

# IMPACT REPORT

CAR SHARING IN BELGIUM IN 2022



# INTRODUCTION

Dear Reader,

This annual report describes the state of car sharing in Belgium at the end of 2022. As usual, you can find an overview of the number of shared cars and car sharers (both active and registered), the average distances and duration of trips using a shared car and the active car sharing providers. But this report is also a first for Flanders. For the first time ever, a large-scale study has been conducted on the impact of car sharing on car ownership and modal shift.

The methodology and results of the impact study can be found in the first part of this report. I would like to take this opportunity to sincerely thank the participating providers (cambio, Claus2you, CoopStroom, Cozywheels, Dégage, Flexigo, GreenMobility, Partago, ShareMobility and Stapp.in) for distributing the questionnaires and actively engaging in the preparation of the impact report. It is thanks to them that, for the first time, we can make informed statements about the impact of car sharing in Flanders. Autodelen.net makes a distinction between the three main forms of car sharing (round-trip, private and free-floating). For the first two, we can present a representative sample and our conclusions are solidly based. For free-floating car sharing, GreenMobility was the only provider actively involved and only achieved a response rate of 3.5%. These figures are given as an indication only; no far-reaching conclusions can be drawn from them.

I am particularly struck by the discrepancy between the number of registered car sharers and the number of car sharers who made at least one trip using a shared car in 2022, referred to in this report as “active car sharers”. There are some 121,000 active car sharers in Belgium, but as many as 270,000 registered car sharers. There is therefore still huge scope for engaging people who are already familiar with the concept and who have even taken the step of registering. The additional impact of this “low-hanging fruit” is potentially very large. I therefore call on policy-makers and car sharing providers to make both the conditions and the offer of car sharing even more attractive so that we dramatically increase the number of active car-sharers in 2023. Because the more car-sharers there are, the fewer private cars there will be, and the more we can create liveable and agreeable living environments designed with people rather than cars in mind.

Happy reading!

Jeffrey Matthijs  
Director of Autodelen.net



# SUMMARY

## ONE SHARED CAR REPLACES TEN PRIVATELY OWNED CARS

Car sharers own significantly fewer cars than the average in Flanders. Every shared car takes between three and ten private cars off the street. What's more, car sharers are conspicuously more likely to choose bicycles, and to travel by car less. This emerges from a survey by Autodelen.net, the first to calculate the replacement ratio of shared cars in Flanders.

A lot of car sharers get rid of their own vehicle because they need no, or fewer, private cars. Autodelen.net in collaboration with KULeuven, has calculated that ownership among car sharers ranges between 0.36 and 0.57 cars per household. By way of comparison, in 2021, an average Flemish household owned 1.14 cars. In a fictitious and theoretical example, this would mean that, in a street with 30 families who do not use car-sharing, there are 34 parked cars.

In a street with 30 families of car sharers, that will be about 12, supplemented by one or two shared vehicles.

The research also shows that each shared car replaces between 3 and 10 private cars, depending on the form of car-sharing. 'So, taken together the shared cars in Flanders replace at least 17,740 private cars. If you were to park these saved cars side by side, they would cov-

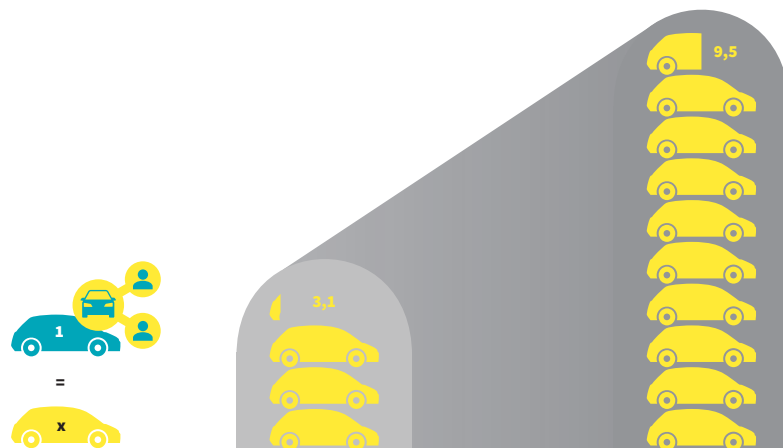
## Since engaging in car sharing, 35% of car sharers drive the car less often.

er an area of 22 hectares, enough for almost 32 football pitches. Shared cars today make up only 0.07% of registered vehicles in Flanders, but still save almost 2% of public parking spaces. In this way, car-sharing improves the liveability of our cities and towns', says Autodelen.net's Jeffrey Matthijs.

These figures are based on an online survey conducted by Autodelen.net and most car-sharing providers among 6,288 respondents in summer 2022. The study is a first for Flanders.

### — Car sharers cycle more often and take the car less often

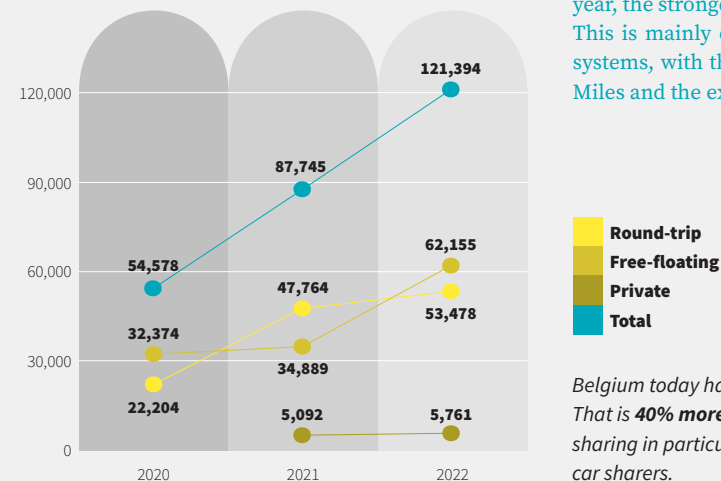
Car sharers are conspicuously more likely to opt for sustainable travel. Since they started car-sharing, 35% have made fewer car journeys. Cycling is the big winner: 31% of car sharers cycle more often. Train, tram and bus benefit less from car-sharing: most car sharers (75%) use public transport to the same extent as before. 16% do so more often.



One shared car replaces 3.1 to 9.5 private cars, according to the type of car sharing.

### — Strong and sustainable growth in active car sharers

By the end of 2022, Belgium had 121,394 active car sharers. That represents a 40% increase on 2021. Around half of these car sharers are Flemish (67,578), four in ten live in Brussels (50,178), and 3% are Walloons (3,638). Brussels is the region in which car-sharing is most firmly embedded: 6.3% of all driving licence holders make use of shared cars. Free-floating car-sharing systems saw the biggest increase last year, with a 78% rise in active car sharers.



'There is still huge scope for engaging people who are already familiar with the car-sharing concept, some of whom have even taken the step of registering. This includes the nearly 150,000 car sharers who are registered but did not travel in a shared car in 2022. By making the framework conditions and supply of car-sharing even more attractive, policymakers and car-sharing providers can better harness this huge potential in 2023 to create liveable and agreeable living environments on a human scale,' points out Jeffrey Matthijs.

The number of shared cars also saw a huge increase in 2022. Today, the tally stands at 5,316. As many as 671 new shared cars were added last year, the strongest growth in the past five years. This is mainly due to free-floating car-sharing systems, with the arrival of the German player Miles and the expansion of Poppy's fleet.

Belgium today has **121,394 active car sharers**. That is **40% more than last year**. Free-floating car sharing in particular saw strong growth in active car sharers.

# CONTENTS

<b>Introduction</b>	<b>2</b>
<b>Summary</b>	<b>3</b>
<b>Contents</b>	<b>5</b>
<b>What is car sharing and what types exist?</b>	<b>6</b>
Providers with their own fleet of shared cars	7
Sharing of private vehicles	7
<b>Methodology</b>	<b>8</b>
Impact of car sharing	8
Car sharing in 2022: state of play	10
<b>Impact of car sharing</b>	<b>11</b>
Impact on car ownership	12
– Number of cars per household	12
– Replacement ratio	13
Impact on travel behaviour	15
Car sharer profile	17
<b>Car sharing in 2022: state of play</b>	<b>18</b>
The number of car sharers and shared cars today	19
Number of trips, duration & distance	21
Historical growth	22
Summary of key figures	24
<b>Glossary</b>	<b>25</b>
<b>Annexes</b>	<b>26</b>
Annex 1:	
Questionnaire used for the car sharers' impact survey	26
Annex 2:	
Summary of car share providers in Belgium since inception	27
<b>Colophon</b>	<b>28</b>

# WHAT IS CAR SHARING

&  
WHAT TYPES  
EXIST?

With car sharing, several families and/or legal entities take turns to use one or more vehicles. They use the vehicle only when they need it. If the vehicle is free, another family or legal entity can use it.

Car sharing generates major social and economic benefits. It reduces the number of vehicles, CO<sub>2</sub> emissions, parking congestion and the individual cost of using<sup>1</sup> a vehicle, and leads to a sustainable modal shift. Car sharing is a sustainable and flexible alternative to owning a private car.

In 2022, there were 15 car share providers operating in Belgium. Historically speaking, there have been two main types: car share providers with their own fleet, and car share providers that facilitate the sharing of private vehicles. Both of these two main categories can again be divided into two groups.

---

<sup>1</sup> Calculate your own financial benefit as compared with car ownership and/or compare car share formulas at [www.savewithcarsharing.be](http://www.savewithcarsharing.be)

## PROVIDERS WITH THEIR OWN FLEET OF SHARED CARS

These providers make a vehicle fleet available to their customers. The fleet varies for each provider and can consist of various models. The user pays the organisation for the use of a vehicle by kilometre, by time, and/or use. Sometimes there is a one-off joining fee and/or subscription fee. Depending on the place at which you collect and return a shared car, there are two different systems.

### — Round-trip car sharing

In round-trip car sharing, the car sharer returns the shared car to the same location or zone (neighbourhood or district) after use. Systems that use permanent locations are known as 'station-based', and those that use a specific zone to which the vehicle must be returned are 'home zone-based'.

### — Free-floating car sharing

Free-floating car share allows the user to leave the shared vehicle in another place (in some cases even in another city). A further distinction is made between systems that use permanent stations ('pool stations') and systems that use a specific zone within which the car may be parked anywhere ('operational area'). Users must have a smartphone to locate the shared car.

## SHARING OF PRIVATE VEHICLES

### — Private cost-sharing car sharing

In this form of car sharing, private cars are used by different households or organisations in a centralised (one large, open group) or decentralised system (several small, closed groups). The vehicle is the property of one member of the car share group or can be bought in joint ownership by several group members. A second significant feature is the cost-sharing principle. The owner of the vehicle does not make a profit, but is reimbursed for the actual cost price of the vehicle for

each shared kilometre. Thirdly, this type of car share involves a great deal of self-organisation and social interaction, with individual arrangements and rules. However, this does not mean that centrally provided services cannot be significantly professionalised by, for example, a group of individuals or a non-profit organisation.

### — Private car rental

There are also online hire platforms where users can rent a private car. This is called peer-to-peer (P2P) car sharing or private car rental, and works in the same way as AirBnB. Owners register their

cars on the platform; users hire a car on the platform for a consideration determined by the owner (price per kilometre and/or an hourly rate). Fuel is not included in this charge: as a user, you have to fill up the car again after use, so you do not know in advance exactly how much your trip will cost. Each time you use it, you as the hirer enter into a contract with the owner of the car. We therefore refer to this as car rental rather than car sharing. With car sharing, you only need to sign a membership contract, after which you have access to all the vehicles. Data on private car rental are not included in this report, which focuses on car sharing.



# METHODOLOGY

## IMPACT OF CAR SHARING

### – Large-scale survey of 10 car share providers

All the results presented in the section on the impact of car sharing come from a **user survey conducted in spring and summer 2022**. Ten of the twelve Flemish car sharing providers active at the time took part in the survey. All customers were asked to complete an online questionnaire via a direct email from the car share provider. This questionnaire was prepared in consultation with the car share questionnaire used in a German survey coordinated by the Bundesverband CarSharing (bcs)<sup>2</sup>. For the analysis of the results, we received the much-appreciated help of Jozef Cossey, doctoral researcher at KU Leuven's Faculty of Economics.

The user survey resulted in a dataset of 6,288 respondents. The table opposite shows the distribution of respondents by type of car sharing. For each provider that distributed the questionnaire, the **response rate** is also shown. A few figures at a glance:

- On average, 19% of all active private customers of the participating providers completed the survey.
- The **round-trip** and **private car sharing** categories recorded high response rates, allowing us to make statements about the entire population of round-trip and private car sharers on the basis of the sample, combined with weighting of the data (see below).

- Regarding **free-floating car sharing**, we can only rely on the results of the questionnaire GreenMobility distributed to its customers. Moreover, their response rate is also very low (3.5%). Although the results have been weighted, this small sample cannot guarantee representative data. The results in this report give an indication of the impact of GreenMobility's carsharers, but due to the low response rate we should treat the results with caution. We cannot extrapolate these to all free-floating car sharers. Nor, therefore, is it possible to draw one-to-one comparisons between the results for free-floating car sharing and those of round-trip and private car sharing.

	Response rate
<b>ROUND-TRIP CAR SHARE</b>	<b>20.5%</b>
<b>Cambio</b>	<b>27.5%</b>
<b>Share Mobility</b>	<b>2.5%</b>
<b>Partago</b>	<b>9.8%</b>
<b>Coopstroom</b>	<b>37.1%</b>
<b>Stapp.in</b>	<b>3.8%</b>
<b>Claus2you</b>	<b>24.3%</b>
<b>Flexigo</b>	<b>12.7%</b>
<b>PRIVATE CAR SHARE</b>	<b>16.9%</b>
<b>Dégage!</b>	<b>20.0%</b>
<b>Cozywheels</b>	<b>5.7%</b>
<b>FREE-FLOATING CAR SHARE</b>	<b>3.5%</b>
<b>GreenMobility</b>	<b>3.5%</b>
<b>TOTAL</b>	<b>18.8%</b>

<sup>2</sup> <https://carsharing.de/alles-ueber-carsharing/studien/evaluations-standard-verkehrsentlastende-wirkung>



### — Data weighting by frequency of use

To correctly extrapolate survey results from the sample to the entire population of car sharers, we weighted the data. This is because we can expect regular car sharers to be more likely to participate in surveys, creating an over-reporting effect in the absence of **weighting based on frequency of use**. This bias is mitigated by the fact that survey responses are weighted per respondent based on actual frequency of use. Each respondent was assigned a weighting coefficient that indicates the weight given to his/her responses in the overall survey result. For each provider, respondents were divided into five categories according to the nature of their car share use<sup>3</sup>. The same exercise was conducted for frequency of use within the provider's entire customer base. Depending on the over- or under-representation of certain categories of questionnaire respondents, they are assigned a weighting coefficient smaller or larger than 1.

For two providers, we lack data for the actual frequency of use of the shared cars across the entire customer base, so it is not possible to calculate specific weighting coefficients for those providers. To weight these data, we relied on the (average) weighting coefficients of providers with similar user profiles.

The private cost-sharing car share organisation Cozywheels is organised in a decentralised way into many small 'car share groups' that are not obliged to use the central platform to record trips. As a result, Cozywheels does not have the necessary data with which to calculate the

weighting coefficients. For Cozywheels, we relied on the weighting coefficients of the other private cost-sharing car share organisation, Dégage.

For GreenMobility, it was not possible to supply customers' actual frequency of use. Therefore, we used the average weighting coefficients of all those providers that, like the free-floating provider, do not charge an entry fee and subscription fees.

The consequence of weighting the data is that, for all forms of car sharing, a shift can be seen in the results of the impact parameters addressed in the report. For example, the reported number of cars in the household among round-trip car share users rises with weighting from 0.28 to 0.37.

### — Private car sharing: what about the owners?

When we discuss results from private car sharers, in most cases we are only talking about **respondents who do not share their own vehicle**, and who occasionally use a car from a private car sharer. This choice enables us to properly compare different groups of car users for the 'current car ownership' and 'replacement ratio' indicators. Car ownership among owners of privately shared cars will necessarily be higher than among users, which also affects the replacement ratio. However, for the 'change in travel behaviour' indicator, we did take the entire group of private car users into account. We can assume that the owner of a shared car may also identify a possible change in their travel pattern as a result of sharing the vehicle.

### — The replacement ratio: how many private cars are replaced by one shared car?

As mentioned, our calculation method relied very largely on the evaluation standard developed by the Bundesverband CarSharing (bcs)<sup>4</sup>. There are two types of replacement ratio, real and hypothetical, and these are combined in an integrated replacement ratio. Methodologically, real and hypothetical replacement ratios have a different status. The real replacement ratio is based on the real trend in car ownership up to the time of the study. The hypothetical replacement ratio is based on answers given instinctively by respondents. This reflects intentions.

The **real replacement ratio** shows how many cars respondents have dispensed with since they started car sharing, and the proportion due to car sharing. We calculated this as follows:

- The total number of a car share provider's active private customers divided by the number of respondents.
- The result of this calculation is then multiplied by the number of cars actually dispensed with: the number of cars the respondent gave up by joining the car sharing provider, multiplied by the weight that membership of the car share scheme had in this decision. The answers to the latter question range from 'of no importance' (score 0), 'of little importance' (score 0.25), to 'of very great importance' (score 1).
- The result of the above division (= the total number of cars dispensed with as a result of car sharing) is divided by the number of shared cars owned by the respective providers.

When calculating the real replacement ratio, we added one aspect at the second step of the calculation (B) by comparison with the German bcs. That is, we also included the impact of membership of a car sharing organisation on the number of cars the respondents dispensed with when they started car sharing. Perhaps people were already planning to get rid of a car and only subsequently decided to start car sharing. Applying this additional weighting to the reduction in the number of cars owned reduces the replacement ratio but it gives us an even more accurate picture of the effective, causal impact of car sharing on car ownership.

The **hypothetical replacement ratio** represents the probability that a respondent, without membership of a car share organisation, would have purchased an additional vehicle. We cannot arrive at an integrated replacement ratio by simply adding up the real and hypothetical replacement ratios because there would be double counting. Nevertheless, we can combine them based on the calculation below:

- The number of cars hypothetically averted by respondents who did not dispense with cars due to car sharing is multiplied by the ratio of the total number of active private customers of the car sharing provider and the number of respondents.

<sup>3</sup> 1) Once a week or more on average 2) more than once a month on average but less than once a week + once a month on average 3) less than once a month on average 4) once 5) never

<sup>4</sup> <https://carsharing.de/alles-ueber-carsharing/studien/evaluations-standard-verkehrsentlastende-wirkung>

## How many private cars have respondents gotten rid of since they started car sharing? And how many cars have they not bought thanks to car sharing?

- \_ The result of this multiplication is added to the real replacement ratio.
- \_ The result of this calculation is divided by the number of shared cars owned by the respective providers.

The result, the **integrated replacement ratio**, takes into account the cars that car sharers actually dispensed with as well as the cars that car sharers did not purchase due to membership of the car sharing provider. The calculation results in a single replacement ratio without double counting.

### — Recommendations for future research

For a future edition of this survey, Autodelen.net will work with car sharing providers to develop an adapted methodology that takes even greater account of the nuanced differences between private car sharing and car sharing through fleet-based providers. It is also our intention to examine the impact of car sharing in Brussels and Wallonia, using data from all active car sharing providers. In this way, we should be able to reach conclusions for free-floating car sharing too. Finally, the impact of car sharing could be explored in even wider terms. The current research focuses on car ownership, the replacement ratio and the shift in the travel behaviour of car sharers. This can be further expanded to include the CO2 savings generated by car sharing, an indication of the reduction in car mileage, etc.

### CAR SHARING IN 2022: STATE OF PLAY

The data for this section of the report were requested in December 2022 from the car sharing organisations operating in Belgium<sup>5</sup>. The figures relate to the period from 1 January 2022 to 1 December 2022. The data analysis is always performed at an aggregated level, either by type of car sharing or by region. No reference is therefore made in this report to individual providers' data, other than exceptionally and with the explicit consent of the provider concerned (see below).

In terms of the number of (active) car sharers, it cannot be ruled out that people using several car sharing systems are also **included multiple times in the figures**. Unfortunately, this cannot be avoided without violating GDPR legislation.

The data used in this report relate to car share providers with their own fleet (both round-trip and free-floating) and private cost-sharing car share. **Private car rental** (or P2P car sharing see 'What is car sharing?') is not included in this annual report. In order to make a proper comparison with previous figures, this type has also been omitted from previous years' data.

Two organisations operate in the **private cost-sharing car share segment** in Belgium: Cozywheels and Dégage. However, we only have data from Dégage for the number of completed journeys made by shared car, the average journey length and distance, and the average

number of journeys per user and per shared vehicle. Therefore, statements about these indicators for private car sharing in this report rely solely on the Dégage data.

For the **Brussels-Capital Region**, we have no data on the number of trips and their characteristics for **free-floating providers**. The total number of trips in Brussels and at the Belgian level is therefore an underestimate.

For **Brussels and Wallonia**, the private cost-sharing car sharing organisation **Cozywheels** used a different, **stricter count** of the number of car sharers and shared cars in 2022, resulting in a decrease in these indicators for both regions compared with 2021. This should be seen as a one-off adjustment to the data.

<sup>5</sup> We received data from the following car sharing providers and would like to thank them. BattMobility, cambio, Claus2you, CoopStroom, Cozywheels, Dégage, GreenMobility, Klimaan, Miles, Partago, Poppy, ShareMobility, Stapp, in and Wibe.

# IMPACT OF CAR SHARING

Car sharing has expanded dramatically in Belgium and Flanders in recent years. The number of trips, shared vehicles and car sharers all increased significantly. But does that growth translate into streets with fewer cars? We know from research conducted abroad that one shared car displaces several private cars from the streets. But what is the situation in Flanders? The results of the study below show very clearly that **car sharers** on average **own fewer cars** than the average person in Flanders, **dispose of cars, refrain from buying additional cars and more often opt for sustainable travel** (e.g. bicycle or public transport) instead of a (shared) car journey.

This study is a first for Flanders. For the first time, we have conducted a large-scale study of the impact of car sharing on the car ownership and travel behaviour of car sharers. We have only been able to do so thanks to the car sharing providers. Ten of the twelve then-active car sharing organisations sent an online questionnaire to their customers in spring and summer 2022. This yielded a sample of more than 6,300 respondents. In this part of the report, we again distinguish between the three forms of car sharing: round-trip, private and

free-floating. In future editions, it is also our intention to examine the impact of car sharing in Brussels and Wallonia.

## — Nuancing the results for free floating and private car sharing

Given the very low response rate among free-floating respondents (3.5%), we must treat the available data with caution. The results in this report give an indication of the impact of GreenMobility's car sharers, but they cannot be extrapolated to all free-floating car sharers. Nor is it possible to draw one-to-one comparisons between the results for free-floating car sharing and those for round-trip and private car sharing.

When we discuss results from private car sharers, in most cases we are only talking about the respondents who do not share their own vehicle. These car sharers use a car from a private car sharer. However, for the 'change in travel behaviour' indicator, we did take the entire group of private car users into account.

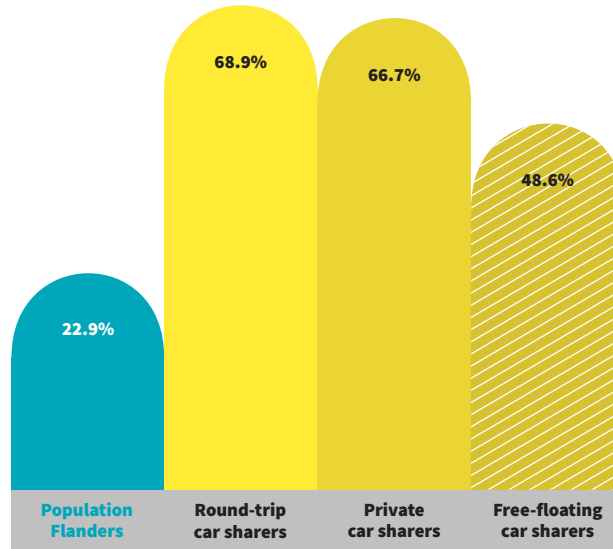
For more information on the study design and how the results were processed, please refer to the Methodology section.

## IMPACT ON CAR OWNERSHIP

### — Number of cars per household

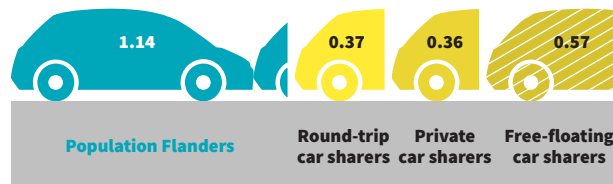
A first indicator of the impact of car sharing is the current number of cars in a household. In 2021, the average Flemish household owned 1.14 cars. Just over one in five Flemish families do not own a car<sup>6</sup>. These include both own cars and company cars. Among car sharers, car ownership was strikingly lower at the time of the survey (see figure at bottom left). Depending on the car sharing model, between five and seven in ten car sharers have no car available in the household<sup>7</sup>. Average car ownership among private and round-trip car sharers is 0.36 and 0.37<sup>8</sup> cars per household, respectively. Among free-floating car sharers (GreenMobility), the average number of cars in the household is 0.57.

In a fictitious and theoretical example, this could mean the following: on a street with 30 families not practising car sharing, 34 cars are parked. In a street with 30 families all using car sharing, that will be about 12<sup>9</sup>, supplemented by one or two shared vehicles.

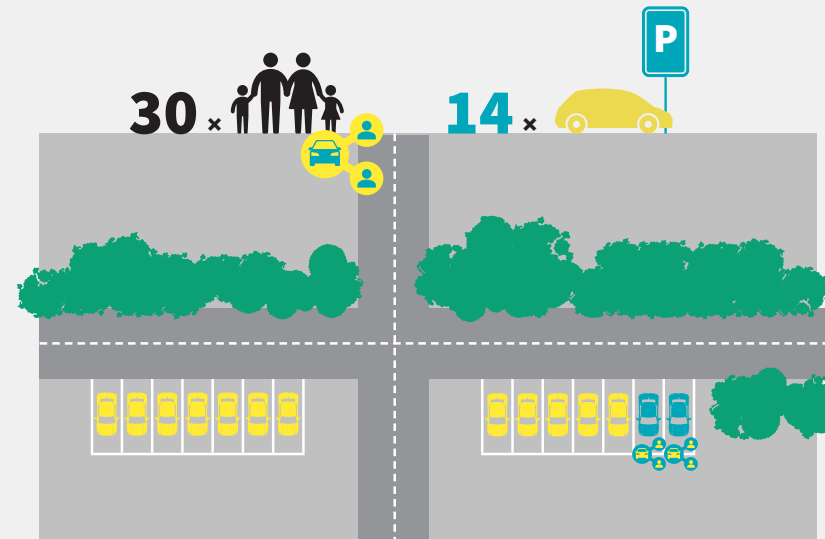
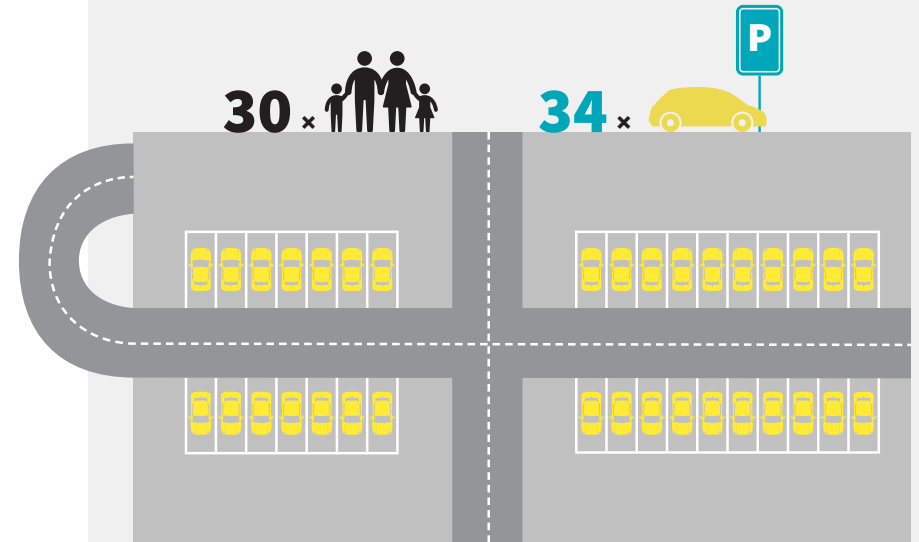


Share of **households without a car** in Flanders

Due to the low response rate of free-floating car sharers, these results give an indication of car ownership. We cannot extrapolate these to all free-floating car sharers. Nor is it possible to draw one-to-one comparisons between the results for free-floating car sharing and those of round-trip and private car sharing.



**Average car ownership** per household in Flanders



Number of cars on a street with 30 families if **no one does car sharing** vs if **everyone does car sharing**

<sup>6</sup> <https://statbel.fgov.be/nl/themas/datalab/wagenbezit-huishouden>

<sup>7</sup> The proportion of households without a car among round-trip car sharers is 69%, but this conceals a wide variation. For some round-trip providers, 6.1% of households are car-free, but equally there are providers where the proportion stands at 72%.

<sup>8</sup> Among the various round-trip car sharing providers who cooperated in the study, average car ownership lay between 0.31 and 1.34.

<sup>9</sup> For this calculation, based on the proportions of customers among the car sharing providers participating in the survey, we factored in 62.2% round-trip car sharers in the street, 9.5% free-floating car sharers and 28.3% private car sharers.

## One round-trip shared car replaces on average

### 9.5 private cars.

## A privately shared car replaces on average

### 3.1 private cars.

#### — Significant differences by region and maturity of car sharing

The overall Flemish averages conceal a number of striking differences. For instance, there are differences in car ownership among car sharers depending on the degree of urbanisation of the region and on the maturity of the car sharing organisation used. The largest cities in Flanders have a high population density and have had a car sharing presence for almost two decades. In Antwerp, for example, car ownership among car sharers stands at 0.22 cars per household compared with 0.73 for all the city's residents. In Ghent, a similar ratio can be seen: 0.27 cars per household among car sharers, 0.80 cars among the general population. By way of contrast, in Zottegem, an East Flanders town with a population of around 26,000, shared cars have only been present since 2020 and we note an average of 1.12 cars per household and 0.52 cars among car sharers.

#### — Replacement ratio

Car sharers own significantly fewer cars than the average in Flanders, but to what extent does car sharing play a role in this? Are people who own no or few cars more likely to choose car sharing? Or is rather the case that car sharing simply enables them to reduce their rate of car ownership?

To resolve these hypotheses, we asked respondents two questions. First question: how many cars have they dispensed with since they started car sharing, and what part did car sharing play? (actual replacement) Second question: how likely is it that, absent car sharing, they would have acquired another vehicle? (hypothetical replacement). Combining the two indicators allows us to calculate an integrated replacement ratio, representing how many private cars one shared car replaces.

Details of how the replacement ratio is calculated can be found in the section on Methodology. We should mention here that the calculations below are an underestimate of the actual replacement ratio as we only take account of the private customers of car sharing providers in this study. We did not survey corporate account holders, nor did we include them in determining the replacement ratio.

The replacement ratio is highest for **round-trip** car sharing organisations. **One round-trip shared car replaces on average 9.5 private cars**<sup>10</sup>. Of these, 6.6 cars have been dispensed with since people started car sharing, while the remaining 2.9 cars are the extra vehicles not purchased due to the availability of car sharing. There are two important reasons for this high figure. First, customers of round-trip providers appear to dispense with a high number of cars per shared car on average when they start car sharing, i.e. 6.6. That number is at least

three times higher than for the other categories of car sharing. Second, the ratio of users to shared car (i.e. 21.5) also plays a major role here. Once again, this is the highest in any form of car sharing and has a positive impact on the replacement ratio.

A **privately shared car replaces 3.1 private cars on average**. However, this underestimates the actual replacement ratio of private car sharing. As described in the Methodology, this calculation only takes account of the users of private vehicles, and not their owners. On average, for every privately shared car, users dispense with 1.7 other cars and refrain from purchasing an additional 1.4 cars due to the availability of car sharing.

The explanation for the lower replacement ratio must be sought mainly in the low level of car ownership among private car sharers. At the time of the survey, the number of cars per household was the lowest in this group (0.36 cars per household), and it was also significantly low before users started car sharing. Among private car sharers, 24% have dispensed with a car by joining a car sharing organisation, while almost 40% of respondents among round-trip car sharers have done so. In other words: private car sharers did not have many cars to dispose of at

the time of joining. Therefore, the replacement ratio, and especially the real replacement ratio, is in any event lower than among providers whose customers had higher car ownership levels before they entered car sharing.

In addition, the ratio of users per shared car for private car sharing organisations (10.8) is much lower than for round-trip and free-floating car sharing, which translates into a lower replacement ratio. Since private cost-sharing car sharing organisations do not charge for the reservation time of a shared trip, we see a much higher average reservation time than for other car sharing organisations (see p. 21). This partly explains the lower number of car sharers per shared car.

Finally, at 1.4 cars, the hypothetical replacement ratio is also lower than for round-trip (2.9 cars) and free-floating car sharing (2.7 cars). The profile of privately cost-sharing car users offers an explanation here. They generally have less need for a car and make fewer trips using a shared car. This is also evident in this study from a lower rate of shared car use than among users of other forms of car sharing<sup>11</sup>. The more limited need for cars makes private car users less likely to consider buying an (additional) car.

<sup>10</sup> In calculating the real replacement ratio, we diverge from the German Bundesverband CarSharing (bcs) by including the impact of membership of a car sharing organisation on the number of cars the respondents dispensed with when they started car sharing (see Methodology). Applying this additional weighting to the reduction in the number of cars owned reduces the replacement ratio but it gives us an even more accurate picture of the effective, causal impact of car sharing on car ownership. However, it does mean that the data can no longer be compared one-to-one with studies from abroad. Without the additional weighting, we obtain a replacement ratio of 11.6 for round-trip car sharing. One private cost-sharing shared car replaces 4 private cars in this model, and one free-floating car replaces 5.5 vehicles.

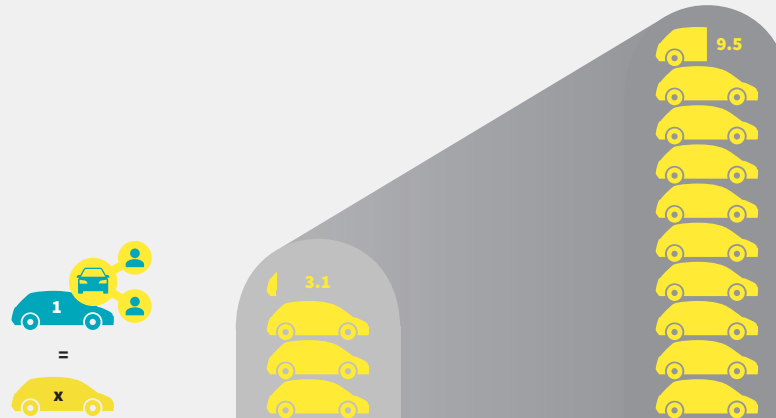
<sup>11</sup> 44% of private car sharing users use a shared car less than once a month, compared with 27% of round-trip car sharers and 32% of free-floating car sharers.

In other words, private car sharing appeals to a different profile of car sharers, provides a low-threshold alternative way to gain entry as a user by using the existing fleet and is complementary to the other forms of car sharing. Low car ownership and use by private car users and the more efficient use of existing private cars have a real beneficial impact, but do not affect the replacement ratio.

And what about the owners of privately shared cars? It is not possible to calculate a replacement ratio for them as we have done for private users and users of providers with their own fleet. For that, we need an adapted calculation method<sup>12</sup>. Owners who share their car relinquish their “own car”, so to speak, and engage in a system where they themselves also make reservations for the use of their “shared car”.

We did ask the car owners to what extent they would buy another car if (one of) their own car(s), which is currently shared, were to be removed. **Almost half of the respondents (46%) who share a car on a cost-sharing basis would not buy a new car if their current vehicle were to disappear.** At that point, current car owners would themselves become users of (private) shared cars and would avoid the purchase of additional cars. The current methodology does not take into account this hypothetical replacement of cars by owners. This means that the effective replacement ratio of private shared cars is in actuality higher than the statistics above suggest.

For a future edition of this survey, Autodelen.net will work with car sharing providers to develop an adapted methodology that takes even greater account of the nuanced differences between private car sharing and car sharing through fleet-based providers.



**Range** between which **replacement ratios** vary by form of car sharing

*\*The general term car sharing conceals differences in terms of the replacement ratio of one shared car. It is therefore appropriate to calculate the impact at the car sharing operator level.*

On average, one **free-floating shared car replaces 3.6 private cars**, according to Green-Mobility figures. Of these, 0.9 cars have been dispensed with since people started car sharing, while the remaining 2.7 cars are the extra vehicles not purchased due to the availability of car sharing. Real car ownership among free-floating car sharers changes the least among the three categories after starting car sharing. Among free-floating respondents, only 12% dispensed with a car, compared with 40% of round-trip users and 24% of private car sharers. Nevertheless, we found a high replacement rate per shared car and there are two explanations for this. First, free-floating car sharing has a relatively high hypothetical replacement rate. This is because for every free-floating shared car, 2.7 cars are not purchased. To calculate the hypothetical replacement ratio, we only take into account respondents who have not disposed of a car: this group is also the largest among free-floating car sharers. Second, the high ratio of customers per shared car also causes the replacement ratio to rise.

<sup>12</sup> As private cost-sharing car sharing is currently almost unknown in other (European) countries, a separate method has not yet been developed.

<sup>13</sup> Given the low response rate, we reach no conclusions as to the total number of private cars saved through free-floating car sharing

<sup>14</sup> <https://www.vlaanderen.be/statistiek-vlaanderen/mobiliteit/personeswagenpark>

<sup>15</sup> There are at least 1,059,000 publicly designated parking spaces in Flanders (source: Ruimterapport Vlaanderen 2021, <https://publicaties.vlaanderen.be/view-file/47143>).

<sup>16</sup> Calculated on the basis of 12.5 square metres per parking space.

### — Fewer cars, more public space

Based on these replacement ratios, we know that the approximately 1,500 round-trip and 1,100 private shared cars in Flanders **reduce the total private car fleet by 17,740 cars**: 14,345 for round-trip and 3,395 for private car sharing<sup>13</sup>. The 2,605 round-trip and private shared cars today account for only 0.07% of registered vehicles in Flanders<sup>14</sup>, but do save 1.7% of publicly designated parking spaces<sup>15</sup>. If you were to park all these 17,740 saved cars right next to each other, you would cover an area of **22 hectares**<sup>16</sup>, good for almost **32 football fields**.

**The conclusion is clear:**  
**on average, car sharers own fewer cars than the average person in Flanders. Car sharing enables them to keep the number of cars in the household low or even to reduce it. Car sharing thus enables citizens to live with no or fewer cars.**

## IMPACT ON TRAVEL BEHAVIOUR

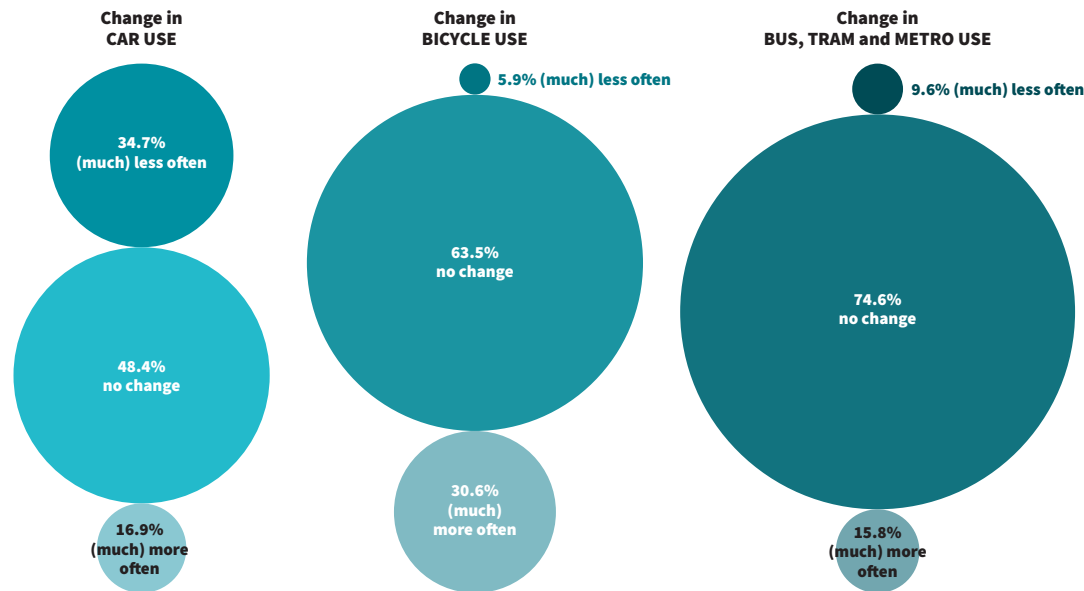
Car sharing reduces car ownership and thus improves the liveability of our cities and towns. The social impact of car sharing becomes even greater if it generates a positive modal shift: a shift from car travel towards more sustainable modes. We therefore asked the almost 6,300 Flemish car sharers how much their travel behaviour had changed since they joined a car sharing organisation.

### — Car use: 35% travel (much) less by car

In the first instance, we probed the **change in car use**. We asked about the number of trips made with a private car or a shared car, both as a driver and as a passenger. In general, car sharers' vehicle use decreases after they join a car sharing organisation. The group of car sharers who travel by car less or much less (35%) is larger than the group who opt for the car more or much more often (17%). About half of car sharers have noticed no change in their car use since they started car sharing.

Among **round-trip car sharers**, the group of customers who (greatly) reduced their car use was more than twice as large as the group that travelled by car more or much more often, 37% versus 15%. Among **free-floating car sharers** (GreenMobility), the proportion who take a car more or much more often is as high as the proportion of customers who saw their car journeys (much) reduced, at 19%. Three in ten **private car sharers** used the car more or much more often, while one in five (greatly) reduced their car travel.

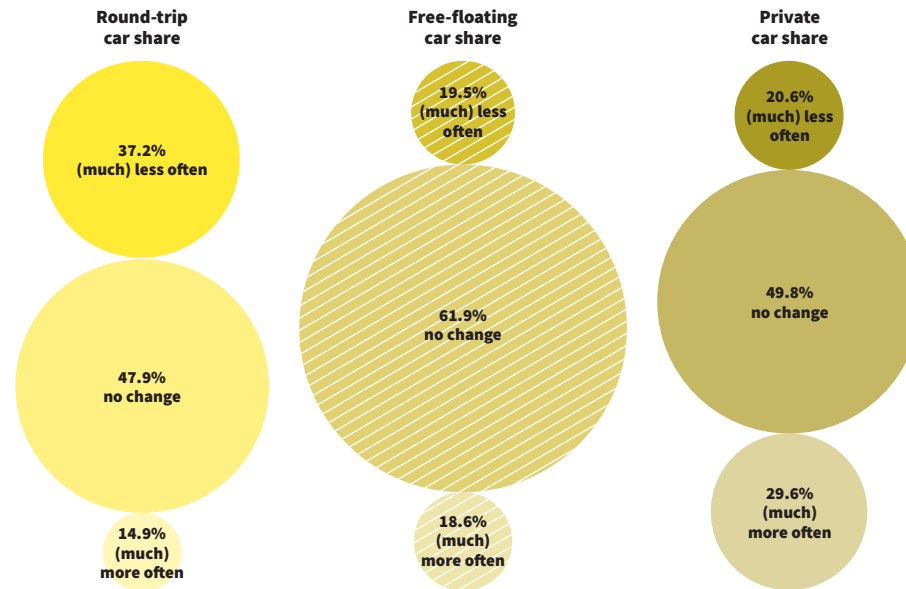
As with the lower replacement ratio among private car users, the slight increase in car travel can also be explained by car ownership. At the time of the survey, the number of cars per household was lower among private car sharers



**35% travel  
(much) less  
by car**

Change in car travel behaviour since the start of car sharing, across all forms of car sharing

than among respondents who are members of round-trip and free-floating systems (0.36 vs. 0.37 vs. 0.57). Low car ownership among private car users appears to be less the result of car sharing than in the case of round-trip car sharers. One in four private car users has dispensed with a car by joining a car sharing organisation, compared with 40% among round-trip car sharing users. This suggests that many private users had few cars even before they started car sharing and that, due to car sharing, they now have access to a car for the first time, which may explain the increase in car use. Finally, for private car owners we observe that the group opting less or much less often for car travel since they started sharing their own car is larger than the group more often using a car (36% versus 13%).



Change in car use since the start of car sharing

*Due to the low response rate of free-floating car sharers, these results give an indication of the change in travel behaviour. We cannot extrapolate these to all free-floating car sharers. Nor is it possible to draw one-to-one comparisons between the results for free-floating car sharing and those of round-trip and private car sharing.*

### — Bicycle use:

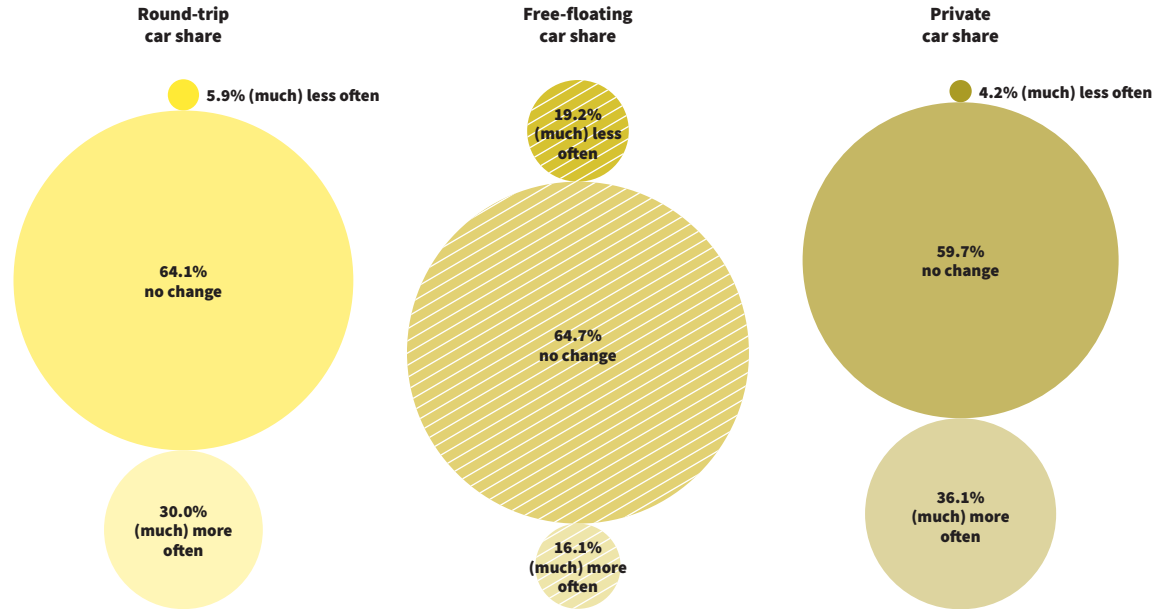
#### 31% travel (much) more often by bike

Second, we looked at **changes in bicycle use**. Across all forms of car sharing, the number of bicycle trips increases after joining a car sharing organisation. The group of car sharers who travel by bike more or much more often (31%) is considerably larger than the group who opt for the bike less or much less often (6%). As with car use, the high percentage of car sharers who saw no change in their number of bicycle trips is striking.

Among **round-trip** and **private car sharers**, the group of customers who cycle (much) more often is six to eight times larger than the group who cycle (much) less often since they started car sharing. The reverse is true of **free-floating car sharers**: the proportion of customers who cycle (much) less often is slightly higher than the proportion of customers who cycle (much) more often. This slight decrease in the number of bicycle trips among free-floating car sharers can be explained by the typical travel pattern of free-floating shared cars. Free-floating systems, which operate on a per-minute fare, are characterised by mainly shorter rides within the city, from location A to B. So in some cases, these are likely to be journeys previously made by (electric) bicycle which are replaced by a trip using a free-floating shared car.

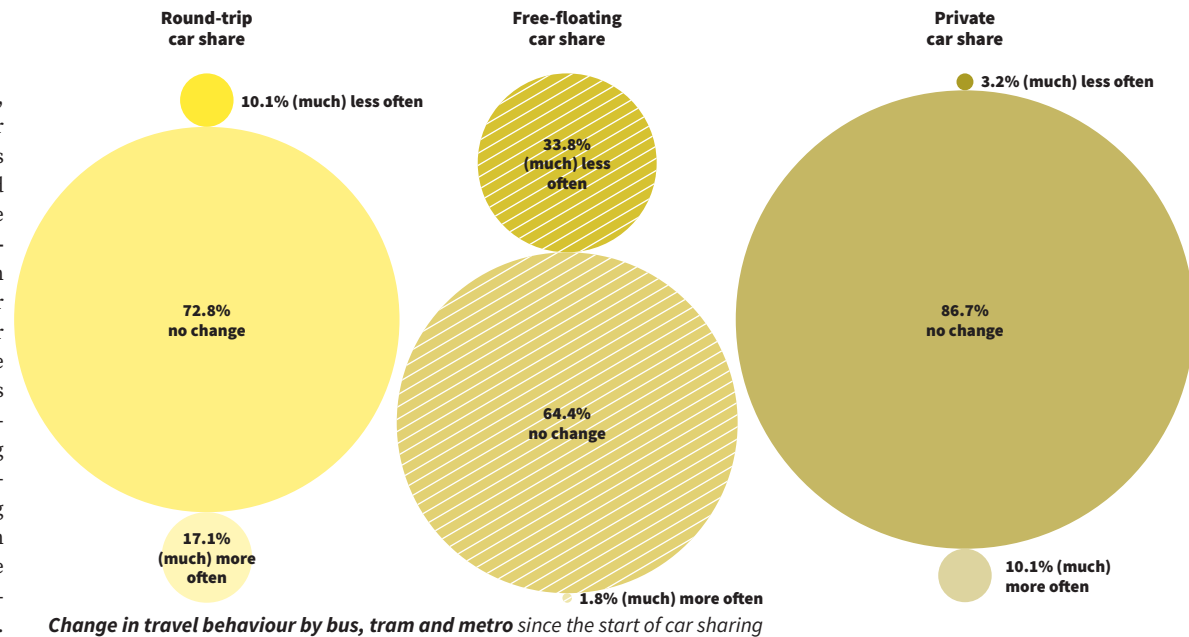
### — Use of public transport: limited impact

Finally, we considered **change in the use of public transport** (bus, tram and metro). Across all forms of car sharing, the number of journeys using public transport increases slightly after joining a car sharing organisation. The group of car sharers who travel by bus, tram or metro more or much more often (16%) is considerably larger than the group who travel less or much less often by public transport (10%), although the difference is smaller than for bicycle use. However, the majority of car sharers see no change in their use of public transport (75%).



Change in bicycle travel behaviour since the start of car sharing

Among **round-trip** and **private car sharers**, the proportion of customers who saw their use of public transport (greatly) increase is about twice as large as the group that travelled (much) less often by bus, tram or metro since starting car sharing. For **free-floating car sharing** a different trend emerges: the proportion of customers who use public transport less or much less often is almost twenty times higher than the proportion of customers who made such journeys more or much more often. As with the change in cycling behaviour, the typical intra-urban travel profile of a free-floating car sharer explains the decline in public transport use. The average free-floating car sharing trip in Flanders in early 2022 was about 20 km and 1 hour and 40 minutes. It may be that some customers use free-floating shared cars as a substitute for the urban public transport network.



Change in travel behaviour by bus, tram and metro since the start of car sharing

Due to the low response rate of free-floating car sharers, these results give an indication of the change in travel behaviour. We cannot extrapolate these to all free-floating car sharers. Nor is it possible to draw one-to-one comparisons between the results for free-floating car sharing and those of round-trip and private car sharing.



**The average car sharer is around 40, highly educated, lives with one or two other family members and resides in a central city.**

## CAR SHARER PROFILE

Who are the nearly 6,300 respondents who took part in this survey? The average car sharer is around 40, highly educated, lives with one or two other family members and resides in a central city. In the following paragraphs, we explore the unweighted proportions within the sample population. Where relevant we make a distinction between the different types of car sharing.

### — Gender and age

**51% of our respondents were men and 49% women.** 0.7% identified as neither. The proportion of women among private car sharers (61%) is significantly higher than in the full sample. The largest group of car sharers is found in the **26–39 age group** (35%). Combined with the 40–49-year-old category, they make up 60% of all car sharers.

In terms of age, there are some interesting differences between the different types of car sharing. The largest group of over-65s use round-trip car sharing schemes, at 11%. Respondents aged 50–64 were the most likely to use round-trip providers, at 27%. At 73%, the figure for private car sharers in the middle bracket, aged 26–49, is more than 10% higher than for other providers. Finally, the average age is lowest among free-floating car sharers. Whereas for round-trip and private organisations, the proportion of users under 25 is just 4%, for free-floating car sharing it is 13%.

### — Family composition and education

Just under three in ten car sharers are single (27%) and **one in three live with one other person** in the household (33%). 15% and 17% of respondents, respectively, constitute a family of 3 or 4 people. Four in ten car sharers live with at least two other people. We did not explicitly ask about the ratio of children to adults, but we can assume that a large part of that 40 per cent consists of families with children. Almost **half of all car sharers are university graduates** (49%). More than one in three have a college-level diploma. This confirms the picture that car sharers tend to be (very) highly educated. The lowest level of educational attainment is found among free-floating car sharers. Just under a third of these respondents have at most a secondary school diploma, which is two and three times higher, respectively, than for round-trip and private car sharers.

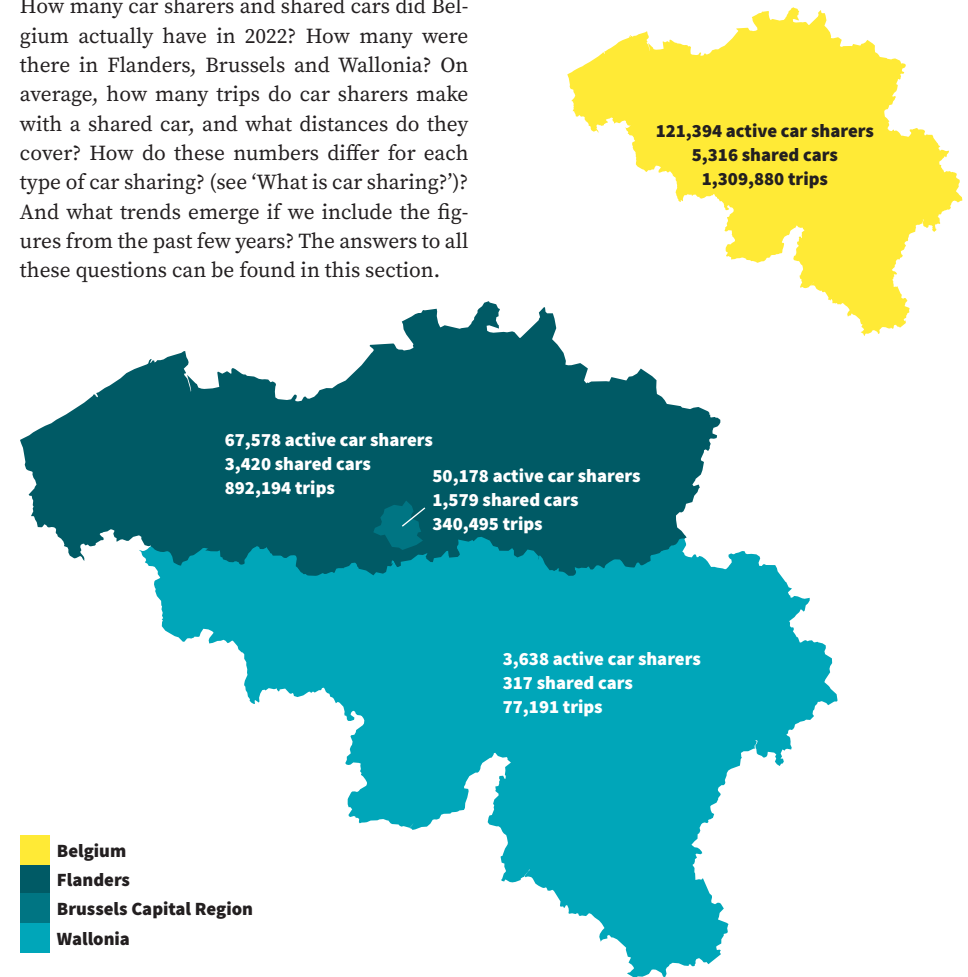
### — Region: focal point in the cities

Finally, we observe the strong representation of respondents from the **largest Flemish cities**. More than half of the respondents come from Ghent (26%) and Antwerp (25%). If we add the responses from Leuven and Mechelen, we arrive at almost 70% of the sample. Car sharing thrives in environments with high population density, a quality supply of public transport and cycling facilities and some form of parking regulation. So it makes sense that this is reflected in the geographical distribution of respondents.

# CAR SHARING IN 2022

STATE  
OF PLAY

How many car sharers and shared cars did Belgium actually have in 2022? How many were there in Flanders, Brussels and Wallonia? On average, how many trips do car sharers make with a shared car, and what distances do they cover? How do these numbers differ for each type of car sharing? (see ‘What is car sharing?’) And what trends emerge if we include the figures from the past few years? The answers to all these questions can be found in this section.



*Number of car sharers, shared cars and trips in Belgium and the three regions*

**In Brussels and in Flanders, the number of active car sharers has increased by 47% and 33% respectively by 2021.**

**THE NUMBER OF CAR SHARERS AND SHARED CARS TODAY**

— **Belgium has 121,394 active car sharers**  
 In 2022, 121,394 Belgians **made active use of a shared car**. Around half were Flemish (67,578), four in ten lived in Brussels (50,178), and 3% were Walloons (3,638). This means that 1.6% of Belgian driving licence holders are engaged in car sharing, or half a percentage point more than in 2021<sup>17</sup>. In Flanders, this figure stands at 1.5% (+0.4 percentage points since 2021) and in Wallonia at 0.2% (more or less unchanged since the previous year). In addition, the high acceptance rate of car sharing in Brussels is particularly striking. In 2021, 4.3% of driving licence holders in Brussels were already active

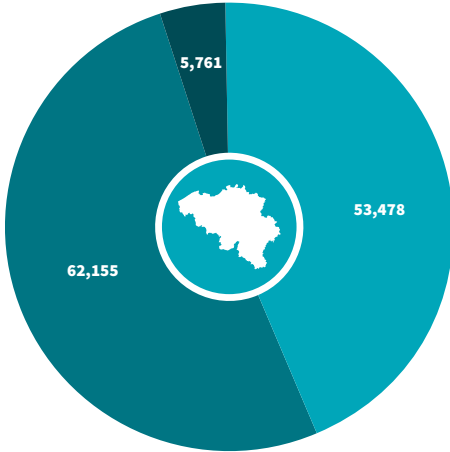
car sharers; in 2022 the proportion was 2 percentage points higher at 6.3%.

In our 2021 annual report, we argued that the innovation phase of car sharing is over in Belgium. According to Rogers’ innovation theory, the ‘early adopters’ phase has now arrived. This should manifest itself in spectacular growth in the use or sale of a product. That prediction is indeed coming true in Brussels and Flanders. In these regions, the number of active car sharers increased by 47% and 33% respectively compared with 2021, meaning that 6.3% and 1.5% of driving licence holders are now car sharing.

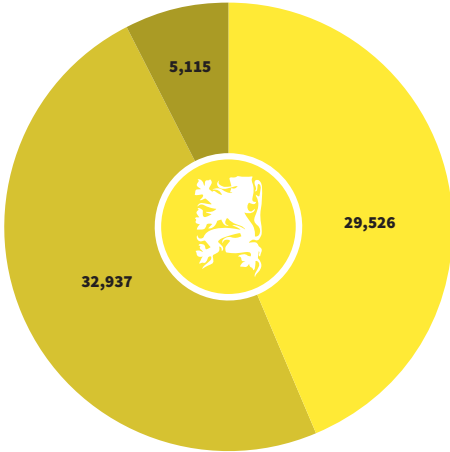
The number of **registered users** is more than double the number of active users. Belgium had 270,796 registered car sharers by the end of 2022: 173,759 in Flanders, 90,485 in Brussels and 6,552 in Wallonia.

**— Registered v. active users: further conclusions**

The figures shown above almost always refer to active users, rather than registered users. This distinction is important because it has a big impact on the numbers. If, for example,

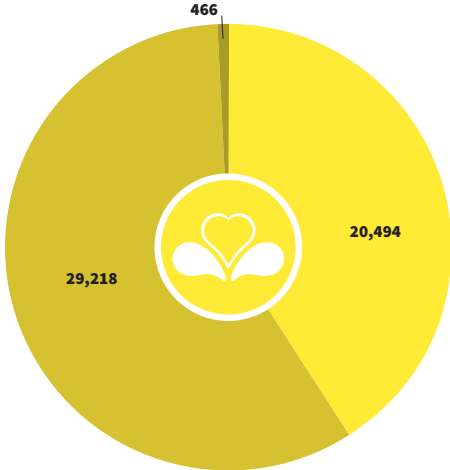


Number of active car sharers in **Belgium** by form of car sharing

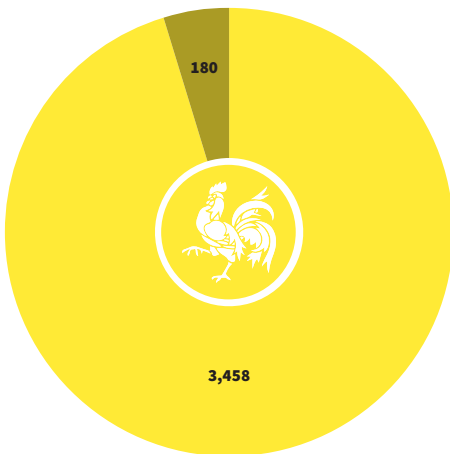


Number of active car sharers in **Flanders** by form of car sharing

- Round-trip
- Free-floating
- Private



Number of active car sharers in **Brussels Capital Region** by form of car sharing



Number of active car sharers in **Wallonia** by form of car sharing

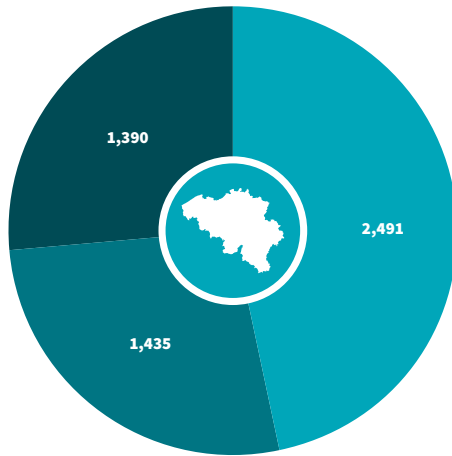
<sup>17</sup> Calculation method: OVG 5.5: 83.38% of Flemish over-18s have a driving licence // Statistiek Vlaanderen: in 2022 there were 5,399,620 over-18s in Flanders. In 2022 therefore, around 4,502,203 Flemish people had a driving licence. We could not find any recent figures for the number of driving licences in Belgium, Brussels and Wallonia. We therefore elected to use the same percentage as Flanders (83.38 % of over-18s). This may lead to an underestimate in Brussels given pre-2018 figures show that a quarter of Brussels residents do not possess a driving licence.

we look at the different forms of car sharing, we find that almost three-quarters (73%) of all registered round-trip car sharers actually took part in car sharing in 2022. For free-floating and private cost-sharing car sharers this stands at 48% and 32% respectively. The latter two forms of car sharing generally involve slightly lower (recurring) financial contributions (e.g. joining or subscription fees) in order to use shared cars, making the threshold for becoming a customer lower.

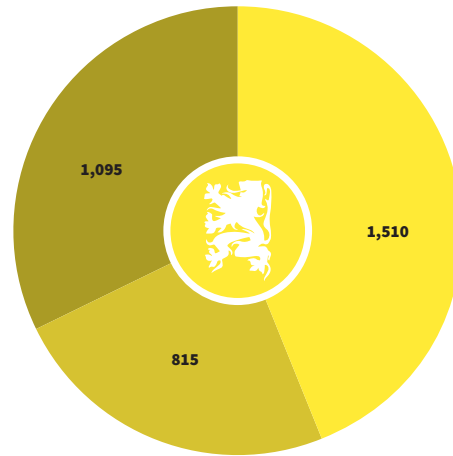
In Belgium, 67% of all registered car sharers are free-floating car users, followed by 27% round-trip car sharers and 6% private car sharers. Among active car sharers, on the other hand, these proportions are quite a bit closer. Just over half of all active car sharers use free-floating cars (51%), 44% opt for round-trip cars and 5% choose private car sharing.

**— Belgium has 5,316 shared cars**

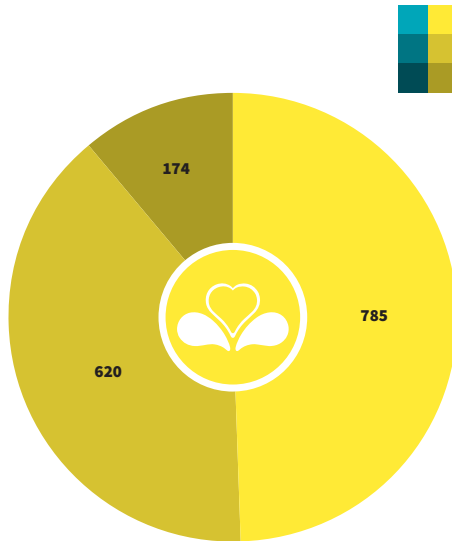
The number of shared cars in Belgium exceeded the 5,300 mark by the end of 2022, with 3,420 in Flanders (64%), 1,579 in Brussels (30%) and 317 in Wallonia (6%). Almost half of all shared cars are owned by round-trip providers (2,491 or 47%). There are also 1,390 individual shared cars (26%) and 1,435 free-floating shared cars (27%).



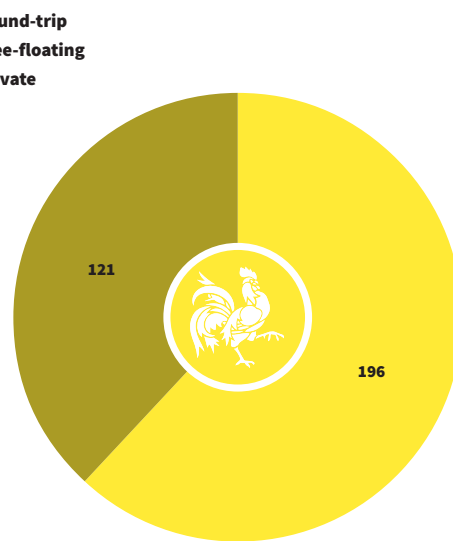
Number of shared cars in **Belgium** by form of car sharing



Number of shared cars in **Flanders** by form of car sharing



Number of shared cars in **Brussels Capital Region** by form of car sharing



Number of shared cars in **Wallonia** by form of car sharing



In Belgium, 16% of all shared cars were **fully electric** at the end of 2022. This is mainly due to the efforts of providers and car sharers in Flanders, where one shared car in four is electric. In Brussels and Wallonia, the figures stand at 2% and 4% respectively. More than six in ten electric shared cars belong to a round-trip provider's fleet. The remaining 28% and 9% are found among free-floating providers or are owned by individuals who share an electric car with others.

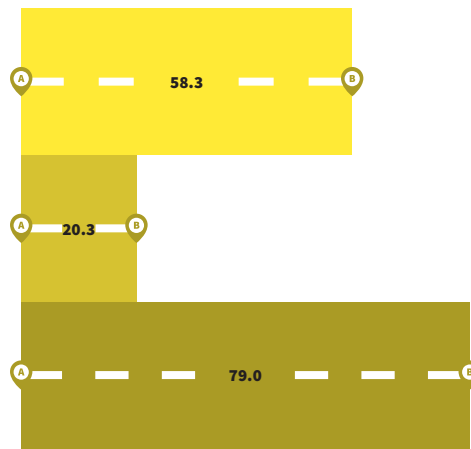
On average, each shared car is used by 22 different active car sharers (see Table below). The proportions in terms of the average number of active users per shared car vary greatly depending on the type of car sharing. A free-floating shared car is used by 43 different active customers, a round-trip shared car by 21, and for private car sharing, that ratio is four active users per shared car. The number of active car sharers per shared car is highest in Brussels (32) and lowest in Wallonia (11).

	General	Round trip	Free-floating	Private
<b>Belgium</b>	23	21	43	4
<b>Flanders</b>	20	20	40	5
<b>Brussels</b>	32	26	47	3
<b>Wallonia</b>	11	15	/	1.5

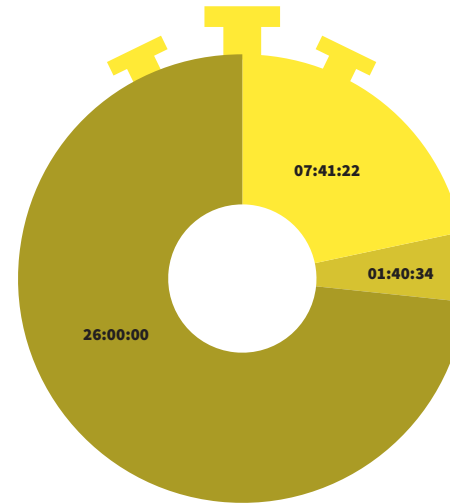
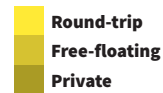
Number of active users per shared car, by form of car sharing

## NUMBER OF TRIPS, DURATION & DISTANCE

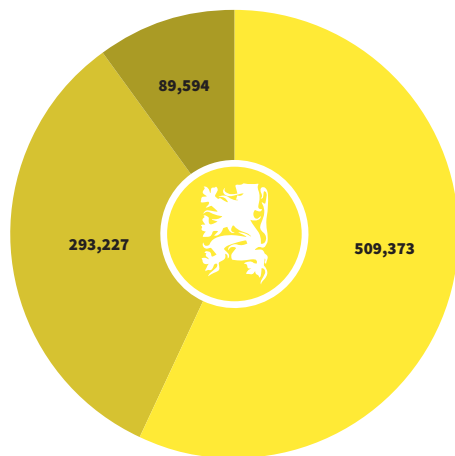
In Belgium, more than 1.3 million trips by shared car were recorded between 1 January and 1 December 2022. Given that we received no information on the number of free-floating trips in the Brussels-Capital Region, the actual number of trips is even higher (see reader's guide). Since these trips were for an average distance of 51 km, an approximate 67 million kilometres will have been travelled by shared cars by 2022. That represents nearly 1,669 trips around the equator or 87 trips to the moon and back. The trips lasted for an average of 7 hours 49 minutes. As the mean is sensitive to outliers and shared cars are also used for longer trips, we also include the medians. The weighted average median for kilometres travelled per trip across providers is 25 kilometres. The median journey time is 3 hours 33 minutes. A shared car recorded an average of 363 trips, representing around one trip per day per shared car. An active car sharer made an average of 15 trips a year.



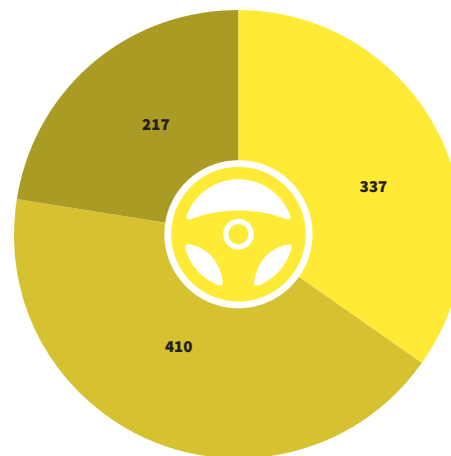
Average distance ride (km) in Flanders by form of car sharing



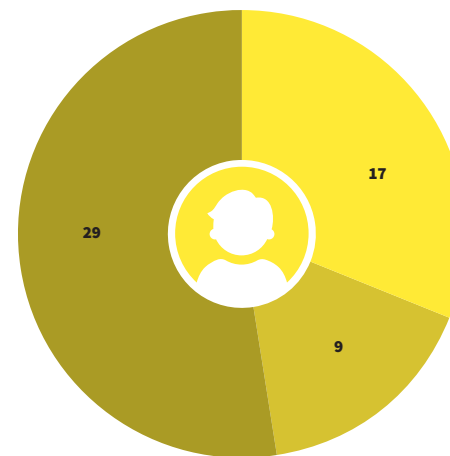
Average journey duration in Flanders by form of car sharing



Number of trips in Flanders by form of car sharing



Average number of trips per shared car in Flanders by form of car sharing



Average number of trips per car sharer in Flanders by form of car sharing

Of the more than **1.3 million trips** recorded, 68% were in Flanders, 26% in Brussels and 6% in Wallonia. The majority of trips were made using a **round-trip shared car** (71%), almost one in three 23% using a **free-floating car** and 7% using a **privately shared car**. For the latter category, however, we only have data from the car sharing organisation Dégage (see reader's guide), which means that the actual number of trips using private shared cars, and hence the overall number of trips using a shared car, is higher than reported here.

In Flanders, the **number of trips per shared car** averaged 338. On an annual basis, a free-floating shared car makes almost twice as many trips as a private shared car in Flanders (410 versus 217 trips). A round-trip shared car is in between, with an average of 337 trips.

In 2022 the average **number of trips per active car sharer** stood at 14 in Flanders. Active private car sharers made an average of 29 trips, round-trip car sharers 17 and free-floating car sharers 9 trips.

In Brussels, the **average distance and duration of a shared trip** was 8 hours 25 minutes and 58 km. In terms of time, trips were on average the longest in Wallonia (8 hours 35 minutes and 56 km.) In Flanders, the averages are close to the figures for Belgium as a whole (7 hours 33 minutes and 48 km), which is not unexpected, given the Flemish predominance in the total number of trips.

A journey using a **round-trip shared car** takes 8 hours 00 minutes on average in Belgium (median: 3 hours 36 minutes) and covers an average of 58 kilometres (median: 27 km). **Free-floating** shared cars generally cover a slightly shorter distance: 20 kilometres on average. Trips are also shorter in time terms: one hour 41 minutes on average. **Private shared cars**

**Over the past six years, the number of car sharers increased by almost a factor of 10, from 28,000 to 270,000 (registered) car sharers today.**

record the longest trips on average: 26 hours and 79 km (median: 10 hours).

In terms of **estimated daily use**, a shared car in Belgium is used for an average of 476 minutes per day, equating to 32% of the time. A free-floating vehicle is in use for an average of 114 minutes, equating to 8% of the time. For round trip car sharing this is an average of 492 minutes, or 34% of the day. For private car sharing this rises to 926 minutes or 64% of the time.

In both Wallonia and Brussels, shared cars are in use about 40% of the time. In Flanders this is a little below 30%. However, these figures must be significantly qualified. By use, we mean here the average time a shared car is reserved per day. The reservation time does not correlate one-to-one with the actual driving time in all car sharing systems. A typical trip with a round-trip or privately shared car consists of a journey from location A to location B, a time period

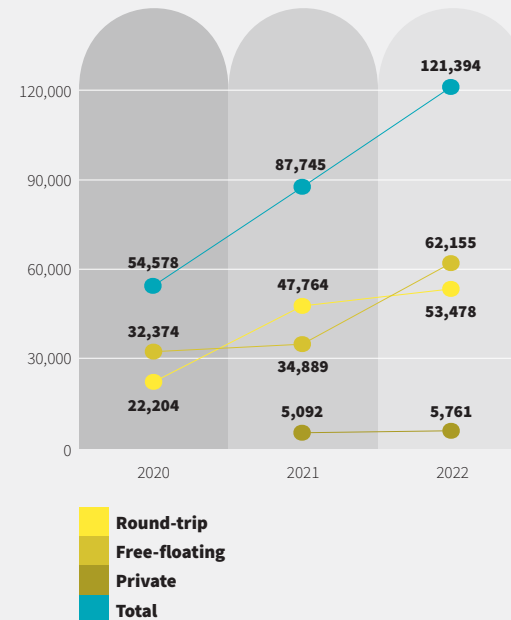
during which the shared car is stationary and a journey back from B to A. Thus, the journey time or reservation time is longer than the actual driving time. In free-floating car sharing, 'one way' journeys (from A to B) are much more frequent, so the actual driving time more closely matches the journey time. This also explains the lower per-day use.

The large differences in these data show that we should not lump the different types and systems together. Different car share systems attract different types of users. Users of free-floating systems, which work on a per-minute and/or per-kilometre rate, mainly make shorter trips from A to B, while most round-trip shared cars, which apply an hourly rate, make on average somewhat longer trips from A to B and back. With private car sharing, on the other hand, you only pay for the distance driven, making longer use more advantageous in comparison with the other systems.

## HISTORICAL GROWTH

### — Strong growth of active car sharers

The first time Autodelen.net collected (some) figures for car sharing in Belgium was in early 2017. The number of registered car sharers then stood at just over 28,000. Over the past six years, this number has risen by a factor of almost 10 to the current level of around 270,000. If we look at the number of active car sharers, we observe an increase of about 40% in 2022 compared with a year earlier (see graphic below). The number of active car sharers in Belgium increased by 33,000 in both 2022 and 2021.



Historical overview of **active car sharers** in Belgium

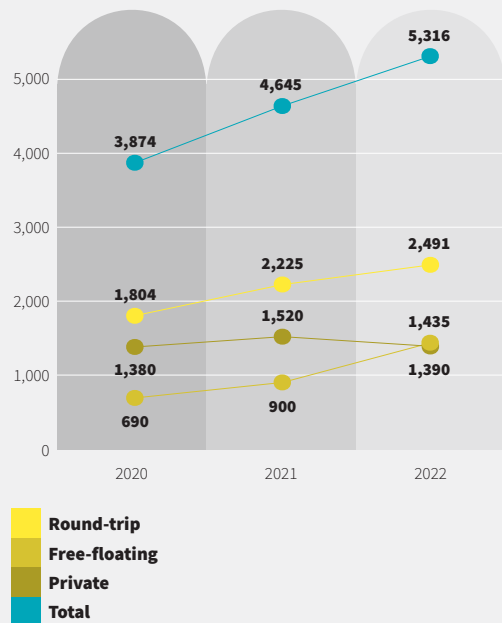
Just as in 2021, free-floating car sharing recorded the strongest growth by comparison with other car sharing systems, recording an additional 78% of active car sharers. Growth rates are slightly lower for round-trip car sharing, but there the stable annual growth is particularly striking. In 2022, the number of customers increased by around 12%. Both round-trip and free-floating car sharing have virtually doubled the number of active car sharers in two years. For private car share we found a 13% rise in active car sharers.

The biggest growth in the number of car sharers was found in the capital. In Brussels the number of active car sharers rose by 47% over the year. In other words, almost half as many Brussels residents again will have taken a trip in a shared car in 2022 as in 2021. This strong growth is mainly due to the rise of free-floating car sharing. In Flanders the number of active car sharers rose by 33% in comparison with 2021, and in Wallonia by 28%.

### — Strong increase in shared cars

In 2022 the number of shared cars rose by 14% in Belgium (+671 vehicles). This is the strongest growth in the past five years. Large contrasts can be seen in the evolution of the number of (electric) shared vehicles across car share segments. The round-trip shared car fleet increased by 12% in 2022 compared with a year earlier (+266 cars) and by 49% compared with 2018. Private car sharing organisations saw the total number of shared cars decline by 9% by 2022. This decrease is mainly explained by a change in the way Cozywheels counts the number of private shared cars in Brussels and Wallonia and should therefore be seen as a one-off adjustment to the data. The number of

free-floating shared cars increased by almost 60% in 2022, reaching a new peak after the record in 2018. This is explained by the arrival of German player Miles and the expansion of Poppy's fleet. At the end of 2018 there were 910 free-floating shared vehicles. At the end of 2022 there were 1,435. Based on the announcements made by free-floating providers, we expect further strong growth in the number of free-floating shared cars in Belgium in 2023.



Historical overview of **number of shared cars** in Belgium

### — Growth in electric shared cars stalls

The growth in the number of electric shared cars slowed down in 2022. While between 26% and 30% more electric shared cars entered the market in 2020 and 2021, the figure was 5% in 2022. As a result, the proportion of electric cars in the total shared fleet fell from 17% to 16%. There are several explanations for this decline. On the one hand, the spillover effects from the corona pandemic and the war in Ukraine are causing very long delivery times for new cars. Second, the effects of scrapping the Flemish zero-emission premium in 2020 are now visible on the ground. Together with high charging rates due to the energy crisis, this makes investment in electric shared cars a less obvious choice in 2022.

In 2022 the number of electric round-trip shared cars rose by 17% in comparison with 2021. A year earlier, growth stood at 45%. The proportion of electric cars in the total shared round-trip fleet was 22% by 2022, the highest percentage in the past five years. Private car sharing organisations recorded strong growth in the number of electric cars (42%, or 22 additional electric shared cars). The number of electric free-floating shared cars rose by 20% in comparison with 2021. This is explained by Poppy's decision to scale back its electric shared car offering in recent years for operational and financial reasons. That brings the proportion of electric shared vehicles in the overall fleet to 16%.

The Brussels-Capital Region has seen the greatest growth in shared cars (+18%) in comparison with the other regions but at the same time saw the number of shared electric vehicles decline

by 32% on the previous year. That brings the proportion of e-vehicles in the overall fleet to 2%. In Flanders, the proportion is much higher (24%) and the number of shared electric cars also continued to grow in 2022 (+7%).

### — More and longer trips

In comparison with a year earlier, 19% more journeys were made using a shared car in Belgium in 2022 (1,312,234 vs 1,107,390). We further see that the average trip distance is slightly longer than in 2021 (51 versus 46 km). The average journey time rose from 6 hours 20 minutes in 2021 to 7 hours 49 minutes in 2022. The explanation lies mainly in the sharp increase in the average distance and duration of free-floating trips.

The number of journeys made with a round-trip shared car increased by almost 30% compared with 2021 (from 725,000 to 926,987 journeys) and the average journey time also increased by 42 minutes, to 8 hours. Among free-floating car sharing organisations, the increase in the average distance (from 12 to 20 km) and duration (from 41 min to 1h41min) of shared trips is particularly striking. There are two reasons for this. First, free-floating car sharing providers allow 'one way' trips between different cities in Belgium. This was not the case in previous years, or much less so, resulting in more longer trips. Second, operators have put more effort into offering economical day packages, formulas where a fixed cost is paid for a full day's use of the shared car. This makes longer journeys more affordable than with regular pricing. For private car sharing organisations, we observe a fairly large increase in the number of trips, from 53,000 in 2021 to almost 90,000 in 2022 (+71%).

In turn, the average distance fell from 111 to 79 km. Average trip duration also fell, from 29 hours to 26 hours. In Flanders, the number of shared trips increased by 44% and the average trip was half an hour longer than in 2021.

Finally, the average number of trips per shared car in Belgium also rose by 14% when compared with a year earlier, from 318 to 363. The magic barrier of one trip per day on average is all but broken, which is good news for the profitability of the car sharing business model in Belgium. The number of trips per shared car is growing most strongly for private car sharing, more precisely at the provider Dégage. The number of trips per shared car at Dégage rose from 148 to 217 over the year (+48%). Growth in Flanders also stood out. There, trips per shared car rose by more than a quarter over the year, from 326 to 374.

**The number of electric shared cars increased among round-trip and private operators, but decreased among free-floating providers.**





# GLOSSARY

— **Car sharing organisation:**

a legal entity that has its own or leased fleet and/or relies on pre-existing vehicles (belonging to individuals or legal entities). All a car sharing organisation's vehicles are available to users at any time unless they are in use by another member or the owner, undergoing maintenance or being recharged.

— **Registered user/car sharer:**

a person who is a customer or member of a car sharing organisation, whether or not by paying an entry fee and/or a periodic subscription fee. Membership gives the user access to the car sharing organisation's shared cars.

— **Active user/car sharer:**

a registered user who has made at least one trip using a shared car in the last year.

— **Journey time:**

the total time during which the user has exclusive access to the shared car, regardless of the actual driving time. This could also be described as **reservation time**. A typical trip with a round-trip or privately shared car consists of a journey from location A to location B, a time period during which the shared car is stationary and a journey back from B to A. Thus, the journey time or reservation time is longer than the actual driving time. In free-floating car sharing, 'one way' journeys (from A to B) are much more frequent, so the actual driving time more closely matches the journey time.

— **Average journey time and distance:**

to calculate average journey time and distance for a given car sharing organisation segment

we used weighted averages. This means that the relative share of a given car sharing organisation (based on the total number of trips) is taken into account.

— **Average number of users per shared car:**

the quotient of the number of a car sharing organisation's active users and the number of shared cars it offers.

— **Average number of journeys per user:**

the quotient of the number of journeys made using shared vehicles from a given car sharing organisation between 01/01/2022 and 01/12/2022 and the number of active users of the same organisation.

— **Average number of journeys per shared vehicle:**

the quotient of the number of journeys made using shared vehicles from a car sharing organisation between 01/01/2022 and 01/12/2022 and the number of shared vehicles provided by that organisation.

— **Replacement ratio:**

the number of private vehicles replaced by one shared car. There are two types of replacement ratio, real and hypothetical, and these are combined in an integrated replacement ratio. Methodologically, real and hypothetical replacement ratios have a different status. The real replacement ratio is based on the real trend in car ownership up to the time of the study. The hypothetical replacement ratio is based on answers given instinctively by respondents. This reflects intentions. For more details see under Methodology.

# ANNEXES

## – Annex 1: Questionnaire used for the car sharers' impact survey

- In the past 12 months, how often have you reserved a shared car from car share provider x? (Once a week or more on average / more than once a month on average but less than once a week / once a month on average / less than once a month on average / once / never)
- How many private cars does your household currently own (including work-related and company cars)? (none/1/2/3/ 4 or more)
  - IF 2. = 1/2/3/4 or more, THEN: How many work-related and company cars does your household currently own? (none/1/2/3/4 or more)
  - IF 2.a = 1/2/3/4 or more, THEN: Have you used a mobility budget for this purpose (i.e. have you opted for a smaller salary or company car so that you had extra budget left over for other sustainable transport alternatives or cash income)? (no/yes)
  - IF 2. = 1/2/3/4 or more, THEN: How many of the cars do you share with others? (none/1/2/3/ 4 or more)
- In your family, have you dispensed with a car by joining car share provider x? (no/yes)
  - IF 3. = yes, THEN: How many cars have you dispensed with by joining car share provider x? (1/2/3 or more)
  - IF 3. = yes, THEN: What part did your membership of car sharing provider x play in this decision? (of no importance/of little importance/of some importance/of great importance/of very great importance)
- How likely do you think it is that you would have purchased an (additional) car if you had not joined car sharing provider x? (We would definitely have bought an (additional) car/We would probably have bought an (additional) car/We would have considered buying an (additional) car/We would not have bought an (additional) car)
- How often do you currently use the following transport modes? (scale: daily or almost daily / 1 – 3 times a week / 1 – 3 times a month / less than once a month / never or almost never / don't know) – (Bus, tram or metro, Train, Motorbike or moped, Bicycle, Electric bicycle, (Shared) (electric) cargo bike or bicycle with tow bar, Pedelec, Shared bike, Scooter, Own car as driver, Shared car as driver, (Shared) car as passenger, Taxi, Walking, Other)
- How has your use of other means of transport changed since joining car sharing provider x? (scale: Much more often – Often – No change – Less often – Much less often) – (Bus, tram or metro, Train, Motorbike or moped, Bicycle, Electric bicycle, (Shared) (electric) cargo bike or bicycle with tow bar, Pedelec, Shared bike, Scooter, Own car as driver, Shared car as driver, (Shared) car as passenger, Taxi, Walking, Other)
- What is your gender? (m/f/x/rather not say)
- How old are you? (in years) [open field n which to enter age in years]
- How many members does your household have, including you yourself? (1/2/3/4/5 or more)
- How many driving licences are there in your household? (1/2/3/4/5 or more)
- What is the highest qualification you have obtained? (Primary education/secondary education/college/university/postgraduate)
- What is your employment situation? (working full-time / working part-time / seeking work / incapacitated for work/ student / retired / other)
- What is your postcode? [open field n which to enter postcode]

— Annex 2:  
Summary of car share providers in Belgium since inception

PLATFORM	PLATFORM	REGION	STARTED	ENDED
ROUND-TRIP	Cambio Wallonië	Wallonia	2002	
	Cambio Brussel	Brussels	2003	
	Cambio Vlaanderen	Flanders	2004	
	Zen Car	Brussels en Flanders	2011	2020
	Bolides	Flanders	2012	2020 (B2B only)
	Wibee	Belgium	2014	
	Partago	Flanders	2015	
	Ubeeqo	Brussels	2016	2019
	Stapp.in	Flanders	2016	
	Battmobility	Flanders	2017	
	CoopStroom	Flanders	2019	
	Justdrive	Flanders	2019	2020
	ShareMobility	Flanders and Wallonia	2020	
	Claus2you	Flanders	2021	
	Flexigo	Flanders	2021	
	Klimaan	Flanders	2021	
Autosphère	Wallonia	2022		
FREE-FLOATING	Drivenow	Brussels	2016	2019
	Zipcar	Brussels	2016	2019
	Poppy	Flanders	2018	
		Brussels	2019	
	GreenMobility	Flanders and Brusselss	2020	
Miles	Flanders and Brusselss	2022		
PRIVATE	Dégage!	Flanders and Brusselss	1999	
	Cozywheels	Belgium	2003	
	Tapazz	Belgium	2014	2019 (still only B2B)
	CarAmigo	Belgium	2015	2019 (still only B2B)
	Drivy	Belgium	2016	Taken over by Getaround in 2019
	Getaround	Belgium	2019 (after takeover of Drivy)	

## COLOPHON

### **Publisher responsible**

Autodelen.net, Koningin Astridlaan 185 box 201, 9000 Ghent

### **Content**

Johannes Rodenbach, Jeffrey Matthijs, Bram Seeuws, Suzanne Ryvers and Sarah Decombel

### **Design**

Trien Pauwels, trien.org

### **Translation**

Architekst

### **With thanks to**

BattMobility, cambio, Claus2you, CoopStroom, Cozywheels, Dégage, Flexigo, Getaround, GreenMobility, Klimaan, Miles, Partago, Poppy, ShareMobility, Stapp.in and Wibee.

### **Copyright and re-use**

Unless otherwise stated, everything in this work is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) licence. This means you may copy, adapt and further distribute this publication, even for commercial purposes, provided that you credit the creator of the work. More info via [creativecommons.org](https://creativecommons.org).



Autodelen.net, February 2023

This publication was prepared with the support of the Interreg North-West Europe project eHUBS, the Flemish Government, the Flanders Agentschap Binnenlands Bestuur and Brussels Mobility.