

Travel in Britain in 2035

Tuesday 28 February, 2017

Chaired by Christopher Stanwell, *Partner and Head of Planning at DAC Beachcroft*

Speaker:

- Charlene Rohr, *Senior Research Leader at RAND Europe*

Panellists:

- Alan Braithwaite, *Chairman of LCP Consulting, Visiting Professor in Supply Chain Management at Cranfield University, and Chair of the CILT Freight and Logistics Policy Group*
- Keith Buchan, *Director of Skills at the Transport Planning Society*
- Toby Thornton, *Associate at WSP|Parsons Brinckerhoff*

Visions: the potential in probabilities

A blog by Hannah Budnitz, Chair of the Transport Planning Network

On 28 February, the RTPI/TPS Transport Planning Network, with CILT and DAC Beachcroft, hosted an event to discuss the RAND Corporation report '[Travel in Britain in 2035](#)'.

This report contains three alternative visions of future mobility, offering a spectrum of possible transport scenarios. One of its authors, Charlene Rohr, explained to the assembled professionals that the project aimed to review how emerging technologies might influence our transport systems, and envision the possible futures that could occur.

Why carry out this research? The one certainty in this crystal ball gazing is that transport technologies, which have been relatively stable for decades, are now undergoing significant change. This could transform not only how we travel, but also our lifestyles, and even societies. Imagining visions of the future can help us prepare for them.

It is not only the giants of the tech world that realise this. Did you see [Ford's Superbowl ad](#)? The car company is promoting a vision of future mobility where it would sell far more than just cars – perhaps shifting towards mobility as a service. It seems that car

manufacturers will have to offer different models of ownership, operation and efficiency to stay in the transport game.

Transport planners will have to change tactics too. Cost benefit analyses for infrastructure investment currently calculates 60 years into the future - but technology is changing so quickly that making predictions for 2035 is challenging enough. Transport appraisal has never been much good at distributional analysis – considering how investment choices impact upon different parts of society - but if we want to avoid the report's dystopian vision of a 'Digital Divide' then we need to correct that fault quickly. And more investment will also be needed in adaptable infrastructure, which avoids locking us into 60 years of technology or behaviour that will be obsolete in 20.

Much of the visioning buzz revolved around fully autonomous vehicles (AVs), which will probably be electric and shared as well. The report's 'Driving Ahead' scenario focused on this technology, and the UK Government is investing heavily to be a world leader in AV development. The Transport Systems Catapult [offers some thoughts](#) on this future, summarising the many benefits of going driver-less.

However, as the discussion ranged at the event, it is clear that it is not only the difficulty of transition that may threaten a driverless society. Land use planners face a capacity conundrum. If AVs result in much less parking adjacent to homes and commercial uses, then what should that land be used for instead? WSP|PB had a panellist at the event to discuss some of the [answers they've envisioned](#). But the vehicles themselves will still need to be off-road some of the time, for storage and maintenance. Where is that going to happen? How do streets need to be re-configured for picking up and dropping off instead of parking? If the reduced travel cost and additional productive time offered by AVs attract more use than the additional road capacity their efficient movement frees up, is the answer to build more roads?

The RAND report specifically ignores the need for new infrastructure. But putting this aside, all their scenarios require more electricity and ICT infrastructure, built to be as resilient as possible in the face of frequent severe weather and other disruptions.

Yet it is not all doom and gloom. Freight drivers may not be out of a job if the complicated work at either end of the journey becomes ever more involved with shared loading and consolidated deliveries. Children may be able to play on the streets again as space is freed from parking and AVs are trusted with their safety. And if policy makers, planners and transport practitioners are proactive about standards, regulations, taxation and investment, then we can push the future to better resemble the RAND report's more utopian 'Live Local' vision, where road user charging replaces fuel duty and mobility is not only a service, but an equitable one.

[Download Charlene's presentation here](#)

[Read this blog post on Hannah's website](#)

Below: the three scenarios from the RAND report



Driving Ahead: A scenario where gross domestic product (GDP) and per capita travel have grown at rates higher than anticipated. Stimulating growth in both is the rise of autonomous vehicles (AVs), which are changing the face of not only transport, but also healthcare and retail. Many of these are shared vehicles, reducing costs for those who no longer have to own cars. The ease of use has led to growth in vehicle travel and congestion, as being stuck in traffic no longer means being unproductive. As the population has grown, the large proportion of older people who live on their own have greater flexibility to travel, especially for medical visits, and the freight and retail sectors make heavy use of AVs for both long-haul freight as well as delivery to customers.



Live Local: This scenario is distinguished by more use of digital substitution for travel and lower per capita travel. The most advanced technologies developed by 2035 are more powerful ICT, user apps and the Internet of Things. They have led to some profound changes in travel demand, because their ease of use has led to far greater use of telepresence. At the same time there has been an evolution in environmental attitudes, with a robust 'Live Local' movement that frowns on excess travel, as well as greater decentralisation of both population and employment away from London. Two other factors have contributed to the decline in per capita travel: first, AVs have not been widely adopted by the public, and second, road pricing has become sophisticated and effective.



Digital Divide: In this scenario, the economy and the overall population are growing at slower-than-anticipated rates. Income inequality is increasing and, while advanced technologies have been commercialised, many remain financially out of reach for much of the population. Lower GDP growth combined with increased travel costs has led to lower levels of travel per capita. Advanced ICT has contributed to businesses moving away from London, which has remained very expensive. AVs and 3D printing are used fairly extensively in the freight sector, with warehouses around the country serving as devolved 3D printing locations. An extensive peer-to-peer and sharing-based economy has developed, because many people cannot afford to buy everything new.

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