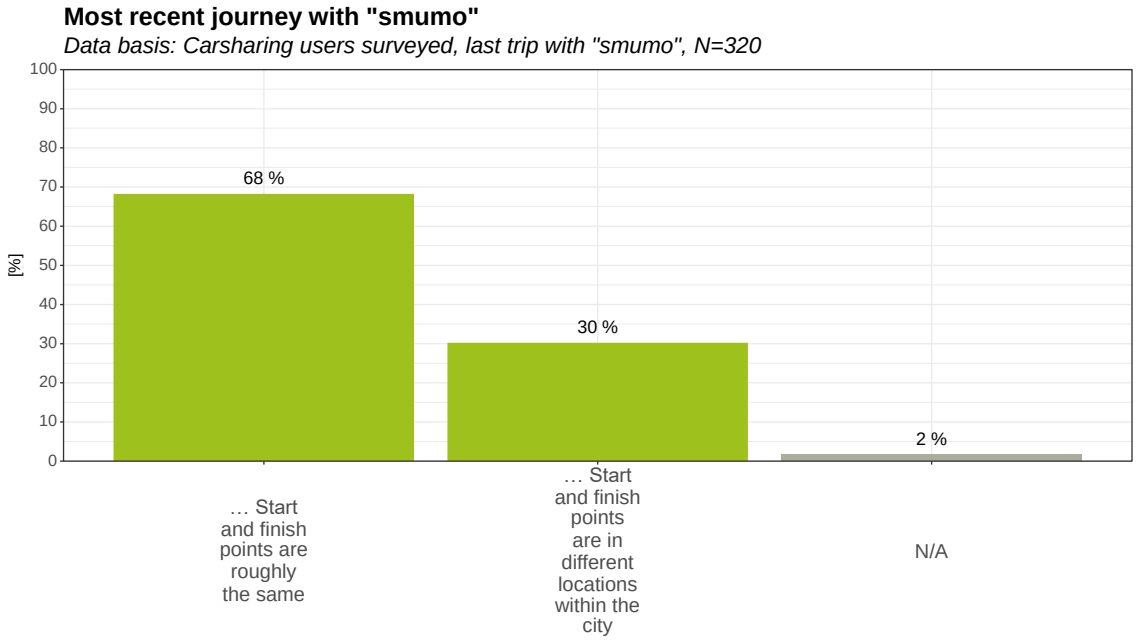

Figure 47: Start and destination of most recent journey using *smumo*

7.5 Reasons for use on the most recent trip

The most common reasons for the most recent trip were **shopping and errands** (30%), **transporting large items** (23%), and **visiting friends and family** (21%).

This was followed by: excursions (11%), passenger transport (8%), visits to restaurants and events (7%), work-related trips (5%), trips to work or training locations and holiday trips (4% each), with 8% citing other reasons.

When it comes to the reasons for the most recent trip, the motives for users of cambio's station-based service and cambio's free-floating service *smumo* differ only in a few areas:

The station-based service was used significantly more often for transporting large items and moving house (cambio: 25%, *smumo*: 7%), while *smumo* users more often cited passenger transport as their reason for travelling (cambio: 8%, *smumo*: 13%).

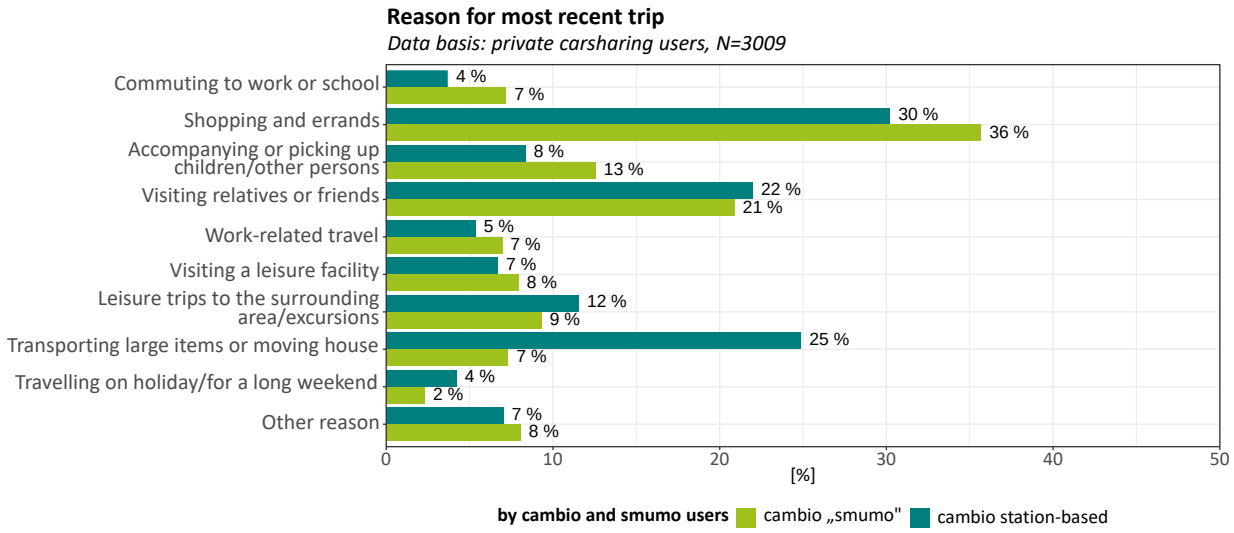

Figure 48: Reason for most recent trip

7.6 Duration of the rental period for the most recent trip

There is a significant difference between the services in terms of the rental duration of the most recent trip: **while almost half of the trips with *smumo*, cambio's free-floating service, were completed in two hours, this was only the case for one-fifth of the trips with cambio's station-based vehicles**. In contrast, the rental duration for 53% of cambio users was between two hours and half a day (*smumo*: 39%) and for 18% between half a day and a whole day (*smumo*: 8%). Trips lasting several days were reported by 8% of cambio users and 5% of *smumo* users.

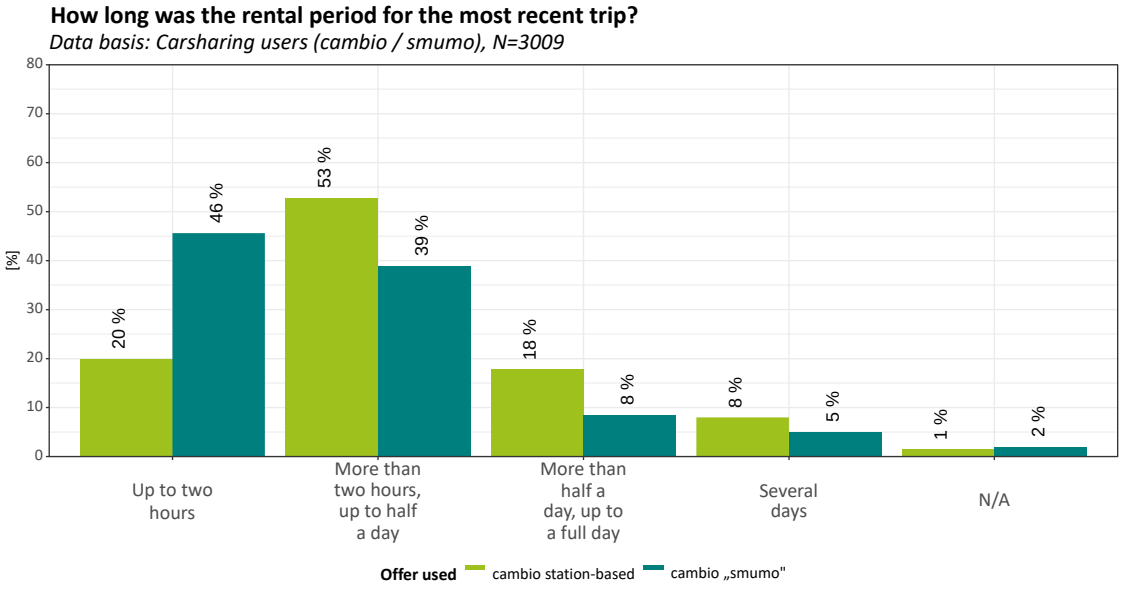

Figure 49: Comparison of length of most recent carsharing use between cambio and *smumo*

7.7 Possible alternatives to the carsharing car used for the most recent trip

If no carsharing vehicle had been available for the most recent trip, most of those affected would have travelled at a **later time** (33%). 28% would have used **public transportation** instead of the carsharing vehicle, and 25% would **not** have **made** the **trip at all**. A further 15% would have used a **private bicycle**, 14% a **rental car**, and 13% **long-distance public transport**. Other alternatives would have been their own vehicle (9%), a different destination (6%), walking (4%), or a ridesharing or carpooling option. Only a few respondents mentioned a cargo bike or bikesharing (1% each) as alternatives, and even fewer mentioned an e-scooter.

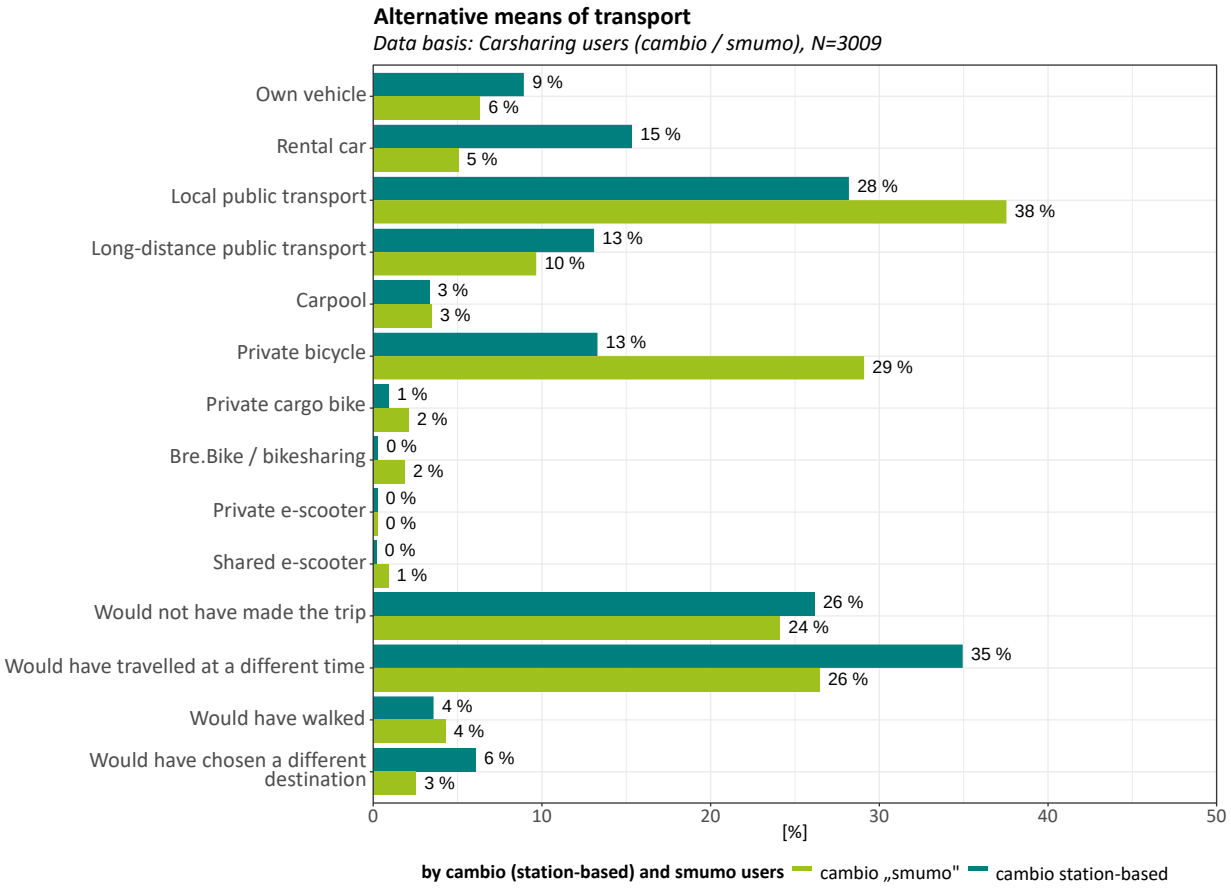

Figure 50: Alternative means of transport to most recent carsharing trip by service that would have been used

There are slight differences between station-based and free-floating services: while *smumo* users would have primarily used public transport (38%) and then a private bicycle (29%) as alternatives, most cambio users would have made the trip at a later time (35%).

8 Effect of carsharing on mobility behaviour and car ownership in Bremen

8.1 Effects of carsharing on car ownership and use based on SrV data

To derive the effects on car ownership and the mileage of cars available in the household, we first refer to the data from the SrV 2023 household data set. As described in chapter 4.2 , households in which at least one member reports using carsharing are treated as carsharing households and compared with households without carsharing membership.

Figure 51 shows the number of cars owned by households.

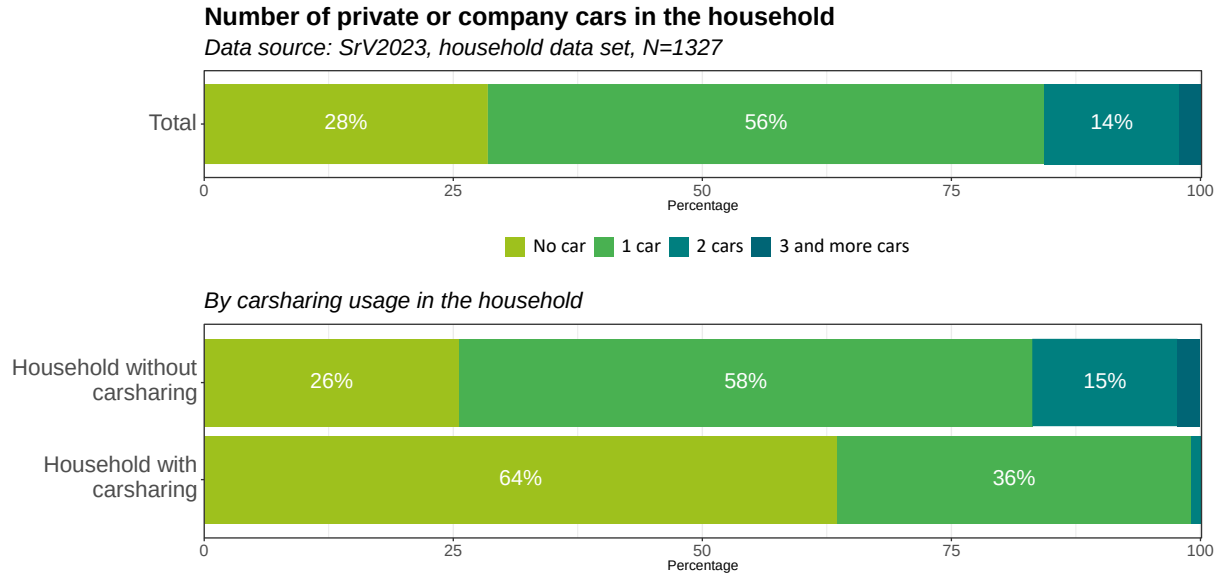

Figure 51: Comparison of the number of cars in carsharing and non-carsharing households based on SrV 2023

As can be seen in the graph, **64% of households that use carsharing** are **car free**. Only around a third of carsharing households have a car, very few households have a second vehicle, and households with more than two cars do not appear in the SrV data set for households that use carsharing.

The differences shown are also reflected in the reported mileage of cars available in the household (see Figure 52). It should be noted that the SrV only collected mileage data for a maximum of three vehicles per household. It should also be noted that mileage data for carsharing vehicles is not included for carsharing households.

Based on the SrV data, households without carsharing have 0.94 private or company cars at their disposal, which are used for a total of around 10,000 km per year on average. In households with carsharing, the comparable mileage is only around 3,500 km, which is covered by an average of 0.37 cars. The 2018 study assumed an additional carsharing mileage of 900 km per household, derived from backend data. However, when this mileage is added, the previous finding that **mileage** with private and company cars **in carsharing households** is **less than 50% of the mileage in households without carsharing** is confirmed.

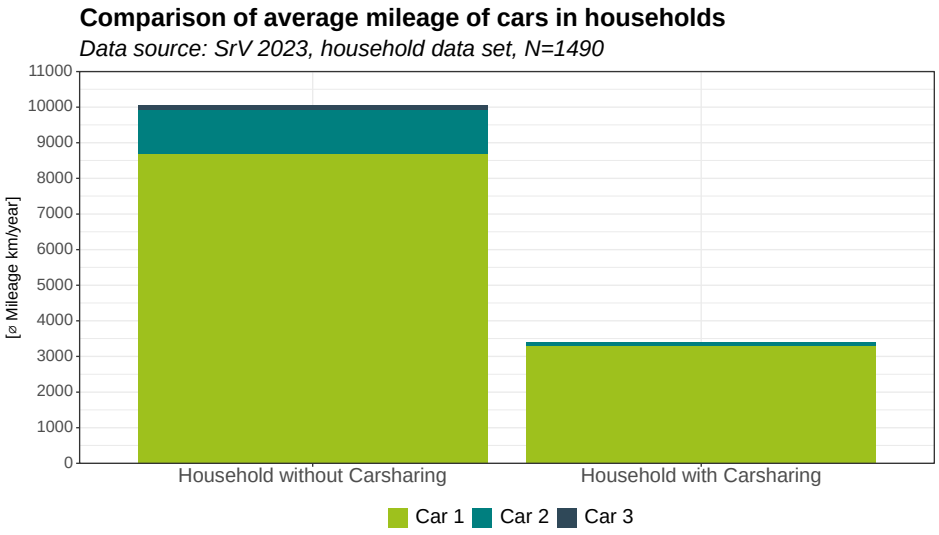

Figure 52: Comparison of average passenger car mileage in households

8.2 Transport mode availability and use from the surveys

There are significant differences in **personal car availability** between carsharing members and non-members. According to their own statements, 77% of driving license holders who are not carsharing members have a car available "at any time," another 13% have one available at least "occasionally," and only 8% "never." The situation is quite different for carsharing customers: only 30% always have access to a car, another 24% "occasionally" and 44% "never."

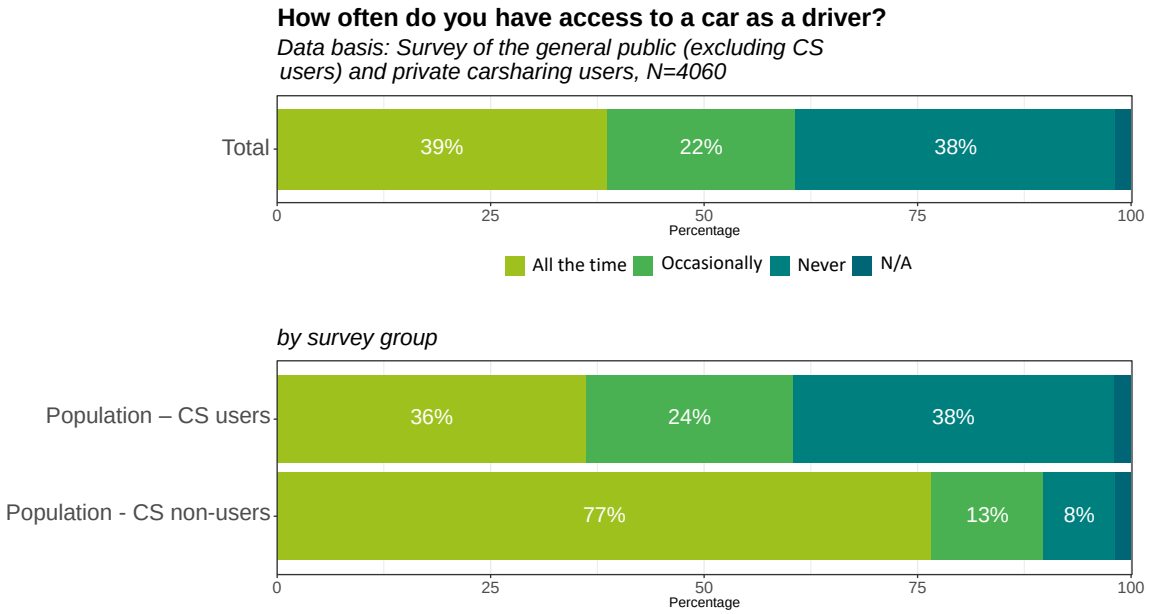

Figure 53: Comparison of car availability between carsharing users and non-users

The results of the surveys conducted impressively confirm the SrV findings. With regard to the **number of cars in households**, 77% of private households of non-carsharing members have at least one car, while 22% have none. The ratios are almost reversed among carsharing members: around two-thirds have no car in their household, while only one-third have at least one car. On average, residents in non-carsharing households have 1.1 cars at their disposal, but only 0.4 in households of carsharing members.

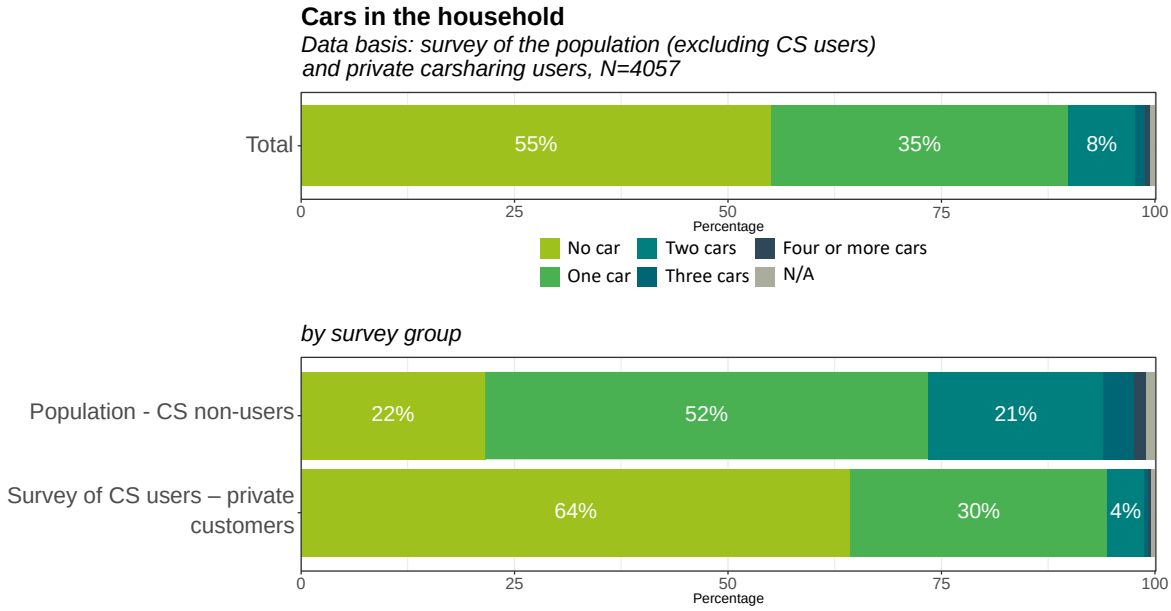

Figure 54: Comparison of number of cars in households between carsharing users and non-users

Looking only at carsharing users, there are significant differences in vehicle ownership by city district. While respondents living in the Mitte district have the highest proportion of car-free households at 80%, this is only the case for 49% of respondents from the Nord district. This district also has the highest proportion of households with two or more cars, at around 17%.

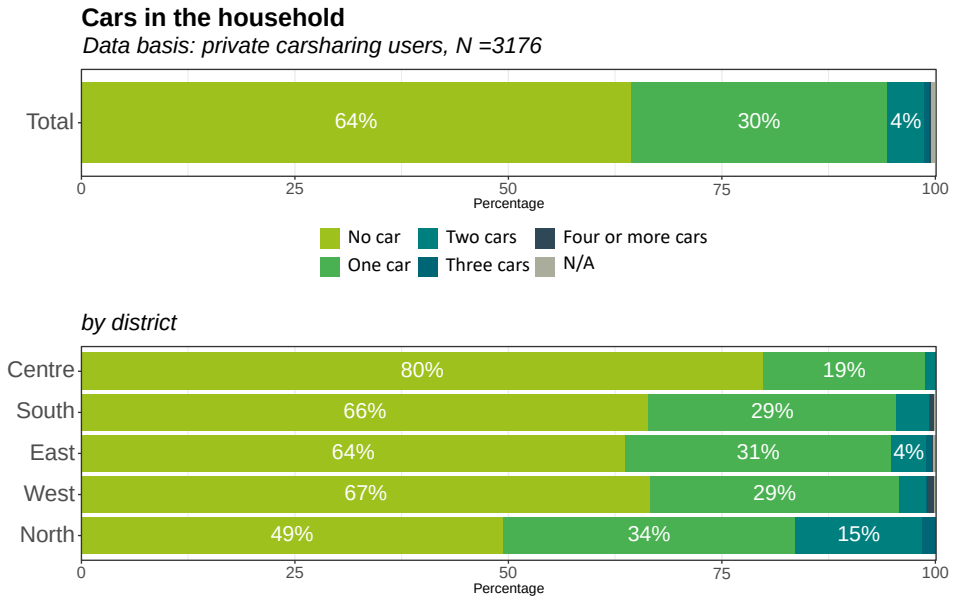

Figure 55: Number of cars in carsharing households by city district

However, there are significant differences between carsharing users and non-users not only in terms of car ownership: **52% of carsharing users, but only 39% of non-carsharers, currently have a public transport pass**. The ***Deutschlandticket***[10] is particularly attractive to carsharing members, with 45% having one. Among the general population without carsharing membership, the comparative figure is only 27%.

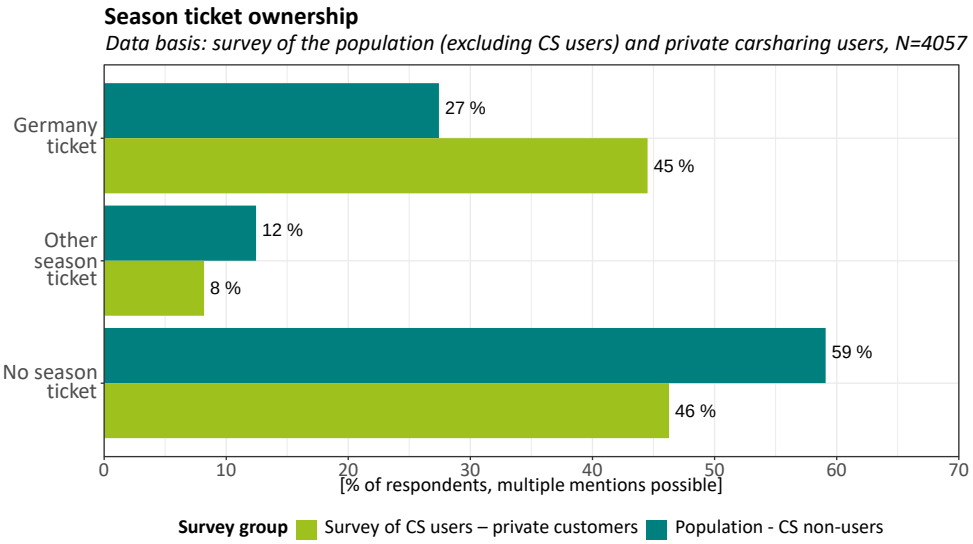

Figure 56: Comparison of public transport season ticket ownership

It is striking that the nearest stop for carsharing members is on average slightly less far away (5.4 minutes) than for non-members (6.0 minutes).

8.3 Mobility behaviour of carsharing users and non-users

8.3.1 Comparison based on SrV data

The following comparison of mobility behaviour is based on **SrV travel logs**. A total of 9,526 useable data sets are available, 910 of which are from people in households that use carsharing. However, there are only 15 data sets in which at least part of the journey was made as a driver or passenger using carsharing. This means that the SrV travel logs do not allow for in-depth analyses of specific travel purposes for carsharing or other modes of transport used in connection with carsharing.

The SrV travel logs record the modes of transport used for each recorded trip, whereby several modes of transport can be specified for connected trips. Figure 57 shows a comparison of the modes of transport specified here between people from households with and without carsharing. The most significant differences can be seen here in terms of car use. While people from households without carsharing use cars for 34% of their journeys, people from households with carsharing use their own cars for 8% of their journeys and carsharing vehicles for a further 2%. On the other hand, journeys on foot (54%/47%) and journeys by public transport (25%/14%) are mentioned more frequently by people from households that use carsharing. The difference is even more pronounced when it comes to bicycle use (including e-bikes,

[10] The *Deutschlandticket* is a subscription-based monthly public transport ticket that can be used in almost all regional public transport modes across Germany, including local and regional buses, trams and trains.

bikesharing, and cargo bikes): while people from households that use carsharing make 44% of their journeys by bicycle, this is the case for 28% of journeys made by people from households that do not use carsharing.

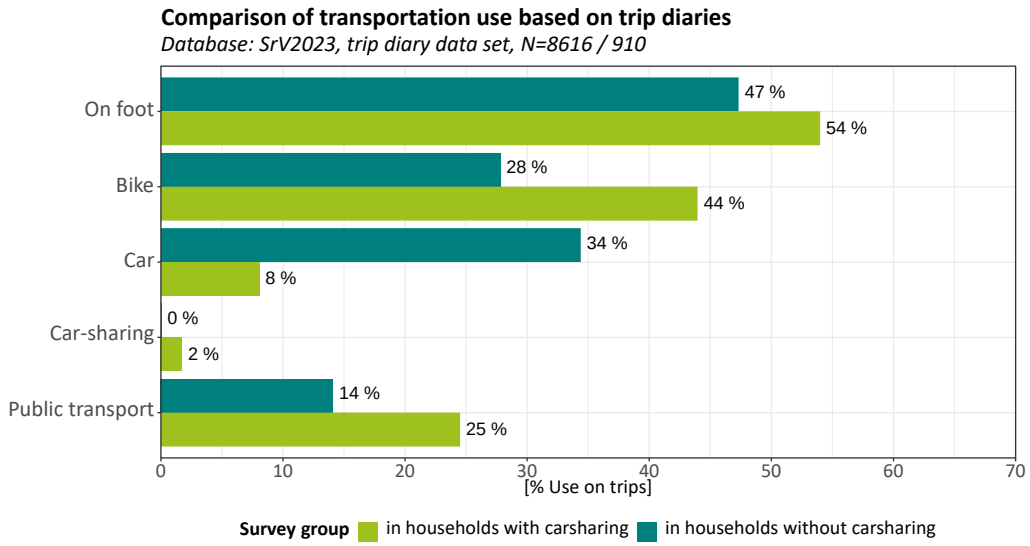

Figure 57: Comparison of transport modes used based on SrV trip logs

It is also interesting to note that differences in transport mode use can be observed not only among people of driving age, but also among minors. In the SrV-logged journeys, cars play virtually no role for minors from households that use carsharing and are only mentioned as the means of transport used in 1% of journeys, while for minors from households without carsharing, cars are used in almost one in five logged journeys (19%).

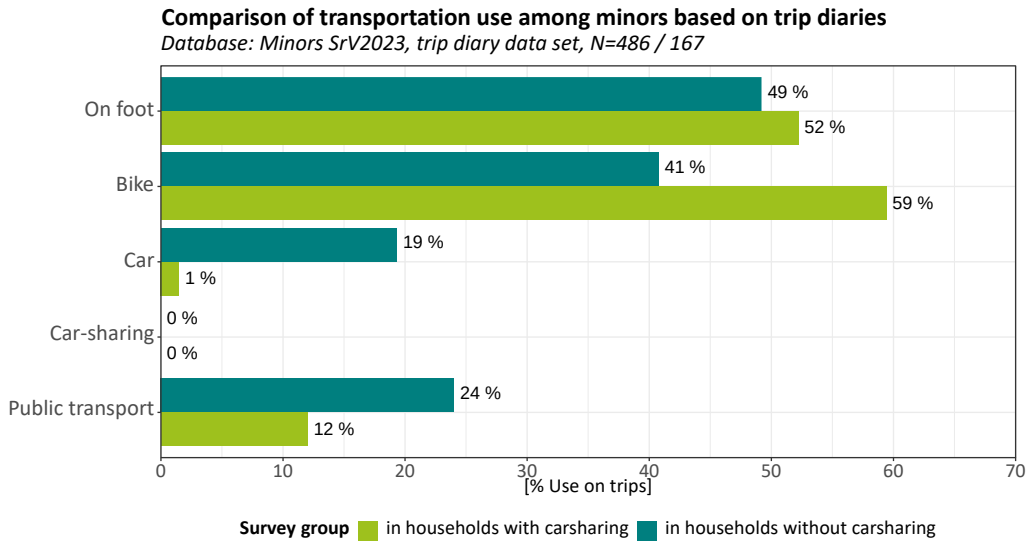

Figure 58: Comparison of transport modes used by minors' based on SrV trip logs

Among minors, the length of the journeys made also correlates with the use of carsharing in the household. While minors from households that use carsharing have recorded journeys with an average length of 2.2 km, the average journey length for minors in non-carsharing households is 6.1 km, meaning that

the journeys are on average almost three times as long. It is conceivable here that the residential location of carsharing households enables shorter journeys, thereby encouraging people to refrain from car use. It is also conceivable that carsharing users choose different destinations (e.g., for leisure activities) based on their accessibility by public transport.

To investigate this question further, the journeys to kindergartens/daycare centres and primary schools for minors were examined in more detail. It can be assumed that these are journeys close to home and that the residential location therefore plays no or only a minor role in the choice of transport. As can be seen from Figure 59, there is also a significant difference here, especially with regard to the use of cars and bicycles. In households that use carsharing, cars are rarely used (3% of journeys), whereas in non-car-sharing households, cars are used for 22% of journeys. Correspondingly, in carsharing households, bicycles are used much more frequently (58% vs. 29%) for journeys to daycare and primary school. The often problematic "parent taxis" are virtually non-existent in carsharing households. In carsharing households, therefore, a different socialisation of transport use takes place from an early age.

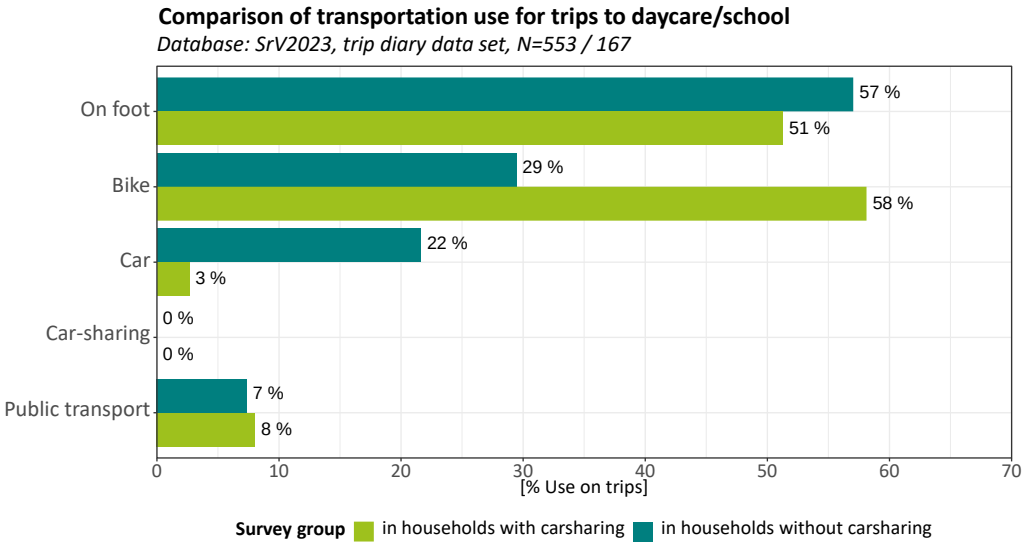

Figure 59: Comparison of transport modes used for trips to daycare and primary school

8.3.2 Purpose-specific journeys: comparison based on collected survey data

There are significant differences between carsharing users and non-users in terms of transport mode used on the **way to work or apprenticeships**. Below, we compare the results of the carsharing users surveyed with those of non-carsharing users from the representative population survey.

42% of non-carsharers drive a private car to work or their apprenticeship at least once a week, while the proportion among carsharing members is only 11%. Carsharers do not fully make up for this difference in car use by using carsharing cars: only 3% use a carsharing car at least once a week for this purpose.

In contrast, 41% of non-carsharers use a private bicycle or e-bike at least once a week to travel to work or apprenticeship, but 74% of carsharers do so. There are hardly any differences between the two groups in terms of public transport (carsharers: 33%, non-users: 31%) and walking to work or apprenticeship (carsharers: 30%, non-users: 25%).

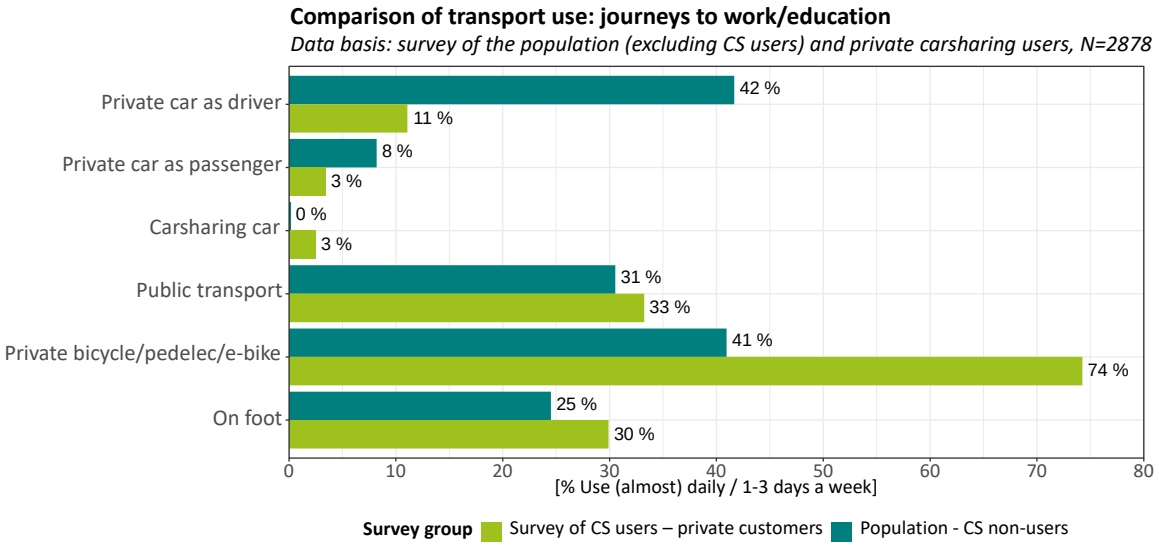

Figure 60: Comparison of transport modes used (journeys to work/education)

Similar differences exist with **regard to** the use **of transport for shopping and errands: 47% of the non-carsharing population use a private car as drivers for this purpose at least once a week, but only 17% of carsharing users do so. Of these, only 4% use a carsharing car.**

72% of carsharing members use a bicycle or e-bike at least once a week for shopping and errands, but only 45% of non-users do so. There are also significant differences in walking (in contrast to journeys to work and education): 72% of carsharers and 58% of non-users walk at least once a week. This is also related to the fact that carsharing members visit retailers "in the neighbourhood" more often than non-users or, due to the distance, can visit them on foot (see also chapter 5.8).

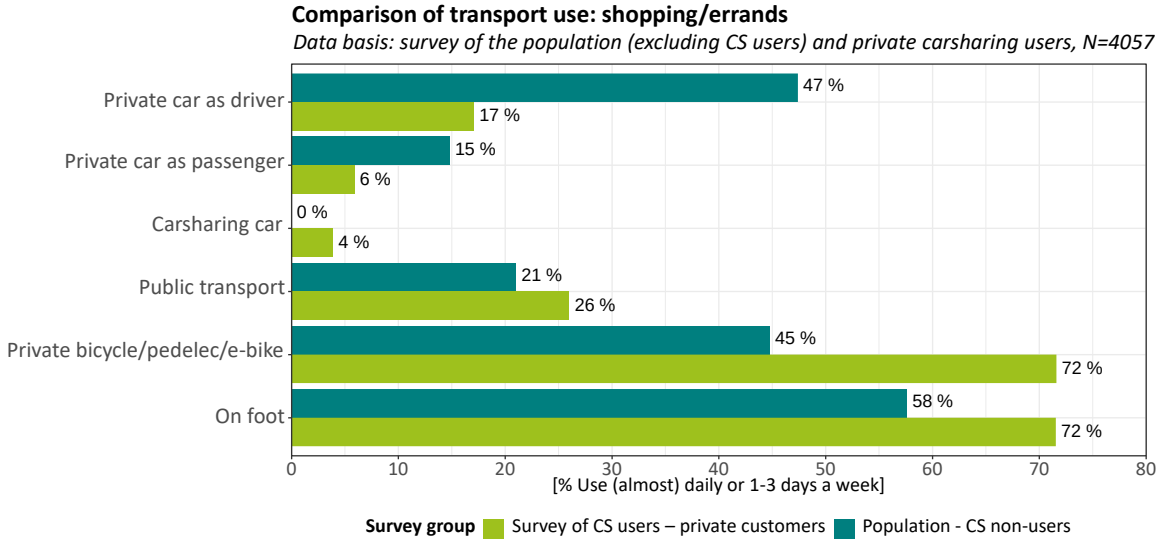

Figure 61: Comparison of transport modes used for shopping/errands

Weekly transport mode use also differs when it comes to **leisure, hobby and holiday trips**: **carsharers use bicycles significantly more often (car sharers: 66% / non-users: 40%), walk significantly more often (57%: 41%), and use public transport slightly more often (25%: 20%).** In contrast, they use private cars as a driver significantly less often (12%: 34%). Carsharing members also cover 3% of their weekly leisure, hobby and holiday trips with a carsharing vehicle.

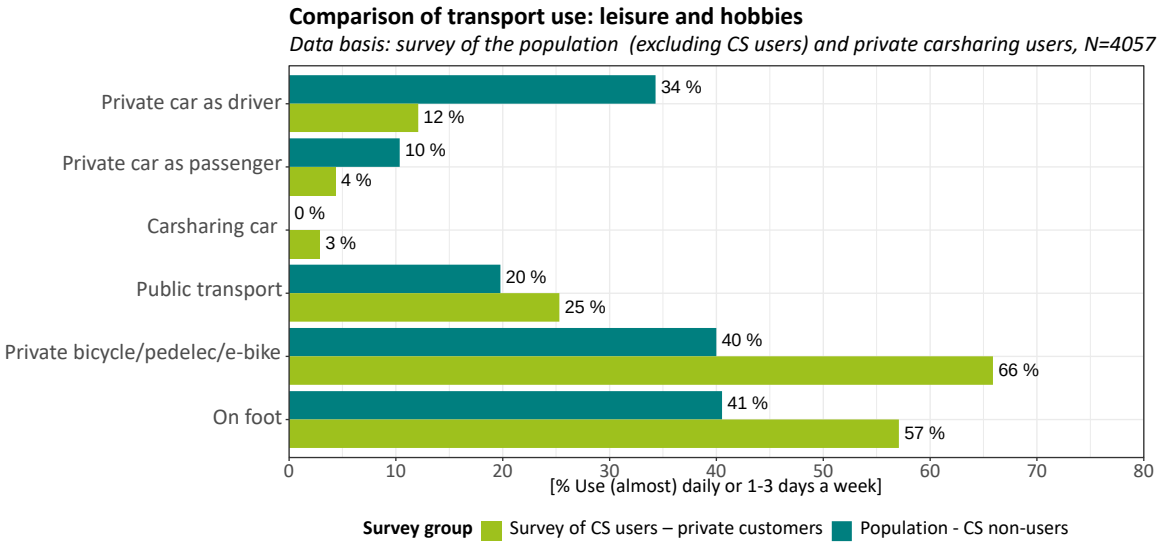

Figure 62: Comparison of transport modes used for leisure and hobby trips

8.4 Traffic-reducing effect of carsharing on the overall number of cars in Bremen based on survey data

To measure the traffic-reducing effect on the overall car fleet, the ratios described in chapter 4 were calculated using two different methods. First, the same method was used as in the 2018 Bremen carsharing study in order to be able to make a temporal comparison between 2018 and 2025 for Bremen. Second, the calculation standard developed in 2021 by the *Bundesverband Carsharing* (bcs standard) was used to enable a comparison between similar studies in Germany. These are presented below.

8.4.1 Calculation analogous to the 2018 study

Analogous to the 2018 calculation, the number of vehicles got rid of or not acquired was calculated in the four variants described in chapter 4.6.2. Table 16 lists the calculated values, with the average variant used for the 2018 report highlighted in bold.

Variant	"All shares" variant	Variant "low"	Variant "medium"	Variant "high"
Vehicles got rid of	7,103	2,197	**3,814**	5,449
Reduction ratio	1:10.9	1:3.4	**1:5.9**	1:8.4
Vehicles not acquired	6,779	2,712	**4,067**	5,423
Avoidance ratio	1:10.9	1:4.2	**1:6.3**	1:10.4
Total ratio	1:21.4	1:7.6	**1:12.1**	1:16.7

Table 16: The ratios determined in 2025 using a method analogous to the 2018 study

The calculated ratios are therefore lower than those calculated in 2018. In the study conducted at that time, the following ratios were reported in the medium variant:

- Reduction ratio: approx. 1:7
- Foregoing an acquisition (avoidance ratio): approx. 1:9
- Overall ratio: approx. 1:16

The data collected does not provide a causal explanation for the slight decline observed. The causes of the decline may be complex and may, for example, point to possible fundamental changes in mobility behaviour and in the world of work due to the coronavirus pandemic or an expansion of carsharing services in urban areas with lower population density or lower carsharing potential.

8.4.2 Calculation according to bcs standard

The following ratios result from the calculation according to the bcs standard (for a description of the method and the user and vehicle numbers used, see chapter 4.6.3):

	Reduction	Replacement
Total vehicles in survey	98	1,140
Number of responses	3,075	2,715
Extrapolated number of vehicles based on **26,489 users**	8,469	11,123
Ratio based on **592** carsharing **vehicles**	1:14.3	1:18.8

Table 17: The ratios determined in 2025 according to the bcs standard method

Measured according to the bcs standard, each carsharing vehicle in Bremen replaces 18.8 privately owned cars. The ratios according to the bcs standard are thus higher than those calculated using the method applied in 2018. A clear methodological advantage of the bcs ratio is a more accurate calculation of the replacement ratio, as potential double counting of vehicles is systematically avoided. The 2018 calculation method, on the other hand, better takes into account the fact that around one-third of respondents state that several people in the household use carsharing.

8.5 Regional effects

The combined ratio was further differentiated by city district. Figure 63 shows the average number of vehicles got rid of or replaced by carsharing per 100 registered users in each district, in descending order according to the number of vehicles replaced by carsharing. As can be seen from the graph, around 49 vehicles are replaced per 100 registered users in the Schwachhausen district, i.e. almost every second user here gets rid of a vehicle and/or avoids acquiring one. In the neighbouring district of Horn-Lehe, a similarly high value is achieved with 46 vehicle acquisitions avoided per 100 users. For most other districts, between 26 and 37 vehicles avoided per 100 users are calculated, i.e., here, every third or fourth user replaced a private car with carsharing.

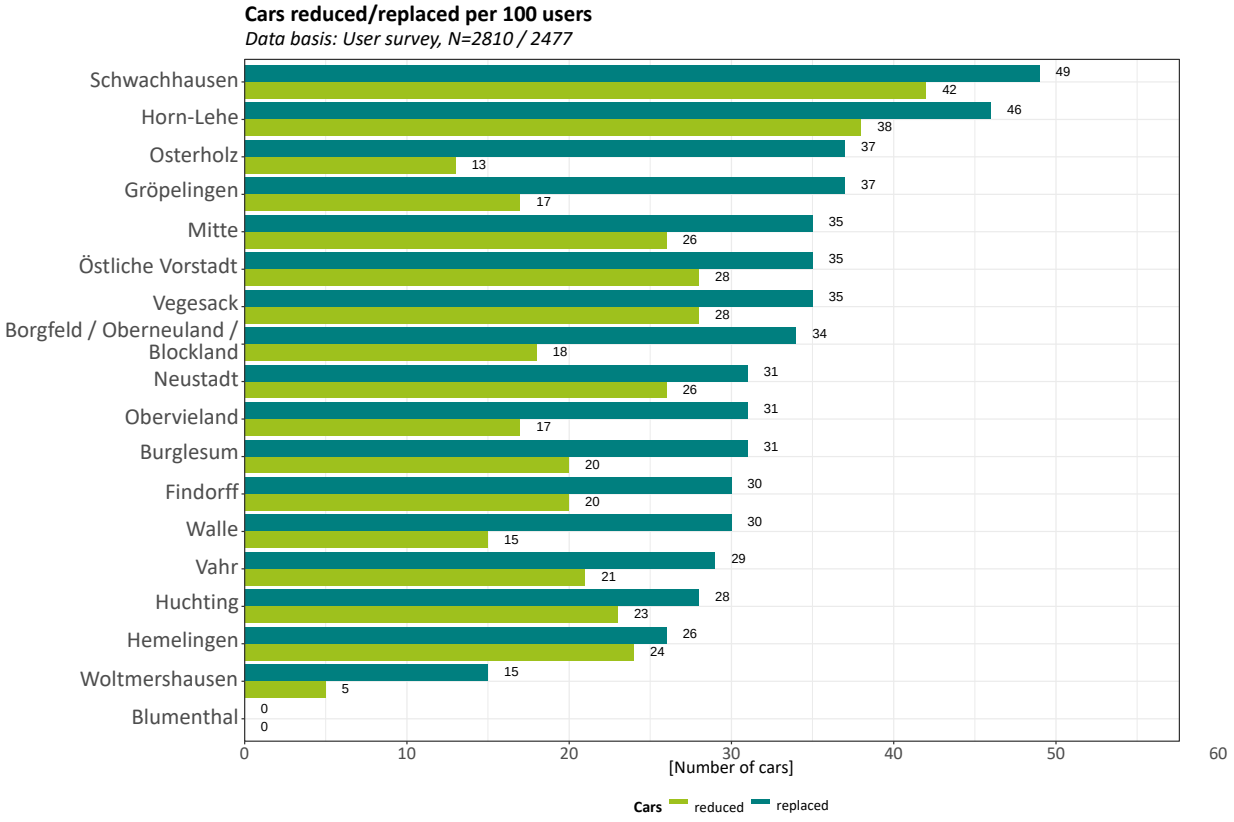

Figure 63: Average number of vehicles got rid of or replaced by carsharing per 100 users by district

9 Corporate customers

9.1 Definition of corporate customers

A total of **3,364 cambio members** were surveyed. Of these members, **82%** use **carsharing purely for private purposes**.

The group of members who **do not use cambio purely for private purposes (18%)** is composed as follows: 14% of members use cambio for both private and professional purposes**,** and 4% use it exclusively for professional purposes.

The corporate customer base was determined from these two groups of cambio users who do not use the service exclusively for private purposes (18%). Corporate customers are defined as cambio members who opt for at least one of the following three categories:

- Self-employed/freelancers who use carsharing as part of their professional activities
- Owners/managing directors who use carsharing as part of their professional activities
- Employees with responsibility for fleet and/or business travel management

Those who only opted for one of these two options were not classified as corporate customers:

- Use of carsharing via employer access
- Use of carsharing via access to a personal customer account.

The proportion of **corporate customers** defined in this way among the total of 3,364 cambio members surveyed is **6**% in the **sample**. Of these, **4%** are **self-employed/freelancers**, 1% are owners/managing directors, and 1% are responsible for fleet and/or business travel management.

Ultimately**, 188 companies/self-employed persons** participated in the study.

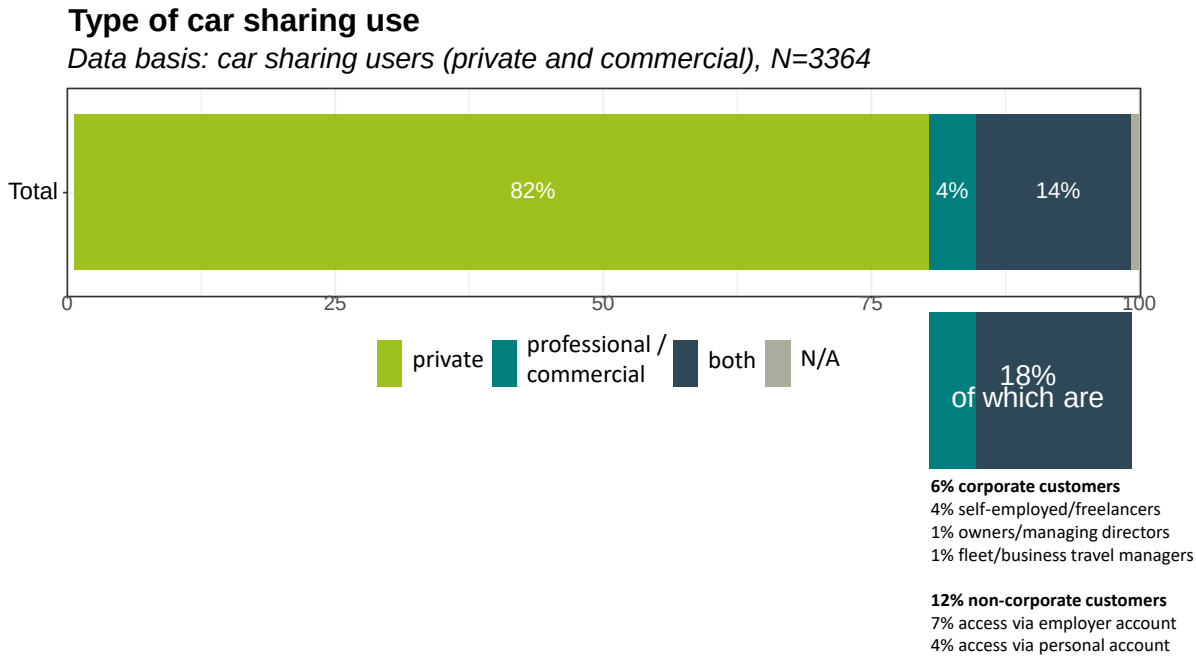

Figure 64: Proportion of private and business users

9.2 Number of employees

Most corporate customers are sole proprietorships or solo self-employed persons (50%). Another 24% are small businesses with fewer than 5 employees. A further 12% of companies have between five and nine employees. Larger companies with 10-49 employees (7%) or more employees (7%) are rare.

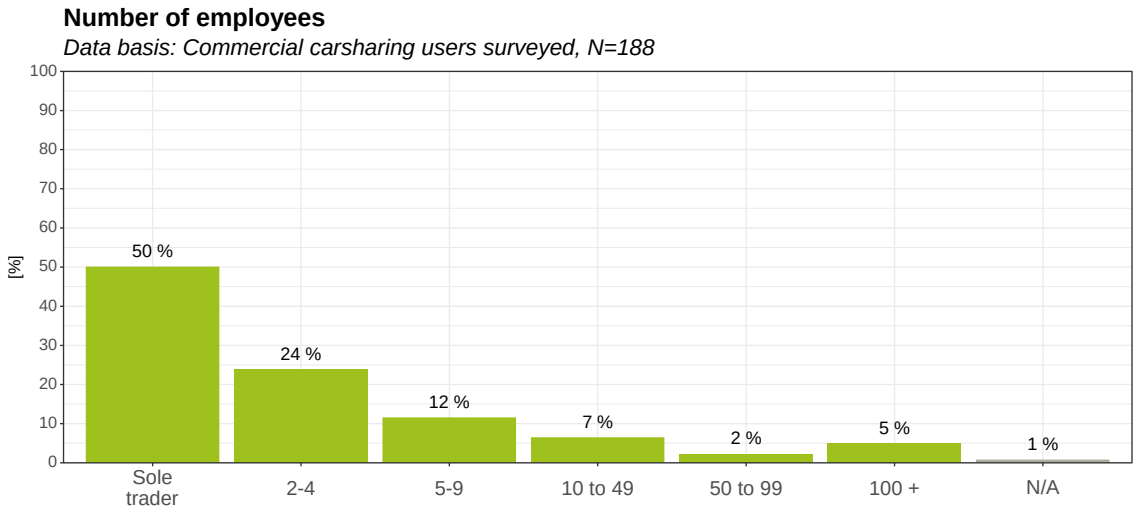

Figure 65: Number of employees of business users

9.3 Company location and industry affiliation

9.3.1 Company location

The City of Bremen is divided into 19 districts. A large proportion of corporate customers are based in districts with a comparatively small population. Around three-quarters of companies are based in one of the following five districts:

- Östliche Vorstadt, 25%: 12th largest district in Bremen by population
- Mitte, 22%: 16th largest district by population
- Schwachhausen, 13%: third-largest district by population
- Neustadt, 9%: largest district by population
- Walle, 8%: 9th largest district by population

Sole proprietorships are more likely to be located in **Schwachhausen (21%)** than multi-person companies, which account for only 5% of businesses there. **Multi-person companies,** on the other hand, are more likely to choose **Mitte** as their location **(31%)** than are sole proprietorships (13%).

Districts *(min. 1%)*	Total (%)	Sole proprietor-ships, N = 94	Multi-person companies, N = 92
Östliche Vorstadt	25	25	26
Mitte	22	13	**31**
Schwachhausen	13	**21**	5
Neustadt	9	9	9
Walle	8	10	7
Findorff	5	8	3
Horn-Lehe	4	3	5
Huchting	3	2	4
Hemelingen	3	1	6
Vahr	2	4	1
Woltmershausen	1	1	1
Gröpelingen	1	1	1
Burglesum	1	2	-

Table 18: Distribution of companies and self-employed persons by district

9.3.2 Industry affiliation

There is a wide variety of industries: the companies surveyed come from 25 different industries. 51% of the companies operate in the five most frequently mentioned industries.

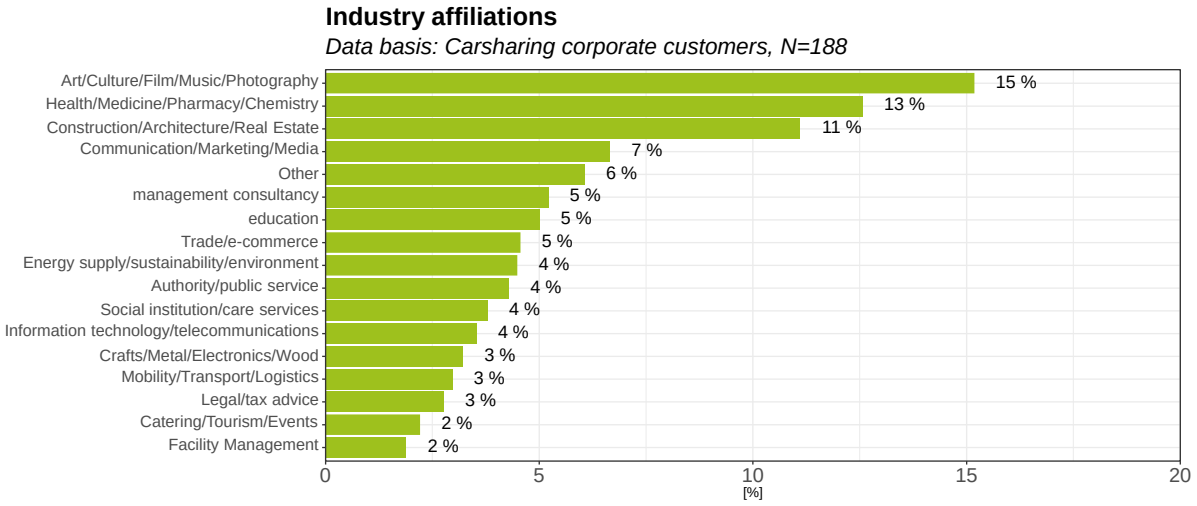

Figure 66: Industry affiliations

The **sole proprietorships** surveyed come from 17 different industries. The two most strongly represented industries are "arts/culture" with 24% and "health/medicine" with 16%.

The **multi-person companies** show even greater diversity, with 24 different industry classifications. The two most strongly represented industries are "construction/architecture/real estate" with 12% and "health/medicine" with 9%.

Sole proprietorships, most common industries	%	Multi-person companies, most common industries	%
Art/culture/film/music/photography	24	Construction/architecture/real estate	12
Health/medicine/pharmacy/chemistry	16	Health/medicine/pharmacy/chemistry	9
Construction/architecture/real estate	9	Government/public service	9
Education	9	Energy supply/sustainability	9
Communication/marketing/media	7	Communication/marketing/media	7
Total of five most common industries	**65**	**Total of five most common industries**	**46**

Table 19: Distribution of corporate customers by industry

9.4 Type of carsharing use

Mixed use clearly dominates for both private and business purposes. Overall**, 78%** of respondents from companies use carsharing **for both professional and private purposes**. 22% stated that they use it purely for professional purposes. 86% of respondents from sole proprietorships use carsharing for professional and private purposes; this applies to only 68% of respondents from multi-person companies.

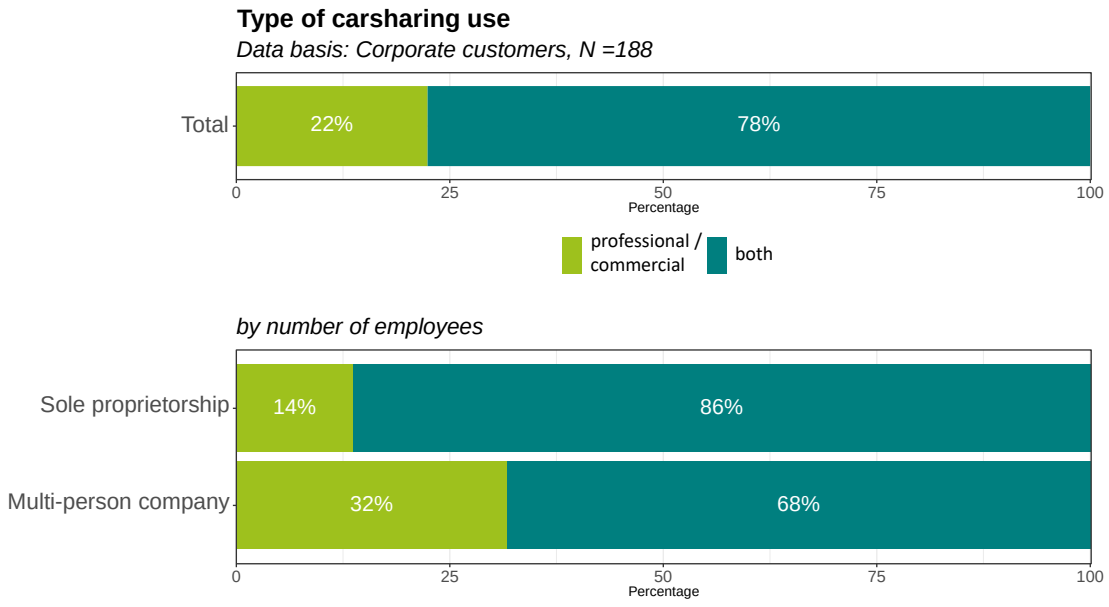

Figure 67: Type of carsharing use

9.5 Position of respondents in the company

The majority of respondents from companies are **self-employed and freelancers (63%)**. Company owners and managing directors (26%) and fleet and business travel managers (11%) complete this target group.

Of the respondents from **sole proprietorships, 89% are self-employed or freelancers.** A further 11% of respondents are owners or managing directors.

In companies with multiple employees, **only 38% are self-employed/freelancers**, 41% are owners/managing directors, and 21% are responsible for fleets/business travel.

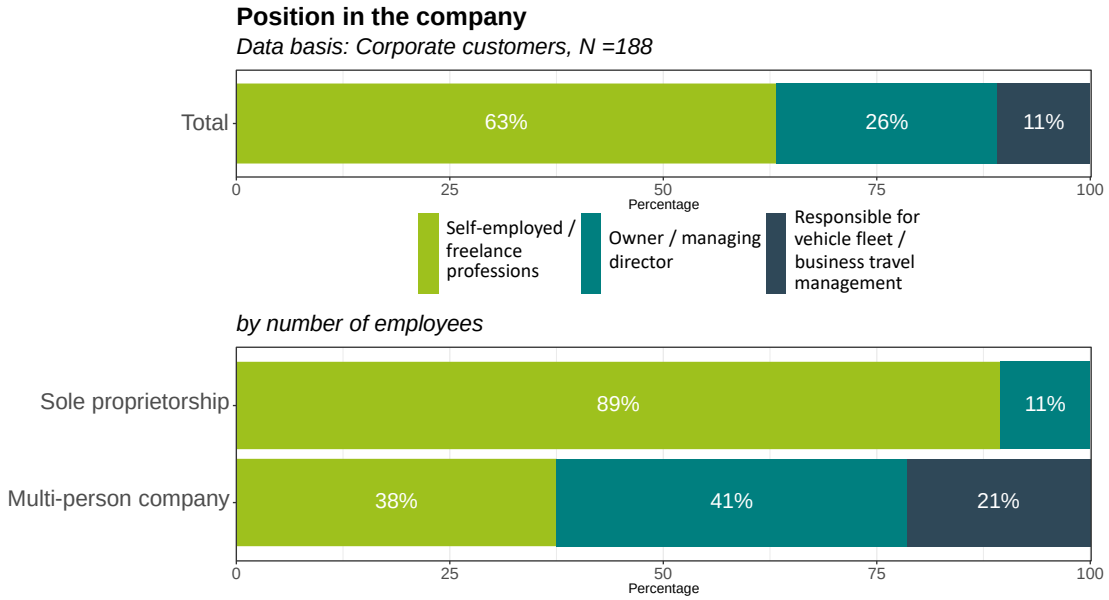

Figure 68: Position in the company

9.6 Carsharing accounts in companies

In 64% of cases, carsharing via the **company account is used by only one person** in the company/institution. In a further 13% of companies, two to four employees have access to carsharing via the company account, and in 7% of cases, five to nine employees have access. In a further 10% of companies, ten or more employees have access.

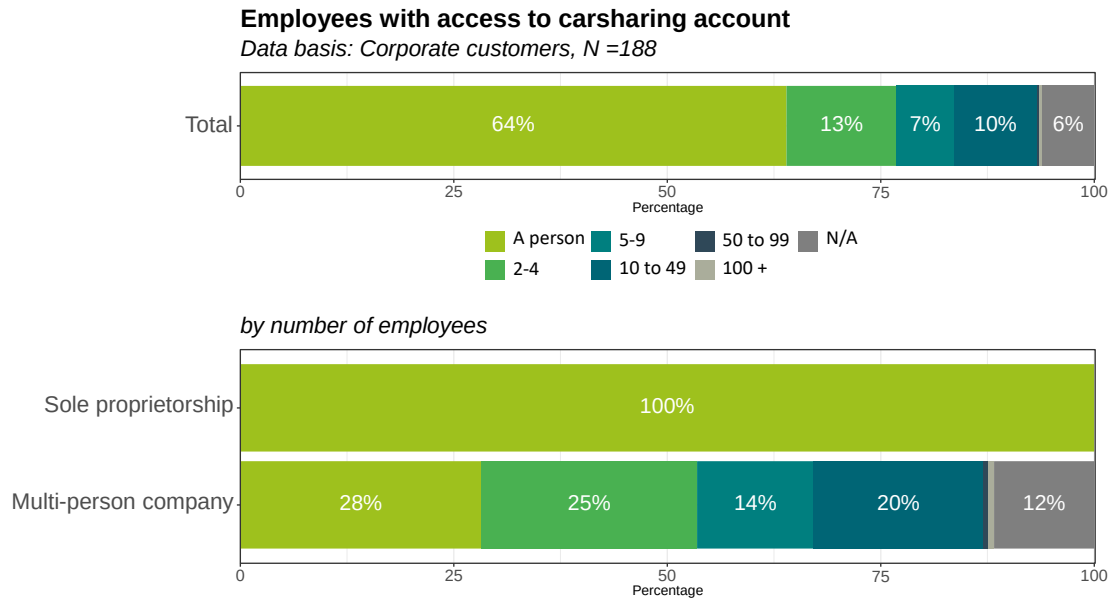

Figure 69: Employees with access to corporate carsharing account

9.7 Other mobility services

In addition to carsharing, companies offer their employees an average of **0.8 other mobility services**. Sole proprietors use 0.4 services, while companies with two or more employees use 1.3 services. It can be assumed that sole proprietors are more likely to have identical private and business premises and therefore have less need for additional mobility services for commuting. Only 28% of sole proprietors use one of the mobility services offered, while **78% of companies with multiple employees** offer **mobility services**.

The most frequently offered option, at 27%, is **the job ticket or *Deutschlandticket*** (partially or fully subsidised by the company), which is used by 18% of sole proprietors and offered by 37% of multi-person companies. The next two most frequently mentioned offers are **compensation for the use of private cars for business trips** and the **Jobrad**[11] (each mentioned by 19%). As with all mobility offers, use is significantly more pronounced in multi-person companies.

Mobility services	Total (%)	Sole proprietors, N = 94	Multi-person companies, N = 92
Job ticket / *Deutschlandticket*	27	18	**37**
Compensation for the use of private cars for business travel	19	9	**29**
Company bicycle	19	7	**31**
Access to company vehicles	7	2	12
Bahncard[12]	5	2	8

[11] *Jobrad* is a bike leasing programme that allows employees to obtain a bike or e-bike through their employer. Financing is usually provided via a monthly salary reduction, which saves on taxes.
[12] A *Bahncard* is an annual discount offered by the German Railway (*Deutsche Bahn*), allowing customers to purchase train tickets at a 25, 50 or 100% reduction (*Bahncard 25*, *Bahncard 50*, *Bahncard 100*) for the period of validity.

Mobility services	Total (%)	Sole proprietors, N = 94	Multi-person companies, N = 92
Mobility budget	4	-	9
Personally assigned company car	2	1	3
No mobility services offered	39	**60**	18
No information provided	8	12	5

Table 20: Other mobility options for employees

9.8 Reasons for using carsharing from a company perspective

At 65%, the reason most frequently cited as "**very important"** for using carsharing is the desire **to have a vehicle available** when needed (68% in sole proprietorships, 63% in multi-person companies). Less important than having a vehicle available at all is the **availability of different vehicle sizes**, **at 36%** (27% in sole proprietorships, 45% in multi-person companies).

Motivations with a business **focus on costs and effort** also play a significant role. For example, 43% cite reduced care and maintenance costs as a motivation, followed by a reduction in fixed fleet costs (39%) and lower parking space requirements on company premises (25%).

Environmental and social motivation is also of considerable relevance for approximately 50% of corporate customers. Fifty percent consider it very important to contribute to the mobility transition, while 48% consider it very important to contribute to a liveable city. Forty-six percent cite improving their environmental footprint.

The aspect of "reducing fleet costs" is very important for 47% of companies without their own company vehicles (companies with their own fleet: 29%). Companies without their own vehicles also cite environmental and social motivation significantly more often:

- "Contributing to the mobility transition": companies without a fleet: 59%, companies with a fleet: 34%.
- "Improving the environmental footprint": companies without a fleet: 57%, companies with a fleet: 29%.
- "Contributing to a liveable city": companies without a fleet: 55%, companies with a fleet: 36%.

Companies without their own vehicles differ from other companies in that they are more strongly motivated by cost reduction as well as environmental and social considerations. These motivations may have already contributed to the fact that these companies either no longer own their own vehicles or have been able to forego acquiring them by using carsharing.

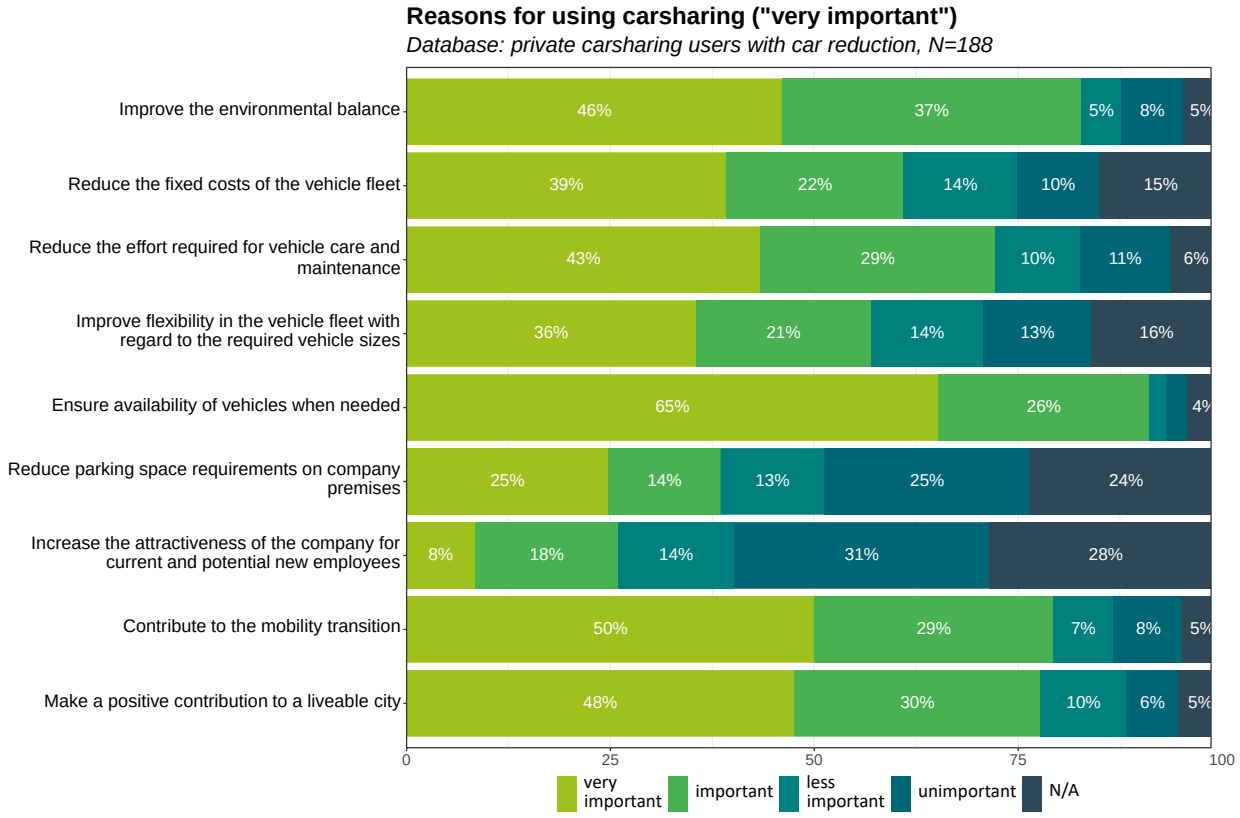

Figure 70: Companies' reasons for using carsharing

9.9 Reasons for using carsharing

The most important use is **"transport of materials" (63%**), followed by **"customer visits" (59%**) and **"spontaneous/unplanned trips" (49%)**.

There are significant differences in the purposes of use between companies that exclusively use cambio's station-based service (*no* smumo *usage*) and companies that use *smumo* (*exclusively* smumo *or both* smumo *and cambio's station-based service*).

Across all corporate customers, an average **of 2.5 purposes for use** were cited. Among those who exclusively use cambio's station-based service, the average was 2.3, and among users of *smumo*, cambio's free-floating service, it was 3.2. For example, 40% of cambio users cite "spur-of-the-moment trips" as their purpose of use, but 71% of *smumo* users do so. These differences are likely due to the greater flexibility of the *smumo* service.

Purposes of use Carsharing	Total	Users only of cambio's station-based service N = 134	Users of station-based service and *smumo* N = 54
Transport of materials	63	59	**72**
Customer visits in the City of Bremen / surrounding area	59	55	**70**
Spur-of-the-moment trips	49	40	**71**
Other errands in Bremen/ surrounding area	34	26	**52**
Longer business trips	28	25	35
Trips between company locations	10	11	5
Connection to rail/air travel	8	8	9
Other purposes	4	4	2
Ø: stated purposes of use	2.5	2.3	**3.2**

Table 21: Purposes of company carsharing use by use as a percentage of responses

There are also clear differences between infrequent users (zero to eleven uses) and frequent users (twelve or more uses per year).

Infrequent users cited an average of 2.3 **uses**, while **frequent users** cited **3.0**. For example, 51% of infrequent users cited "customer visits in the City of Bremen/surrounding area", compared to 76% of frequent users. The most common purpose of use among infrequent users is "transport of materials" (64%), which is slightly more important in this group than among frequent users (60%).

Purposes of use	Total	Infrequent users, N = 128	Frequent users, N = 60
Transport of materials	63	**64**	60
Customer visits in the City of Bremen / surrounding area	59	51	**76**
Spur-of-the-moment trips	49	47	52
Other errands in Bremen/ surrounding area	34	28	**46**
Longer business trips	28	24	**36**
Trips between company locations	10	10	9
Connection to rail/air travel	8	7	2
Other purposes of use	4	3	5
Ø: stated purposes of use	2.5	2.3	**3**

Table 22: Purposes of company carsharing use by frequency of use in % of responses

9.10 Satisfaction with aspects of carsharing use

At 53%, the highest satisfaction ratings (scale point "very satisfied") **are achieved by "distance/accessibility of the nearest carsharing station"** (with 94% at least “satisfied”) **and "bureaucratic effort" with 51%** (91% at least “satisfied”). Frequent users (twelve or more carsharing trips per year), who are more familiar with the procedure, rate this aspect as very satisfactory at 67% (with 98% at least “satisfied”).

31% are very satisfied with the aspect **"flexible and spontaneous use options"** (80% at least “satisfied”), but 19% are less satisfied or dissatisfied. This is the highest negative value of all items. In particular, 23% of infrequent users express little satisfaction or dissatisfaction. This is a potential reason for their infrequent use.

The criterion **"availability of different vehicles"** is rated as “very satisfactory” **by 28%** (82% at least “satisfied”).

The **"availability of both standard and automatic shift"** is very satisfactory **for 19%** (with 62% at least “satisfied”) and has high values for "no opinion/no answer" at 31%. The situation is similar with regard to **"availability of both electric and petrol vehicles**": 15% are very satisfied (65% at least satisfied) and the statement also scores high in the "no opinion/no answer" category with 27%.

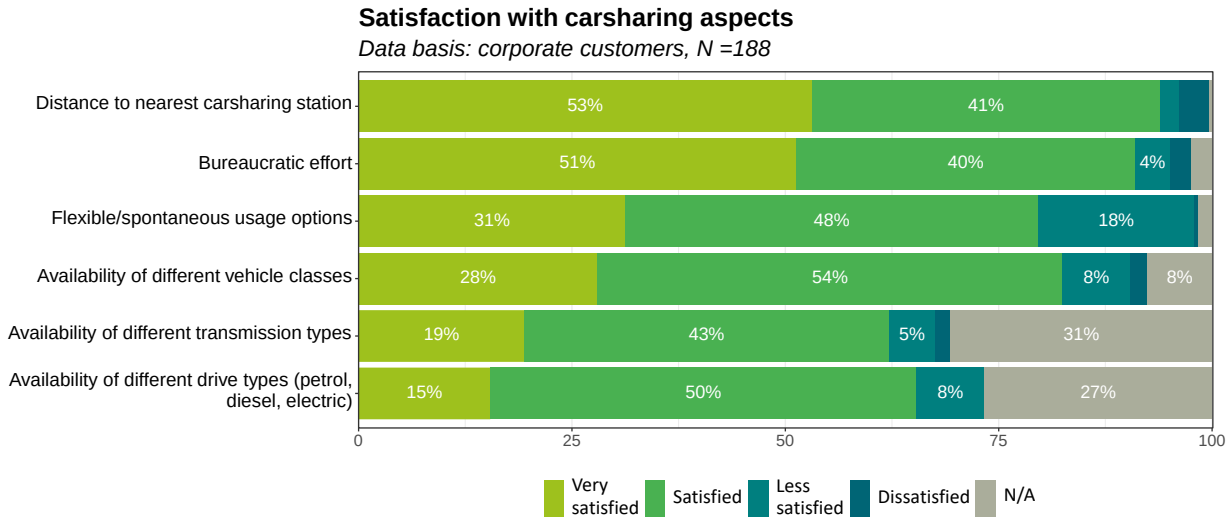

Figure 71: Satisfaction of corporate customers with aspects of carsharing services

There are larger differences in satisfaction with the various aspects of the service between infrequent users (zero to eleven uses per year) and frequent users (twelve or more uses per year). Corporate customers who use carsharing frequently are consistently more positive about the items surveyed. Overall, frequent users are "very satisfied" with 2.5 of the six aspects surveyed.

Satisfaction ("very satisfied") with aspects of carsharing	Overall %	Infrequent users, N = 128	Frequent users, N = 60
Distance/accessibility of nearest carsharing station	53	49	**63**
Bureaucratic effort required	51	44	**67**
Flexible and spontaneous use options	31	29	35
Availability of different vehicle classes	28	25	35

Satisfaction ("very satisfied") with aspects of carsharing	Overall %	Infrequent users, N = 128	Frequent users, N = 60
Availability of different transmission types (manual/automatic)	19	16	26
Availability of different drive types (gasoline, diesel, electric)	15	13	20
Ø: aspects mentioned	**2.0**	**1.8**	**2.5**

Table 23: Satisfaction of corporate customers by frequency of use

Furthermore, **corporate customers who use the free-floating *smumo* in addition to cambio's station-based service consistently express more positive opinions on the criteria surveyed**.

Satisfaction ("very satisfied") With aspects of carsharing	Overall %	Users only of cambio's station-based service N = 134	Users of station-based service and *smumo* N = 54
Distance/accessibility of nearest carsharing station	53	50	**6**
Bureaucratic effort required	51	47	***62***
Flexible and spontaneous use options	31	30	**35**
Availability of different vehicle classes	28	26	**33**
Availability of different transmission types (manual/automatic)	19	17	**25**
Availability of different drive types (gasoline, diesel, electric)	15	12	**23**
Ø aspects mentioned	**2.0**	**1.8**	**2.4**

Table 24: Satisfaction of corporate customers by service used

9.11 Impact of carsharing on companies

For the statements "Carsharing is viewed positively by employees" and "Offering carsharing makes it easier for us to attract employees to our company," the results are presented based on companies with two or more employees, as 60% and 87% of sole proprietor businesses did not answer these questions.

The **carsharing service** itself is viewed positively by the majority of companies with multiple employees, with 60% agreeing (strongly agree/somewhat agree). 17% of companies with multiple employees did not give an opinion on this. Carsharing is considered to be of moderate relevance in **attracting employees,** with 12% (strongly agree/somewhat agree). 33% did not give an opinion on this.

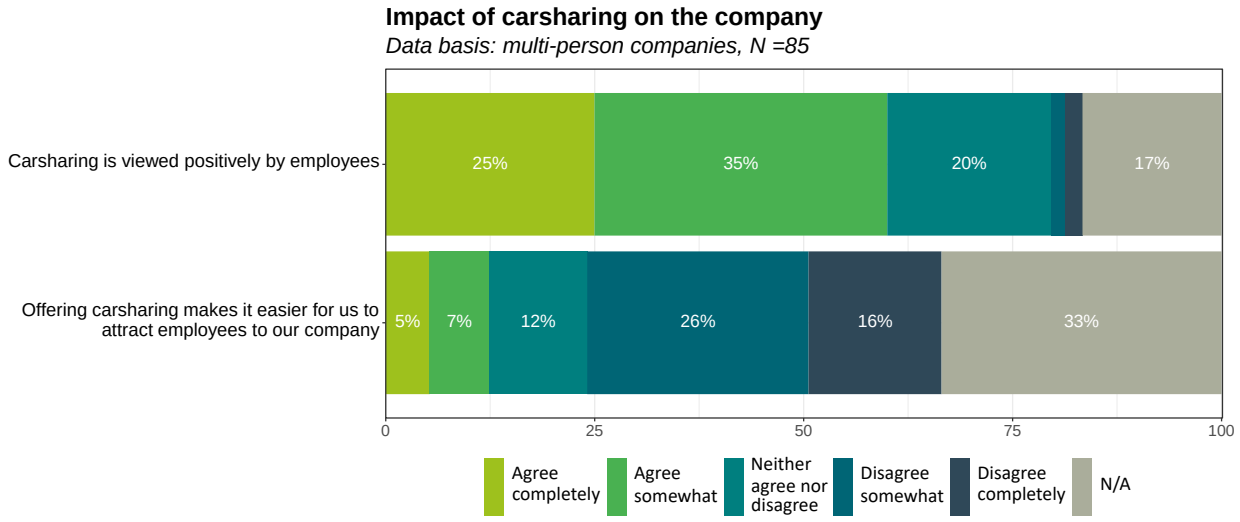

Figure 72: Effects of carsharing on the company (1)

The statements **"Carsharing encourages us to use eco-friendly modes of transport more often"** and **"Carsharing allows us to use vehicles that fit our corporate image/culture"** are presented on the basis of all companies. Forty percent of all companies strongly agree/somewhat agree that carsharing leads to greater use of **eco-friendly modes of transport**. **Vehicles that fit in with the company's image / culture** is confirmed by 36% of all companies. The agreement rate is 41% for companies without their own vehicle fleet and 30% for companies with their own vehicles.

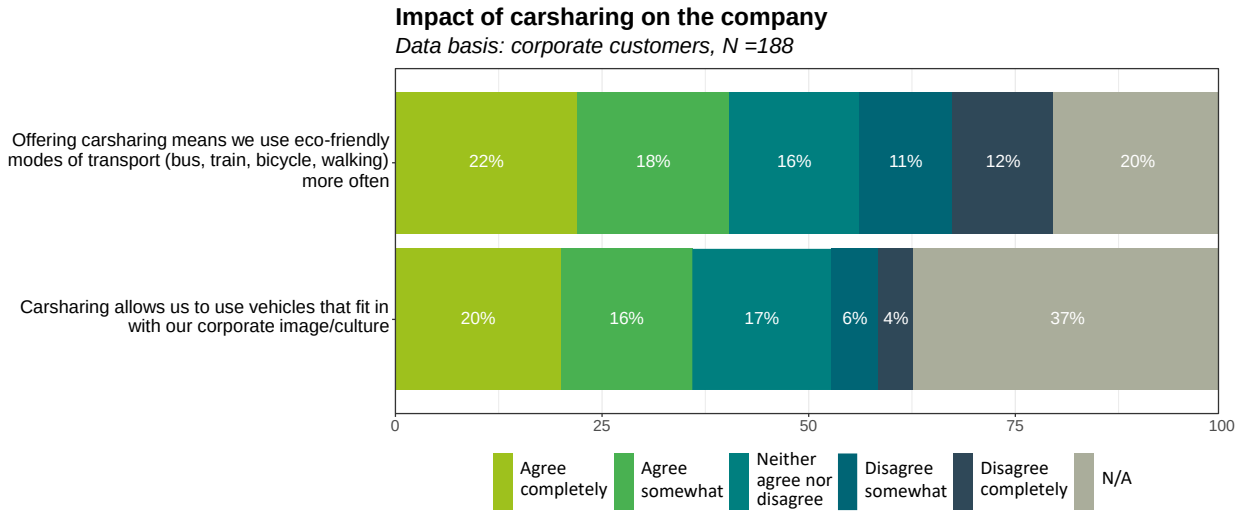

Figure 73: Effects of carsharing on the company (2)

9.12 Use of carsharing providers

98% of corporate customers use cambio's station-based service, while 29% also use the free-floating service *smumo* for professional purposes. Providers other than cambio/*smumo* play a very minor role; Flinkster and snappcar/Tamyca are each used by only 1% of the companies surveyed.

In the group of frequent users, **50% said they use *smumo***, while only 19% of infrequent users said the same.

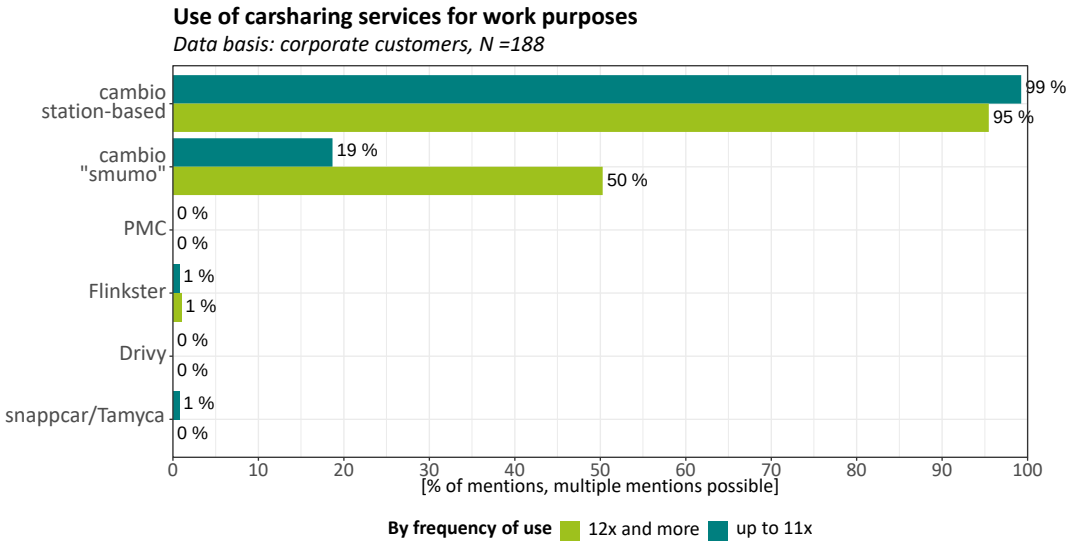

Figure 74: Use of carsharing services for work purposes by frequency of use

9.13 Frequency of carsharing use

The information on frequency of use was obtained from the survey data sets from the backend data. Carsharing is used zero to eleven times a year by 68% of the companies surveyed and twelve times or more by 32% of the companies.

There are clear **differences** in frequency of use between companies that exclusively use cambio's station-based service and those that also use *smumo*, cambio's free-floating service: **56% of *smumo* customers used the service twelve times or more,** while **only 22%** of the group that exclusively **used cambio's** station-based service reported **doing so**.

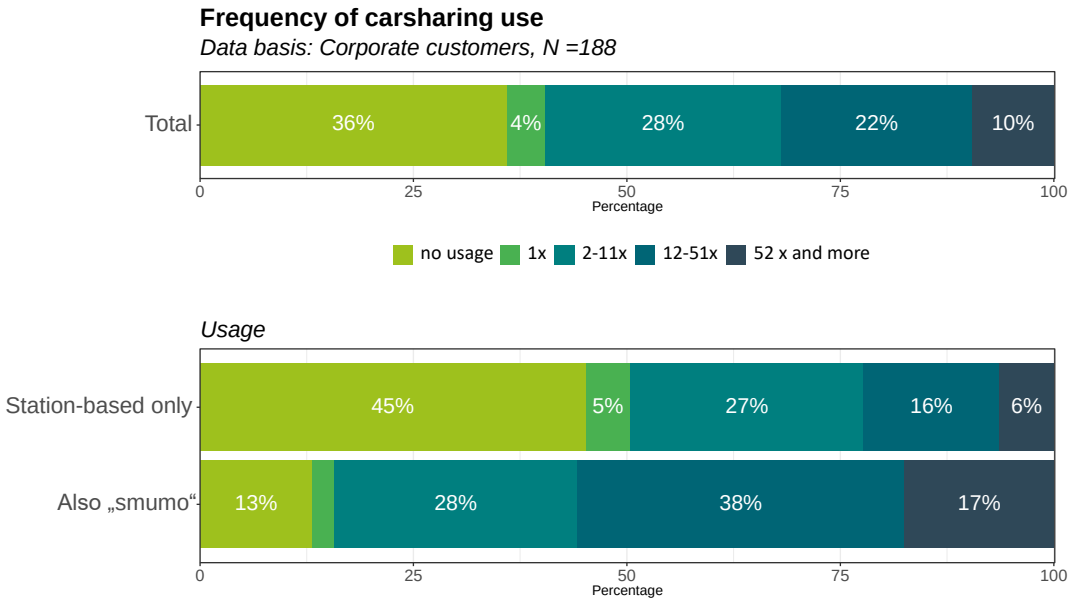

Figure 75: Frequency of corporate customer use by service

Further finding: **41% of corporate customers without their own vehicle fleet are frequent users**, with twelve or more uses, whereas this applies to only 16% of companies with their own vehicles.

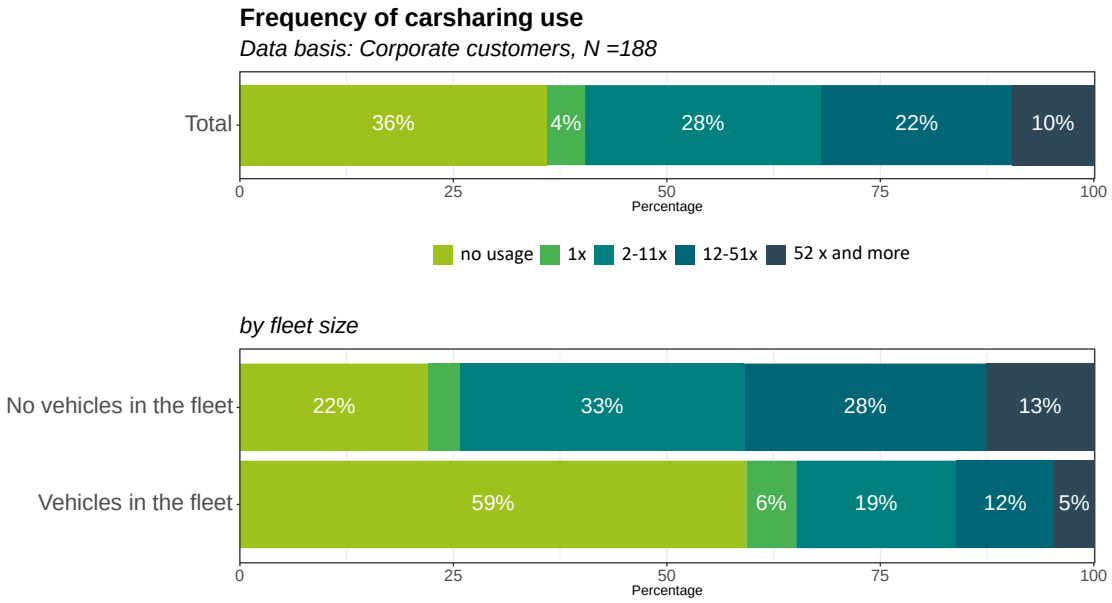

Figure 76: Frequency of corporate customer carsharing use by fleet size

9.14 Fleet size

On average**,** the fleet size **of the companies surveyed is 1.4 vehicles,** with 60% of companies stating that they do not have their own car (passenger car/van). Thirty percent have one or two cars, and 8% of companies have three or more cars in their own fleet. Companies with their own vehicles have an average of 3.6 vehicles.

Infrequent carsharing users own an average **of 1.6 cars, whereas frequent users have an average of only 0.9 cars in their fleet and 80% do not have a company car.**

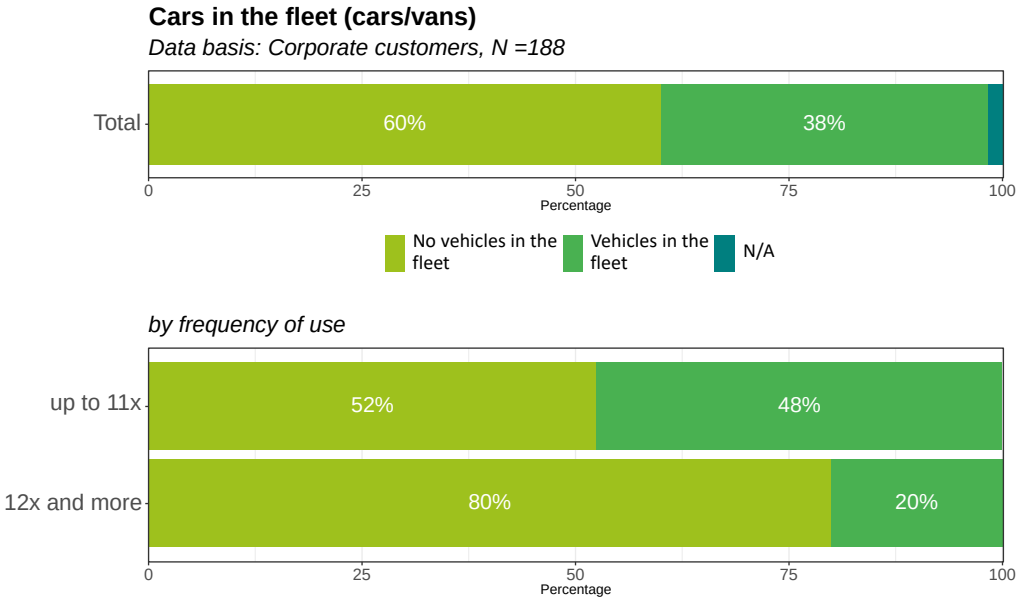

Figure 77: Vehicles in the company fleet vs. frequency of use

As **the number of employees** increases, so does the size of the fleet. Sole proprietorships have an average of 0.4 **cars** (69% in this group have no car) and **multi-person companies have an average of 2.4 cars (52% have no car)**.

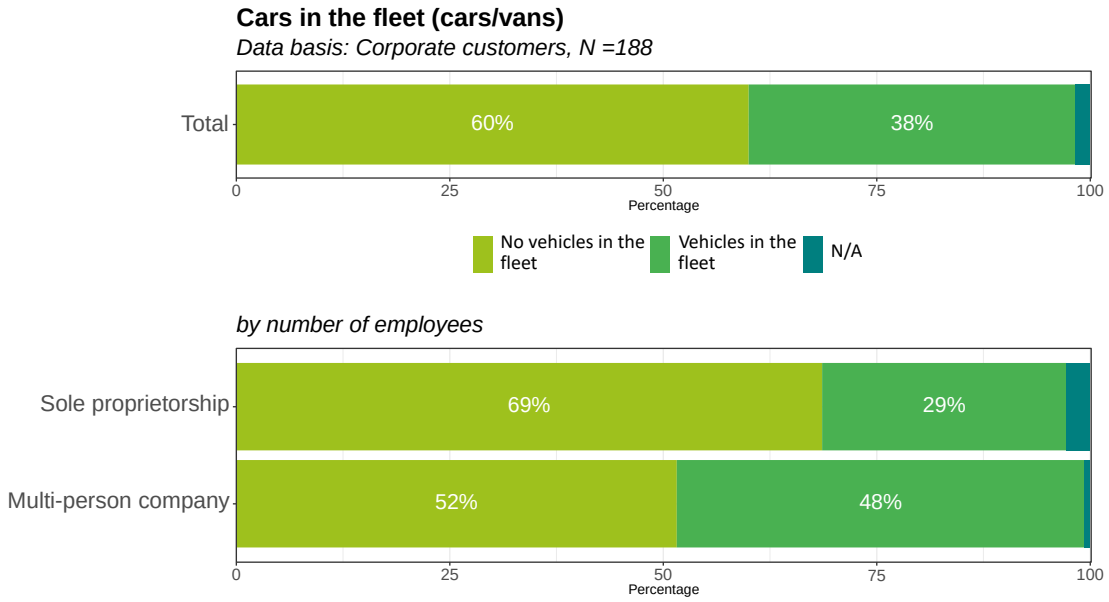

Figure 78: Vehicles in the fleet by company size

There is a noticeable difference between corporate customers who exclusively use cambio's station-based service (average of 1.5 cars) and those who also use the free-floating *smumo* service (average of 1.2 cars in the fleet).

9.15 Fleet-size reduction

The results of the question of whether the availability of carsharing has reduced fleet sizes are presented below.

43% of corporate customers stated that **carsharing** had **not changed** their **fleet. We received no response to this question from 6%, but in 50% of cases, carsharing did lead to a change.** Carsharing has the strongest influence on the decision not to acquire new or replace existing vehicles (36%), followed by reduction of the use of private vehicles for business purposes (14%) and fleet size reduction (10%).

Thirty-six percent of companies reported that they had **refrained from making new and replacement vehicle purchases**. The most pronounced reduction in vehicle purchases was among **multi-person companies at 47%** (sole proprietors: 26%) and **companies without their own vehicle fleet at 41%** (companies with vehicle fleets: 29%).

Fourteen percent of companies reduced **or eliminated the use of private vehicles for business purposes**. This **reduction** in business use led to a 21% decrease by users of cambio's free-floating *smumo* service, compared to only a 12% decrease for those who solely use cambio's station-based service.

A **reduction in fleet size** was reported by 10% of companies. Higher reduction rates are found in the groups of **multi-person companies at 15%** (sole proprietors: 6%) and companies that **use carsharing frequently at 16%** (companies that use it infrequently: 8%).

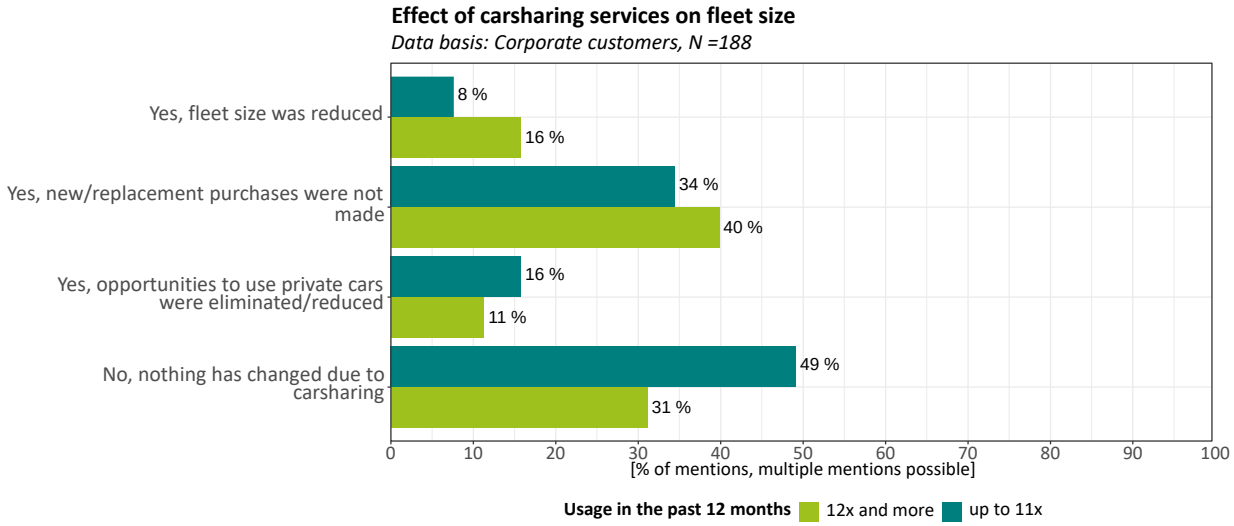

Figure 79: Effect of carsharing on the vehicle fleet size compared to current fleet size

A comparison of the current fleet size with the estimated fleet size in the hypothetical case that there were no longer a carsharing service is shown in the following table.

How many cars would be in your fleet if there were no carsharing? **Only 28% assume that there would be no vehicles left in that case (currently 60%)**. On average, in a scenario where carsharing no longer existed, there would be 2.1 cars in the fleet, which is 0.7 cars more than currently.

Figures in %	Current fleet size	Fleet size without carsharing
Zero vehicles	**60**	**28**
1 vehicle	21	41
2 vehicles	9	14
3+ vehicles	9	16
No information provided	2	2
Average	1.4	**2.1**

Table 23: Influence of carsharing on fleet size

9.16 Wishes of the carsharing service

The corporate customers surveyed were also given the opportunity to express their wishes of future car-sharing service (open-ended question). The responses were categorised. The main requests were for more stations, more electric vehicles, an expansion of *smumo*, cambio's free-floating service, a general increase in availability and more vehicle types.

10 Summary assessment

In summary, based on the data collected and evaluated from various sources (representative survey of citizens, private carsharing customers, corporate customers, SrV data), it can be concluded that **carsharing in Bremen** has a **positive** effect **in terms of the mobility transition** and **sustainably strengthens walking, cycling and public transport**. The contribution of carsharing to the common good in Bremen includes a **significant reduction in parked cars as well as a significant shift away from private cars toward more environmental modes, especially cycling**.

Key findings:

- A **dense network of clearly visible stations** is of great importance for the success of the carsharing service. Here, the city continues to be challenged **to identify suitable locations** in close cooperation with the providers **and make them available for carsharing**. Other **important aspects of carsharing** for users are uncomplicated availability of vehicles at the desired time, reserved parking at a carsharing station, and simple, self-explanatory operation of the vehicles.
- **Carsharing in Bremen has had a lasting effect on reducing traffic**. This includes both parked cars and the annual mileage of carsharing users. While the average household in Bremen has 0.9 cars and drive an average of around 10,000 km per year, households that use carsharing have 0.4 cars and drive around 3,500 km per year. **Carsharing households** therefore have **60% fewer cars** and drive **65% fewer car kilometres per year**. Correspondingly, **two out of three carsharing households** are **car-free**, i.e., there are no private or company cars in the household. Among non-carsharers, however, this is only the case in one in four households.
- In the (hypothetical) event that **the existing carsharing service in Bremen were discontinued**, this would have **a massive impact both on users and on the number of cars in Bremen**: the proportion of car-free households of carsharing members would be halved, and more than half of the households of carsharing members would then have one or more cars.
- The number of users has more than doubled from 12,500 in 2018 to around 28,000 in 2025, and the carsharing fleet comprises 650 vehicles at the time of the study. Allowing for the vehicles reserved for corporate use and for carsharing use by several household members, it can be assumed that there are at least **11,800 fewer cars** from private households **on the streets of Bremen**. According to the bcs standard calculation method**, each carsharing vehicle in Bremen replaces 18.8 privately owned vehicles.**
- In addition to lower car mileage, there are further differences in **mobility behaviour** between carsharing users and non-users. The significantly lower proportion of journeys made by car is accompanied by a **significantly higher use of bicycles, e-bikes, and (e-)cargo bikes** among carsharing users, based on the comparatively high share of bicycle use in Bremen's modal split. According to data from the German System of Representative Traffic Surveys (SrV), the total length of journeys made by members of households with carsharing is also shorter than that of members of households without carsharing.
- Although the effects are slightly less pronounced overall compared to the 2018 study, **carsharing users** show **a stronger local orientation in their shopping behaviour**. Carsharing therefore continues to contribute to **the strengthening of the local economy.**
- **Similar to the 2018 study results, user satisfaction is high for the most important aspects of carsharing**
- The **most important reason** for most carsharers to **become members** was the fact that they did not own a car but still needed one from time to time. For around half of carsharers, climate and environmental protection also played a role.
- From the perspective of carsharing users, **the decisive reasons for using a carsharing vehicle** are the lack of (convenient) access to their destination by public transport, the need to transport luggage, and the fact that they do not have their own car.

- **Carsharing also has a high level of awareness and a predominantly positive image among (current) non-users in the population**. 85% of non-users are aware of a carsharing service in their area and two-thirds consider carsharing to be a good idea in principle. There is definitely potential for new memberships, which should be actively pursued. Possible target groups that have been identified include younger people, women, and people with a migrant background.
- **A frequently cited barrier to use among non-users** is the fact that they already own a car. Added to this is a lack of knowledge about the actual costs of carsharing and the assumption that carsharing is too inflexible, as users have to commit to a time window in advance. This argument is largely countered by the introduction of *smumo*, cambio's free-floating service.
- Regarding the vehicles got rid of or replaced by carsharing, the users surveyed indicate no differences depending on whether only cambio or *smumo* or both services are used together**. The *smumo* service is therefore seen as a useful addition to the existing service.**
- ***smumo*, cambio's free-floating service** introduced in 2020 to complement cambio's station-based carsharing service, is viewed positively. The response from users is overwhelmingly positive, especially with regard to the fact that **it is not necessary to specify the end time of a booking in advance**. At the same time, **no negative effects** can be identified; on the contrary, the additional free-floating service contributes positively to the traffic-reducing effect of carsharing in Bremen.
- The ***mobil.punkte* are well known among the population and are overwhelmingly viewed positively.** Users rate these stations on public street space more positively than stations on private property, especially in terms of their proximity to their own homes.
- **Around one in three of the carsharing users surveyed has already used e-carsharing**. Of those who have not yet used an electric car, 38% intend to test one in the next 12 months. **Electric cars are significantly more attractive to men and younger customers than to older ones**.
- Respondents who already have experience with electric carsharing cite **curiosity** and **climate and environmental protection** as the main **reasons for using an electric car**.
- The main reasons for **not having driven an electric carsharing vehicle** to date are the lack of **availability of electric carsharing vehicles**, **a lack of knowledge about the charging process**, **range concerns** and a general **concern that using electric cars is too complicated**.
- This study also examined **for the first time the effects of carsharing on business customers**. It is striking that, in addition to larger companies/institutions, carsharing services are used in a variety of ways by solo self-employed persons and small businesses.
- **The most important motivation** for the business use of carsharing is the **availability of vehicles while reducing the financial costs** of car use.
- The self-employed individuals and companies surveyed cited the **transport of materials and customer visits** as the most important uses for carsharing.
- In terms of their **sociodemographic composition**, carsharing members differ from the rest of the population in many ways: they are disproportionately likely to be **middle-aged men with higher education and above-average net household income**.

11 Appendix

11.1 Questionnaire

Target groups

Via online survey (invitation by email from provider):

A CS customers

Derived from the responses

A Survey focus on private use

A Survey focusing on professional/ business use

Differentiated access links according to frequency of use in the last 12 months in accordance with the categories of the bcs standard:

- Use 52 times or more
- Use 12 to 51 times
- Use 2 to 11 times
- Use 1 time
- No usage in the last 12 months under consideration

➔ Similarly, provision of marginal distributions in the backend data of the CS provider for subsequent weighting of the data

To reduce the time required to complete the survey, division into 15 randomly assigned groups:

		Gruppe 1	Gruppe 2	Gruppe 3	Gruppe 4	Gruppe 5	Gruppe 6	Gruppe 7	Gruppe 8	Gruppe 9	Gruppe 10	Gruppe 11	Gruppe 12	Gruppe 13	Gruppe 14	Gruppe 15
Fr. 29	Wenn Anbieter Angebot einstellen würde	x	x	x	x	x	x	x	x	x	x					
Fr. 30/31	Wichtigkeit / Zufriedenheit	x	x	x	x	x	x					x	x	x	x	
Fr. 32	Wenn folgende Situation eintreten würde…	x	x	x				x	x	x		x	x	x		x
Fr. 33-33c	E-Carsharing	x			x	x		x	x		x	x	x		x	x
Fr. 34	Aussagen zu CS		x		x		x	x		x	x	x		x	x	x
Fr. 46	Aspekte Entscheidung CS			x		x	x		x	x	x		x	x	x	x

Via representative online survey (random selection of resident registration office sample, invitation by written letter):

B Population survey (control group)

➔ Provision of marginal distributions by age group, gender, and district for subsequent weighting of the data

Introduction

Thank you very much for participating in our survey on mobility, which focuses primarily on the means of transport you use in Bremen and the surrounding area [only group A: and in particular on the topic of car-sharing].

Participation takes [Group A: approx. 10-15 minutes | Group B: approx. 5-10 minutes].

At the end of the questionnaire, you will have the opportunity to participate in a prize draw. Prizes include three JBL Charge Bluetooth speakers, Bremen leisure cards, and regional delicacies.

The survey is conducted in compliance with data protection regulations and is used exclusively for scientific purposes. All data protection requirements are also taken into account in the prize draw.

Please click on *Continue* to start the survey.

Subgroup. [hidden]
Random number, integer in the range 1-15

A screening for CS customers / Questions for business users

1. [Group A]
Do you use carsharing in Bremen privately or professionally/commercially?

1☐ privately 2☐ for business/commercial purposes 3☐ both

2. [Group A, if F1 is not private]
Which status applies to you?

1☐ I am self-employed/freelance and use carsharing as part of my professional activities [→ Group A2]

2☐ I am the owner/managing director and I (or the company) use carsharing as part of my professional activities [→ Group A2]

3☐ I am an employee and am responsible for the vehicle fleet and/or business travel management [→ Group A2]

4☐ I use carsharing via my employer's account [→ Group A1]

5☐ I use carsharing via my personal customer account [→ Group A1]

3. [Group A2]

In which district of Bremen is your company/institution located? *(If your institution/company has several locations in Bremen, please name the district where your headquarters are located)*

District: _____

53☐ Blumenthal
35☐ Borgfeld / Oberneuland / Blockland
51☐ Burglesum
42☐ Findorff
44☐ Gröpelingen
38☐ Hemelingen
34☐ Horn-Lehe
24☐ Huchting
11☐ Mitte
21☐ Neustadt
23☐ Obervieland
37☐ Osterholz
31☐ Östliche Vorstadt
32☐ Schwachhausen
26☐ Seehausen / Strom
33☐ Vahr
52☐ Vegesack
43☐ Walle
25☐ Woltmershausen

4. [Group A2]

Which industry does your company/institution belong to?

1☐ Authority/public service

2☐ Public sector companies

3☐ Construction/architecture/real estate

4☐ Education

5☐ Raw materials/plastics/precision engineering

6☐ Energy supply/sustainability/environment

7☐ Facility management

8☐ Finance/insurance/banking

9☐ Research/institute

10☐ Catering/tourism/events

11☐ Health/medicine/pharmacy/chemistry

12☐ Trade unions/associations/chambers

13☐ Trade/e-commerce

14☐ Crafts/metalworking/electronics/woodworking

15☐ Information technology/telecommunications

16☐ Church organisations

17☐ Communication/marketing/media

18☐ Art/culture/film/music/photography

19☐ Food industry

20☐ Lifestyle/sports

21☐ Maritime industry

22☐ Machinery/plant engineering

23☐ Mobility/transport/logistics

24☐ Politics

25☐ Legal/tax consulting

26☐ Social institutions/care services

27☐ Management consulting

28☐ Other

4a. [Group A2, if F4 = 28] **And what other industry is this?** _____

5. [Group A2]
Which carsharing services available in Bremen do you use for professional/commercial purposes? *(Multiple answers possible)*

F51☐ cambio (at fixed carsharing stations)

F52☐ *smumo* (the free-floating service from cambio without fixed parking spaces)

F53☐ PMC

F54☐ Flinkster

F55☐ Car sharing Drivy

F56☐ snappcar/Tamyca

6. [Group A2]
How important are the following reasons for using carsharing for your company [if F4=3 to 8] **/ your institution** [if F4=1 or 2]**?**

[rotating]	very important (1)	important (2)	less important (3)	unimportant (4)	No opinion (9)
Improve environmental performance	☐	☐	☐	☐	☐
Reducing the fixed costs of the vehicle fleet	☐	☐	☐	☐	☐
Reducing vehicle care and maintenance costs	☐	☐	☐	☐	☐
Improving flexibility in the fleet with regard to vehicle size	☐	☐	☐	☐	☐
Ensuring vehicle availability when needed	☐	☐	☐	☐	☐
Reducing parking space requirements on company premises	☐	☐	☐	☐	☐
Increasing the attractiveness of the company for current and potential new employees	☐	☐	☐	☐	☐
Contributing to the mobility transition	☐	☐	☐	☐	☐
Make a positive contribution to a liveable city	☐	☐	☐	☐	☐

7. [Group A2]

How many employees do you have?

1☐ Sole proprietor 2☐ 2-4 3☐ 5-9 4☐ 10 to 49 5☐ 50 to 99 6☐ 100+

8. [Group A2] **And how many employees can use carsharing via the company account?**

1☐ One person 2☐ 2-4 3☐ 5-9 4☐ 10 to 49 5☐ 50 to 99 6☐ 100 +

9. [Group A2]

How many cars (passenger cars/vans) are currently in your fleet? (including personally assigned company vehicles)

Number: _____ (please enter number)

10. [Group A2]

Has your fleet size been reduced or have you decided not to purchase new vehicles because you can use carsharing services? *(Multiple answers possible)*

F101☐ Yes, fleet size has been reduced

F102☐ Yes, new/replacement purchases were not made

F103☐ Yes, options for using private cars for business purposes have been eliminated/reduced

F104☐ No, nothing has changed due to carsharing [exclusive answer option]

11. [Group A2, if F101 or F102 "Yes,..." was selected]

How many cars would be in your fleet without carsharing? (including personally assigned company cars)

Number: _____ (please enter number)

12. [Group A2]

Which of the following offers are available to employees in addition to carsharing? *(Multiple answers possible)*

F121☐ Job ticket / subsidy or full cost coverage *Deutschlandticket*

F122☐ Subsidy or full cost coverage *Bahncard*

F123☐ Jobrad

F124☐ Mobility budget

F125☐ Platform for arranging carpooling

F126☐ Access to company vehicle when needed

F127☐ Personally assigned company car

F128☐ Remuneration for the use of private cars for business trips

F129☐ None of the above [exclusive option]

13. [Group A2]
For what purposes is carsharing used in your company [if F4=3 to 28] **/ your institution** [if F4=1 or 2]**?** *(Multiple answers possible)*

F131☐ Customer visits within the City of Bremen or in neighbouring municipalities
F132☐ Trips between company locations
F133☐ Longer business trips
F134☐ Spur-of-the-moment/unplanned trips
F135☐ Transport of materials
F136☐ Other errands within the city or in neighbouring municipalities
F137☐ Connection to rail/air travel
F138☐ Other purpose of use

13a. [Group A2, if F138 = 1] **And what is this other purpose?** _____

14. [Group A2]
How satisfied are you with the following aspects of carsharing?

[scroll]	Very satisfied (1)	Satisfied (2)	Less satisfied (3)	dissatisfied (4)	No opinion (9)
Bureaucratic effort required	☐	☐	☐	☐	☐
Distance/accessibility of the nearest carsharing station	☐	☐	☐	☐	☐
Flexible and spontaneous usage options	☐	☐	☐	☐	☐
Availability of different vehicle classes	☐	☐	☐	☐	☐
Availability of different drive types (gasoline, diesel, electric)	☐	☐	☐	☐	☐
Availability of different transmission types (manual/auto-matic)	☐	☐	☐	☐	☐

15. [Group A2]
When you think **about carsharing and its impact on your company** [if F4=3 to 8] **/ your institution** [if F4=1 or 2], **to what extent do you agree with the following statements?**

[scroll]	I completely agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	disagree (5)
Car sharing is viewed positively by employees	☐	☐	☐	☐	☐
By offering carsharing, we use eco-friendly modes of transport (bus, train, bicycle, walking) more often	☐	☐	☐	☐	☐
The carsharing offer makes it easier for us to attract employees to our company	☐	☐	☐	☐	☐
Car sharing allows us to use vehicles that match our corporate image/corporate culture.	☐	☐	☐	☐	☐

15a. [Group A2]
What would you like to see from carsharing providers in order to further improve the service for your company [if F4=3 to 8] **/ your institution** [if F4=1 or 2]**?**

_____
_____
_____
_____

End of interview Group A2→ Show final page

B Availability of transportation

16. [Groups A1, B]
Do you currently have a *Deutschlandticket* or another season ticket for buses and trains?

1☐ *Deutschlandticket* (58-euro ticket)

2☐ Other season ticket, e.g., MIA, MIA-Plus, Job ticket, etc.

3☐ No season ticket

17. [Groups A1, B]
How many minutes does it take you to walk from your home to the nearest stop? If there are several stops, please indicate the one you use most often.

Approx. _____ minutes

18 (Mandatory question) [Group B]
Do you have a driving licence for cars?

1☐ Yes 2☐ No

19. [Group A1, Group B only if F18=yes]
How often do you have access to a car as a driver? (only private or company cars, no carsharing)

1☐ Anytime 2☐ Occasionally 3☐ Never

20. [Groups A1, B]
How many cars are currently available in your household? Please also include company cars that are permanently available for private use.

0☐ No car

1☐ One car

2☐ Two cars

3☐ Three cars

4☐ Four or more cars

21. [Group B, if F18=yes]
Which of the following carsharing services are you familiar with?
b. [Only offers that are known according to F21a] **And which of the carsharing providers do you use?**

	F21 I am familiar with	F21b I use
cambio (at fixed carsharing stations)	☐	☐
smumo (the free-floating service from cambio without fixed parking spaces)	☐	☐
PMC	☐	☐
Flinkster	☐	☐
Drivy	☐	☐
Snappcar / Tamyca	☐	☐

22. [Group A1]
How long have you been a carsharing customer in Bremen? For...

1☐ ... less than a year
2☐ … 1 to 4 years
3☐ … more than 4 to 8 years
4☐ … more than 8 years
5☐ Don't know / Can't say anymore

23. [Group A1]
What was/were the reason(s) why you became a customer*? (Multiple answers possible, max. three answers, rotating answers)*

F23a01☐ As an alternative to buying a (second) car for the family

F23a02☐ Climate/environmental protection reasons

F23a03☐ I don't have my own car, but I still need one from time to time

F23a04☐ To always drive a new and well-maintained car

F23a05☐ Because owning a car involves a lot of effort (repairs, inspections, tire changes)

F23a06☐ For financial reasons (reduction in mobility costs)

F23a07☐ An inexpensive way to drive electric vehicles

F23a08☐ I can choose the right type of car at any time

F23a09☐ As an alternative to replacing a broken-down car

F23a10☐ Car sharing membership was offered when I moved into my apartment/house

F23a11☐ To test different car models before making a purchase decision

F23a12☐ Because I don't have a parking space for my own car

F23a13☐ Because I want to contribute to the mobility transition

F23a13☐ Because I want to contribute to a liveable city

23a. [Group A1]

Do you use cambio or *smumo* or both services?

1☐ cambio (at fixed carsharing stations)

2☐ *smumo* (cambio's free-floating service without fixed parking spaces)

3☐ Both

23b. [Group A1, only if F23a = *smumo* or "both"]:

In your opinion, what are the advantages of *smumo*?

_____

_____

_____

23c. [Group A1, only if F23a = *smumo* or "both"]:

And what are the disadvantages of *smumo* in your opinion?

_____

_____

_____

23d. [Group A1, only if F22a does not mention *smumo* or "both"]:

Why don't you use *smumo*?

_____

_____

_____

24. [Group A1]

Overall, how satisfied are you with the carsharing service in Bremen?

1☐ Very satisfied

2☐ Somewhat satisfied

3☐ Somewhat dissatisfied

4☐ Very dissatisfied

C Substitution of means of transport

25- [Group A1]

Think back to the 12 months before you signed up for carsharing: How many cars were available to your household 12 months before you signed up for carsharing (including company cars and cars for private use)?

0☐ No car

1☐ One car

2☐ Two cars

3☐ Three cars

4☐ Four or more cars

5☐ Don't know / Can't say anymore

26. [Group A1 If F20<F25]

You stated that your household has fewer cars available today than it did 12 months before registering for carsharing. To what extent did the use of carsharing contribute to this change?

1☐ Very large proportion

2☐ Rather large proportion

3☐ Was partly decisive

4☐ Rather small part

5☐ Very small part

27. [Group A1, if F20<F25]
And what modes of transport do you now mainly use to do the journeys that you previously did with the car(s) that you no longer have? *(Multiple answers possible)*

F271☐ Another car in the household or one belonging to relatives/friends

F272☐ Car from a carsharing provider

F273☐ Public transport (bus and regional train)

F274☐ Long-distance trains/long-distance buses

F275☐ Bicycle

F276☐ On foot

F277☐ Journey no longer made

F278☐ Other,

F27a. [Group A1, if F278=1] **Namely**: _____

28. [Group A1]
Assuming that there were no longer any carsharing services in Bremen: How many cars would there be in your household?

0☐ No car

1☐ One car

2☐ Two cars

3☐ Three cars

4☐ Four or more cars

5☐ Don't know / can't say

D Opinions on carsharing

29. [Group A1, subgroups 1-10]
If the provider were to discontinue its service, ...

	I completely agree (1)	Somewhat agree (2)	Partly agree/partly dis-	Somewhat disagree (4)	Disagree (5)
...I would lose an important means of transportation	☐	☐	☐	☐	☐
...I would no longer be able to easily reach destinations and places that are important to me	☐	☐	☐	☐	☐
...this would mean a loss of quality of life for me	☐	☐	☐	☐	☐
...I would buy my own car	☐	☐	☐	☐	☐
...I would use buses/trains more often	☐	☐	☐	☐	☐
...I would no longer travel certain routes	☐	☐	☐	☐	☐

30. [Group A1, subgroups 1-6 and 11-14]
How important are the following aspects of carsharing to you?

[rotating]	Very important (1)	important (2)	Less important (3)	Not important (4)
Availability of desired vehicles at the desired time	☐	☐	☐	☐
Uncomplicated booking/easy use of the app	☐	☐	☐	☐
Feeling of security at carsharing stations (even in the evening hours)	☐	☐	☐	☐
Choice between different car models	☐	☐	☐	☐
24-hour telephone availability of the provider	☐	☐	☐	☐
Short distance to the nearest station	☐	☐	☐	☐
Connection of carsharing stations to public transport stops	☐	☐	☐	☐
Design and appearance of the vehicles	☐	☐	☐	☐
Availability of child seats in the vehicles	☐	☐	☐	☐
Easy parking at the station	☐	☐	☐	☐
Reserved parking spaces at carsharing stations (so I don't have to look for a parking space)	☐	☐	☐	☐
Highly visible parking spaces in public areas	☐	☐	☐	☐
Simple, self-explanatory operation of the vehicle	☐	☐	☐	☐
Availability of vans	☐	☐	☐	☐
Access to vehicle with a customer card (not just with a smartphone)	☐	☐	☐	☐
Open-ended booking option	☐	☐	☐	☐
Additional services at carsharing stations (e.g., bikesharing, cargo bikes, other neighbourhood services)	☐	☐	☐	☐
Availability of electric vehicles	☐	☐	☐	☐

31. [Group A1, subgroups 1-6 and 11-14]
And how satisfied are you with the carsharing service in Bremen?

[rotating]	Very satisfied (1)	Satisfied (2)	Less satisfied (3)	dissatisfied (4)	No opinion (9)
Availability of desired vehicles at the desired time	☐	☐	☐	☐	☐
Uncomplicated booking/easy operation of the app	☐	☐	☐	☐	☐
Feeling of safety at carsharing stations (even in the evening hours)	☐	☐	☐	☐	☐
Choice between different models	☐	☐	☐	☐	☐
24-hour telephone availability of the provider	☐	☐	☐	☐	☐
Short distances to the nearest station	☐	☐	☐	☐	☐
Connection of carsharing stations to public transport stops	☐	☐	☐	☐	☐
Design and appearance of the vehicles	☐	☐	☐	☐	☐
Availability of child seats in the vehicles	☐	☐	☐	☐	☐
Easy parking at the station	☐	☐	☐	☐	☐
Fixed parking spaces at carsharing stations (so I don't have to look for a parking space)	☐	☐	☐	☐	☐
Highly visible parking spaces in public areas	☐	☐	☐	☐	☐
Simple, self-explanatory operation of the vehicle	☐	☐	☐	☐	☐
Availability of vans	☐	☐	☐	☐	☐
Access to the vehicle with a customer card (not just with a smartphone)	☐	☐	☐	☐	☐
Booking option with open end date	☐	☐	☐	☐	☐
Additional services at carsharing stations (e.g., bikesharing, cargo bikes, other neighbourhood services)	☐	☐	☐	☐	☐
Availability of electric vehicles	☐	☐	☐	☐	☐

32. [Group A1, subgroups 1-3, 7-9, 11-13, and 15]
If the following situations were to occur, how would this affect your carsharing use?

If... [rotating]	...I would use carsharing much more frequently	...use it a little more often (2)	...use it just as often as before (3)	...use it a little less often (4)	...use it significantly less often
...the distance to the nearest carsharing station were longer, ...	☐	☐	☐	☐	☐
... there were only cars with automatic transmission, ...	☐	☐	☐	☐	☐
... more vehicles were equipped with electric drives, ...	☐	☐	☐	☐	☐
... there were only electric vehicles, ...	☐	☐	☐	☐	☐
... the *smumo* service no longer existed, ...	☐	☐	☐	☐	☐
... there were several carsharing providers available throughout the City of Bremen, ...	☐	☐	☐	☐	☐
... there was a joint app for carsharing and other modes of transport (e.g., public transport, bikesharing, e-scooters, taxis), ...	☐	☐	☐	☐	☐
...if there were more carsharing stations in Bremen ...	☐	☐	☐	☐	☐
...if there were different providers at the existing carsharing stations in Bremen...	☐	☐	☐	☐	☐

33. [Group A1, subgroups 1, 4, 5, 7, 8, 10-12, and 14-15]
Have you ever driven an electric carsharing vehicle?

1☐ Yes

2☐ No, not yet

33a. [Group A1, if F33="no," subgroups 1,4,5,7,8, 10-12, and 14-15]
Do you plan to drive an electric carsharing vehicle in the next 12 months?

1☐ Yes

2☐ No

F33b [Group A1, if F33="no", subgroups 1,4,5,7,8, 10-12 and 14-15]
What are the reasons why you have not yet driven an electric carsharing vehicle? *(Multiple answers possible)*

F33b01☐ No electric cars were available

F33b02☐ Using an electric car seems complicated to me

F33b03☐ I don't know how charging works

F33b04☐ I am concerned that I will not reach my destination or will not be able to charge there

F33b05☐ I would have to specify how many kilometers I want to drive when booking.

F33c [Group A1, if F33="yes", subgroups 1,4,5,7,8, 10-12 and 14-15]
What are the reasons why you have already driven an electric carsharing vehicle? *(Multiple answers possible)*

F33c01☐ Because I can be sure that the car is sufficiently charged

F33c02☐ Climate/environmental protection reasons

F33c03☐ I enjoy driving an electric car/ It's fun/ It's very comfortable to drive

F33c04☐ I wanted to test drive an electric car to see if it was worth buying

F33c05☐ There was no (fully fueled) gasoline-powered car available

F33c06☐ I was curious to see what it was like to drive an electric vehicle

34. [Group A1, subgroups 2, 4, 6, 7, 9-11, and 13-15]
Please indicate whether you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or completely disagree with each of the following statements.

	Strongly agree (1)	Agree somewhat (2)	Agree/disagree (3)	Somewhat disagree (4)	Disagree (5)
Since I started using carsharing, I feel freer in my decisions about which mode of transport to use.	☐	☐	☐	☐	☐
My total mobility expenses have decreased since I started using carsharing.	☐	☐	☐	☐	☐
[If F20 > 0] Since I started using carsharing, I use the cars available in my household less often.	☐	☐	☐	☐	☐
For me, it is an advantage that I don't have to worry about vehicle care and maintenance with carsharing.	☐	☐	☐	☐	☐
Not having to pay for repairs, maintenance, taxes, and insurance is an important advantage of carsharing for me.	☐	☐	☐	☐	☐

E Use of transportation

35. [Groups A1, B] **(mandatory question)**

Are you currently employed or in education*? (Multiple answers possible)*

1☐ Employed
2☐ In education/apprenticeship
3☐ School/university
4☐ Retired/pensioner
5☐ Unemployed/job seeker
6☐ None of the above

36. [Groups A1, B, if F35=employed or in training, apprenticeship, school, university]

For commuting to work or training: How often do you use ...?

	(almost) daily (1)	1-3 days a week (2)	1-3 days a month (3)	Less than once a month (4)	(almost) never (5)
Private car as driver	☐	☐	☐	☐	☐
Private car as passenger	☐	☐	☐	☐	☐
Car sharing	☐	☐	☐	☐	☐
Motorcycle or moped	☐	☐	☐	☐	☐
Public transportation	☐	☐	☐	☐	☐
Private bicycle/pedelec/e-bike	☐	☐	☐	☐	☐
Private cargo bike/cargo pedelec	☐	☐	☐	☐	☐
Bike sharing (e.g., Bre.Bike)	☐	☐	☐	☐	☐
On foot	☐	☐	☐	☐	☐
Private e-scooter	☐	☐	☐	☐	☐
Shared e-scooter (e.g., Lime or Bolt)	☐	☐	☐	☐	☐

37. [Groups A1, B]

Now let's move on to ways of getting to the shops/running errands and doing private errands. How often do you use ...?

	(almost) daily (1)	1-3 days a week (2)	1-3 days per month (3)	Less than once a month (4)	(almost) never (5)
Private car as driver	☐	☐	☐	☐	☐
Private car as passenger	☐	☐	☐	☐	☐
Car sharing	☐	☐	☐	☐	☐
Motorcycle or moped	☐	☐	☐	☐	☐
Public transportation	☐	☐	☐	☐	☐
Private bicycle/pedelec/e-bike	☐	☐	☐	☐	☐
Private cargo bike/cargo pedelec	☐	☐	☐	☐	☐
Bike sharing (e.g., Bre.Bike)	☐	☐	☐	☐	☐
On foot	☐	☐	☐	☐	☐
Private e-scooter	☐	☐	☐	☐	☐
Shared e-scooter (e.g., Lime or Bolt)	☐	☐	☐	☐	☐

38. [Groups A1, B]

How often do you usually use the following shopping options?

[scroll]	(almost) daily (1)	1-3 times per week (2)	1-3 times a month (3)	Less often (4)	Never (5)
Retailers (e.g., butchers, bakers, etc.) nearby	☐	☐	☐	☐	☐
Supermarket nearby	☐	☐	☐	☐	☐
Large shopping centres where different stores are located in one place	☐	☐	☐	☐	☐
Weekly markets	☐	☐	☐	☐	☐
Online orders	☐	☐	☐	☐	☐
Local delivery services	☐	☐	☐	☐	☐
DIY stores / garden centres / furniture stores	☐	☐	☐	☐	☐

39. [Groups A1, B]

People also travel for leisure, hobbies, and holidays, e.g., for excursions, visits to friends and relatives, training at sports clubs, or visits to restaurants. How often do you use the following for leisure travel ...?

	(almost) daily (1)	1-3 days a week (2)	1-3 days a month (3)	Less than once a month (4)	(almost) never (5)
Private car as driver	☐	☐	☐	☐	☐
Private car as passenger	☐	☐	☐	☐	☐
Car sharing	☐	☐	☐	☐	☐
Motorcycle or moped	☐	☐	☐	☐	☐
Public transportation	☐	☐	☐	☐	☐
Private bicycle/pedelec/e-bike	☐	☐	☐	☐	☐
Private cargo bike/cargo pedelec	☐	☐	☐	☐	☐
Bike sharing (e.g., Bre.Bike)	☐	☐	☐	☐	☐
On foot	☐	☐	☐	☐	☐
Private e-scooters	☐	☐	☐	☐	☐
Shared e-scooters (e.g., Lime or Bolt)	☐	☐	☐	☐	☐

F Users: Most recent trip

40. [Group A1]
The following questions are about the most recent trip you took with a carsharing vehicle in Bremen. Which provider's vehicle did you use?

1☐ cambio (at fixed carsharing stations)
2☐ *smumo* (the free-floating service from cambio without fixed parking spaces)
3☐ PMC
4☐ Flinkster
5☐ Drivy
6☐ snappcar / Tamyca

41. [Group A1, if cambio - station-based]
Which station did you use to start your journey?

District:

1☐ Borgfeld
2☐ Bremen North
3☐ Findorff
4☐ Gröpelingen
5☐ Hastedt
6☐ Horn-Lehe
7☐ Huchting
8☐ Mitte
9☐ Neustadt
10☐ Obervieland
11☐ Osterholz
12☐ Ostertor
13☐ Peterswerder
14☐ Schwachhausen
15☐ Sebaldsbrück/ Hemelingen
16☐ Steintor
17☐ Vahr
18☐ Walle
19☐ Woltmershausen

Stations:

Borgfeld
111001 Borgfeld Mitte
110002 Daniel
Bremen North
110003 Ascherfeld
111004 Blumenthal-Bahnhof
120005 Fähre
110006 Kulturbahnhof
121007 Lesum Park
120008 Lesumer Brink
110009 Sedanplatz
120010 Stehnckenshoff

Finddorf
220011 Admiral
210012 Eickedorfer Straße
130013 Jan
111014 Kissinger Straße
120015 Luther
210016 Magdeburg
210017 München
120018 Regen
211019 Ricarda-Huch-Straße
210020 Schlachthof
110021 Torfhafen
210022 Utbremer Ring
210023 Winter
Gröpelingen
210024 Königsberger Straße
210025 Liegnitzstraße
210026 Togostraße
210027 Westbahn
Hastedt
210028 Alter Postweg
10029 Bennigsenstraße
10030 Föhrenstraße

10031	Goslar
10032	Hohnholt
10033	Hohwisch
10034	Suhrfeldstaße
Horn-Lehe	
120035	Astell
120036	Berck
131037	Campus_Sparkasse
110038	Fultonstraße
120039	Höger
130040	Horner Mühle
110041	Kopernikusstraße
111042	Ohmstraße
110043	Werner-von-Siemens
Huchting	
210044	Kötnerweide
110045	Roland-Center
110046	Westertill
Centre	
130047	Bahnhof_Breitenweg
120048	Bahnhof_Bürgerweide
220049	Bahnhof_Hohenlohe
211050	Birke
110051	Brill_Breparkhaus
211052	Diepenau
120053	Domsheide
110054	Doventorsteinweg
231055	Remberti
210056	Richtweg
110057	Stephani
Neustadt	
110058	Beginen
210059	Biebrich
110060	Claudiusstraße
110061	Erle
110062	Falstaff
220063	Gottfried
120064	Hardy
130065	Hochschule Bremen
110066	Hoffmann
210067	Hohentorsplatz
120068	Kirchweg
231069	Leibniz
130070	Modern
210071	Oster
230072	Otto
210073	Stadtwerder
220074	Werderhöhe
120075	Westerstraße
120076	Zion
Obervieland	
110077	Anna-Seghers-Street
110078	Heukämpendamm
110079	Kattenturm Center
Osterholt	
110080	Blockdiek
110081	Ellener Hof
110082	Graubündener Straße
110083	Hallacker
110084	Schweizer Viertel
111085	Walliser Straße
Ostertor	
120086	Albrecht
230087	Auf den Häfen
231088	Dobben
120089	Pauli
120090	Theater
Peterswerder	
110091	Bismarck
121092	Brommy
110093	Hulsberg
110094	Kunath
130095	SchwarzMeer Ost
120096	SchwarzMeer West
130097	Stade
220098	Tannhäuser
Schwachhausen	
110099	Baumschulenweg
110100	Crüsemannallee
220101	Elsass
130102	Emma
110103	Friedhofstraße
221104	Georg
210105	Gete
110106	H.-H.-Meier-Allee
210107	Hartwigstraße
130108	Kirchbach
110109	Meier
130110	Moltke

110111	Obernkirchener Straße
120112	Parkstraße
210113	Scharnhorst
210114	Schubert
110115	Schwachhauser Heer
110116	Schwachhauser Ring
120117	Stern

Sebaldsbrück/Hemelingen

110118	Diedrich
110119	Ostbahn

Steintor

131120	Ges-Amt
130121	Pastor
210122	Kepler
210123	Klinikum Mitte
131124	Lübeck
221125	Mecklenburg
210126	Römer
210127	Sankt-Jürgen-Straße
210128	Schmidt
210129	Therese

Vahr

121130	Berliner Freiheit
110131	Eislebener Straße
211132	Heideplatz
210133	Paul-Singer-Straße
111134	Philipp Scheidemann
110135	Sendesaal
110136	Wilhelm Leuschner
110137	Wilseder-Berg-Straße

Walle

111138	Arndtstraße
211139	Bremerhavener Straße
120140	Elisabeth
220141	Hansator
110142	Lloydstraße
220143	Osterfeuerberg
221144	Probststraße
110145	Schuppen Eins
110146	Speicher 17
110147	Steffen
111148	Travemünder Straße
110149	Union Brauerei
130150	WallerRing

Woltmershausen

110151	Dötlinger Street
210152	Schillingstraße
110153	Tabakquarter

41a. [Group A1, if *smumo* - free-floating]
On the most recent trip, were...?

1☐ ... Start and end points roughly the same

2☐ … Start and end points in different locations within the city

42. [Group A1, if cambio - station-based]
Do you use this station regularly/frequently or only in exceptional cases?

1☐ Regularly / frequently

2☐ Only in exceptional cases

43. [Group A1]
What means of transport did you use to get to the carsharing vehicle the last time you used one? *(Multiple answers possible)*

F431☐ On foot

F432☐ Own bicycle/e-bike

F433☐ Bre.Bike / bikesharing

F434☐ Bus and/or train

F435☐ Personal e-scooter

F436☐ Shared e-scooter (e.g., Lime or Bolt)

F437☐ Other car (own car, as a passenger)

F438☐ Other,
F43a. [Group A1, if F438=1] **Namely:** _____

44. [Group A1]
For what reasons did you use a carsharing vehicle on your most recent trip?
(Multiple answers possible)

F441☐ Trip to work or school/apprenticeship

F442☐ For shopping and errands

F443☐ To accompany or pick up children/other people

F444☐ Visiting relatives or friends

F445☐ Work-related travel

F446☐ Visiting a leisure facility (e.g., sporting event, restaurant, etc.)

F447☐ Trip to the surrounding area/excursion during leisure time

F448☐ Transport of large items, moving house

F449☐ Trip for holiday/long weekend

F4410☐ Other reason,

44a. [Group A1, if F438=1] **Namely:** _____

44b. [Group A1]
How long was the booking for the most recent trip?

1☐ Up to two hours
2☐ More than two hours, max. half a day
3☐ More than half a day, max. whole day
3☐ Several days

45. [Group A1]
If a carsharing vehicle had not been available at the desired time, what alternative means of transport would you have considered? *(Multiple answers possible)*

[rotating]	
Own vehicle	☐
Rental car (e.g., Europcar, Sixt, or similar)	☐
Public transportation (bus and tram)	☐
Long-distance public transport (train, long-distance bus)	☐
Carpooling / ridesharing	☐
Private bicycle	☐
Private cargo bike	☐
Bre.Bike / bikesharing	☐
Personal e-scooter	☐
Shared e-scooter (e.g., Lime or Bolt)	☐
I would not have made the trip	☐
I would have travelled at a different time	☐
I would have walked	☐
I would have chosen a different destination	☐

46. [Group A1, subgroups 3, 5, 6, 8-10, and 12-15]
What reasons are usually decisive for you when using a carsharing vehicle, and which are not?

[rotating]	Decisive (1)	Not decisive (2)
Spontaneous availability of the vehicle	☐	☐
Cost	☐	☐
Luggage to be transported	☐	☐
Fellow travellers	☐	☐
Multiple destinations	☐	☐
Convenience	☐	☐
Current weather conditions	☐	☐
No private car available	☐	☐
Unreliability of (long-distance) rail transport	☐	☐
Destination not accessible or difficult to reach by public transport	☐	☐

G Non-users: Car sharing potential

47. [Only target group B and question 18 (driving licence)=yes]
In Bremen, carsharing is offered at *mobil.punkte*, among other places. Have you already noticed or used *mobil.punkte* in Bremen?

1☐ Yes, aware
2☐ Yes, aware and have already used
3☐ No, I am not familiar with them

47a. [Only target group B and question 18 (driving licence)=yes, if F47 = 1 or 2]
And how do you rate the concept of *mobil.punkte*?

1☐ I like it
2☐ I don't like it
3☐ I don't care / I can't judge

48. [Only target group B and question 18 (driving licence)=yes and question 21b (use of carsharing) "no provider"]
Below are some statements about carsharing. Please indicate whether you strongly agree, somewhat agree, somewhat disagree, strongly disagree, or completely disagree with each statement.

[rotating]	Agree completely (1)	Agree somewhat (2)	Partly agree (3)	Somewhat disagree (4)	Completely disagree (5)	Don't know/No opinion (6)
I think carsharing is basically a good idea.	☐	☐	☐	☐	☐	☐
Car sharing seems too expensive to me.	☐	☐	☐	☐	☐	☐
I find carsharing too complicated.	☐	☐	☐	☐	☐	☐
Car sharing makes me too inflexible, as I have to commit to a schedule in advance.	☐	☐	☐	☐	☐	☐
I could imagine using carsharing in principle.	☐	☐	☐	☐	☐	☐
[If F20>0] I could imagine not owning a car.	☐	☐	☐	☐	☐	☐
I would like to use carsharing, but there is no service available in my area.	☐	☐	☐	☐	☐	☐
I am not sure what the actual costs of using carsharing services would be.	☐	☐	☐	☐	☐	☐
I have already looked into carsharing services in my area.	☐	☐	☐	☐	☐	☐
I have noticed a carsharing station near me before.	☐	☐	☐	☐	☐	☐

[If F20>0] I find it difficult to use an unfamiliar car.	☐	☐	☐	☐	☐	☐
From the perspective of my friends and acquaintances, owning a car is a must.	☐	☐	☐	☐	☐	☐
It is important for me to own my own car.	☐	☐	☐	☐	☐	☐

48a. [Only target group B and question 18 (driving licence)=yes and question 21b (carsharing use) "no provider"]
Would you use carsharing if there were more carsharing stations in Bremen?

1☐ Yes, definitely
2☐ Probably yes
3☐ Maybe
4☐ Probably not
5☐ No, definitely not

48b. [Only target group B and question 18 (driving licence)=yes and question 21b (use of car-sharing) "no provider"]
Would you use carsharing if there were different providers at the existing carsharing stations in Bremen?

1☐ Yes, definitely
2☐ Probably yes
3☐ Maybe
4☐ Probably not
5☐ No, definitely not

48c. [Only target group B and question 18 (driving licence)=yes and question 21b (use of carsharing) "no provider"] Only if, according to F47, one can imagine using CS
What hinders you most from using carsharing?

_____
_____
_____
_____

H Basic attitudes

49. [Groups A1, B]
To what extent do you agree with the following statements?

	Strongly agree (1)	Somewhat agree (2)	Partly agree (3)	Somewhat disagree (4)	Strongly disagree (5)
I enjoy driving	☐	☐	☐	☐	☐
I like travelling by public transport	☐	☐	☐	☐	☐
I like to ride a bike	☐	☐	☐	☐	☐
I like walking	☐	☐	☐	☐	☐

I Demographics

50. [Groups A1, B]
Gender

1☐ male 2☐ female 3☐ diverse

51. [Groups A1, B]
How old are you?

1☐ 18-25 years

2☐ 26-35 years

3☐ 36-50 years

4☐ 51-60 years

5☐ 61-70 years

6☐ 71 years and older

52. [Groups A1, B]
Were you and/or at least one of your parents born outside Germany? *(Multiple answers possible)*

F521☐ Yes, I was born outside Germany

F522☐ Yes, one parent was born outside Germany

F523☐ Yes, both parents were born outside Germany

F524☐ No, neither [exclusive option]

53. [Groups A1, B] **(mandatory question)**

How many people live permanently in your household, including yourself?

1☐ 1 person

2☐ 2 persons

3☐ 3 persons

4☐ 4 persons

5☐ 5 or more persons

54. [Groups A1, B. if F53 ≥ 2]

How many household members are children under the age of 18?

1☐ 1 person

2☐ 2 persons

3☐ 3 persons

4☐ 4 persons

5☐ 5 and more persons

55. [Groups A1, B]

And how many members of the household have a standard car driving licence?

1☐ 1 person

2☐ 2 persons

3☐ 3 persons

4☐ 4 persons

5☐ 5 or more persons

56. [Groups A1, B]

And how many household members are registered with at least one carsharing provider?

1☐ 1 person

2☐ 2 people

3☐ 3 persons

4☐ 4 persons

5☐ 5 or more persons

57. [Groups A1, B] **(mandatory question)**
What is your highest level of education?

1☐ Secondary school completed without a diploma/
2☐ Primary or middle school completion
3☐ Intermediate secondary school completion
4☐ (Technical) secondary school diploma
5☐ University degree
7☐ Other qualification
8☐ Still a pupil or student

58. [Groups A1, B, if F35=employed]
What is your professional position?

1☐ Unskilled/semi-skilled worker
2☐ Skilled worker
3☐ Salaried employee/civil servant
4☐ Management employee/civil servant
5☐ Self-employed/freelancer

59. [Groups A1, B, if F35=employed or in training]
In a typical working week (i.e. excluding vacations and public holidays): How many days do you drive/walk to your place of work/apprenticeship?

1☐ Daily or almost daily
2☐ 4 days a week
3☐ 3 days a week
4☐ 2 days per week
5☐ 1 day per week
6☐ less frequently

60. [Groups A1, B]
What is your household's total monthly net income (after deduction of taxes and social security contributions)?

1☐ less than 900 euros per month
2☐ 900 to less than 1,500 euros per month
3☐ 1,500 to less than 2,600 euros per month
4☐ 2,600 to less than 4,000 euros per month
5☐ 4,000 to less than 6,000 euros per month
6☐ 6,000 euros or more per month

61. [Groups A1, B]
Do you live in Bremen or elsewhere?

1☐ In Bremen
2☐ In: _____

62. [Groups A1, B, if F61=in Bremen]
Please provide the postal code of your place of residence (if you have multiple residences, please provide the postal code of your primary residence in Bremen):

Postal code: _ _ _ _ _

63. [Groups A1, B, if F61=in Bremen]
In which district of Bremen do you live?

11☐ Mitte
12☐ Häfen
21☐ Neustadt
23☐ Obervieland
24☐ Huchting
25☐ Woltmershausen
26☐ Seehausen / Strom
31☐ Östliche Vorstadt
32☐ Schwachhausen
33☐ Vahr
34☐ Horn-Lehe
35☐ Borgfeld
36☐ Oberneuland
37☐ Osterholz
38☐ Hemelingen
41☐ Blockland
42☐ Findorff
43☐ Walle
44☐ Gröpelingen
51☐ Burglesum
52☐ Vegesack
53☐ Blumenthal

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