Three trends shaping the future of mobility in 2020

The cost of owning private vehicles will rise. Citizens' demands for inclusive mobility are growing in volume. More public-private partnerships will form to address mobility issues.

As the futurist Jim Dator has said: "Any useful statement about the future should at first seem ridiculous" - and this is true of mobility.

I want to examine three current mobility trends - and while they may seem ridiculous at first, they may not be ridiculous at all.

M. Avary is Head of Automotive and Autonomous Mobility. World Economic Forum.

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Take congestion, for instance. In every city and community around the world, congestion has reached unbearable levels. It is destroying our quality of life and our environment, wasting our time, damaging our health and outright killing people.

But congestion is not something that is happening to you. You are congestion. Every time you choose to get into your car alone and drive into the city, you are part of the problem. You are, in effect, doing this to yourself - which means you can choose to do something different.

Perhaps, in many cities around the world, you will soon not be allowed to drive your car into the city in the future - or it will become so expensive that you will choose to do something else.

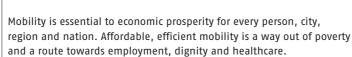
Many cities around the globe are experimenting with reducing parking spaces and converting curb space into dynamically priced zones for passenger pick up and drop off, and package delivery. Other cities are repurposing road lanes for bus rapid transit systems and bikes. Places like Jakarta are moving to limit the age of vehicles allowed on the road and restrict the numbers allowed into the city, while Los Angeles, New York and Seattle are looking at enacting congestion pricing. It would not be ridiculous to expect a major city in the future to ban singleoccupancy vehicles in the city centre outright.

This gets me to the first trend:

1) RISING PRICES FOR PRIVATELY OWNED VEHICLES Society is no longer willing to bear the high cost of private vehicle ownership without making the vehicle owner pay.

Owning a car will become more expensive in many ways, be it higher registration, fuel taxes, road tolls or parking fees. Experiments are underway to incentivize people to make different choices. Some companies are offering employees direct benefits to not drive - by, for example, subsidising the cost of public transit, bike sharing or scooter rentals, while raising the cost of driving.

The impact of increasing prices will be felt in many ways, including lower vehicle sales, people moving closer to work and increased use of public transport. But for these higher costs to make a significant impact, people must be offered reasonable alternatives to driving themselves.



Many companies are entering the market to offer mobility choice although it is not always happening in a manner that is making our lives better. There are many unintended side effects, such as ride-



hailing services adding to congestion, dock-less bikes blocking sidewalks and roads, electric bikes catching fire, people getting killed riding scooters or bikes, and women being attacked by ride-sharing drivers or by men posing as ride-sharing drivers.

Car sharing, meanwhile, won't get more cars off the roads unless those cars are fully or nearly fully occupied.

powers to address some of these externalities.

Some ride-sharing companies are being subsidized by governments to get people from outlying areas to public transit hubs. Various While governments are grappling with these confluences, another trend autonomous vehicle (AV) shuttle companies are now operating services is emerging: in city centres, replacing select public bus lines or extending services 2) MORE ENGAGED CITIZENRY ARE DEMANDING into new areas, such as at night near university campuses. Cities are INCLUSIVE MOBILITY hiring mobility-as-a-service providers to operate ticketing systems. People today are insisting that mobility is a right and a public good, Rural authorities are partnering with on-demand, high-occupancy and that it must be inclusive. ride-hailing companies to serve outlying areas. Transit authorities are creating dedicated offices devoted to advancing automated Governments and the citizens they serve are asking questions such as: technologies. State governments are passing laws allowing for What can we do better? What kind of future do we want? How can we automated trucks, shuttles and taxis. Consortia are being formed to reclaim our spaces and put people first, not cars? How can we address educate the public and to advocate for safety and cleaner powertrains.

rural mobility needs?

A consensus is forming that we cannot do this alone. We cannot make Around the globe, inclusivity and improved quality of life are top of the mobility safer, cleaner or more inclusive without partnering and list of the most important issues. without sharing solutions.

This means that mobility must serve everyone - including those on low incomes, the disabled and elderly, and places with low demand such as rural areas. Inclusive mobility is mobility that is safe for everyone, including women.

This is not an orderly trend; rather it will involve a lot of experimentation, no single correct solution, and a very long horizon.

As our quality of life degrades as a result of congestion, and as people are excluded from mobility options, they are less willing to accept the status quo and more willing to experiment with alternative mobility options. Technological advances can be harnessed to make mobility more inclusive and improve quality of life. Advances in artificial

intelligence, machine learning, data analytics, connectivity and automation are being applied to mobility. But they cannot happen in a vacuum.

Because mobility is integral to all of our overall success, governments need to exert their influence, while private companies need to partner with governments to be part of the solution. This is the third trend:

Transit regulators are beginning to exert their power or are gaining new 3) INCREASED PRIVATE-PUBLIC PARTNERSHIP AROUND MOBILITY

Inclusive mobility holds the promise for businesses to find new markets for growth and for governments to enact balanced policies that improve everyone's lives. What viable business models and industrial policies of the future will look like is unknown and will shift over time. People and governments are becoming frustrated with the traditionally slow pace of public transit improvements and the associated costs. Many are turning to the private sector to help deliver real solutions faster and more affordably. And there is widespread belief in the potential of Fourth Industrial Revolution technologies to solve seemingly intractable mobility problems.

This year - 2020 - can become the year of inclusive mobility. And I, for one, am looking forward to it.