

The road reimagined

Cities are starting to experiment with banning cars from their streets. It is a move that makes a lot of sense, says **Alice Klein**

IN DOWNTOWN Madrid, the reign of cars is coming to an end. Starting next month, the city centre will be shut off to all cars, barring electric vehicles, those belonging to residents and a few other exceptions.

Several other capital cities are also clamping down on cars. Oslo is eliminating on-street parking and converting roads into cycleways and pedestrian paths. Paris and Brussels have started hosting annual car-free days. Others – including Mexico City, Athens and Rome – are planning to ban diesel cars by 2025. So does this herald the end of city driving?

There are good reasons for banning cars in dense urban areas. Cars and their supporting infrastructure now fill up to 60 per cent of space in cities, says Mark Nieuwenhuijsen at the Barcelona Institute for Global Health in Spain, which takes a heavy toll on our physical and mental health. “We’ve forgotten that cities are meant to be for people, not cars,” he says.

“Health benefits of going car-free would be 30 times more than from switching to electric vehicles”

The latest estimates suggest that vehicle pollution – which includes nitrogen oxides, soot and carbon monoxide – is responsible for at least 184,000 premature deaths globally each year, mostly due to heart and lung disease.

It has also been linked with dementia, with recent research finding that people who live near major highways are 7 per cent more likely to develop the condition. Of course, petrol

and diesel cars also produce greenhouse gases – chiefly carbon dioxide – that contribute to climate change.

On top of this, road crashes injure 78 million people and kill more than 1 million others globally every year. Long

Cyclists in Mexico City take full advantage of a car-free Sunday

commutes by car contribute to physical inactivity, one of the biggest public health problems of the 21st century. Exposure to traffic noise, meanwhile, has been linked with depression in adults and attention problems in children.

In other words, cars are bad news. Now, evidence is mounting that bans can help to alleviate some of these problems.

When Paris held its fourth annual car-free day on 16 September, levels of nitrogen dioxide pollution near major roads dropped by as much as 41 per cent and noise levels fell by up to 5 per cent. In Brussels, soot levels decreased by 80 per cent when it banned cars on the same day. And after Stockholm introduced a congestion charge



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in 2006, the drop in traffic was accompanied by fewer asthma attacks in children.

Unsurprisingly, car bans also seem to reduce road accidents. The city of Pontevedra in Spain, for example, has had zero road deaths in its central zone since it was closed off to all non-essential vehicles in 1999.

Additional evidence shows that car restrictions help to promote active lifestyles. In Copenhagen, which has turned many of its streets into car-free walkways and cycleways since the 1960s, over 60 per cent of residents now cycle to work, compared with 2 per cent of people in London. Similarly, more than 80 per cent of children

in Pontevedra now walk to school.

For cities that are considering car restrictions, several options are available. One is to ban petrol and diesel cars but permit zero-emission electric vehicles. Another is to ban all cars. A third is to change the way the city is organised so that walking, cycling and public transport are more attractive than driving.

Audrey de Nazelle at Imperial College London believes that getting rid of all cars, except for those belonging to less mobile people and essential services, is the winning option. Restricting fossil fuel cars while still allowing electric vehicles doesn't go far enough, she says.

"It will reduce air pollution, but I still think it's short-sighted and a missed opportunity for more holistic thinking about health," says de Nazelle. Modelling suggests that the health benefits gained by cities going car-free would be 30 times greater than those from switching to electric vehicles, because it would also reduce accidents and promote more exercise.

Radical change

Taking all cars out of the equation would also let us radically reshape city landscapes and make them more people-friendly. The space freed up could be repurposed for other activities, like playgrounds, markets and community events, says de Nazelle.

Given that many people would balk at the thought of banning cars altogether, less extreme approaches may work better. Similar effects can be achieved by simply making other modes of transport more convenient, says Hanna Marcussen, the vice mayor for urban development in Oslo.

Since 2015, Oslo has turned many of its roads into walkways and cycleways and removed all on-street parking from its centre to discourage car use. It has also extended its rail network, added

extra trams to existing lines, made public transport cheaper, and started offering subsidies for electric bikes.

Few private cars still drive into the city centre, leaving a trickle of taxis, delivery vans and public service vehicles. A recent Greenpeace report found that the city now has some of the cleanest air in Europe.

Large, sprawling cities like Sydney present additional challenges because they are harder to traverse on bike or foot, says Dorina Pojani at the University of Queensland in Australia. But she still thinks they could go car-free with well-connected public transport systems.

"We need to move away from extreme individualism – wanting to have our own separate car and detached house – and start embracing communal consumption patterns like public transport and apartment-living," she says. Better public transport would also reduce congestion, which currently traps Sydney motorists in their cars for an estimated three weeks per year.

But not everyone supports these car-free visions. The Madrid Association of Automobile Dealers, for example, has raised concerns about the Spanish city's imminent ban on all cars except for electric models and those belonging to residents, less mobile people, delivery drivers and essential services. The group says it will discriminate against people who can't afford electric cars and those living further out, while also discouraging visitors to the city.

Similarly, the Facebook page

Yes to Cars in Oslo is filled with complaints about how the city's "war on cars" is infringing on personal freedoms, making it unpleasant to get around in winter, reducing visitor numbers and hurting local businesses. "Oslo has become a ghost town!" one post says.

However, Marcussen says it is actually the car-free parts of Oslo that now attract the most

"Our grandchildren will probably look at pictures of our car-clogged cities and think we were crazy"

visitors – both locals and tourists. And Nieuwenhuijsen disagrees with the argument that everyone should have the right to drive. "We banned smoking inside buildings because we realised the effects of the pollution on other people," he says. "Now we're realising the same thing with cars."

It is difficult to imagine weaning ourselves off cars because we have become so used to them, says Nieuwenhuijsen. "We just get in a car and go from A to B without thinking about the impact," he says. But de Nazelle thinks it is only a matter of time before other cities follow the lead of Madrid and Oslo.

"Change will happen because we'll no longer be able to accept living in places where we can't send our children out to play because of the pollution and the danger of cars zooming past," she says. "Our grandchildren will probably look at pictures of our car-clogged cities in 2018 and think we were crazy." ■

