



# Car parks in towns and cities – future-proof investment or soon a thing of the past?

## *Introduction and summary*

Car-park properties are a firmly established investment class, and many institutional investors are now investing in car parks. Car-park investments generate stable long-term lease income. Income security is relatively high, as the properties are leased to professional operators on a long-term basis. In addition, car-park investments provide higher yields than investments in office or retail properties in comparable locations.

Like all property investments, those in car parks are essentially always long-term. At the same time, the car is evolving faster than ever before. In its study on the evolution of the car up to 2030, the consultancy firm McKinsey describes four main trends: the increasing diversification of mobility (car/ bicycle/local public transport/car-sharing), the development of autonomous driving, the growing prevalence of the electric car and the increasing digitalisation of the car. All industry experts agree that the trends will influence each other and accelerate, and that the car will undergo significant changes in the next ten to fifteen years.

In view of this rapid technological advancement of the car, more and more investors are asking themselves: will car parks still be needed in ten or fifteen years?

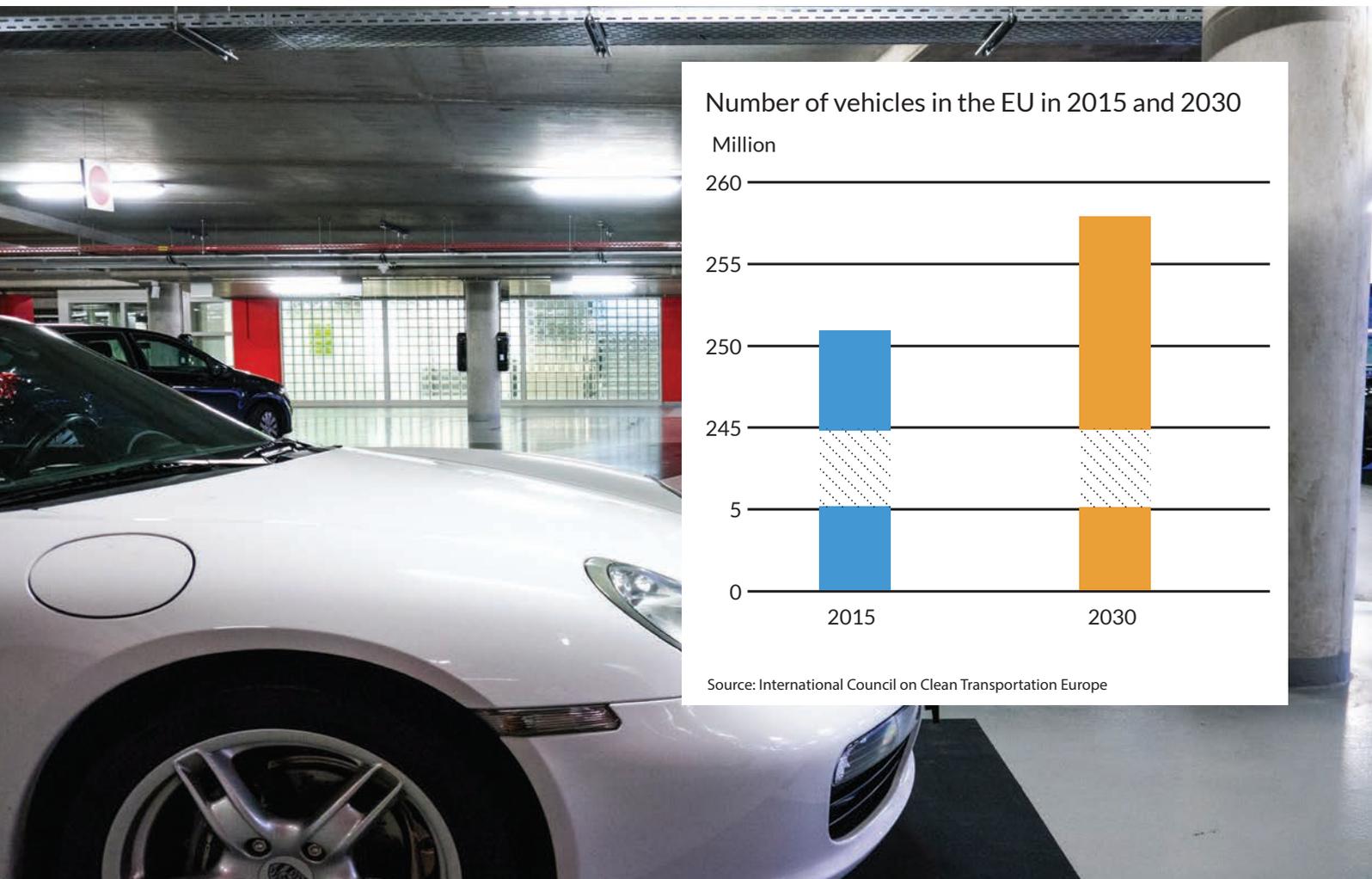
At Bouwfonds IM, we believe that car-park properties have a future. We base this view on eight theories that we have developed in the course of our work and in discussions with many experts:

### **Eight theories on the future of car parks**

- 1. The number of cars continues to rise; technical advancement of the car will not cause a decline in car figures.**
- 2. Free parking is being increasingly restricted by town and city councils in order to make town and city centres more attractive.**
- 3. A relatively high proportion of the population could not face giving up their own car.**
- 4. Car-sharing works only in large cities. In absolute terms, it only has a very minor effect. In the countryside and in the suburbs, people will continue to (have to) use their own cars. It is these same car drivers who use urban car parks.**
- 5. Autonomous driving may lead to better capacity utilisation of car parks.**
- 6. Urban parking-guidance systems are constantly improving. This is increasing the capacity utilisation of car parks. Parking apps are another factor in this trend.**
- 7. Autonomous driving leads to a rise in the number of potential car users.**
- 8. Some cars can already park autonomously. Autonomous parking will catch on long before autonomous driving and lead to more efficient use of space in car parks.**

## 1. The number of cars is rising; technical advancement of the car will not cause a decline in car figures.

Forecasts suggest that the number of cars will rise in all key Western European core markets of Bouwfonds (Belgium, Germany, France, the UK, the Netherlands and Spain) at least until 2020. In Belgium, for example, the figure is expected to rise from 5.2 million cars in 2009 to 5.9 million cars in 2020: an increase of 14 percent. In the UK, the figure is set to rise by 16 percent from 28.5 million cars to 33.1 million in the same period.

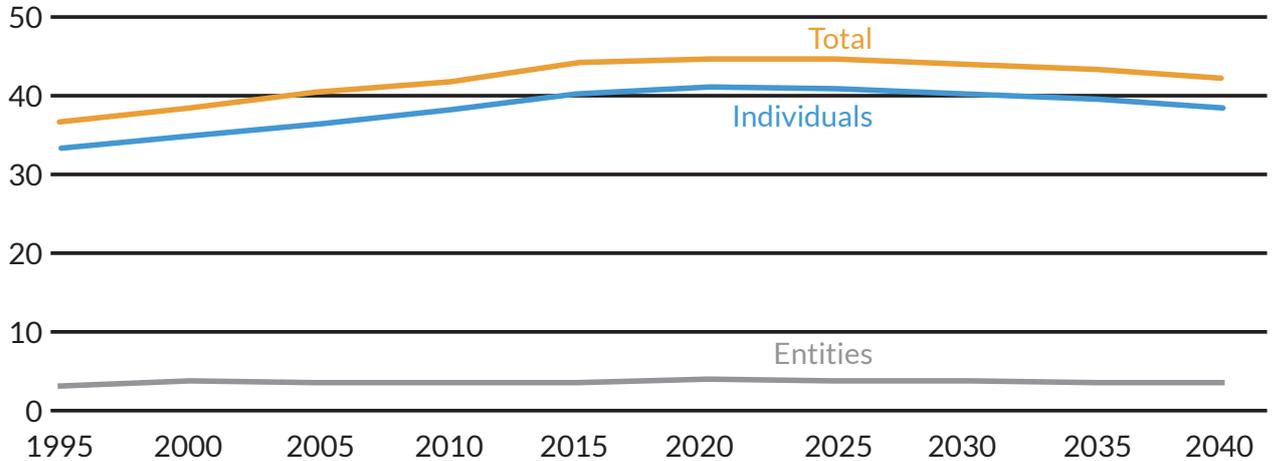


In Germany, the number of privately-owned cars is set to keep rising until 2025, when there will be 41.4 million registered cars compared with the current figure of 39.7 million. A slight decrease in private owners is likely to start in 2025: the number is expected to fall back to 39.1 million cars by 2040.<sup>1</sup>

<sup>1</sup> Source: Shell Passenger-Car Scenarios to 2040: Facts, Trends and Prospects for Car Mobility

*Development of the number of cars among all owner groups in Germany*

Million

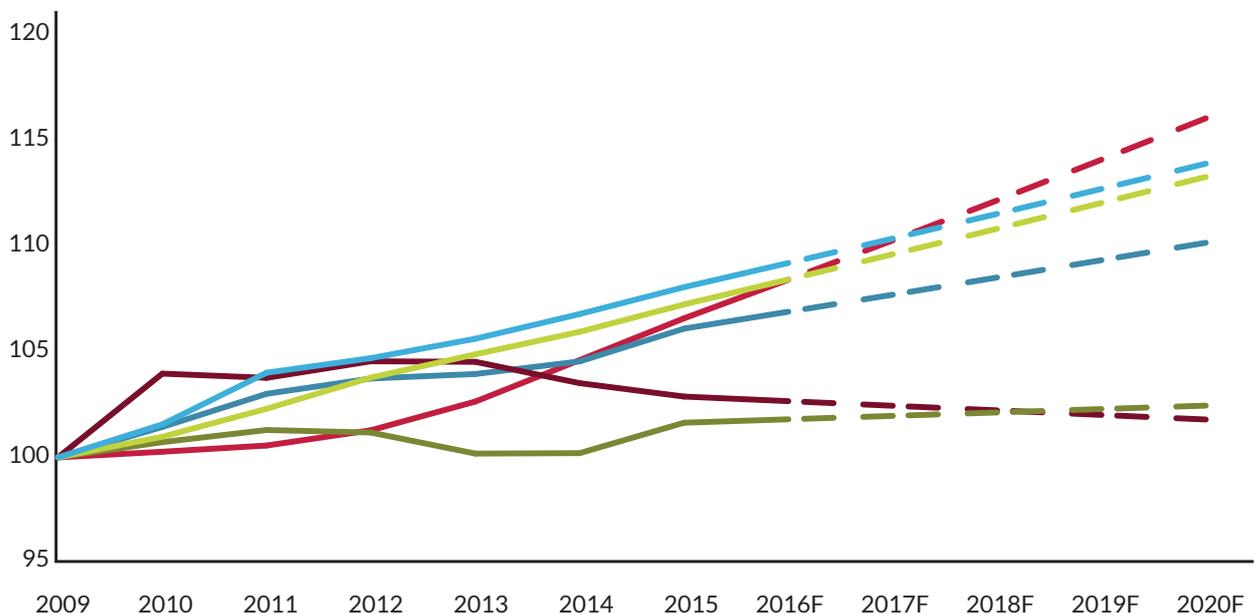


\* Forecast from 2016

We believe that this trend is a sound basis for car-park investments. Although the number of cars is set to tail off slightly again after 2025, the decrease should be very small and, in our view, no cause for concern. According to this forecast, even in 2040, the number of cars in Germany is only likely to be 1.5 percent (or 600,000 vehicles) lower than at present.

Trends and forecasts for the other major European economies show a similar picture. The International Council on Clean Transportation Europe expects the total number of cars on European roads to rise from 251 million in 2015 to 258 million in 2030.

*Development of the car fleet in the key European markets (indexed from 2009)\**



\* Forecast from 2016

Source: Bouwfonds

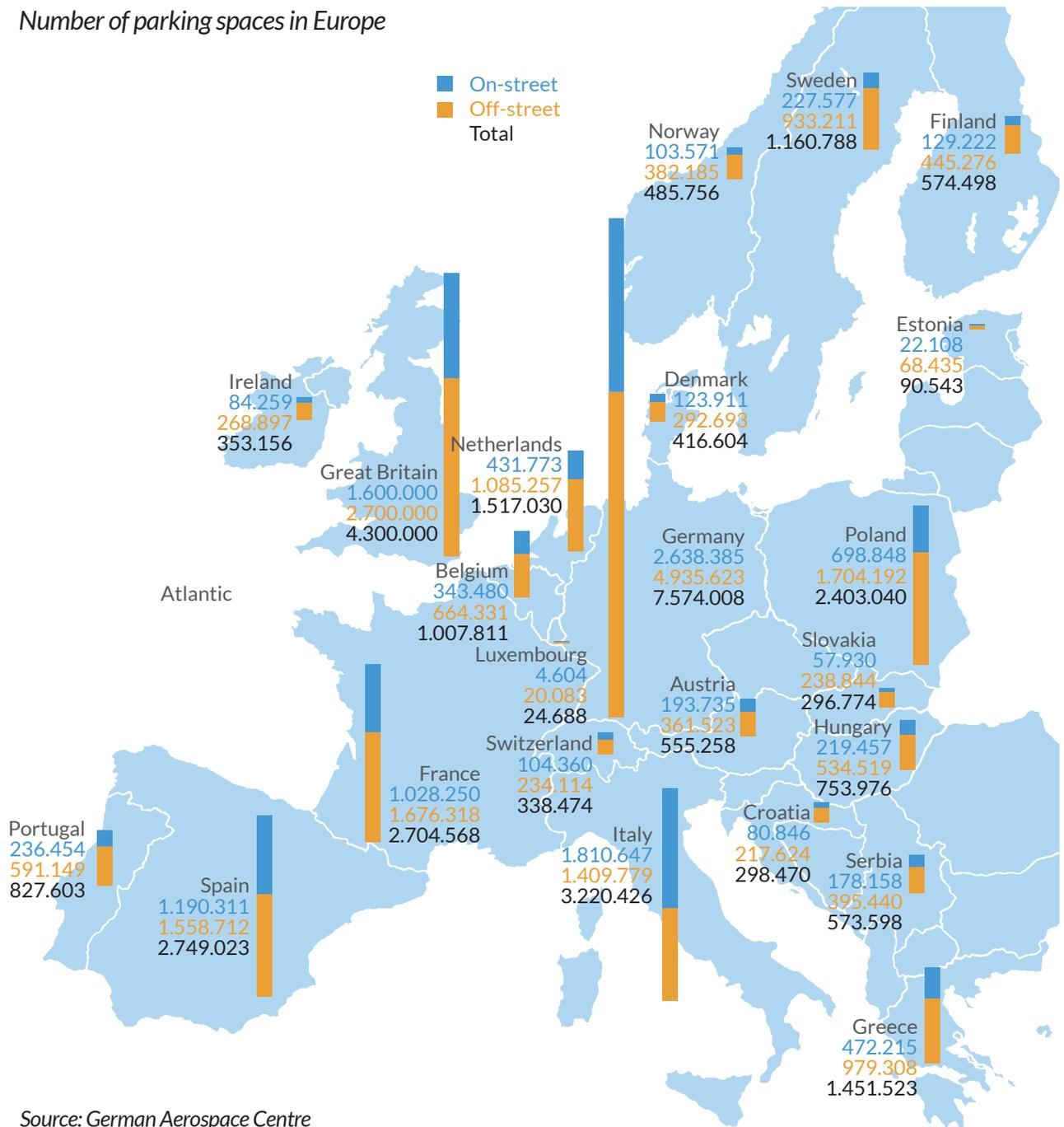
We believe that scenarios suggesting a significant fall in the number of cars because there will be a fleet of only permanently available self-driving cars is not realistic – at least not all over the country. These scenarios are described as follows: instead of having their own vehicle, individuals order a car on demand, then collect it at a time of their choosing. Such scenarios are unrealistic for several reasons: it is a problem that the cars are in short supply in the morning and in the evening because all people want to go in the same direction at the same time – from the suburbs or the surrounding countryside into town. During the day, demand is significantly lower, and many of the cars have to be parked in town. The scenario is repeated when people return home in the evening. In addition, traffic flows are often not conducive to packing several people into one car. Another key aspect is that people are more reliant on their cars in the countryside in particular, but this is precisely where communal use of self-driving cars will not work ideally because there are not enough users. For many users, then, keeping their own car is the more attractive option.

A study by McKinsey (Automotive Revolution – Perspective Towards 2030) suggests that autonomous driving will only catch on slowly, as the technical and regulatory challenges are significant. According to McKinsey, around 15 percent of cars could be fully self-driving in 2030. Automation of aspects of driving (advanced driver-assistance systems) will play a pioneering role on the way to achieving fully autonomous driving. Therefore, the consultancy firm predicts that around 50 percent of cars will be largely self-driven in 2030.

## **2. Free parking is being increasingly restricted by town and city councils in order to make town and city centres more attractive.**

In Europe (in municipalities with over 20,000 inhabitants), there are a total of 33.8 million parking spaces – 21.8 million off-street and 12.0 million on-street. At the same time, increasing numbers of people live in the popular big cities. Many municipal authorities are pursuing the aim of making town and city centres even more attractive. Public street space is increasingly being given over to uses other than parking in the name of “reclaiming urban living space”. Numerous towns and cities are setting up entirely car-free zones, which means that on-street parking is completely disappearing there and car parks on the outskirts of these zones are gaining in prominence. Another trend that is already apparent in many places is the conversion of parking spaces into cycle-parking spaces or spaces for call-a-bike stations or e-bikes.

### Number of parking spaces in Europe



Source: German Aerospace Centre

In addition, in the conurbations, all available parking space is managed increasingly holistically. However, there is still a great deal of untapped potential for individual towns and cities. For example, in Berlin, around 50 percent of households still park their cars in the street.<sup>2</sup>

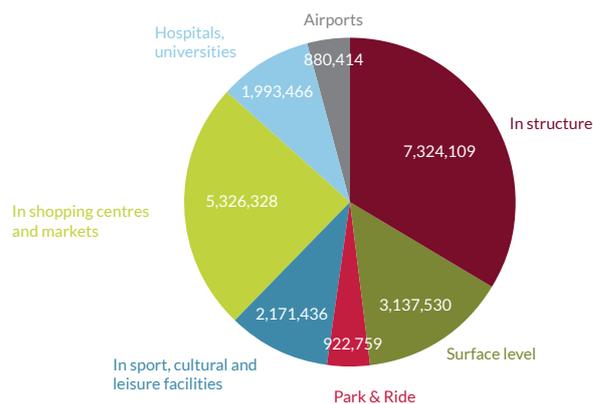
This results in the following consequences for the car parks: new projects are being built on smaller sites and with less parking-space capacity than before. In addition, renovation measures will be undertaken more promptly in future in order to avoid downtime and high renovation costs.

<sup>2</sup> Quelle: Deutsches Zentrum für Luft und Raumfahrt

One current example is the Norwegian capital, Oslo. On 1 June 2017, the municipality got rid of around a thousand on-street parking spaces in the city centre as part of its new parking policy. As the Scandinavian countries have always been pioneers in the fields of transport and the environment, it can be assumed that comparable parking policies will also extend to other countries.

### Off-street

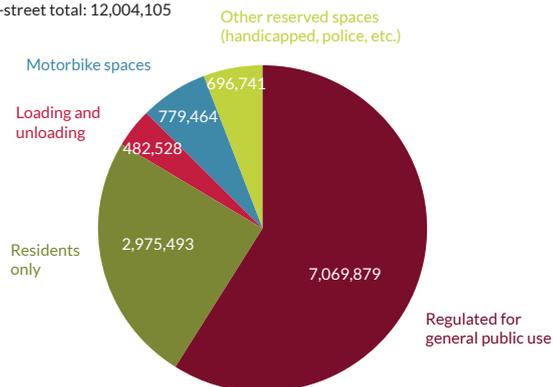
Off-street total: 21,756,041



\* Predictions on regulated parking spaces EPA municipalities with more than 20,000 inhabitants

### On-street

On-street total: 12,004,105



\* Predictions on regulated parking spaces EPA municipalities with more than 20,000 inhabitants

Source: European Parking Association EPA, 2013

There are around 33.7 million parking spaces in Europe. On-street parking accounts for 12 million of these (around a third). In turn, over a quarter of these are residents' parking spaces, while generally accessible public parking spaces at the side of the street account for more than half.

Off-street parking accounts for the remaining two thirds – approx. 21.8 million parking spaces. The most important sub-category here is parking spaces in car parks (around 7 million).

### 3. A higher proportion of the population could not face giving up their own car.

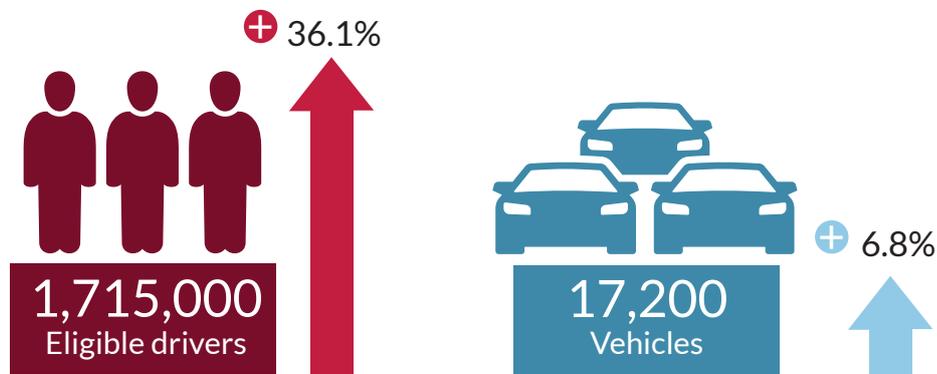
The above-mentioned scenarios with a fleet of free-floating cars do not take the ownership situation into account. Along with “public” cars (which already exist in the form of taxis), there will continue to be many private cars. People who live in the countryside or on the outskirts of large cities will particularly want to keep their own car – either because the alternatives are too poor or in too short supply or because it is a matter of personal preference. Some people simply want to drive by themselves. In our view, this group will constitute the majority, whereas users of floating cars will be found mainly in the central districts of major cities. Furthermore, the floating cars also have to park somewhere. As they cannot be parked in private parking spaces, they will predominantly have to use car parks.

**4. Car-sharing works only in large cities. However, in absolute terms, it has only a very minor effect. In the countryside and in the suburbs, people will continue to (have to) use their own cars. It is these same car drivers who mainly use urban car parks.**

Another smartphone-based trend that is impacting on demand for parking space is car-sharing. In the major German cities, the Car2go and DriveNow brands in particular are widely established and have achieved impressive growth in user numbers in recent years. Forecasts are optimistic: at the end of 2011, there were 700,000 car-sharing users in Europe. The consulting firm Frost & Sullivan predicts that there will be around 15 million users in 2020.<sup>3</sup> It is tempting to conclude that the spread of car-sharing will lead to a decreased number of cars and consequently reduced demand for parking spaces.

However, we feel that the effect of car-sharing is overestimated. A look at absolute vehicle numbers confirms this. In total, there were just 17,200 car-sharing vehicles in Germany in 2016. Given that there are now around 40 million cars in Germany, this proportion is limited. At the end of 2016, around 9,400 vehicles were in use in station-based car-sharing, and 7,800 vehicles in free-floating car-sharing.

*Number of users of car-sharing and of vehicles at the end of 2016 in Germany*



German Federal Car-Sharing Association 2017

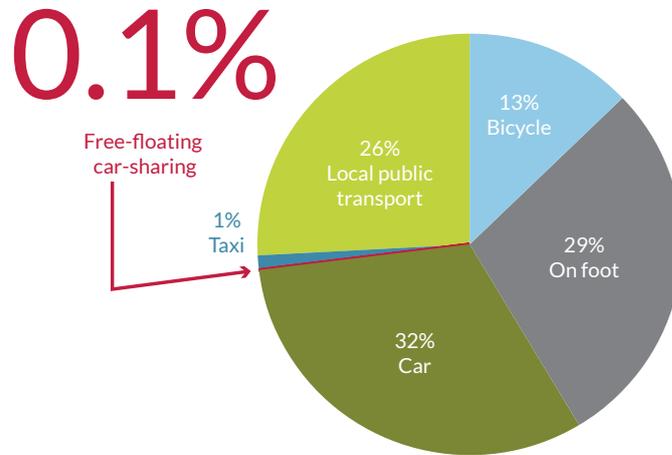
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A study by the consultancy firm Civity has brought yet another aspect to light: in Berlin, for example, half of all journeys are shorter than five kilometres. According to Civity, car-sharing results only in “short-range motorised convenience mobility”. This means journeys that would also be possible by bicycle or local public transport. For parking, the large number of short journeys means that the same car usually has to be re-parked several times a day.<sup>4</sup>

<sup>3</sup><http://www.wiwo.de/technologie/auto/carsharing-markt-15-millionen-nutzer-bis-2020/7245234-2.html>

<sup>4</sup>Source: <http://matters.civity.de/>

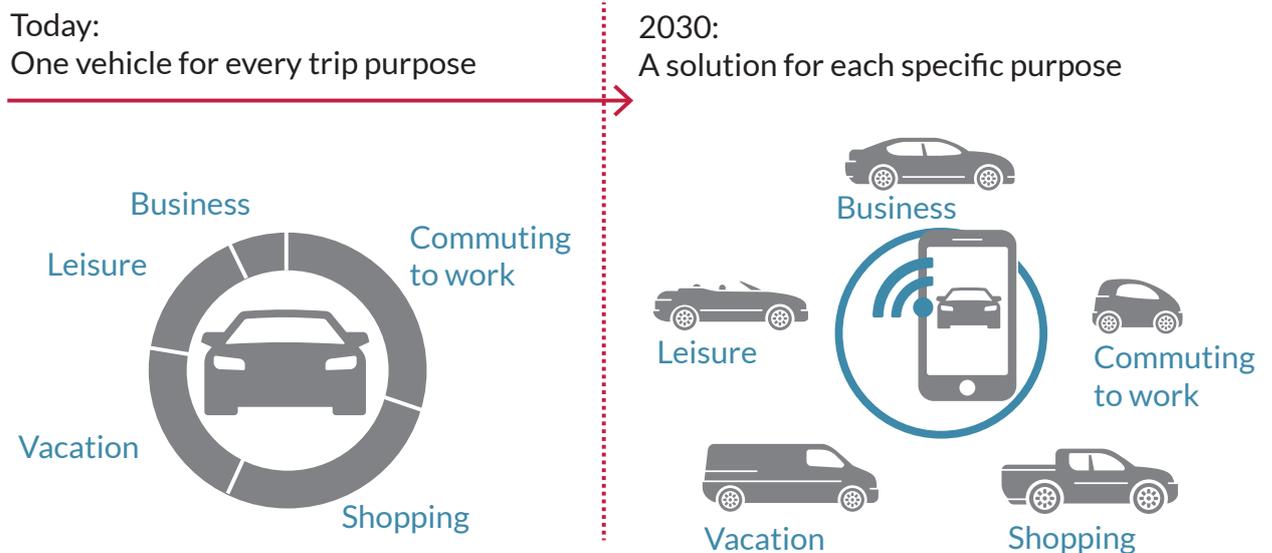
Urban mobility by mode of transport in Berlin



Source: Civity, 2014

User behaviour is also likely to change further with car-sharing. At present, most car-owners use a car for all purposes – i.e. for work, shopping, holidays, business trips and leisure. According to McKinsey, in the distant future (2030), there will be a trend towards using a different “shared” car for each purpose – i.e. one for working, another for holidays, a third for shopping, etc. This change will also lead to more instances of parking.

Today consumers use their vehicles for all purposes; in the future, they will choose an optimal mobility solution for each specific purpose



Source: McKinsey

## 5. Autonomous driving may lead to better capacity utilisation of car parks.

Currently, more than 1.2 billion people spend an average of 50 minutes per day in a car. Traffic jams account for a considerable proportion of this time. Automated driving can improve traffic flow and reduce time spent in a car.<sup>5</sup> The improved traffic flow may also lead to better capacity utilisation of car parks. For car-park operators, this means that they can generate more revenue from the same space. Enhancement of car parks will also help to improve capacity utilisation: car parks are increasingly turning into mobility hubs and service centres. In practice, this means that users park their car and hire a bicycle from the bicycle-hire point in the car park and shop in the kiosk or supermarket that is also located in the car park. This can lead to new income sources for investors.

## 6. Urban parking-guidance systems are constantly improving. This is increasing the capacity utilisation of car parks. Parking apps are another factor in this trend.

In addition to the location criteria and the greatest possible proximity to the customer magnets (town/city centre, airport, etc.), integration in the local parking guidance system is hugely important to good capacity utilisation of a car park. Urban parking guidance systems are constantly improving: these days, most dynamic parking guidance systems show how many free parking spaces are available in which car park in a variable display immediately on entry into a town or city. A key aim of the municipalities here is to limit the number of cars looking for parking spaces through clear guidance as to where drivers can park, for how long and at what price. In particular, instances of parking that last longer are to be relocated to car parks and underground garages.

There are also parking guidance systems inside car parks. Drivers can thus see quickly how to get to the empty parking spaces. The next stage of development is that XXL parking spaces, electric-car charging points, and disabled parking spaces are also dynamically signposted. In addition, this information can be obtained on the Internet and via apps.

The urban parking guidance systems and urban parking-space policy differ significantly from one municipality to another, as shown by the following example: In 2013, the city of Erlangen received EUR 688 per parking space for the year, while the town of Bamberg received just EUR 76 per parking space for the year. Both cities are in Germany. One of the reasons is that there are 25 times more free-of-charge parking spaces in Bamberg than in Erlangen.<sup>6</sup>

Parking apps can have the same effect. They help to guide drivers looking for parking spaces straight to vacant spaces in car parks. This also increases the capacity utilisation of the car parks.

<sup>5</sup> Source: [https://www.mckinsey.de/files/150303\\_pm\\_av.pdf](https://www.mckinsey.de/files/150303_pm_av.pdf)

<sup>6</sup> Fraunhofer Institute, *Münchner Abend Zeitung*.



## **7. Autonomous driving leads to a rise in the number of potential car users.**

As part of the transition from independent to autonomous driving with “shared” vehicles, the mobility costs per kilometre will fall significantly according to McKinsey. One effect of this is that driving will become more attractive and more common. In addition, autonomous driving will enable new target groups to use cars – such as very elderly people, children, and disabled people. In short, autonomous driving can lead to more users and therefore to more instances of parking.

## **8. Some cars can already park autonomously. Autonomous parking will catch on long before autonomous driving and lead to more efficient use of space in car parks**

Some cars can already park autonomously. This means that from a standstill in front of the parking space, the car drives into it independently. For car parks, this means that space utilisation is essentially lower, as less manoeuvring space is required. For older car parks with smaller parking spaces in particular, this provides opportunities to stay fit for the future. Younger car parks with larger parking spaces can have the width of their parking spaces reduced if necessary, resulting in a greater number of parking spaces and higher revenues.



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Philippe Op de Beeck  
CEO APCOA PARKING

Our preparation for this sector focus included discussing with leading operators about their assessments of the future of parking. To give readers a wider perspective, we are hugely grateful to the CEO of APCOA PARKING, Philippe op de Beeck, for giving us his views on the future of parking here.

## Business with parking continues to grow in Germany

Parking management is already a billion-euro market. The car-park operator APCOA has five theories that explain why further dynamic expansion is highly likely. The ongoing scarcity of space in central locations and new mobility options are key factors here.

As long ago as 2012, Quantum Immobilien AG estimated the market for off-street parking spaces in Germany at EUR 1.7 billion. There are no more-recent figures. For car parks, revenue figures of more than a billion euros have been circulated for 2015. According to APCOA, the European market leader in parking management, income will continue to rise – and there are five for this, which the company has put forward as theories.

**Theory number one:** “A further rise in parking charges is expected.” This is because car drivers now accept charges and therefore recognise that provision and preservation of the infrastructure for parking require investment. In addition, municipalities will tend to expand rather than reduce the income source of parking management due to their widespread budget restrictions. Free parking is an exception in many town and city centres. Yet pay parking spaces are also scarce in cities – and that is a reason in favour of higher prices. By international standards, parking in Germany is still relatively cheap. The process of calculating justified market prices is not yet complete in most cities. In Berlin’s Mitte district, for instance, all-day parking for a vehicle ranges from EUR 5.50 to EUR 24.

“Demand for parking space will tend to rise” - that is **theory number two**. With this statement, APCOA defies forecasts which suggest a continuous decline in the number of drivers and cars. These predictions are associated with demographic and environmental trends as well as the boom in online retail. At present, the facts tell a different story. Figures from the German Federal Motor

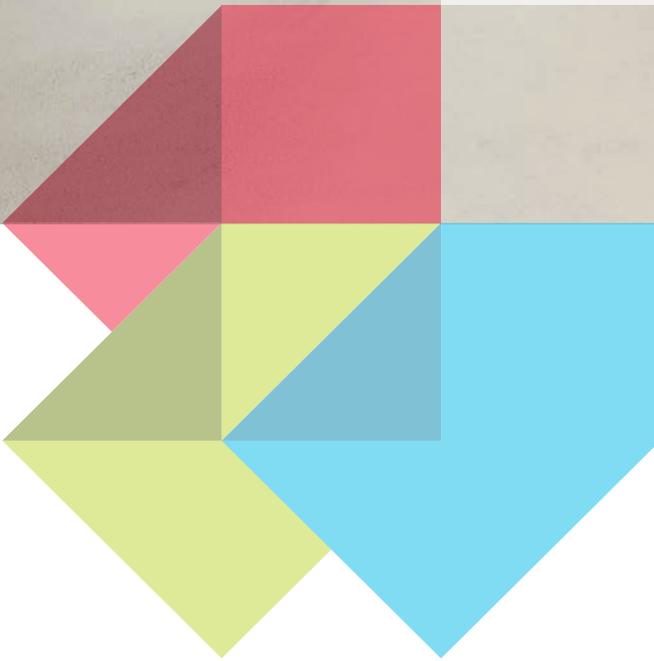
Transport Authority (KBA) suggest that the number of cars in Germany is still rising. As at 1 January 2017, there were 45.8 million passenger cars in Germany, up 1.6 percent on the previous year. However, more parking spaces are needed for more cars. In addition, there are trends such as urbanisation and migration as well as the fact that more older people are driving.

**Theory number three:** “New mobility options are presenting opportunities for whole new business models for car-park operators.” Car-sharing and electric mobility are mobility trends that are set to continue to gain in prominence. APCOA sees extremely interesting developments in both trends from a parking-management perspective: ever more parking spaces in high-traffic locations will be needed for the vehicles in car-sharing fleets. And as part of the expansion of electric mobility, new business models involving provision of parking spaces with charging stations can be developed.

Another sign that market potential remains high is the large proportion of parking spaces that are not yet managed professionally. After all – according to **theory number four** – “only around half the parking spaces in the off-street sector are managed by commercial operators.” Only 46 percent of the 2.4 million pay parking spaces in the off-street market (as at 2012) are managed by specialist operators. However, parking management is regarded as a classic field for outsourcing, as it requires special expertise that is not part of the owners’ core business.

**Theory number five** points out that interest from providers will remain high, as “Car parks have a particularly attractive risk/reward profile”. The car-park asset class constantly generates income. There is no vacancy rate at all in the sector. From the perspective of investors, there will be a particularly good risk/reward profile if car parks in city locations are used as a port of call for numerous destinations in the surrounding area. In view of this, a multi-tenant car park in which parking spaces are permanently rented by various companies as well as by individuals as required is advisable. And with an average initial yield of over 6 percent, car parks are well above the yield expectations for investments in office or retail properties.





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