Conducted in 2012, the first edition of the National Survey on Carsharing\(^1\) was the first large-scale survey on the users, uses and impacts of carsharing in France.

Conducted with 2090 users who subscribed to 20 different carsharing services, it showed the “triggering multimodality effect” of round trip carsharing: carsharing allowed the inhabitants of cities to free themselves of their personal car, discover and adopt other modes of transportation.

Four years later, does carsharing still play the same role in urban mobility? Are its users still the same? Have its uses or its impacts changed?

Similar to the 2012 edition\(^2\), the 2016 edition focuses primarily on round-trip carsharing.

**This study has two key objectives:**

- **Update the results of the first edition**: have the users, uses and impacts of carsharing evolved between 2012 and 2016?

- **Better understand the users, uses and impacts of carsharing**: in particular, who are carsharing users? Once registered to carsharing, do their travelling practices change in the same way? What are the uses and impacts of carsharing among private individuals and carsharing in professional contexts?

Full reports can be downloaded here:

**The different forms of carsharing**

<table>
<thead>
<tr>
<th><strong>Round trip carsharing: The main purpose of the study</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The vehicle is returned to the departing station.</td>
</tr>
<tr>
<td>It is possible to book it several hours in advance, and the rental duration must be specified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>One-way carsharing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With stations</strong>: The vehicle can be picked-up at one station and returned at another.</td>
</tr>
<tr>
<td><strong>Without stations / free-floating</strong>: The vehicle can be taken and returned anywhere in a given area. The rental duration need not be specified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Peer-to-peer carsharing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Done among private individuals, the rental is carried out through operators who handle the billing as well as the insurance and who take a commission on every transaction.</td>
</tr>
</tbody>
</table>

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1 - 6t -, 2013, National Survey on Carsharing - Carsharing as a trigger of an alternative mobility to the personal car. Report and summary available at the address [http://www.ademe.fr/enquete-nationale-lautopartage](http://www.ademe.fr/enquete-nationale-lautopartage)

2 - The methodology is described on page 6
How does one become a carsharing user?

The first National Survey on Carsharing thoroughly described the profile of users and the impact of carsharing on their modal practices. This study describes the paths of users in their diversity.

We can distinguish four types of paths:

**Carsharing as a cause of car-free environments**: Carsharing, coupled with other alternative modes, allows users to gradually learn how to get by without their personal vehicle.

> Nowadays, everything is done by bike. Carsharing was one of the triggering events, among other things; it started with Vélo'v, followed by bicycle paths and carsharing. (René, aged 47, in a couple with 2 children, Lyon)

**Carsharing as a consequence of car-free environments**: Carsharing is a choice resulting from the decision to do without one’s personal car and change one’s traveling practices.

> I visited a car factory with my brother and when I saw the waste of energy that is used to manufacture cars I decided to get rid of mine. I sold it and I immediately started to look for alternatives. (Pierric, 42, célibataire, Strasbourg)

**Carsharing as a car ownership alternative**: Carsharing is chosen as an alternative to buying a (first) personal car.

> When I had moved to Strasbourg and I was reluctant to buy a car, I made a trip by carsharing with a colleague. It perfectly suited my needs in terms of an automobile. (Louis, 28 years, in a couple without children, Strasbourg)

**Carsharing as a means of accessing automobility**: Carsharing is not a substitute for the personal car, but it allows users to do activities that are not easily accessible without a car.

> I tend to go on vacation more often and I more often automatically consider weekends within the metropolitan area because I know that there is the possibility to use carsharing. (Fabien, 33, in a couple without children, Bordeaux)

1. The four paths presented do not include the 3% of users who have more cars in their households since they started using carsharing.

### Three major paths in behavioral evolution

All users do not evolve in the same way in terms of their behavior after having signed up for carsharing. The changes in mobility practices observed at the global scale involve rather a minority of users whose behaviors are changing considerably.

<table>
<thead>
<tr>
<th>Profil 1</th>
<th>Profil 2</th>
<th>Profil 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little change in behaviors</td>
<td>Bicycle fans</td>
<td>ex-motorists who have become multimoda</td>
</tr>
</tbody>
</table>

- > no significant change in the traveling practices
- > Increase in the use of bicycles
- > Decrease in the use of personal cars and sharp drop in the use of public transportation
- > Increase in the use of public transportation, walking and cycling
- > Sharp drop in the use of cars

81% of carsharing users

10% of carsharing users

9% of carsharing users

Source iconographies: Noun Project - Edward Boatman, Galaxicon, Eagle Eye, Yamini Ahlawia
Older and more affluent users in 2016 than in 2012

Although the users’ paths and their mobility behaviors differ, their socio-economic profile shows that carsharing remains a niche market, with a wide over-representation of people who are rather elderly, financially well-off and highly qualified compared to the population of the large French cities in which they reside (carsharing services are mainly available in large metropolitan areas).

Furthermore, the specificity of carsharing users is tending to increase since their average age and their level of income has increased since 2012.

A need for communication in order to make carsharing more accessible

It is therefore necessary to continue the reflection on the means to be implemented in order to make carsharing more accessible and encourage its adoption by people with less favored socio-economic profiles. Carsharing users usually discover it by “informal” means (seeing a station in the street, by word-of-mouth) rather than by communication measures that are aimed directly at presenting the concept of carsharing.

Communication on the economic benefits of carsharing

Carsharing users come especially by a desire to save money. In order to disseminate the practice of carsharing and also convince a younger and/or less favored population, increasing the communication effort on the financial benefits of carsharing compared to owning a personal car seems relevant.

A mode of transportation suitable for families with children

Although carsharing is still limited to a niche audience, one should however note the strong representation of households with children. In addition, these users use carsharing more than users belonging to one-person households and households without children.

### Profile of carsharing users in 2016

- **73%** of holders of a bachelor’s degree or higher (71% in 2012)
- **54%** men (53% in 2012)
- **45 ans** years old average age (42 years old)
- **57%** executives and higher intellectual professions
- **3 691 €** monthly net income of the household of a carsharing user on average (3 375 € in 2012)

### Carsharing rentals in 2016

- **13 hours / 4 hours** average and median duration of rentals
- **78 km / 35 km** average and median distance traveled during a rental
- **56 € / 30 €** average and median cost of a rental
- **2,2** Average number of rentals per user and per month

Source: [Noun Project](https://www.nounproject.com) - mungang kim, Khomsun Chawong, Souvik Bhattacharjee, Alice Noir
Can carsharing trigger long-term multimodality?

The users in 2016 appear to have less changed their mobility behaviors after having adopted carsharing than those interviewed at the time of the 2012 survey. It would be tempting to conclude that carsharing in 2016 is less an «alternative mobility trigger» than in 2012. However, the differences between the 2012 and 2016 surveys may be due to multiple factors: Development of modes based on shared cars (chauffeur-driven cars, carpooling) to the detriment of “classic” car alternatives (public transport, cycling), a partial return to the personal car, the forgetting of practices before carsharing leading to an underassessment of the change in behaviors.

2016/2012 Comparison - Average number of days of use reported for the different modes, per user and per month, before and after carsharing registration

<table>
<thead>
<tr>
<th>Modes motorisés individuels</th>
<th>2016</th>
<th>2012</th>
<th>Evolution</th>
<th>Modes alternatifs à la voiture personnelle et au deux-roues motorisé</th>
<th>2016</th>
<th>2012</th>
<th>Evolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiture personnelle</td>
<td>5,8</td>
<td>2,4</td>
<td>-3,4</td>
<td>Transports en commun</td>
<td>12,6</td>
<td>12,8</td>
<td>0,2</td>
</tr>
<tr>
<td>Deux-roues motorisé</td>
<td>0,9</td>
<td>0,7</td>
<td>-0,2</td>
<td>Vélo</td>
<td>10,1</td>
<td>10,3</td>
<td>0,2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Marche (déplacements complets)</td>
<td>12,2</td>
<td>12,5</td>
<td>0,3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Autopartage</td>
<td></td>
<td>2,2</td>
<td>/</td>
</tr>
</tbody>
</table>

NB : Figures in gray indicate new developments which are statistically non-significant

Moreover, carsharing caused the same decrease in automotive equipment in 2016 than in 2012. Its environmental relevance as well as the decrease in the place occupied by cars in cities therefore remains considerable. In 2016, one carsharing vehicle replaced:

- 5 personal cars, if you take into account the cars which respondents reported to have gotten rid of thanks to carsharing;
- 10 personal cars, if you take into account all the cars which users said they got rid of after their carsharing registration.

From the 2012 survey data, we had calculated that one carsharing vehicle replaced 6 personal cars at the time, by taking into account all the cars which users said they had gotten rid of after their carsharing registration.

Between 2012 and 2016, the number of users per carsharing vehicle increased, while the percentage of users who got rid of their car remained the same: it is therefore logical that each carsharing vehicle replaced more personal cars.

By taking into account all the cars which respondents got rid of after their carsharing registration: in 2016, each carsharing vehicle replaced 10 personal cars and freed 9 parking spaces.

1 - In 2012, we had only questioned users on their amount of equipment before and after their subscription to a carsharing service. In 2016, we also asked users if carsharing was the main trigger for getting rid of their car or if another event (moving, change of employment) had encouraged their decision to do away with their car.

2 - Estimate based on the round-trip carsharing network Citiz, carried out for comparative purposes as part of the study conducted by 6t on one-way carsharing with the support of ADEME. Report and summary in free access on http://www.ademe.fr/enquete-lautopartage-trace-directe
The success factors for a carsharing system

Set up stations where there are many car alternatives options

Carsharing users are people who do not need to use their car daily: Only 5% use it every day. They are typically people who can go to their place of work by using another means of transportation than their own car, particularly by public transportation or bicycle.

Create a dense network of stations

During their last carsharing rental, 63% of users declared that they favored the proximity of the station rather than the choice of the car model. That is why it seems pertinent to favor proximity by developing a dense network of stations, even if this means offering only one or two vehicles in most stations.

Offer different kinds of vehicles, both combustion and hybrid engines

Users like to be able to occasionally use a van, a family vehicle or even a vehicle which is accessible to persons with reduced mobility.

Facilitate access to the service

Operators can facilitate registration and access to carsharing by offering:
- A registration that can be done entirely online;
- Access to the vehicle via the metropolitan area transportation pass or a smartphone;
- Several pricing formulas, including one without a subscription.

Promote carsharing with businesses and local authorities

People who use carsharing for professional trips need it during weekdays, while private individuals use it especially in the evenings and on weekends. These two audiences are therefore compatible.

How local authorities can support carsharing?

Provide parking spaces

Street stations should be widely preferred since they are the main means of presenting the carsharing concept: 30% of current users discovered carsharing by passing in front of a station.

Implement parking restriction policies

43% of users declared that car parking constraints played a role in their decision to subscribe to carsharing. The more car parking restriction policies are deliberate, the more the comparative advantage of carsharing in terms of parking becomes significant.

Give financial support

Local authorities that wish to do so can provide financial support to carsharing operators, especially in order to accompany them towards cost-effectiveness in the first phase of their development. Local authorities can also promote the use of carsharing by their agents for both professional and personal journeys, in order to provide service operators with a steady user base.

Develop an institutional communication

Operators want communication that starts with the local authorities and community’s active support through the different communication spaces which it has available: display areas, halls, municipal bulletins, etc.
Methodology of the National Survey on Carsharing, 2016

5 surveys to understand the various aspects of carsharing

For this 2016 edition, 4 quantitative online surveys were carried out:
- A large survey of 2,061 round trip carsharing users;
- A follow-up survey of 276 persons who had already responded to the 2012 survey;
- A survey of 158 vehicle fleet managers working within companies, local authorities or associations;
- A survey of 83 users of the carsharing service among private individuals, Koolicar.

The quantitative surveys were supplemented by a qualitative survey through interviews with 25 carsharing users and former users in order to better understand how the use of carsharing intervenes in their life paths and by what means it encourages change in traveling practices.

These surveys were distributed by the carsharing operators Citiz, Communauto, Koolicar, Ubeeqo to their users.

Three research reports

This research led to the publication of three reports, all of which can be downloaded for free at the address indicated below:
- A situational analysis on the knowledge relating to the users, uses and impacts of carsharing, as well as on the measurement methods of these impacts;
- An analysis report of the quantitative and qualitative surveys;
- A recommendation report for communities who wish to support the development of round trip carsharing.

Full reports can be downloaded here:
ademe.fr/Enquete-nationale-lautopartage-edition-2016

Map of “round trip” and “one-way” carsharing in France (non-exhaustive)

- Carsharing operators part of Citiz’s network
- Others B2C services
- Scheme launched before 2012
- Scheme launched after 2012
- Name (City of Metropolitan area/Region)
- Name (City of Metropolitan area/Region)