

Transport Select Committee: Our Future Transport

**Are we prepared for the digital roads revolution?**

The UK economy is dependent on its road network. Government projects a 22% increase in traffic between 2025 and 2060.

While technological advances such as the rollout of electric vehicles will support the country’s journey to net zero, the continuous need for new capacity and improved levels of service on our roads (including, importantly, for public transport) must also be addressed.

The road network, across strategic, major and local roads, is an ageing asset. Yet, the ability of new roads investment programmes to address the pace of decline and provide the new capacity needed to accommodate predicted growth in traffic is not financially, environmentally or socially viable.

A future network, for all road-based transport, needs to be planned differently. The principle of extracting maximum value from existing assets must become central to the way we design, fund and manage roads.

In 2023 87%[[1]](#footnote-2)[1] of new vehicles are considered ‘connected’. Smart technologies offer a new opportunity to extract maximum value from what already exists. However, the extent to which the transport system is ready to respond to this opportunity is unbalanced.

A Transport Committee inquiry could help ensure the pace of change is escalated, considering:

* Whether Government is prepared for the digital roads revolution –are funding allocations and decision making across Whitehall agile enough for a solution-based future?
* The extent to which digitisation of assets and traffic control could reduce the need to invest in high-cost and high carbon, physical network improvements
* The skills challenge facing the transport sector, where depleting levels of transport planning and delivery skills need to be supported by new data and technology competences
* Whether National Highways’ steps to deliver smarter roads on the Strategic Road Network (SRN) through its ‘digital roads’ programme and deployment of ‘internet of things’ (IoT) enabled infrastructure is ambitious enough?
* The growing gap between smart capabilities on the SRN, Major Road Network (MRN) and A-road network. Given that A-roads are fundamental to local and regional economies and delivering an integrated network, how can this gap be narrowed?
* Whether technology can support better management of roads. Can vehicle use be planned differently in terms of the way we prioritise modes, times of the day and corridors: supporting better more reliable journeys by bus, coach and for our HGV operators?
* Could real time information be better managed? Could there be regional or national management of data and prioritisation of routing - something that’s currently largely controlled by Google’s algorithms.

England’s Economic Heartland (the sub-national transport body for the Oxford-Milton Keynes-Cambridge region) would be delighted to provide evidence to such an inquiry. We are currently undertaking a review of smart junction technology, including studies on their impact on traffic flow and congestion, safety, fuel consumption and emissions, and cost-effectiveness. This will inform further work – and develop our understanding of the benefit of deploying this technology across long distance, strategic corridors.

1. [1] [https://www.statista.com/statistics/993364/new-connected-vehicles-on-roads-uk/](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.statista.com%2Fstatistics%2F993364%2Fnew-connected-vehicles-on-roads-uk%2F&data=05%7C01%7Caking%40englandseconomicheartland.com%7C3d4c20660299480f3e3708db046445f1%7C7fb976b99e2848e180861ddabecf82a0%7C0%7C0%7C638108600953620845%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=%2BLw4W5dZsBHHK96eCYLaXUWzbYhGKzeGQCxZfSw75Ag%3D&reserved=0) [↑](#footnote-ref-2)