

Report calls for radical redesign of cities to cope with population growth

Megacities on the Move report says authorities must start planning their transport infrastructure now for a future when two thirds of the world's population will live in cities

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Alok Jha, science correspondent
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Moving away from car ownership, using real-time traffic information to help plan journeys and having more virtual meetings will be vital to prevent the megacities of the future from becoming dysfunctional and unpleasant places to live, according to a study by the environmental think tank [Forum for the Future](#).

The report argues that authorities must begin to plan now in order to create easier and more sustainable ways of accessing goods and services in the world's ever-growing cities. Citizens must also be encouraged to change their behaviour to keep cities liveable.

By 2040, the world's urban population is expected to have grown from 3.5bn to 5.6bn. The new report calls for a radical re-[engineering](#) of cities' infrastructure to cope. "The future is going to look pretty urban ... with more and more people shifting to cities to the point that, by 2040, we're going to have two thirds of all the people in the world living in cities," said Ivana Gazibara, senior strategic adviser at Forum for the Future and an author of the report, [Megacities on the Move](#).

"If we go on with business as usual, what happens is unmanageable levels of congestion because personal car ownership has proliferated," she said. "Cities could be a pretty nasty place to live for the two-thirds of the global population in the next 30 years if we don't act on things like climate change mitigation and adaptation, smarter use of resources and sorting out big systemic things like urban mobility."

The report looked at transport, but not just moving from A to B. "It's about accessibility and productivity and interaction," said Gazibara. "Those are things you can do through physical interaction but you don't have to.."

One issue is to integrate different modes of transport: citizens will want to walk, cycle, access public transport, drive personal vehicles or a mixture of all modes in one journey. "Information technology is going to be incredibly important in all of this, in terms of better integrating and connecting physical modes of transport," said Gazibara. "But we're also going to see lots more user-centred ICT [information and communication technology] so it makes it easier for us to access things virtually."

She said there are already cars that have integrated hardware allowing them to communicate with each other and central traffic hubs. By collecting and centralising information of this kind, city authorities could manage traffic information in real time and help speed up people's journeys. And better "telepresence" systems for virtual meetings could remove the need for some journeys altogether.

The trickiest part, though, could be getting citizens themselves to take part. "We have the technological solutions, whether it's alternative drive-trains for vehicles or sophisticated IT – the real challenge will be scaling it in a meaningful way," said Gazibara.

City planning will also be important, she said, creating self-contained neighbourhoods where everything is accessible by walking or cycling.

The report also highlights examples of good practice that are already in use. Vancouver, for example, has recognised that many of its inhabitants will use several modes of transport in one journey, so city planners have widened pedestrian crossings, built more cycle lanes and provided cycle racks on buses.

For the future, Gazibara pointed to innovative car-sharing schemes such as the [CityCar concept](#), developed at the Massachusetts Institute of Technology, with "[stackable](#)" electric cars lined up near transport hubs. These could be rented out for short journeys within city limits. They could also store power at night, when renewable sources might be generating electricity that would otherwise have to be dumped.

Friends of the Earth transport campaigner Richard Dyer agreed that action was needed now to make cities more sustainable. "Tackling climate change must be at the heart of building a greener, fairer future – and local people must have their say. New technologies will be part of the solution, but rising populations and the urgent need to cut carbon emissions mean that we also need policies that reduce the need to travel, cut car use and make walking and cycling the first choice for short journeys. Alongside green energy and better insulation for our homes, this will make our cities healthier, more pleasant and vibrant places to live – and will create new jobs too."

Gazibara said city authorities needed to start taking the issues more seriously. "[There are] far too many places where cities that are acknowledging climate change as a threat continue to build more roads,

continue to provide incentives to more car ownership and more driving.
That's something that will fundamentally need to change."

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