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Consumer pull: The growth of shared urban mobility

As new shared-mobility opportunities emerge virtually everywhere, industry players need to tap into true consumer needs to find the path to long-term success.

by Kersten Heineke, Soukayna Lakhsassi, Felix Rupalla, and Darius Scurtu



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Urban-mobility ecosystems face tough worldwide challenges that shared-mobility solutions can help answer. It is a multibillion-dollar opportunity for mobility players across the three main shared-mobility use cases: hailed mobility, shared micromobility, and car sharing.[1] (Micromobility options include e-kickscooters, traditional or electric bicycles, and traditional or electric mopeds.) We estimate today's global market value pool for shared micromobility is only about $10 billion to $15 billion, compared with $110 billion to $130 billion for hailed mobility and $4 billion to $5 billion for car sharing.[2] But shared-mobility offerings are on the rise everywhere, and stakeholders need to understand the consumer's take on the offerings, as well as their adoption preferences.

About the survey

The online McKinsey Mobility Consumer Pulse Survey was in the field in December 2022 and garnered responses from 30,978 current mobility users across 15 markets: Australia, Brazil, China, Egypt, France, Germany, Italy, Japan, Norway, Saudi Arabia, South Africa, South Korea, the United Arab Emirates, the United Kingdom, and the United States.

Taking the consumer pulse on mobility

The McKinsey Mobility Consumer Pulse Survey regularly asks mobility users across the globe regarding their perceptions and preferences when it comes to future mobility, with shared-urban-mobility solutions playing a cornerstone role (see sidebar, "About the survey").

Mobility patterns today remain primarily car centered for many consumers. However, survey respondents across all demographics speak with a clear voice for this to change drastically in the coming decade, with consumers flocking to shared, more sustainable mobility modes and planning to reduce their private-vehicle use (Exhibit 1).

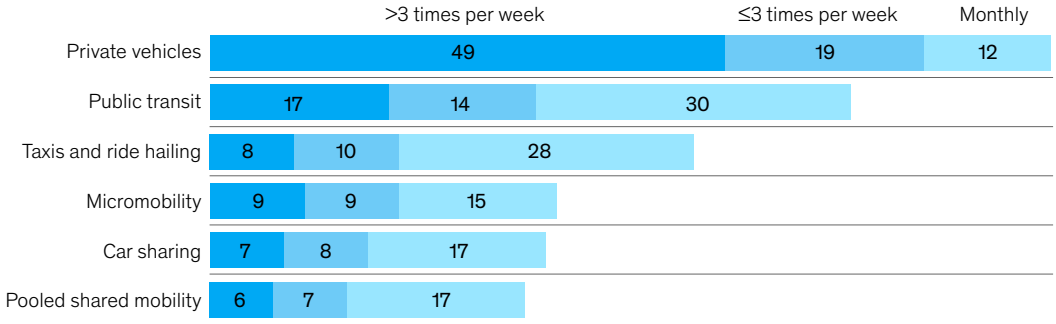
Consumers are flocking to shared, more sustainable mobility modes and planning to reduce their private-vehicle use.

[1] Hailed mobility includes pooled and non-pooled ride hailing and pooled shuttles. Car sharing includes station-based, free-floating, and peer-to-peer car sharing.
[2] Estimate covers China, Europe, and North America.

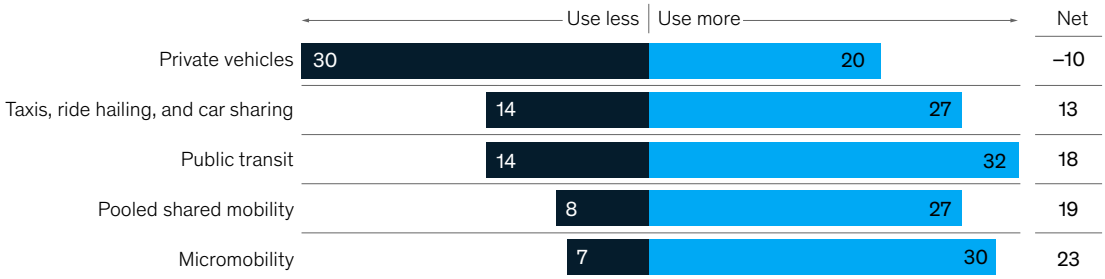
Exhibit 1

Many survey respondents plan to use shared-mobility and micromobility options more frequently in the future.

Current use of transportation modes, % of respondents



Planned future use of transportation modes, % of respondents



Source: McKinsey Mobility Consumer Pulse Survey, 30,978 current mobility users, December 2022; McKinsey analysis

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Over a quarter of respondents living in urban areas say they are thinking of getting rid of their private vehicles entirely, replacing them with other means of transport in the future. The urban–rural contrast for results is considerable, as fewer than 15 percent of respondents living in rural areas can see themselves doing without their private cars. Based on our survey results, sustainability considerations, travel efficiency, and improved inner-city livelihoods play central roles in consumers' change of mobility choices; cost, less so.

Three mobility modes will likely disrupt the most

We believe that three transport mode categories show the greatest disruption potential: shared autonomous shuttles; micromobility solutions, such

as e-kickscooters, (e)mopeds, and (e)bicycles; and minimobility alternatives. The latter refers to L6 and L7 electric vehicles with three or four wheels, an unladen mass over 100 kg, and capacity for one to two passengers.[3]

More than 60 percent of global mobility users in our survey are open to using a shared autonomous shuttle service as part of their mobility mix in the future. Shared autonomous shuttles could potentially get existing vehicles off the road more often, as 42 percent of respondents willing to use the new mode of transport indicate that it will replace their private-car trips (Exhibit 2). As such, fleets of shared autonomous shuttles might help solve key urban-mobility challenges of congestion, parking, air pollution from traffic, fatalities, and many other issues without cannibalizing a city's existing public-transit infrastructure. Respondents see themselves using shared autonomous shuttles across a broad range of occasional and regular use cases: city center–airport connections (26 percent), supermarket runs (26 percent), and commutes (24 percent) top the list.

Micromobility solutions have gained scale and widespread popularity among urban users in recent years for their convenience as sustainable travel alternatives. As every third mobility user in urban areas in our survey plans to use micromobility substantially more often in the future, this trend will undoubtedly continue. Among urban respondents, 37 percent state that an improved micromobility infrastructure marks the first step toward their ideal future mobility landscape, while 33 percent agree that micromobility solutions can replace up to 50 percent or more of their car trips today (Exhibit 3). While still popular at scale in shared-mobility offerings, the private ownership of micromobility vehicles, especially electric kick scooters, may be rising soon, as more than 60 percent of respondents indicate an interest in owning a kick scooter and only using shared services occasionally in the future.

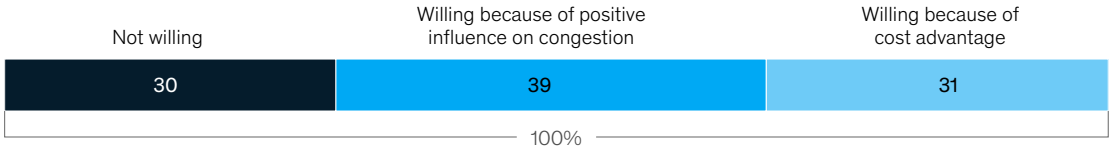
Fleets of shared autonomous shuttles might help solve key urban-mobility challenges of congestion, parking, air pollution from traffic, fatalities, and many other issues.

[3] Minimobility providers include Aixam, Arcimoto, City Transformer, CityQ, Eli Electric Vehicles, Luvly, Microlino, Nimbus, Squad Mobility BV, and Triggo.

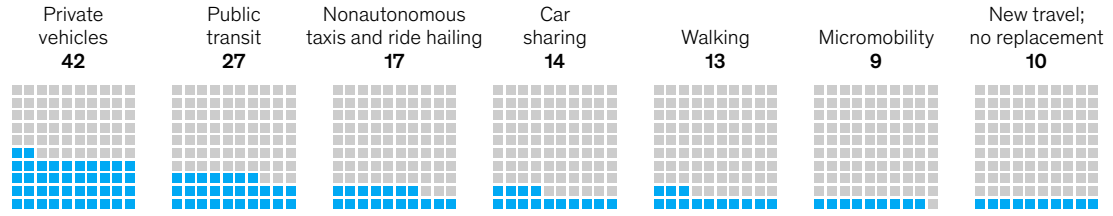
Exhibit 2

Many respondents are willing to use shared autonomous shuttles, which could decrease the use of other mobility modes.

Willingness to use shared autonomous shuttle,[1] % of respondents



Mobility modes replaced by use of shared autonomous shuttle,[2]
% of respondents willing to use (n = 21,685)



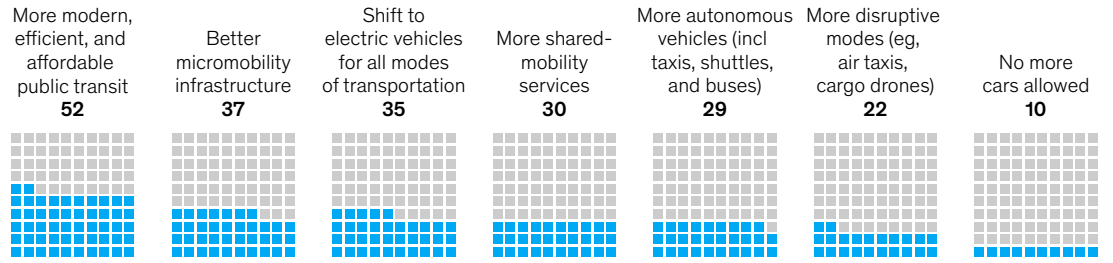
[1]With 2 or 3 passengers at max 15% more travel time and 30% lower cost.
[2]Question: If you are willing to use a shared autonomous shuttle in the future, which mobility modes are you most likely to be replacing?
Source: McKinsey Mobility Consumer Pulse Survey, 30,978 current mobility users, December 2022; McKinsey analysis

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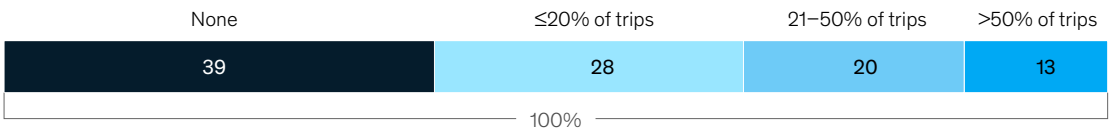
Exhibit 3

Urban respondents highly value public transport and want an improved micromobility infrastructure.

Desired improvement to mobility landscape in hometown, % of respondents in urban areas (n = 11,462)



Share of private car trips replaceable via micromobility, % of respondents



Source: McKinsey Mobility Consumer Pulse Survey, 30,978 current mobility users, December 2022; McKinsey analysis

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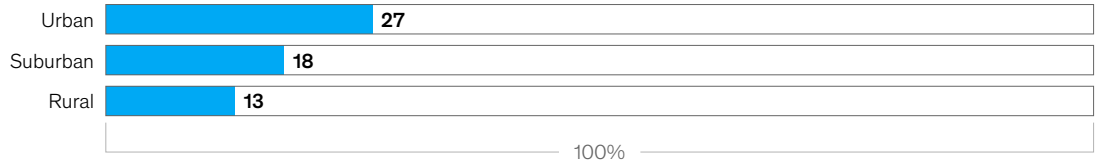
The minimobility alternative sparks great respondent interest (Exhibit 4). Of respondents living in urban areas, 27 percent will consider integrating microcars into their mobility mix in the coming decade, and every second one of them can imagine replacing their private cars with such microcars in the long run. Respondents see themselves integrating microcars holistically into their mobility mix across a broad set of use cases, the top three being grocery shopping (48 percent), performing leisure activities (47 percent), and commuting to work (35 percent). While 20 percent of respondents prefer using such vehicles as part of shared-mobility fleets, a higher share indicate a willingness to own one themselves.

Beyond new mobility modes and form factors, respondents expect public-transit operations to play a key role in the urban-mobility landscape of the future, especially given access and affordability.

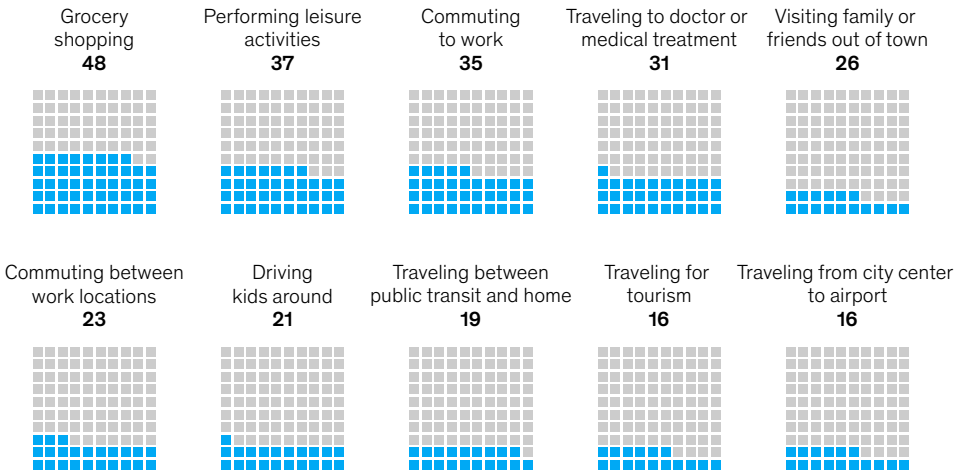
Exhibit 4

Some respondents are willing to use microcars for a number of use cases.

Likeliness of using microcar as part of mobility mix in next 10 years, by community type, % of respondents



Top use cases for microcars, % of respondents considering use of microcar (n = 12,701)



Source: McKinsey Mobility Consumer Pulse Survey, 30,978 current mobility users, December 2022; McKinsey analysis

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Our research suggests that three themes of consumer expectation cut across this consumer pull for more shared-mobility solutions in the future. The first is the integration of user experiences across mobility offerings within cities, including possible combined flat rates. The second is having accessible, safe, and reliable infrastructure. And the third is a shift toward electrified vehicles in shared-mobility operations as the de facto normal.

As the elements of shared mobility continue to multiply, emerging innovations—such as minimobility alternatives and shared autonomous shuttles—have the potential to disrupt the industry in new and exciting ways. Mobility incumbents and new entries alike need to anticipate three consumer themes: people want integrated user experiences, safe and accessible infrastructure, and continued electrification. Overall, understanding the changing dynamics facing urban-mobility ecosystems, consumers, and industry players can help companies lay claim to opportunities that will succeed in the changing future.

About the McKinsey Center for Future Mobility

These insights were developed by the McKinsey Center for Future Mobility (MCFM). Since 2011, the MCFM has worked with stakeholders across the mobility ecosystem by providing independent and integrated evidence about possible future-mobility scenarios. With our unique, bottom-up modeling approach, our insights enable an end-to-end analytics journey through the future of mobility—from consumer needs to modal mix across urban/rural areas, sales, value pools, and lifecycle sustainability. Contact us if you are interested in getting full access to our market insights via the McKinsey Mobility Insights Portal.

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