

How can we steer placemaking in a driverless future?

Connected and Autonomous Vehicles present a huge opportunity to radically transform how we live and travel says Louise Brooke-Smith



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Connected and Autonomous Vehicles – otherwise known as CAV - are no longer the preserve of science fiction. A future in which driverless cars are an increasingly common sight on our city streets is fast becoming a reality, but what does this mean for the shape of the urban environment?

The impact of Digital Disruption on London

Every industry, from retail to leisure and health to banking, is being transformed by the rise in new technology. Mobility is no exception. The emerging revolution in driverless vehicles has opened a new frontier of disruption in transportation and urban living. For our cities, exclusively electric Connected and Autonomous Vehicles present a huge opportunity to radically transform how we live and travel.

This is an exciting prospect for London. The push towards introducing driverless technology could take more vehicles off the roads, helping to address issues ranging from congestion and an overcrowded public transport system through to poor air quality.

In London, 54 per cent of households currently have at least one private motor vehicle and, with Greater London's population expected to grow by over 0.7 per cent every year to 2046, the strain on

city infrastructure is only set to increase. As ride-sharing services continue to proliferate and customer engagement sees year-on-year growth, there is significant potential for automated technology to play a greater role in helping to move people around the city and, by taking more vehicles off the road, free-up space for alternative uses.

In fact, a CAV revolution could allow for the reclamation of up to 80 per cent of space currently allocated to car parking in every city. This would potentially free up over 6,300 hectares of land in London alone. To put this into perspective, that's enough space to build the equivalent of 180,000 much-needed new homes right across the capital.

Integrating and Progressing

Crucially however, every city has its own dynamic and, to be successful, driverless vehicles will need to be integrated with and work alongside the existing network. In London, where the focus is on improving public transport and creating opportunities for new homes and jobs by encouraging more healthy travel options, like walking or cycling, this means early government engagement with the private sector will be essential if the benefits of CAV are to be

realised and work in parallel with London's wider mobility objectives.

We have a unique window of opportunity for local authorities, developers and planners to consider how cities can best adapt now to exploit the potential benefits of driverless technology in the future.

The Centre for Connected and Autonomous Vehicles (CCAV) has already provided over £250m in funding to make the UK a premier development location. Yet the fact that Transport for London is focusing heavily on 'connected citizens' rather than CAV illustrates the extent to which new and emergent technologies will need to be developed with a view first and foremost on customer needs, experience and value.

Who's driving London's future?

London has the potential to become more competitive and sustainable through smart outcomes focusing on mobility, resiliency and regeneration. However national, regional and local governance regimes will be critical to success. These elements all need to combine to create an environment where CAV can thrive as part of a balanced eco-system. Stakeholder engagement, regulation and licensing, along with private sector investment and finance, will be key. But importantly, whatever the system adopted, the practical implementation of CAV will take time to emerge.

There is no right or wrong way to pursue CAV. City administrations will need to be open minded and consider new approaches to established problems, to guide expectations, support culture change and shape behaviours. The planning community has a critical role to play here in shaping the vision and drive for this brave new world. Now is not the time for us to take a back seat! ■

