

Introduction by Professor Sadie Morgan

HS2 is at a significant crossroads. In August, the government commissioned an independent review of the project. Led by Douglas Oakervee, the review will consider HS2's benefits and impacts, affordability and efficiency, deliverability, scope and phasing - including its relationship with Northern Powerhouse Rail.

In September the HS2 Ltd chairman, Allan Cook, published his stocktake - a look at the current status of the project. This report made it clear that HS2 remains the right strategic answer to join up Britain more effectively to meet the transport needs of the 21st century. As well as contributing to growth and regeneration ambitions, HS2 is also an integral part of the plans of Transport for Northern Powerhouse Rail (NPR) and Midlands Connect.

While the recommendations of the 'Oakervee Review' and the subsequent decisions of the newly elected government are unknown, it is clear that the nation is reflecting on the value of HS2 more than ever.

The 'value' of HS2

This context set the agenda of this year's HS2 Independent Design Panel annual meeting, focusing on 'value' with the theme of delivering 'More Than a Railway'. The meeting took place on 28 November, and was attended by panel members, key HS2 Ltd staff, design teams, and a representative of the Department for Transport.

Value is at the heart of the panel's guidance in its role as an independent critical friend to HS2 Ltd. This year the annual meeting provided an opportunity for reflection on some of the successes of the project to date, and how it may evolve in the new year. A number of case studies were presented, giving an insight into how different aspects of HS2, are contributing value that goes beyond its core function as a new railway. This chair's report summarises some of the areas of work discussed at the meeting.

Sustainability

HS2 Ltd has set itself an ambition to create the most sustainable high speed railway in the world. The panel is hugely supportive of this, and has been tasked with championing sustainability, as part of its broader remit on design. The guidance and tools developed by the HS2 Ltd sustainability team provide a strong basis for this.



HS2 won a National Air Quality Award for its work in setting new standards for air quality mitigation during construction. HS2 Ltd and Arup. Photo © AirQualityNews

However, there is a need for more evidence of how sustainability is driving design decisions across HS2. This will be integral to delivering 'More than a Railway' with environmental benefits going hand in hand with transport improvements.

The UK has set itself a target of achieving net zero carbon emissions by 2050. The role HS2 Ltd can play in meeting this target should be clearly communicated. Through HS2, the government is investing in a series of transformative transport hubs that will move people from cars to rail. This is essential in the context of a groundswell of public opinion - with many feeling that current targets of limiting global temperature increases to 1.5 celsius should be treated as a bare minimum.

Following the Oakervee Review, there will be an opportunity for HS2 Ltd to demonstrate its value as part of the government's response to the climate change emergency. This will require commitment by all involved, from board level to those working on site. The Design Panel offers its support in ensuring sustainability is placed front and centre of everything HS2 Ltd does.

Urban and rural integration

The Design Panel has consistently championed the importance of taking a place-based approach to the design of HS2. This includes the role that urban design thinking could play in the design of HS2 as it passes through places along the route, as well as around stations. This approach has potential to inform the design of structures, and also to identify regeneration opportunities.

The emerging work now being produced by HS2 Ltd, such as the 'HS2 Urban Design, Urban Integration and Legacy Approach' document, and the 'Urban Leeds Integration Study' are both excellent pieces of work and are central to unlocking the potential value of HS2.

The panel has also welcomed the 'HS2 Green Corridor' concept. This offers a vision for the landscape along the line of route, including enhancements that HS2 can deliver or enable beyond the 'red line'. There are some positive stories coming out of the initial stages of this concept, ranging from funding being made available to small scale volunteer led projects, to larger scale landscape interventions such as the HS2 Woodland Fund.



Wendover Woods Forest Centre which received a £450k grant from the HS2's Community and Environment Fund. Photo: © Jim Stephenson / Forestry England

The panel urges HS2 Ltd to embed 'place-based' thinking across the organisation and its decision making processes. This should include the exploration of commercialisation opportunities to ensure they deliver maximum value in return for

public investment in HS2. Collaborative working with stakeholders and local communities will be essential as part of this process. There has rarely been a greater opportunity for infrastructure investment to contribute so significantly to our urban and rural environments.

Innovation

The panel has been exposed to some of the innovative work being undertaken by HS2 Ltd. For example, it has been impressed by the work of the HS2 Customer Experience team who are demonstrating the 'art of the possible' through work such as the rolling stock interior concept, utilising tools such as virtual reality to present an exciting vision of what travel on HS2 could be like.

From advances in managing noise emissions, to the way the supply chain is procured and incentivised - HS2 Ltd must be bold and wield the power that such a large scale project has to drive innovation. This will be critical to ensuring HS2 exceeds current expectations of rail travel, and successfully addresses some of the challenges it faces, such as minimising noise without excessive use of noise barriers detrimental to the landscape.

Looking ahead

HS2 is without doubt the most complex and ambitious single infrastructure project the UK has ever undertaken. The range of topics and discussions at the annual meeting demonstrated the fantastic opportunity it presents.

The value that HS2 can create, in its broadest sense, needs to be part of the culture of its delivery organisation – embedded in the language it uses, decisions making, conversations with communities, and what it empowers the supply chain to deliver. While there are positive examples where HS2 will deliver value, it is essential the project does not lose focus on enhancing:

"the lives of future generations of people in Britain by designing a transformational rail system that is admired around the world."
(HS2 Design Vision)



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