

BearingPoint®

Destination 2030

Who's in the driving seat for the future of mobility?



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The new realities of remote working, energy crises, climate change and supply chain disruption are profoundly changing the demand for mobility and the direction and pace of change. What does this mean for the current and future players in the mobility market?

We believe demand patterns for personal mobility are now permanently transformed. The new mobility paradigm will be based on provision of services. Transportation modes will converge, and new players will change the competitive landscape.

The drivers of how consumers make their mobility decisions will be different, as will the priorities for all stakeholders in the mobility ecosystem. What's more, every global megatrend – urbanization, remote working, energy supply, renewables, population health, cloud computing, and supply chain access – will have an impact on how mobility services are provided and consumed.

At BearingPoint we believe that, whether you're an automotive manufacturer, transportation provider, energy supplier, government body, technology provider, insurance company, bank, telco, or retailer you need to start working through the likely effects on your business now. This will be driven by the following three core realities:

1. Every journey will become a personalized experience
2. Climate neutrality will be non-negotiable – from cradle to grave
3. Users will consume services rather than own vehicles

This will require a revalidation of policies, strategies, investment decisions, service portfolios, and operating and business models to align with the new patterns of demand for mobility services across different modes.

These insights are based on BearingPoint's research, the views from our clients across all industry sectors, and input from our sector and technology leaders from throughout the firm. It's a prelude to a further series of insights and research that will be published regularly to keep our clients informed.

Mobility 2030 – who’s in the driving seat?

The demand for mobility is being profoundly changed...



1
Every journey will become a personalized experience



2
Climate neutrality will be non-negotiable – from cradle to grave



3
Users will consume services rather than own vehicles



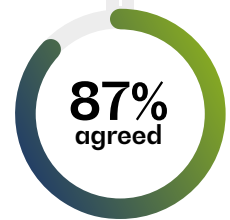
By 2030, I will take significantly fewer business trips compared to 2019



By 2030, I will sacrifice vehicle ownership to reduce my environmental footprint

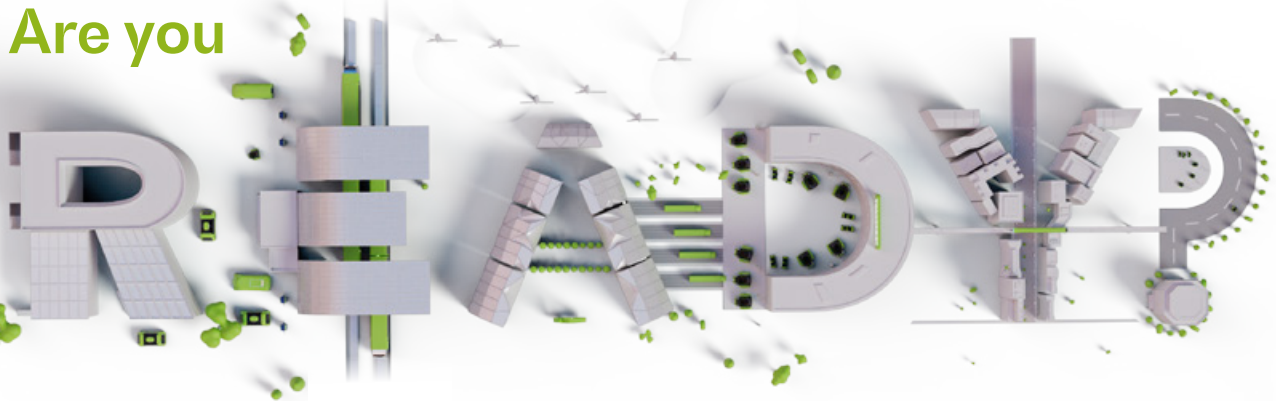


By 2030, I will prefer to use one single app/platform for ordering and billing ALL my mobility-related services (e.g., car, bus, train, plane)



By 2030, I will commute less frequently (e.g., to work) compared to 2019

Are you



Source: BearingPoint Mobility 2030 Survey (2022)

1 Every journey will become a personalized experience

Regardless of the mode of transport being used, consumers will be provided with more and more options to personalize the service and experience they receive. They will be offered a wide range of services and different levels of autonomy, control, content, and pricing. This change will have a significant impact on OEM brands.

Public transportation will shift toward individual mobility

Cities around the world are already seeing an increase in the use of small electric vehicles, such as e-scooters, e-mopeds, and micro cars, as well as individual car-based mobility, delivered now by companies like Lyft, Didi, and Ola and, in the future, by robot taxis. This will lead to a rise in individually determined, multi-modal journeys in which mass transportation may also play a part.

The car is the ultimate personal space where it will be possible to personalize virtually every aspect of the experience. But even mass transportation and multi-modal journeys will see a transformation in the way service is planned and pre-configured end-to-end. Services will become more dynamic, with schedules dictated by consumer needs, rather than predefined as with traditional public transportation.

Individual mobility will become cheaper and more attractive, due to 24/7 operating modes, more efficient capacity management and higher flexibility and availability. New market entrants will further fragment the mobility landscape. The mobility of the future will be more inclusive, providing for people from a broader span of ages and with disabilities not currently catered for.



Mobility will have more user-centric offerings, making traveling time more productive

We believe there will be an increase in individualized user interfaces in public transportation, such as digital user setups for entertainment in trains, planes, and buses. The time people spend traveling will increasingly be used as productive time for other activities that can be accessed online – shopping, entertainment, household administration – enabling multiple service providers from different sectors to earn revenues.

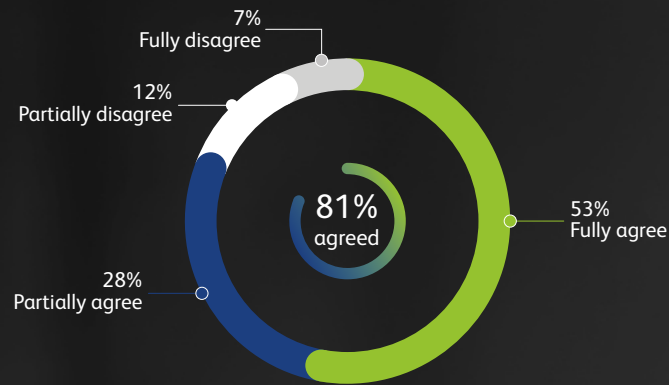
Software platforms will provide the means to generate new revenue streams by offering consumers over-the-air (OTA) updates and features to upgrade their journey. These could include providing additional horsepower, range, and suspension to enhance the performance of a vehicle, as well as music and games for entertainment. New services, from food delivery to mobile sleeping options, will be included.

Innovation will happen more within cities, but attention must be paid to rural needs

The shift toward on-demand transportation will see the greatest adoption in urban areas, due to the cost-effectiveness of running such a system where there is a significant number of regular travelers. Already, mobility choice within cities is increasingly heterogeneous. This contrasts with most rural areas, where people will continue to prefer private vehicle ownership until public transportation of sufficient quality and regularity is in place. Indeed, all the changes we're forecasting will depend on the public sector being willing and able to deliver regulation and supporting infrastructure in areas that need it. Significant subsidization will most likely be needed.



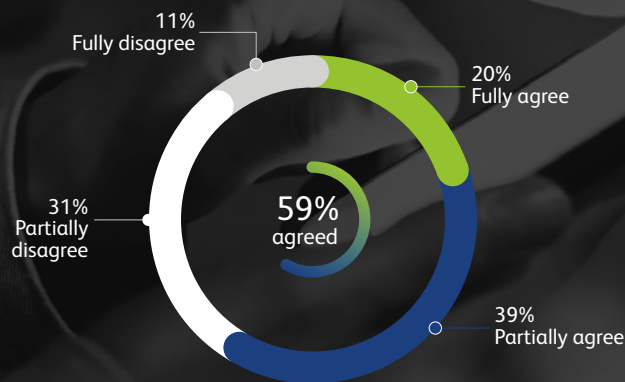
By 2030, I will take significantly fewer business trips compared to 2019



% Share of responses

Source: BearingPoint Mobility 2030 Survey (2022)

By 2030, I will travel significantly more for leisure (e.g., from day-trips to longer vacations) compared to 2019



% Share of responses, figures rounded

Source: BearingPoint Mobility 2030 Survey (2022)

Case Study: Every journey will become a personalized experience

At BearingPoint we're working with a number of OEMs to create subscription models for vehicle usage. We're also working to enable consumers to personalize their premium vehicles in the manufacturing stage. By combining the right technologies and knowledge, we're supporting clients with programs to harmonize product and service development, customer-specific solution engineering, and customer service.

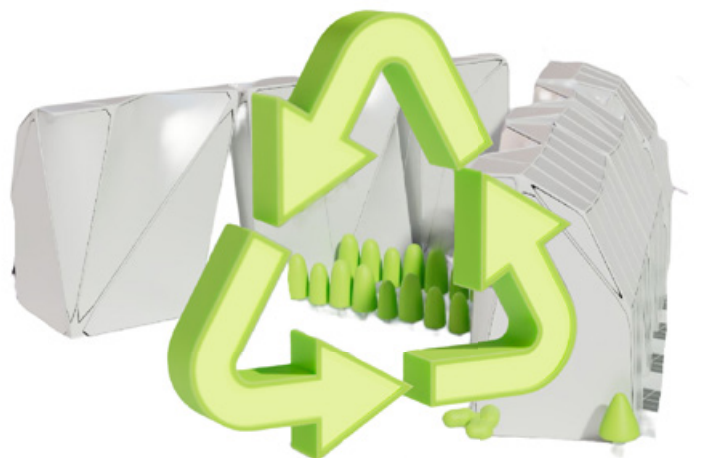
2 Climate neutrality will be non-negotiable – from cradle to grave

We believe that, by 2030, 80% of all manufactured engines will be green. Consumers will choose journeys based on the environmental impact and the extent of reuse and recycling involved. Investment will increase in zero-impact modes and related infrastructure, particularly those that have the added benefit of promoting well-being, such as walking and cycling. The gap between capacity and usage will be reduced.

Climate impact will increasingly influence consumer demands

Public awareness is constantly increasing of the negative impact of energy-intensive and climate-damaging modes of transportation, and this is a more and more important factor for consumers when deciding which mode of transportation to use. This will provide a strong impetus for mobility players to move to zero-impact mobility modes. In the bid to achieve carbon neutral transportation in Europe, a huge amount of work must be done by both public transportation providers and OEMs.

The need for climate neutrality in mobility will also extend to the environmental impact of manufacturing, maintaining, and disposing of vehicles. In the future, most components within the production process will be sustainable and carbon neutral, with a strong emphasis on reusability and carbon measurement.



Energy consumption will dramatically reduce

Over and above consumer demand, most governments have made commitments requiring engines to be carbon neutral and this has become even more pressing given the threats to energy supply from global developments. The pursuit of carbon neutral propulsion will result in advances in cleaner powertrain technologies, such as biofuels, CNG, LPG and synthetic fuels, as well as various battery and charging technologies (e.g., lithium ion and redox flow) and fuel cell technology.

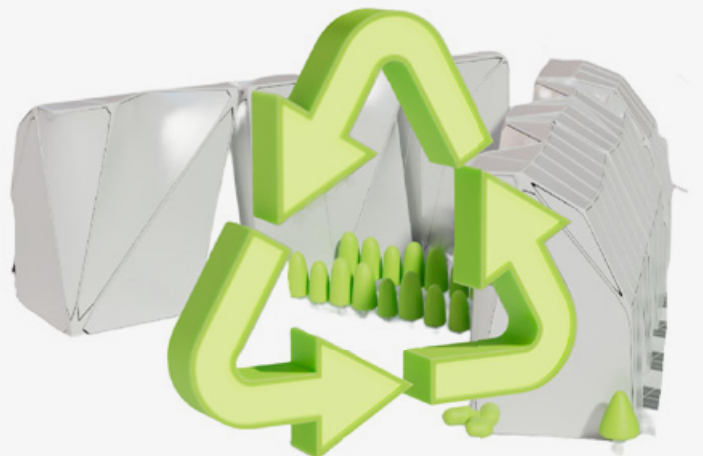
In addition to this effort to develop cleaner means of propulsion, governments will need to take steps to reduce the number of certain kinds of energy-intensive transportation. New policy decisions will be made to shape demand, such as banning intra-country flights in favor of rail.

Available capacity will be optimized to reduce carbon footprint

Sustainable car use, production and recycling is only part of the story. In the future, there will be better utilization of available vehicles, especially within cities, optimizing capacity and reducing emissions. AI-based recommendations will help avoid congestion by an optimum choice of routes and new modes of transport, such as air taxis, will free up road capacity. Increased utilization of both private and shared mobility will reduce the number of stationary vehicles in cities, bringing down the overall carbon footprint. Governments may need to incentivize or legislate to support progress in this area.

Well-being activities will merge with commuting mobility

Increased flexibility in work locations and working hours will continue to change the commuting model and traffic levels. There will be more and more opportunities to hire electric vehicles, whether e-cars, e-bikes or e-scooters and people will increasingly use modes of mobility such as cycling and walking as a means of exercising to promote well-being. The increased use of electric vehicles for commuting will have knock-on effects, though, including more volatile demand for electricity and increased need for charging capacity.



By 2030, I will sacrifice vehicle ownership to reduce my environmental footprint



% Share of responses

Source: BearingPoint Mobility 2030 Survey (2022)

Case study: Paving the way for sustainable mobility by cooperating across industries and countries

An automotive OEM is working with an Oil and Gas company to offer a charging network across Europe. The aim is to offer ultra-fast charging for private and fleet customers with a seamless charging experience by reducing the number of apps and charging cards. BearingPoint has enabled stakeholder collaboration and the development of an integrated fleet portfolio, as well as the rollout of processes and products for electric drivers.

3 Users will consume services rather than own vehicles

Consumers will increasingly choose to consume mobility as an on-demand service rather than own an underutilized vehicle. The charge for the actual journey will become a lower and lower percentage of the total, relative to the additional services provided. To the general consumer the service and software will be more important than the physical vehicle and brand, as software platforms will orchestrate the entire journey. Consumers will invest less in cars.

There will be a switch from ownership to on-demand

Soon we will think more in terms of mobility than vehicle ownership. Transportation will be about far more than just personal vehicles. Consumers are already thinking of their transportation as a service that can be summoned on-demand, with many choosing not to own a car and switching to car subscription models. While modes of transportation will proliferate – with driverless cars, air taxis and hover boards coming on stream – the number of transactions for the consumer will decrease. For example, instead of buying a car, securing finance to pay for it, fueling and maintaining the car, and paying for insurance and tolls, consumers will pay just once for an overall service. This shift will have profound consequences for established OEMs and their brands.



New entrants will be constructors not disruptors

The dominant players in mobility have traditionally been OEMs and public- and private-sector operators. The disruptors that have moved into the mobility ecosystem from other sectors – particularly big tech – will have a critical influence on direction. They will be constructors building infrastructure, connectivity, platforms, consumer data assets, and hardware to enable the global mobility network and the services provided on it. It is likely that they will be the service providers and the OEM hardware providers will increasingly become suppliers to the platforms.

Big tech can leverage consumer data and insights from other products and services they offer, such as Google maps and smart phones and watches, to provide consumers with personalized mobility services and create new revenue streams through value-added services. Software platforms are already steering the demand for mobility via flexible pricing packages – Uber’s peak pricing being an example – and in offering additional services, such as Uber Eats. This will expand in scope, with these value-added services growing to such an extent that mobility could become “freemium”, with the costs for the experience covered, or at least subsidized, by revenue generated through offers and advertising. Freemium will coexist with premium level services, although the contrast between the experiences will be significant.

Besides offering software, big tech is investing heavily in technologies such as autonomous driving, connectivity, and shared mobility, which are disrupting both traditional automotive OEMs and their suppliers. Hardware-based services, such as the autonomous, self-driving Apple Car, will offer consumers a holistic mobility offering.

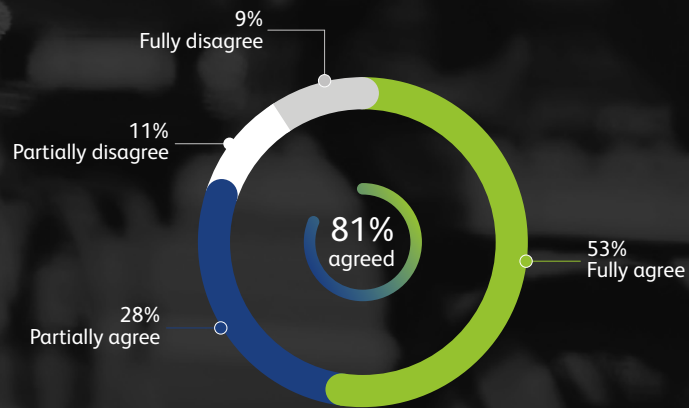
Government and operators must bring it all together

The full potential of the future of mobility will not be successfully realized by OEMs and service providers alone. Governments and operators will need to finance and invest more in infrastructure and connectivity enablement and find more sophisticated ways to manage network demand, capacity, and incidents. They will need to solve the divide between rural and urban areas and increase access to modes of transportation.

New taxes may need to be applied, since the increased costs associated with developing new mobility infrastructure cannot be passed on wholly to the end user. Legislation may also need to be put in place to achieve 100% green engines and the right level of infrastructure to support electric vehicles. Licensing and enforcement will shift focus from the individual to the provider.



By 2030, I will prefer to use one single app/platform for ordering and billing ALL my mobility-related services (e.g., car, bus, train, plane)



% Share of responses, figures rounded

Source: BearingPoint Mobility 2030 Survey (2022)

Case Study: Software drives personal transport

We believe that, in the future, software will drive mobility options. Software is becoming a more and more important feature of products, performance, and usability. Already, at BearingPoint, we are working with multiple OEMs and suppliers on software development applications, and with IT architects as mobility services generate a huge set of new opportunities. We are also working with clients on utilizing the Metaverse for a number of use cases, from vehicle maintenance to virtual prototyping.

How will this impact your organization and sector?

Now is the time for all the key players in the mobility ecosystem to start considering their strategies, priorities, and objectives.

How will the Automotive industry be impacted?



1. How should your company deal with the need for individuality while producing vehicles in high volumes?
2. What key factors should drive your company to become a true part of the solution for climate neutral mobility in 2030?
3. How will your company stay relevant in a mobility world dominated by big tech and platforms?

How will energy companies respond?



1. How can the Oil and Gas industry promote cross-industry collaboration?
2. Why does your industry have to choose between becoming an energy and mobility solutions provider or a source of problems and pollution?
3. How will your company stay relevant in a mobility world dominated by big tech and platforms?

How will public services organizations adapt?



1. How will governments model and manage infrastructure investment in the new ecosystem?
2. How will governments balance the available supply capacities across all modes of personal transportation?
3. Where do governments focus regulation and citizen protection in the new mobility ecosystem?

How will utilities and transportation organizations respond?

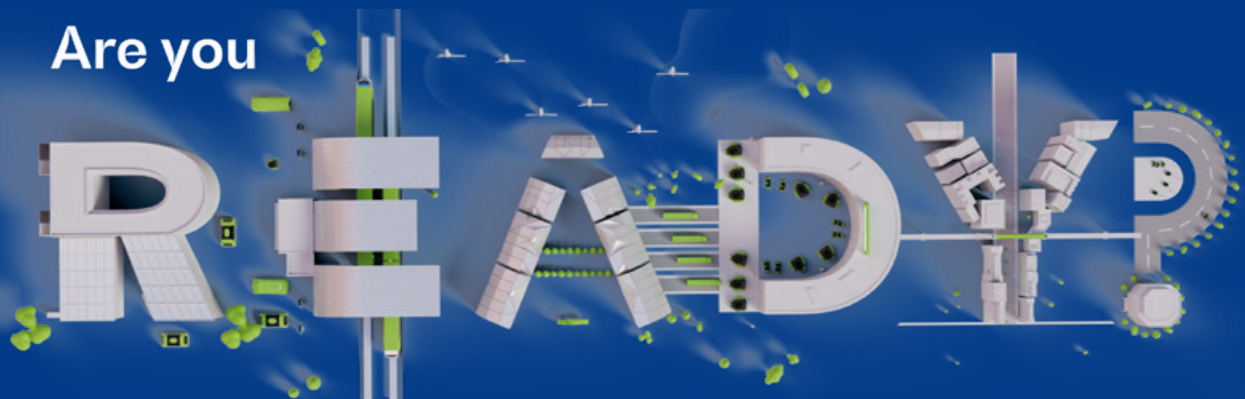


1. How can utility companies contribute to climate neutrality in mobility?
2. Which role will utility companies play in the future mobility ecosystem?
3. Who will pay for the new transportation infrastructure?

How will insurance organization models change?



1. How can insurance companies ensure the future success and sustainability of individual mobility?
2. How can insurance practices support change and foster innovation to achieve climate neutral mobility by 2030?
3. What kind of insurance initiatives and innovations could help to increase mobility as a service?



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About BearingPoint

BearingPoint is an independent management and technology consultancy with European roots and a global reach. The company operates in three business units: Consulting, Products, and Capital. Consulting covers the advisory business with a clear focus on selected business areas. Products provides IP-driven digital assets and managed services for business-critical processes. Capital delivers M&A and transaction services.

BearingPoint's clients include many of the world's leading companies and organizations. The firm has a global consulting network with more than 13,000 people and supports clients in over 70 countries, engaging with them to achieve measurable and sustainable success.

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