

# Car-less but not careless: why cities should prioritise people over transport

By *Lucelia Rodrigues* | 21.11.18

You have probably experienced trying to cross a major road in a city somewhere in the world and feeling that you are about to cross a fast-flowing river. Your senses are assaulted by the taste of pollution, the suffocating sound of engines and the incessant lights. You are vaguely aware of people gathering around you, perhaps a bit too close for comfort. You may need to act fast for safety. It can be overwhelming or even terrifying for some.



*Figure 1: Crossing one of Brasilia's avenues*

The word city comes from the Latin 'civis', which means citizen. Nevertheless, somewhere somehow we lost the connection between city and 'civis' and have transferred the focus from people to place. Semantics? Perhaps. But the fact is that cities have traditionally responded to growth by expanding the availability of land for building and the transport network, particularly roads, giving less attention to their citizens. Estimations suggest that built land plus streets make up to 99% of land area in many cities around the world ([Gardner, 2011](#)).

Cities were – and still frequently are – designed around transport, and more often than not prioritise personal vehicles, firstly horses and then cars. If you have ever been in Brasilia, Brazil's modern capital, you will know how true this is. Brasilia was designed by Lucio Costa in the late 1950s to be a symbol of modernity and therefore turned its back to Brazil's colonial and baroque legacy to be a city of clean lines mapped out within rigid rational planning, where the car is king and walking is impractical.

Brasilia is not unique in its approach. Researchers have found that not owning a car is often associated with reduced access to opportunities ([Brown, 2017](#)) and being unemployed ([Gurley and Bruce, 2005](#), [Ong, 2002](#)) or earning low wages ([Raphael and Rice, 2002](#)). Cars can also be seen as necessary to improve financial stability in deprived neighbourhoods ([Curls et al, 2018](#)), despite the fact that cars may be a financial burden themselves. There is a sense that having access to a personal vehicle brings a convenience you cannot get any other way. You can avoid public transport, enjoy freedom and independence, carry whatever you need, decide your own timetable. It seems easy, and it is - if global warming, pollution, health, congestion, time and money are not concerns.

According to the Intergovernmental Panel on Climate Change ([IPCC, 2018](#)): “Limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society [including] energy, industry, buildings, transport, and cities [and] could go hand in hand with ensuring a more sustainable and equitable society. (...) Net human-caused emissions of carbon dioxide would need to fall by about 45 percent from 2010 levels by 2030, reaching ‘net zero’ around 2050”. Carbon dioxide emissions need to be reduced in order to limit global warming and the transport sector alone is currently responsible for 20.5% of it globally ([The World Bank, 2018](#)). Therefore, global warming is indeed a transport and mobility issue.

The same goes for health. The World Health Organisation ([WHO, 2018](#)) suggests that 90% of people breathe air containing high levels of pollutants, leading to a death toll of 7 million people every year. It is estimated that the economic impact of air pollution on health is up to £3.7 billion in London alone ([Walton et al, 2015](#)). Nottingham was one of the cities listed by the World Health Organisation ([WHO, 2018](#)) as one of the worse in the UK for poor air quality with pollution levels above the safe levels, particularly nitrogen dioxide, an air pollutant that is largely produced by road traffic sources. But health benefits are not only from breathing in clean air, but also from being physically active. Despite the vast benefits of active commuting, it is not very common in the UK where only 3% of commuters cycle and 11% walk ([Goodman, 2013](#)) - one of the lowest rates in Europe, where rates of commuters cycling can be as high as 62% in Copenhagen ([City of Copenhagen, 2017](#)).



Figure 2: 62% of commuters in Copenhagen cycle to work or study

Driving also wastes time and money. UK drivers spent an average of 31 hours in rush-hour traffic in 2017, with an estimated cost of £1,168 per driver, and the figures are more than double in London: 74 hours at a cost of £2,430 ([INRIX, 2018](#)). The UK ranked in the top ten most congested countries in the world and is the third most congested in Europe, with London being Europe's second most gridlocked city after Moscow. The

worst part of this is that it is likely to get worse if we do not act fast. Cities are currently home to more than 55% of the world's population, a proportion that is expected to increase to 68% by 2050 with additional 2.5 billion urban residents according to the United Nations (2018). This brings added pressure on the urban infrastructure, such as the transport network.

As urban traffic congestion continues to grow, more and more cities have started to prioritise public transport modes and to adopt policies that hinder the uptake and use of personal vehicles. The UK announced a ban on the sale of diesel and petrol cars by 2040, following a similar pledge in France (Asthana and Taylor, 2017), and cities like Oxford (Jones, 2017) and Paris (Kotkar, 2017) have announced a ban of diesel and petrol cars from their city centres. London has seen a 25% fall in the share of journeys made by car since 1990 despite population and wealth growth (Metz, 2015).

Does this mean that cities are caring even less for their citizens?

This may be the case sometimes, where there is no room for the individual as the system is already overloaded trying to address the collective. Nevertheless, it does not need to be. The future of cities and transport lies in prioritising the citizens and their needs, lies in intelligent personalised mobility that can help decrease congestion and pollution, save citizens' time and money and support a healthier happier – and potentially car-free - lifestyle.

Why now I hear you ask? Because we now can. Technology has advanced to a level that we can track people, vehicles and environmental conditions to produce datasets with a level of granularity and immediateness that allows us to inform decision making in real-time. Individual requirements can be recognised and catered for without impacting on the collective needs. Digital connected intelligence put live information literally in the hands of the users as and when they need it. Intelligent systems support integrated ticketing so journeys can be continuous between transport modes and urban conglomerates. These systems also make borrowing a vehicle temporarily, ordering a taxi or ride-sharing easy, quick and safe. Online shopping and social media have reduced the need to travel. The advent of mainstream electric vehicles mean no need for easily accessible petrol stations. Autonomous vehicles open a completely new world of possibilities where the responsiveness of the transport system is increased and constantly improving.

We can no longer focus on transport in cities, we need to focus on people – served by optimised transport, enhanced city infrastructure, and real-time data. (Ironically) paraphrasing Henry Ford (1922) “the remains of the old must be decently laid away; the path of the new prepared”: it is time for an intelligent mobility revolution. We need to rethink our mobility offer and our transport technology, to integrate the end user as an active partner of the system. We need to focus on walkability, cyclability, point-to-point personal rapid transit systems, low-emission car-sharing schemes and an efficient and connected public transportation network with a low-carbon footprint.

We envisage a future where new technology allows you to ditch your old driving habit – better, makes you choose to stop driving because it is much more convenient, quicker, cheaper, healthier and safer to use what your city can offer as oppose to owning a car. Where urban mobility systems expand access to opportunities for urban residents delivering equality and inclusion by default. Where being car-free is a symbol of modernity and prosperity.

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