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## **Second National Infrastructure Assessment: Call for Evidence**

England's Economic Heartland is the sub-national transport body for the region from Swindon across to Cambridgeshire and Northamptonshire to Hertfordshire, incorporating the Oxford – Cambridge Arc. In February 2021, EEH published the region's 30-year transport strategy, including in it an initial pipeline for infrastructure investment. Since then, EEH has been undertaking detailed analysis – both by mode and by area to shape and finalise an infrastructure proposition that form the basis for our infrastructure priorities going forward.

It is in the context of delivering the region's transport strategy that I welcome the opportunity to respond to the National Infrastructure Commission's call for evidence on the second national infrastructure assessment.

Please find our responses below.

### **Question 1: Do the nine challenges identified by the Commission cover the most pressing issues that economic infrastructure will face over the next 30 years? If not, what other challenges should the Commission consider?**

While EEH recognises the requirement to focus on connectivity challenges in and between large cities, however, in focusing on these areas, there is a real and concerning risk that the infrastructure requirements for towns, dispersed economic areas, and rural areas are missed. As the Commission's report, 'Infrastructure, towns and regeneration' itself identifies, improving connectivity in these areas is crucial for economic growth, levelling-up and reaching net zero.

The EEH region provides a good example of why consideration of towns and rural areas is important. The Heartland is home to 5.1 million people, around 9% of the total population of England, and in 2019 contributed £168 billion in GVA.

However, this economic success is not centred around a single city: indeed the region comprises a relatively low number of primary economic centres, a large number of small and medium sized market towns and large rural areas.

The region's largest urban centre – Northampton – accounts for just 4% of the region's population, and the top 15 most populated urban areas are home to just 41% of the population. Nearly 35% of Heartland residents live in small market towns (under 30,000 population) and their rural hinterlands, compared with 23% in England and Wales.

This results in a diverse number of connectivity challenges which must be addressed and which would be missed if the focus was merely on larger cities.

The Heartland accounts for approximately 10% of the UK's carbon emissions from surface transport. Emissions per capita are 30% higher than the UK average (2005-2020), and are growing faster, too. Across the Heartland people are more likely to travel longer distances to work, more likely to do this by car, and more likely to own multiple vehicles, than the national average.

Cutting emissions in the Heartland is therefore critical to supporting the government's target of net zero no later than 2050, but this can only be achieved with investment in infrastructure which reflects the polycentric nature of the region and addresses challenges such as rural connectivity. In this regard, first mile, last mile connectivity to major transport hubs must in itself be considered a strategic priority.

Addressing infrastructure requirements outside of the city regions will also contribute to economic growth and levelling-up (the most deprived local authority area in the Heartland is Fenland – a predominantly rural district).

On the subject of levelling up, our headline economic success must not mask the daily struggles faced by a large proportion of Heartland residents. Investment is needed to address the high levels of inequality and pockets of significant deprivation which exist. As the Levelling Up white paper acknowledges, 'pockets of affluence and deprivation may exist in the same district. Indeed, many of the worst areas of deprivation are found in the UK's most successful cities'. The Heartland illustrates this point well: thirteen of our towns and cities contain neighbourhoods amongst the 10% most deprived in the country. There are also significant variations in life chances within the same towns and cities. For example, the life expectancy of boys in the Northfield Brook estate in Oxford is 75.5, almost 15 years lower than their peers in Oxford North – just six miles away. Similarly, in the Harpur ward in Bedford, life expectancy at birth for males is 71.6 years: less than five miles away in the Oakley ward, it is 86.9 years.

EEH recently sponsored a research project by the University of Hertfordshire – [Transport for Counties](#) – which considered the issue of connectivity outside of cities.

**Question 2: What changes to funding policy help address the Commission's nine challenges and what evidence is there to support this?**

To have the best chance of enabling growth, investment should be planned as part of a long-term infrastructure strategy which complements the wider visions for individual places.

The regional transport strategy, supported by refreshed local transport plans, will provide the framework for the Heartland region. Together, these documents provide a clear plan for our response to delivering economic growth while reducing emissions from transport towards our net zero target.

At present, funding to deliver the region's transport priorities is piecemeal, requiring local authorities, supported by EEH, to continually bid into small funding pots that may or may not deliver some or all of the investment needed to achieve an identified outcome.

The challenge of local transport being funded in this way is well recognised by the National Infrastructure Commission. In September 2021 the NIC stated: “The multiple funding streams that exist today tend to be short term, ringfenced and often require rounds of competitive bidding. Central government needs to simplify these funding streams and provide those county councils and unitary authorities that are responsible for strategic transport planning with devolved five-year budgets for local transport. Failure to empower local authorities to deliver local infrastructure will lead the government to fail in its levelling up goals”.

The benefits of having certainty when it comes to investment in strategic infrastructure is already acknowledged by government with both Network Rail and National Highways operating within the framework of a five-year investment plan. Without the same level of certainty for local transport funding, a well-planned and integrated transport system is difficult to achieve.

It is on this basis, along with the benefits that certainty of investment brings to the ability to leverage further investment opportunities, that EEH continues to press for devolved long term budgets for local transport.

EEH also notes the recent work completed by the NIC which states that, in devising a long-term settlement, the total funding available for local transport in England outside London should be around £6 billion per year, around a 40% increase on 2019/20.

**Question 5: What are the main opportunities in terms of governance, policy, regulation and market mechanisms that may help solve any of the Commission’s nine challenges for the Next Assessment? What are the main barriers?**

We welcome recognition of the role played by sub-national transport bodies, as set out within the transport section of the baseline review.

STBs such as England’s Economic Heartland have established, comprehensive evidence bases and, in partnership with local areas and government have worked to set out priorities for investment in their regions.

STBs are ideally placed to work with government to support the place-based implementation of national policy, such as that outlined in the government’s transport decarbonisation plan. To an extent, they can also perform a similar role to the National Infrastructure Commission but at a regional level. It is therefore critical that their role is further embedded and strengthened within infrastructure governance.

**Question 6: In which of the Commission’s sectors (outside of digital) can digital services and technologies enabled by fixed and wireless communications networks deliver the biggest benefits and how much would this cost?**

EEH’s ‘Pathways to Decarbonisation’ modelling with the universities of Oxford and Southampton demonstrated the importance of digital infrastructure in improving the transport system and reaching net zero emissions by 2050.

Digital services are required to support a highly connected future, one that enables our transport system to provide better transport information to the user, better management of the transport network, and the rapid deployment of connected and autonomous vehicles.

Digital services also enable a step change in the provision of digital access and services to the home – supporting home working and a significant change in travel patterns.

Improved digital connectivity is critical for our transport system for a number of reasons, not least:

- It is necessary in enabling the widespread rollout of user centred apps and transport solutions, both of which are key components in encouraging greater use of public transport and active travel solutions

- It is fundamental in enabling the potential of connected vehicles to be realised, a key opportunity for harnessing the requirement to decarbonise as an economic development opportunity
- It is essential in enabling businesses to employ flexible/hybrid ways of working, which not only reduces the overall need to travel, but where there is a need to travel enables greater discretion as to the timing of that trip, both of which have benefits for our transport system as a whole.

**Question 7: What barriers exist that are preventing the widescale adoption and application of these new digital services and technologies to deliver better infrastructure services? And how might they be addressed?**

EEH has worked with the Satellite Applications Catapult to develop the strategic case for achieving ubiquitous digital connectivity (UDC) in our region. This incorporates both fixed (e.g. fibre) and mobile (e.g. cell-phone) infrastructure and would be powered by a combination of ground-based and satellite networks. It would create new opportunities for a modern-day transport policy that meets the needs of a healthy and vibrant society that is also economically active and successful.

Satellite Applications Catapult's report suggested that until high quality digital connectivity is available to all, there is a limit to the impact of digital technologies and the user-centric services that they enable.

This is particularly true of rural areas, where current solutions such as fibre links are problematic, but where dependency on private cars is highest and journey times longest. This is where satellite-based communications solutions really come into their own, since coverage is universally independent of population density.

By eliminating the need for expensive physical communications networks such as fibre, all areas of the country can enjoy access to comparable digital connectivity, supporting the levelling up agenda and enabling new services to be rolled out without having to worry about contingency solutions for "have not" areas.

**Question 16: What evidence is there of the effectiveness in reducing congestion of different approaches to demand management used in cities around the world, including, but not limited to, congestion charging, and what are the different approaches used to build public consensus for such measures?**

Our 'Pathways to Decarbonisation' work highlights the need for demand management/demand reduction policy and programmes in order to achieve net-zero carbon from surface transport by 2050.

Without a reduction in trip rates and mode shift, it is clear that the legally binding 2050 carbon targets will not be met and network congestion and journey times will increase significantly. The result of this will be significant impacts on our economic output and quality of life for residents.

EEH is not explicit in its preferred pathway to better managing congestion and has been clear that any proposal to bring forward road pricing would need to take place at the national level in order to ensure equity and consistency. We have some local authorities for which this would not be a preferred approach. A small number of EEH constituent authorities are considering the need for complementary demand management measures locally, this could include: city-centre access restrictions, workplace parking levies, low traffic neighbourhoods, dynamic parking charges and emission-based congestion zones.

In considering options, EEH's Pathways to Decarbonisation modelling assessed the impact of demand management utilised road pricing (elasticity models). The outcome of the work



showed that whilst trip rates fell as a result of the intervention, there remained an overall increase in trip numbers as a result of population growth in our region. As a result, it is a clear that managing demand on the highway network is just one of several tools/policies that need to be combined in order to achieve net-zero, most notably in addition: an improved public transport system and an active behaviour change programme to support it.

With a few notable exceptions, we have seen significant reductions in the extent of traditional bus routes particularly those serving more rural and less densely populated areas: a reflection of how the business model used to deliver such services is long overdue. On the rail network, the growing and continued emergence of more flexible/hybrid ways of working is changing the nature of demand for services.

Whilst a smoothing of demand across the day may be helpful in terms of better asset management and an easing of over-crowding, there will be longer term implications for the business model for rail, particularly those areas where commuter revenues have previously been dominant. As we look to meet the requirement to achieve net zero carbon emissions no later than 2050 so it becomes ever more important for a more fundamental review of the way in which investment in transport infrastructure and services is paid for.

**Question 17: What are the barriers to a decision-making framework on interurban transport that reflects a balanced approach across different transport modes?**

Current barriers at a national level include departmental and modally-specific silos. At the heart of this conundrum is the national approach to infrastructure assessment. At present, it is the same individual organisation, or government department that 'owns' both the problem and the solution to a connectivity issue on any given mode.

In contrast, sub-national transport bodies offer a model to overcome fragmented decision-making. Through working with both constituent local authorities and government, STBs understand the needs of our local places, but are still able to work at a scale which ensures a strategic approach. Our approach to infrastructure prioritisation embraces all modes (and also considers digital and wider infrastructure), focused on securing the best outcomes for our residents, businesses and environment at a regional level.

Yours sincerely

**Richard Wenham**  
**Chair**  
**England's Economic Heartland**