



Connectivity is key to modern transport

- Smartphone apps are reducing traffic congestion and parking shortages and providing real-time transport solutions, but they rely on high quality mobile network connectivity.
- Transport computers increasingly communicate with each other through the mobile network, and there is the growing expectation among transport providers and passengers of instant connectivity throughout transport routes.
- Policy-makers can take action – often without resource implications – to improve local mobile connectivity.

More than any other sector, transport digital technology is by its nature almost completely reliant on mobile data connectivity. Mobile transmission is virtually the only mechanism for relaying information with vehicles and trains, and technological developments are exponentially increasing the data bandwidth required.

A 2015 KPMG report on automated vehicles has shown that these new cars will require a vast amount of mobile network access to the Internet for planning journeys, emergency braking, adaptive cruise control, communicating with other vehicles, providing entertainment and offering passengers the ability to conduct their work in their cars. The overall economic and social benefit of connected and autonomous vehicles could be in the region of £51 billion per year by 2030 according to this report.

Public transport innovations need mobile connectivity, not least for traffic controllers and drivers to communicate between moving vehicles in real time. A 2015 Deloitte report, *Transport in the digital age: disruptive trends for smart mobility*, highlighted how mobile network based apps such as CityMapper are improving traffic congestion and parking problems for local councils. Time spent on the roads searching for parking spaces is being cut by these innovations, and mobile services such as Google Maps are allowing drivers to avoid congested routes.



Public transport customers increasingly expect good mobile internet coverage throughout their journeys. Transport for London (TfL) has issued guidance for its property managers, to facilitate mobile network infrastructure access to TfL real estate. This is a welcome development, but more transport service firms need to adopt such proactive approaches to infrastructure facilitation to help our networks keep pace with growing passenger demand for connectivity.

The UK government has recognised the link between mobile connectivity and transport innovation. Complementing the extensive investments that the mobile network operators have made since the introduction of 4G technology – amounting to £2bn every year – the 2010-15 Coalition government invested £150m to improve the quality and coverage of mobile phone voice and data services, and the 2016 Autumn Statement announced over £1bn for mobile and internet upgrades. Since the June 2017 General Election the government has upgraded the importance of digital policy, with the rebranding of DCMS to become the Department for Digital, Culture, Media and Sport.

But central spending alone cannot solve the UK's mobile challenges. Local action is needed, which is why Mobile Britain has launched its new Building Mobile Britain campaign to get local authorities, mobile network operators, central government and other players working together to take action.

Local authorities can greatly enhance the benefits they reap from the Smart Cities agenda by:

- Abolishing planning controls for small equipment installations
- Explicitly supporting the Mobile UK campaign, Building Mobile Britain, including in the transport services they provide.
- Partnering with mobile providers to trial new methods of extending mobile coverage
- Partnering with transport bodies such as Network Rail and the highways agencies to deliver the necessary capacity.

