Usage, users and impacts of private hire services



Results of the first large-scale survey on the impacts of private hire services



The need to reduce the negative environmental, economic or societal impacts of automobile use on the lives of city dwellers is ever more strongly felt within urban areas and constitutes a real challenge for public authorities.

New shared transport services that are supported by digital applications have developed within this context. Based on an increasing divergence between the possession and use of private cars, these services must both:

• respond to the growing demand of the population, and

 adapt to the urban environment in complement to the existing transport offer. Amid all these services, private hire car services with drivers are in full development. The dissemination of mobile telephones during the 2000s, followed by the smartphone and global positioning systems (GPS) since the beginning of the 2010s, have created an upheaval in the personal transport industry. Thanks to these smartphone applications, users are able to geolocate themselves to request a ride from the nearest vehicle, with no need for a switchboard.

Evaluating the impact of private hire services



While the offer of private hire services is experiencing strong growth, the usage, users and impact of these services remain unknown.

The objective of this study is to describe and understand them:

- Who are the users of private hire services?
- Why do they use these services?
- In what ways are these services complementary
- to the range of alternatives to the private car?
- To what extent do these services influence changes in mobility behavior?

>> What type of services are we are talking about?

Licensed transportation services

In the study, the expression "licensed transportation services" designates transport services that are proposed via the use of an application that connects users with licensed drivers. They correspond to private hire vehicles (PHV).



Peer-to-peer transportation services

We will use the term "peer-to-peer transportation services" in the context of applications that connect users with peer-to-peer drivers.

Djump and uberPOP, two applications that connect users with peer-to-peer transportation services in France, were suspended on July 3, 2015. On July 30, 2015, Djump was purchased by the PHV application Chauffeur-Privé.



>> What is the place of private hire services within the existing transport offer?

Today, Uber is the largest operator for matching users with private hire services in France and Switzerland: 1,026,373 users have used the service at least once during the last twelve months in these two countries. Among these, 777,650 are account holders who signed up to the application in France or Switzerland (Uber figures on 10 July 2015). Uber is thus an ideal field of study.

The challenge of the present study is not to analyze the users of Uber services, but to better understand the phenomenon of private hire services within the environment of the existing transport offer, ranging from private cars to all the alternative modes: public transport, walking, bicycles, car-sharing, taxis, etc. The results of the study have been brought into perspective with:

data from the French¹ and Swiss² population censuses,

 a sample of users of return-trip car-sharing services in France from a study conducted by 6t in 2013³ (2 090 users),

 a sample of users of single-trip car-sharing services in France from a study conducted by 6t in 2014⁴ (644 users),

• a sample of taxi users in France from a study conducted by 6t in 2015⁵ (1 001 users).

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¹ INSEE, Census of the population 2012 - Territorial limits from 1 January 2013.

² OSF, Recensement de la population 2010.

³ 6t-bureau de recherche, Enquête Nationale sur l'Autopartage : l'autopartage comme déclencheur d'une mobilité alternative à la voiture particulière, 2013.

⁴ 6t-bureau de recherche, ENA.3 – Enquête sur l'autopartage en trace directe (le cas d'Autolib' Paris). L'autopartage en trace directe : quelle alternative à la voiture particulière ?, 2014.

⁵ 6t-bureau de recherche, Usagers, usages et impacts du taxi – enquête auprès de 1000 usagers du taxi en France, 2015.

>> A mode that is very widely used for private journeys within the urban area of residence ...

Sixty-two percent of the users of private hire services use them exclusively for private reasons. If we consider only the users of peer-to-peer driver services, 83% use them exclusively for private reasons, whereas only 57% of taxi users use taxis for private reasons (6t taxi panel, 2015).

In addition, 84% of the journeys made with private hire services take place within the user's area of residence, whereas this is the case for only 64% of taxi journeys.

>> ... and for recreational activities.

The principal reason for journeys made with private hire services concerns recreational outings (47%). This is followed by journeys that link with stations or airports (21%). Conversely, the principal reason for taxi travel concerns access to a railway station or airport (36%), followed by travel for leisure (20%).

Business travel and access to medical services respectively represent 14% and 12% of taxi travel, while they concern only 8% and 2% of the journeys with private hire services.

A service that complements the public transport offer

>> A mode that is primarily used when the alternative is less attractive

Private hire services dominate the night transport market (midnight - 8 a.m.): **37% of all journeys made with these services take place at night**, mainly during the weekend but also during the week. These journeys are mainly provided by peer-to-peer driver services, with 47% taking place after midnight, compared with 26% for licensed drivers. The night market represents only **20 % of the journeys made by taxi**.

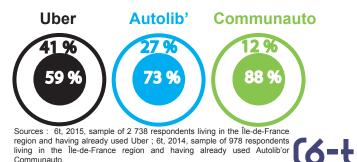
>> A mode that is integrated into the existing transport offer

Users have a multimodal approach toward the use of private hire services. Over 70% of the journeys made with a private hire service are preceded or followed by a journey with an alternative mode to the private car: in 20% to 30% of the cases the journey is continued on foot (depending on whether the pick-up or drop-off point is the home) and in 29% to 47% of the cases by public transport.

>> A mode in the service of urban mobility

On one hand, these services facilitate connections between city centers and their peripheral areas, and on the other hand they develop alternatives within these peripheral areas. Thus, 44% of the journeys with private hire services have a pick-up and/or drop-off point in the suburbs of the urban area, including 8% which are entirely made within the peripheral area. In the Paris metropolitan area, this amounts to 47% of all journeys, i.e. a little more than the number of journeys made with the Autolib' car-sharing system, for which 44% of the journeys have a pick-up or drop-off point in the suburbs (Autolib' activity report, 2014).

Distribution of users by their place of residence (center or suburbs) in the Île-de-France region

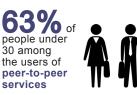


>> The users of peer-to-peer driver services are mostly young people and students

The users of peer-to-peer driver services are predominantly students or young employed

under people 30 years old, living alone or as a couple without students and children and with modest income. They use these services above all for private reasons and are looking for efficiency in terms of cost and/ or travel time.





>> The users of licensed driver services are older, wealthier and have a higher level of education

The users of licensed driver services are

older (38 years old), better educated, more affluent and are more likely to live as a couple with children. They these use services both privately and



professionally and approach them more from the point of view of comfort and convenience, without under-estimating the functional aspect of the service.

services

>> Few users are retired

There are few pensioners among the users of private hire services users (1%). They are more widely represented among taxi users (13%), but still less than within the French population (25%). Conversely, students represent 25% of private hire services users whereas they represent 10% of taxi users. Contrary to pensioners, students tend to live in large cities and to make intensive use of smartphones.

inspires Α mode which >> confidence



Information about private hire services is distributed mainly through word-ofmouth. The reputation of these services among

users is therefore particularly important for their development.

The users show a confidence in these services which goes beyond the mere question of efficiency. Indeed, 53% declare that they are favorable to the idea of allowing their child to travel unaccompanied with a private hire service while only 38% of taxi users would let their child travel alone in a taxi.

>> Private hire services change mobility behaviour

In relation to the various niche modes of transport (car-sharing, carpooling, etc.), private hire services have a very direct and massive impact on the changes in mobility behavior.

Sixty-four percent of the users of private hire services report that this service (and not other events of life like relocation or change of employment, etc.) is responsible for changing their behavior. In the Paris metropolitan area, almost 70% consider that this is the case, whereas only 40% of carsharers consider this to be true (6t, 2013).

Car-sharing and demotorisation: a closer look at the Paris metropolitan area

Private hire services with professional or peer-to-peer drivers

UBER

Booking is made in real-time via a smartphone application. In the lle-de-France region, the average journey lasts 22 minutes for a distance of 9 km. These services are more used by the residents of suburban areas than car-sharing services.

CAR-SHARING

Car-sharing is a system of car hire, usually within urban areas, which allows users to use vehicles on an ad hoc basis with or without booking.

AUTOLIB': "single-trip system"

The vehicle is booked in real-time. It may be returned to a station other than the pick-up station. The average rental is for 40 minutes and 9 km. It is mainly used by Parisians to drive within the city of Paris. COMMUNAUTO : 'return-trip system'

The vehicule is booked in advance and the duration of the rental must be specified. The average rental is for 5 hours and 40 km. It is widely used by Parisians for trips to the outside of Paris.

>> Uber users use cars less than Autolib' users in the lle-de-France region

The effects of Uber on mobility behavior are similar to those of Autolib'. All modes of transport are seeing their use decrease following the adoption of these two car-sharing services. For users both of Uber and Autolib', it is the use of private cars and taxis which has decreased the most.

Nevertheless, Uber users distinguish themselves from the users of Autolib' in that on average they use cars less often, all forms combined (private and shared): the first use cars on average 10.7 times per month following their adoption of Uber, while the latter use them on average 13.6 times per month after adopting Autolib'.

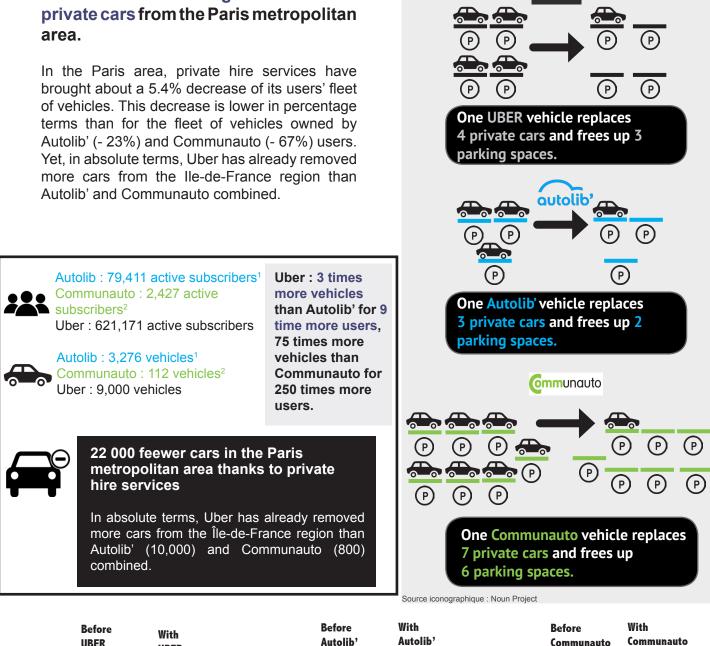
This is explained by the fact that, unlike Uber, Autolib' is a mode that is used frequently, which very largely compensates the decrease observed in the use of private cars. Conversely, Uber remains an occasional mode of transport. The users of Uber use this service for new journeys that they did not make before, whereas Autolib' users use Autolib' instead of other modes of transport to make journeys which they already carried out before. Thus, the increase of mobility by car among Uber users is especially determined by these new journeys, which is not the case for Autolib'.

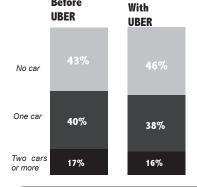
	Private hire services in the Ile-de- France region (Uber)		Autopartage en trace directe IdF (Autolib')		Autopartage en boucle ldF (Communauto)	
	No. of uses before	No. of uses after	No. of uses before	No. of uses after	No. of uses before	No. of uses after
Private car	6,1	5,0	4,8	2,5	3,5	0,5
Public transport	16,4	14,5	16,1	14,1	16,7	17,0
Bicycle	3,3	2,9	4,4	3,7	6,4	6,8
On foot	7,0	6,9	9,4	9,0	11,5	11,9
Two-wheeled motor vehicles	2,5	2,2	2,5	2,2	2,2	2,2
Taxi	3,4	0,8	3,1	1,5	1,5	1,4
Shared-car	/	4,9	/	9,6	/	1,6
Total car use	9,5	10,7	7,9	13,6	5,0	3,5

Evolution of the monthly usage of different modes of transport before and after subscription to a car-sharing service in the lle-de-France region

Sources : 6t, 2015, sample of 2 738 respondents living in the Île-de-France region and having already used Uber ; 6t, 2014, sample of 978 respondents living in the Île-de-France region and having already used Autolib'or Communauto.

>> Uber: the car-sharing service that has removed the largest number of

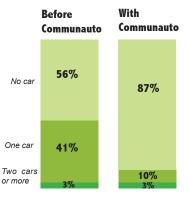




A 5.4% decrease in the vehicle fleet of Uber subscribers following their subscription.

50% No car 60% 37% One car 30% Two cars or more

A 23% decrease in the vehicle fleet of Autolib' subscribers following their subscription.



A 67% decrease in the vehicle of Communauto subscribers following their subscription.

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Source :. Autolib' activity report, 2014 ²Source : .6t-bureau de recherche, ENA.3 Enquête sur l'autopartage en trace directe (le cas d'Autolib' Paris), 2014

>> Private hire services respond to the demand...

Licensed driver services satisfy a latent demand. It is not the price that is highlighted by the users of these services but rather the **quality of service**. According to them, the main strengths of these services with respect to taxis are the effectiveness of the smartphone application and the method of payment; two assets which taxis could benefit from by strengthening the development of a similar application for their users.

>> ... and also create a new demand.

Peer-to-peer driver services are creating a new market and a new demand. The users of these services are predominantly young people and students, a target that is virtually non-existent among taxi users and not very present among the users of licensed driver services. In addition, the users of peerto-peer driver services constitute a reserve for licensed driver services and taxis. Indeed, one can imagine that when they are older and have higher incomes, they will also use licensed driver services and taxis. In other terms, peerto-peer driver services create habits of usage among a young population that will massively use the full range of private hire services when they are older.

>> Services that extend the mobility of users

In addition, the smartphone application has very clearly expanded the use of private hire services. Indeed, whereas the average frequency of use of a taxi user is 2.6 journeys per month, the average frequency of use of private hire services is **4.2 journeys per month**, i.e. 60% more journeys. In addition, when private hire services are not available, the taxi option becomes an alternative for 39% of the users, even though they were not taxi users before.

Moreover, forty percent of users declare that private hire services allow them to make journeys (and therefore undertake activities) that they could not have done before. Twentyseven percent say that they could not have made their most recent journey with any other mode. It can therefore be assumed that 27% of the journeys made with these services are for travel that would not have taken place without them. For the most part, these are for recreational outings (restaurant, cinema, theatre, nightclub, etc.) and mainly take place in the evening. They therefore have a direct impact on economic activity, while limiting the number of road accidents that can be related to nightlife and alcohol consumption.

The 10 most frequently mentionned adjectives by Uber users to describe private hire services



Survey methodology

A self-administrered online survey was carried out from **12 June 2015 to 22 June 2016** (before the peer-to-peer services uberPOP and Djump were suspended in France on July 3, 2015).

>> 150 questions were asked in order to determine the use and interest not only for private hire services but also for other modes of transport.

>> It was distributed by Uber to its account holders.

The respondents reside in **6 urban areas in France** (Paris, Lyon, Lille, Nice, Bordeaux and Toulouse) and **2 urban areas in Switzerland** (Lausanne and Geneva).

After auditing the data, **6,476 respondents were retained for the study**, including:

- 1,175 using only licensed driver services;
- 1,442 using only perr-to-peer driver services;
- 3,859 using both types of private hire service.

The 95% confidence interval reaches 0.2 points at its minimum and 1.2 points at its maximum.



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Report of the complete analysis available on request.

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The aim of the 6t research consultancy is to combine academic research and applied research to meet social demand with a high level of expertise while supplying scientific and technical information to aid decision-making.

Our skills at 6t mobilise different types of methods to aid understanding of sociology and urban geography, and to conduct qualitative, quantitative and cartographic analysis.

This variety of skills is based on a multidisciplinary team of sociologists, geographers, political scientists, engineers and planners who regularly accompany private and public stakeholders in France and abroad, on urban issues related to mobility, practices and lifestyles.

A survey of 6,476 users



