

Congestion, Capacity, Carbon

Andrew Adonis, launch of Interim National Infrastructure Assessment

Birmingham, 13 October 2017

Can I first thank Birmingham City University and Andy Street, the Mayor of the West Midlands, for hosting us this afternoon. I also thank my fellow Commissioners and staff of the National Infrastructure Commission who have done a magnificent job over the past two years. The Commission's chief executive Phil Graham, and chief economist James Richardson, lead a brilliant team who are the very best of modern public service.

This venue overlooks what in nine years' time will be Birmingham Curzon Street station, terminus for High Speed 2, 48 minutes from London Euston and half an hour from Manchester, Liverpool and Leeds.

It is precisely seven and a half years since Sadiq and I set out the plans for HS2 to Parliament. Three governments later, the legislation for HS2 from

London to Birmingham is enacted, the plans for the route north from Birmingham to Manchester and Leeds are before Parliament, HS2 Ltd has a thousand staff and a headquarters a few hundred yards from where we are meeting, and construction starts next year on the biggest infrastructure project in Europe.

The 330 miles of HS2 will change the face of Britain fundamentally and for the better. It will bring great conurbations close together and turn them into essentially one integrated economic area, transforming jobs and lives for the next generation in the north, the midlands and the south. It will play a decisive role in bringing our country together – genuinely one nation – in radically new ways.

When people say, we can't do big infrastructure in Britain; that it all gets stuck in Parliament or in planning, or is undermined by NIMBYs, HS2 is the standing refutation. Even in China, they don't do things better. As Transport Secretary I visited Beijing to study their high speed rail revolution. Their Transport Minister said to me: 'Lord Adonis, we will build HS2 at half the price of the Germans.' I said, thank you very much, but I think

we may be able to build it ourselves. I'm sorry to report that he is now in jail for corruption. A few vice-chancellors apparently want me to go the same way. But we won't go there.

There is a proposal that the HS2 Birmingham Interchange station – the next stop from Curzon Street, by Birmingham Airport, the National Exhibition Centre and the existing Birmingham International station – should be named UK Central. I think that's an idea well worth Andy Street considering. It is the reason why we are here today. Birmingham is not only England's second largest city; it is in the centre of the country and with HS2 it will be the junction between London and the two branches of HS2 going north to Manchester and Leeds.

Nothing symbolises and advances the renaissance of our cities and city regions more than the advent of England's new generation of great city mayors. That's why we are launching the interim national infrastructure plan with the collective of mayors - the collective noun for mayors being, I'm advised, a 'can-do' of mayors, as opposed to a 'can't-do' of no, we won't go there either.

I am delighted that we have here today almost the full ‘can-do’ collective of metro mayors - Andy Street, Andy Burnham, Sadiq Khan, Tim Boles and James Palmer.

When Joseph Chamberlain, in many ways the creator of this city, was sent here from London at the age of 18 in 1854 to work in his uncle’s screwmaking business, it was No. 25 Highbury Place that he left. He loved Highbury so much that he built a mansion here called Highbury. He would therefore have been an avid Arsenal supporter if alive today; or maybe not. But he would certainly have had an infrastructure plan for the West Midlands. Andy Street, in the image of Joe Chamberlain, is working on one and the NIC stands ready to help as we do with all the mayoral infrastructure plans.

A strong relationship between national and city-regional planning is essential to set priorities, organise funding, secure consents, and get things done; so we have great work to do together. I am keen that we progress top priority infrastructure projects in tandem: we need HS2 to proceed alongside HS3 linking the northern cities, and

Crossrail 2 which serves Euston, the terminus for HS2, and the Midlands Hub which builds out from UK Central to transform connections between the towns and cities of the West and East Midlands. There are also key projects in the other cities and regions, and Scotland and Wales, and these need to be progressed in tandem too.

Today's interim national infrastructure plan commits the NIC to seeking to advance top priority projects in all the regions and nations of the UK, and to try as best we can to plan them together and join them up, learning from each other; and we pledge to work closely with you, and with Ministers, regulators and Whitehall departments, to help make them happen.

The plan focuses on the 'three Cs' – congestion, capacity, and carbon and air pollution - as the three principal infrastructure challenges we face in this and the next generation.

Let me take congestion and capacity together.

There's a lot more we can do to use infrastructure better, and apply new technology, as well as building

new things. Let me emphasise this: new infrastructure is no more the complete answer to congestion than new hospitals are the complete answer to health: we need to take better care of what we have already, as well as building anew.

For example, water metering can reduce water consumption by nearly a fifth. Digital signalling and automatic train operation now enables the Victoria Line to operate 36 trains an hour, the most intensive metro operation in the world. Air traffic modernisation and larger planes enable airports to carry far more passengers. ‘Smart’ metering and demand management could cut the requirement for new electricity generating capacity by up to £8 billion a year by 2030. If we get the infrastructure right to allow as much charging as possible to be done off-peak, electric cars and other vehicles could be introduced nationwide without vast increases electricity generating capacity, and this needs to be done.

One of our Commissioners, Demis Hassabis, runs the path-breaking artificial intelligence company Deep Mind. Deep Mind’s work applying AI to the complex task of optimising cooling interventions in

data centres is saving 40% - 40% - in electricity requirements. These data centres are huge: about 3% of total global energy consumption goes on them, largely on cooling. Just think what that could mean as we apply AI and digital technology across our daily lives and infrastructure. We are only in the foothills.

But while new technology and congestion management are essential, extra, modern infrastructure is also required. The UK is far behind other countries in its 4G mobile and fibre-for-broadband coverage. We need a plan – and action – to sort out 4G become a world leader in 5G and ultrafast broadband. Our national 4G coverage is frankly deplorable; and with internet of things connections set to increase tenfold over the next decade, we can't afford to have inadequate ultra-fast broadband either.

60% of the UK's power stations will have to close by 2030 and new capacity is required to replace them. Extra capacity is required to overcome bottlenecks on railways, motorways and inter-urban roads, particularly to and from our major ports.

We need to invest more in alternatives to the private car, including new and upgraded rail and metro systems, better facilities for cycling and walking, and improved bus networks. New technology makes congestion and pollution charging for vehicles easier and cheaper to introduce in towns and cities where the impact of traffic is increasingly unbearable; and alongside radical improvements in public transport, I urge mayors and council leaders to consider this and to learn, for example, from Nottingham, with its workplace parking levy which helped fund its new tram system, as well as London with its congestion charge and cycle superhighways.

Serious congestion is also being exacerbated by the delay in the planning of new national airport capacity. I know there are differing and strongly-held views on this, but surely, 13 years after a definite statement of state policy for the construction of a third runway at the UK's principal hub airport at Heathrow, the time for debate without end is over and the time for decision and action has arrived. All regions of the UK rely on Heathrow for national and international connectivity for passenger and high value freight services.

Britain lives or dies by global trade, and I suggest that the ‘Heathrow full’ sign needs to be taken down as fast as possible. The one thing Britain can’t be after Brexit is closed for business.

Then there is the greatest infrastructure capacity crisis of all: the shortage of good quality, affordable housing in much of the country. A key priority of the Commission is the planning of economic infrastructure – especially transport – to boost housing growth in places where jobs and quality of life are best served and promoted.

In dealing with these infrastructure challenges, Mayors, local authorities, Ministers and Parliament have vital roles to play. But let me emphasise the role of regulators too, whose importance is critical and who need to develop robust infrastructure plans for their sectors. Britain’s digital infrastructure is mainly the responsibility of Ofcom, the telecommunications regulator; and the investment required to deal with our digital shortcomings lies almost entirely with the private sector subject to requirements laid down by Ofcom. I will be encouraging Ofcom to be bold in tackling the digital challenges – and shortages – we face, and we will

certainly have more to say about this in the 2018 National Infrastructure Plan.

Good design must also be at the heart of tomorrow's infrastructure. As Sadie Morgan keeps telling us, and she is right, good design is not just about aesthetics: it is about problem-solving from the outset, making infrastructure human-scale and user-friendly. Joining up infrastructure is so important: try walking with heavy luggage from the trains to the Underground at Euston – 10 minutes, multiple stairs and escalators, and the real possibility that the tube platform will be closed because of congestion when you finally make it to the bowels of the earth.

That brings me to the third C, carbon and air quality.

Everything we do must enhance the environment: tackling air quality, protecting natural capital, reducing CO2 emissions, improving quality of life.

Big reductions are taking place in CO2 emissions from electricity generation and the cost of renewable energy is falling sharply. The cost of offshore wind has halved in the last two years alone, and this is a

huge industrial opportunity. Early conversion to electric vehicles will reduce CO2 emissions and air pollution dramatically. The challenge of cutting, and ultimately eradicating, CO2 emissions from domestic gas-fired heating is equally great. A balanced energy strategy is needed, which takes a credible view of policy on nuclear power, carbon capture and storage, and wind, tidal and solar power.

So ‘what next.’ Today’s interim plan sets out the ‘3 Cs’ and other issues for consultation. I and fellow commissioners will be on road, train and plane taking the debate around the country over the next six months. And we aim to publish the National Infrastructure Plan for consideration by Government, Parliament and the public next Summer. I look forward to working with you all as we do so.

A final word on the big picture. It is important we focus, constantly, on the kind of country we want to build for us, our children and grandchildren.

Aqueducts, viaducts, roads and public buildings were the glory of Rome and have inspired every

civilisation since. The Victorians are celebrated for their amazing public works: railways, bridges, parks, schools, hospitals, civic and parliamentary edifices – and don't forget London's sewers, built by Sir Joseph Bazalgette, ending the 'Great Stink' and cholera and vital to London becoming the capital of the world.

However, the Romans and the Victorians are remembered not only for their infrastructure, but for what they did with it, good and bad. Great national infrastructure is not an end in itself. It makes everything else possible.