

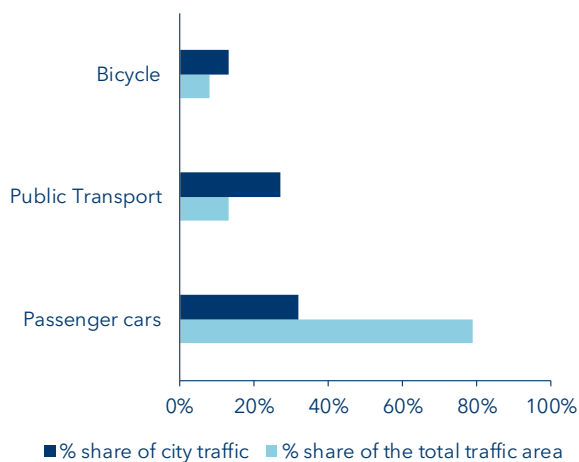
# Green City

## Theme facet 4: Urban mobility

MOBILITY IS THE LIFEblood OF CITIES – NOT JUST FOR ITS ECONOMY, BUT ALSO FOR THE QUALITY OF LIFE IT OFFERS. THEREFORE, A FLEXIBLE AND AFFORDABLE RANGE OF MOBILITY OPTIONS IS INDISPENSABLE FOR ANY MAJOR METROPOLITAN AREA.

The various means of urban transport are certainly not cheap. In the European Union alone, they are the source of more than EUR 230 billion in damages each year, and this on top of their basic operating costs. The cause: air pollution, noise, congestion, accidents and CO<sub>2</sub> emissions. Moreover, the conditions for mobility and the requisite space are getting totally out of hand. In Europe’s city centres, more than 40% of personal mobility is accomplished by automobile, 30% by walking or cycling, and roughly 28% by public transport.

Traffic area use in Berlin



Sources: VP Bank, Transformative Urban Mobility Initiative

The circumstances in Berlin illustrate a drastic imbalance between the use of public/private transport and the amount of land necessary for doing so. At 79%, cars monopolise a traffic area in Berlin that is 2.5 times more than their use for personal transport justifies. This corresponds to 4,738 hectares, or more than 6,635 football fields worth of territory in one of the largest cities in Europe. Aside from the necessary streets, private transport also requires a sizeable amount of space simply for parking those cars. The estimated 300 million parking spaces in Western Europe (EU 15) cause recurring operating and maintenance costs of EUR 195 billion annually, only a quarter of which can be recouped through parking fees – the remainder is borne by the general public and reduces the city’s budget. Likewise, a car is parked more than 95% of the day, making it a very inefficient means of urban transport. All of this underscores the fact that privately used automobiles are becoming a problem for cities and city-dwellers in many ways. Viewed as a whole, urban mobility displays its

true virtues when the benefits accrue to the broad populace, not just a certain demographic.

Here, too, digital transformation opens us a wide variety of solutions. The implementation of a digital infrastructure management system allows holistic traffic control, which in turn increases energy efficiency and the use of public transport. The focal points will shift depending on the status of technological innovations: currently, the intent is to promote electromobility. For example, this past August online retailer Amazon ordered 1,800 electric delivery vans from Daimler AG for use in Germany and England. The majority of these vans will be delivered already by the end of 2020. Compared to the 100,000 battery-powered vehicles that Amazon has already ordered from its own subsidiary Rivian Automotive, this seems like a drop in the ocean. Nevertheless, it shows that Daimler has entered the age of electromobility. And quite obviously, vans like this help to reduce CO<sub>2</sub> emissions and noise pollution.

Other important areas of development include so-called “sharing services” and autonomous, i.e. driverless, car control. Here as well, car sharing would reduce traffic congestion and air pollution. But the sharing-services business models will only add true value when the vehicles can be operated autonomously in metropolitan centres. This would make it possible to offer seamless mobility packages, i.e. subscriptions tailored to the specific needs and preferences of urbanites that offer those commuters not only the use of public transport, but also a utilisation quota for all forms of micro-mobility. Such a development holds enormous potential in terms of managing the urban sprawl, as well as opens up new growth opportunities for car manufacturers. Here, the related profits are less dependent on the absolute number of vehicles sold than on the distance travelled or the way they are used. Some automakers are already testing business models of this nature. For example, last year Daimler and BMW combined their sharing solutions in a joint venture called “Share Now”. Together, they already serve 60 million customers. Swedish car company Volvo is trying a different approach with a long-term rental and round-the-clock mobility guarantee. With its “Care by Volvo” subscription plan, it currently offers three types of vehicle, whereby the customer only has to pay for the fuel consumption – all other services, such as insurance, tyres, service and vehicle tax are included in the monthly fee. These business models are still quite a rarity, but the trend towards mobility concepts is no longer stoppable, especially in larger metropolitan areas.

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Opportunities from sustainable urbanisation

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