



HS2 Midlands Voices

November 2020

About High Speed Rail Group

High Speed Rail Group (HSRG) is committed to supporting the successful delivery of a world-class high speed rail network in Britain. Our members have helped deliver major infrastructure projects in the UK and around the world, including creating entirely new high speed networks and improving the UK's existing rail network. This gives us a unique insight into both the shortcomings of the current network and the transformative capacity, connectivity and carbon benefits that high speed rail brings. We support a national high speed rail network which includes the delivery of HS2, high speed rail's integration with the existing network and investment to maximise the released capacity benefits HS2 brings on and off route, along with other rail investments such as Northern Powerhouse Rail and Midlands Engine Rail.

Find out more at **www.rail-leaders.com**

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“HS2 will provide a new rail spine for Britain, improving connections and increasing capacity on existing lines for both passenger rail and freight services. The project will be critical in helping the country reach net zero by addressing greenhouse gas emissions from transport, which are now greater than any other sector.”

Executive Summary

With agreement that the country needs to 'build back better' from the COVID-19 pandemic, green infrastructure has a significant role to play in delivering jobs, economic growth, 'levelling up' and addressing carbon emissions. High Speed 2 (HS2) is not just a 'shovel ready' infrastructure project that can help deliver these goals in the long term, but one that is already underway and as such its benefits can be felt in the here and now as well as ahead.

HS2 creates opportunity across the country, and the Midlands in particular stands to gain significantly. This report, the latest in High Speed Rail Group's (HSRG) *Voices* series, examines the benefits, opportunities and economic future of the Midlands in the context of high speed rail with contributions drawn from business, politics and academia. Our writers also outline the steps that need to be taken to maximise and realise these benefits.

2020 has been a critical year for HS2. Following the Oakervee Review, in February the Government decided to continue to move ahead with the project. This was followed in April by 'Notice to Proceed' and in September the Prime Minister formally launched the start of the main construction works for Phase 1 of the programme at the site of the new Birmingham Interchange station in Solihull.

HS2 will provide a new rail spine for Britain, improving connections and increasing capacity on existing lines for both passenger rail and freight services. The project will be critical in helping the country reach net zero by addressing greenhouse gas emissions from transport, which are now greater than any other sector. HS2 will create a permanent, beneficial green change in the way we travel. Whilst it is true that COVID-19 has placed restrictions and curtailment on travel including rail, demand will return. As a recent HSRG and Rail Delivery Group report highlighted, since 1994 rail demand has more than doubled, whilst historically it has been shown to recover following pandemics. HS2 is preparing the country for a green, safe way to travel, enabling freight to move off roads and passengers out of cars, also providing an alternative to flying - particularly important if we are to reduce emissions in longer distance leisure travel.

As an economic programme, HS2 will help to reset the country's economic geography and enable areas including the Midlands to truly 'level up'. More critical than ever, the project will have significant multiplier effects, providing jobs and spurring investment.



HS2's construction will be essential to other critical railway infrastructure including Midlands Engine Rail (MER). As a £3.5 billion investment programme, MER is made up of seven projects spanning the East and West Midlands, with up to 60 locations benefitting from improved east to west services by creating space for 736 more passenger trains on the network each day. These plans from Midlands Connect link to HS2 and include two compatible services that could directly link Nottingham and Leicester city centres to the new high speed network. The Midlands Rail Hub, the flagship project within the programme, was awarded £20 million in the March 2020 Budget to develop the scheme to outline business case. Through HS2 and MER, the connectivity in Midlands will be transformed from north to south and east to west. The Integrated Rail Plan, the outcome of which is expected at the end of the year, will also explore how MER and Northern Powerhouse Rail (NPR) are integrated and delivered together to ensure the maximum benefits of these schemes are realised.

The West Midlands is the more advanced part of the HS2 route, with relevant parliamentary milestones already passed for the line from London to Birmingham, enabling works have already taken place and the main construction programme is now underway. The parliamentary consent for Phase 2a from Birmingham to Crewe is also well advanced and should be complete in the coming months, paving the way for an acceleration of this part of the scheme. The Eastern Leg, which includes the East Midlands and is part of Phase 2b of the project, is less progressed. The recent prioritisation of HS2's Western Leg into Manchester in the HS2 Phase 2b design refinement consultation has led to questions over the future of the eastern side of the project. Any curtailment would be contrary to the commitments the Government has given to date on the project and its impact on the levelling up agenda.

As this publication makes clear, the full 'Y shaped' network must be completed in full if we are to ensure the benefits of HS2 are shared equally across the Midlands and provide the new railway spine the country needs. The project makes a critical difference to the East Midlands, which will experience some of the scheme's biggest benefits. The East Midlands currently has the lowest transport spend per head of any region in the UK - HS2 not only brings transport benefits and connections, but also provides a huge uplift in growth and jobs.



Three major new stations serving the whole of the Midlands

The HS2 programme will see three major new stations in the Midlands take shape - Birmingham Curzon Street, Birmingham Interchange and the East Midlands Hub at Toton.

The development of **Birmingham Curzon Street** is vast and spans the regeneration of a 141 hectare area that will cover not only the station itself, but a £724 million investment programme in the surrounding area. It is the first brand new intercity terminus station built in Britain since the 19th century, with plans for the creation of 36,000 new jobs, 4,000 homes and 600,000 square metres of commercial development associated with the new station. Once complete, there will be nine trains per hour in each direction. Sustainable considerations will lie at the heart of the new station's design and it will be built to achieve 'BREEAM excellent' status.

Once complete, **Birmingham Interchange** will be one of the best connected places in the UK by rail, road and air. The station will be linked to the UK Central Hub of the NEC, Birmingham International Station and Birmingham Airport via an automated people mover carrying up to 2,100 passengers per hour in each direction. Through the design of the station and a developing masterplan, HS2 will play a role, along with bodies such as the Urban Growth Company (on behalf of Solihull Council) and West Midlands Combined Authority (WMCA), in creating a new growth area around the station. It is estimated that this will create an environment supporting 70,000 jobs - existing employment safeguarded and creation of new jobs - up to 5,000 new homes and £6.2 billion GVA per annum added to the economy.

The **East Midlands Hub** at Toton will be one of the best served stations on the high speed rail network, with up to 14 high speed trains an hour. Midlands Connect has plans to connect the Hub to major centres in the region including Nottingham, Derby, Leicester and East Midlands Airport. The East Midlands HS2 Growth Strategy estimates that the arrival of HS2 could help provide 74,000 new jobs and add an extra £4bn a year to the regional economy, helping to support the area's ambitions to build on its existing strengths and be a globally competitive centre for hi-tech manufacturing and engineering and create opportunities for high value service sector jobs.



These stations bring the Midlands much closer to other parts of the country:

Birmingham Curzon Street to	Birmingham Interchange to	East Midlands Hub to
Manchester: 40 minutes (current time 88 minutes)	East Midlands Hub: 17 minutes	Birmingham Interchange: 17 minutes
London: 45 minutes (current time 82 minutes)	Manchester: 37 minutes (current time 106 minutes)	Birmingham Curzon Street: 20 minutes
Sheffield: 49 minutes (current time 63 minutes)	London: 38 minutes (current time 70 minutes)	Leeds: 27 minutes
Leeds: 49 minutes (current time 118 minutes)	Leeds: 46 minutes (current time 106 minutes)	York: 35 minutes
Newcastle: 118 minutes (current time 172 minutes)	Edinburgh: 186 minutes (current time 255 minutes)	London: 52 minutes
Edinburgh: 191 minutes (current time 237 minutes)	Glasgow: 186 minutes (current time 256 minutes)	Newcastle: 96 minutes

HS2 has already had a positive impact in the region in terms of investment, job opportunities and apprenticeships, with businesses across the Midlands winning contracts as part of the supply chain. These benefits are set to grow more rapidly as the scheme moves from enabling works to the main construction programme.

HS2 will be so much more than a railway. It will act as a catalyst for growth, a gateway to the rest of the country and part of a resurgent and stronger Midlands, as outlined. The West Midlands has already benefited significantly from the prospect of HS2's arrival - Deutsche Bank, HSBC and HSRG member Jacobs are examples of major businesses who have already relocated operations to Birmingham, while PwC has significantly expanded its presence there too. HS2 has created more jobs in the West Midlands than any other region outside of London. Looking ahead, the WMCA's HS2 Growth Strategy has shown that the major investment in regional connectivity has the potential to deliver £14bn of additional economic input, over 100,000 jobs and 2,000 apprenticeships.





Our Voices

The contributions contained within this collection come from a range of voices throughout the Midlands. Members of Parliament, local Government, business membership organisations, transport bodies and leading businesses are all represented. Our ‘voices’ coalesce around a number of key themes:

- Levelling up the Midlands regional economy, and boosting connections east to west and north to south
- Supporting the national economy in its recovery from COVID-19
- Radically changing the transport offer for passengers with more capacity, connections and faster services
- Increasing jobs and access to them, along with a skills legacy
- Environmental benefits including modal shift and air quality
- Design and construction innovation
- HS2 as an essential component in the delivery of Midlands Engine Rail.

Many of our contributors point to the positive relationship between infrastructure investment and levelling up. As Paul Faulkner, CEO of the Greater Birmingham Chambers of Commerce writes in *Why the West Midlands needs HS2 more than ever*, the scheme will be fundamental in ‘realising the Government’s long held ambition to move away from a reliance on the South to drive economic growth and bring prosperity to all four corners of the country.’ He makes clear that in doing so, it is not about taking investment away from London and the South East, but ensuring that the Midlands gets its fair share. This is echoed by the Leader of Nottinghamshire County Council and HS2 East Co-Chair Cllr Kay Cutts: ‘We are not in competition with other cities’ she says in *East must meet West, and North and South*, ‘I do not begrudge the investment in the South, but I do resent not having equivalent investment in the East.’ Birmingham Hodge Hill MP Liam Byrne highlights the ‘critical’ role HS2 will play in rebalancing Britain’s economy. ‘We have one of the most centralised states in the world and we have very stubborn imbalances in regional growth, regional productivity, regional wealth and we’re not going to be able to rebalance our country until we get in place significant transport infrastructure like HS2.’



The role that HS2 will play in supporting the national economy in its recovery from COVID-19 provides a clear focus. Cllr Ian Courts, Leader of Solihull Council and portfolio lead for HS2 on the WMCA, writes in *Regaining the growth momentum* that 'HS2 unlocks the enormous strengths of our economy, maximising opportunities across the nation, which is why HS2 is central to the UK's post-COVID-19 recovery.' Paul Faulkner points to research from the Greater Birmingham Chambers of Commerce, which shows that local businesses have experienced drastic falls in domestic and international demand as a result of the virus, with business confidence at an all-time low. HS2 can address this. In addition to job creation, skills and supply opportunities, HS2, says Faulkner, 'will provide a much needed shot in the arm to business confidence and remind the world that the West Midlands is open for business.' For Liam Byrne, this means looking to speed up the delivery of HS2 to ensure that the economy has the significant 'capital kickstart' it needs to take on job losses resulting from the virus.

Radically changing the transport offer available to residents of the Midlands is a central theme. Cllr Courts writes that 'our region is at the strategic heart of the HS2 network.' For the East Midlands, HS2 has a significant role. Transport spend per head in the area is lower than any other region of the UK, with nearly '14% of the Eastern Leg's working population in transport poverty' says East Midlands Chamber's Scott Knowles, putting jobs out of reach and prohibiting social mobility. Productivity rates in the East Midlands are 23% below the national average, with unreliable and overcrowded trains cutting communities off from good transport links – a disparity that only a project the scale of HS2 can address. HS2 in turn plays a role in the East Midlands economy bouncing back and ensuring that the whole of the Midlands is firing on all cylinders.

This growth potential closely connects to wider job creation opportunities, and the importance of securing HS2's skills legacy. Our supply chain 'voices' make clear the role HS2's construction is playing in ensuring the workforce has the skills required to build the infrastructure of the future. In *The new building blocks for construction - delivering the enabling works for HS2 in the West Midlands*, Simon Russell from LM, a joint venture between Laing O'Rourke and J. Murphy, says that 'young people looking for a stimulating and hi-tech career that could potentially take them across the world, can achieve all of this in the modern construction sector.' SYSTRA's Andy Duggins points to the role his company has played in hiring, coaching and mentoring high speed rail apprentices, with the specialist training provided by organisations like the National College for Advanced



Transport & Infrastructure (which has a campus in Birmingham) ‘giving businesses like mine a tangible incentive to invest in new talent.’ it is echoed by Paddy Patterson at EKFB joint venture, who speaks to the importance of ensuring diversity in recruitment and ‘looking at how a potentially more diverse talent pool can benefit us...attract[ing] new people to the industry from other sectors.’

Innovation is at the heart of the skills pipeline. Both Cllr Cutts and Scott Knowles point to the Innovation Campus that will be developed at the East Midlands Hub in Toton, which will ‘support the creation of new technology, where connections to the rest of the country – and indeed the world – will be vital.’ Birmingham Centre for Railway Research and Education’s (BCRRE) Jenny Illingsworth points to the opportunity for the institution, run out of the University of Birmingham, ‘to collaborate with experts, mull over ideas and to access specialist development, simulation and testing equipment’. She also points to programmes such as the Digi-Rail project, which supports business and technical development for SMEs in the Greater Birmingham & Solihull, Coventry & Warwickshire and Black Country Local Enterprise Partnership regions.

The increasingly important environmental benefits associated with high speed rail are also raised by a number of our contributors. Liam Byrne writes of the importance of HS2 to the West Midlands’ net zero target. In the East Midlands, Scott Knowles emphasises the importance of the scheme in modal shift from car to rail, with almost three quarters of all journeys in the Eastern Leg currently made by car. In *‘Touching the ground lightly’ to design the sustainable and beautiful public infrastructure of the future*, Arup’s Andrew Lloyd and Kim Quazi speak to the trailblazing work of their team on the design for the Birmingham Interchange, which has been awarded BREEAM outstanding status in recognition of the groundbreaking approach that has gone into making the station design an exemplar of sustainable public infrastructure design. ‘To reach this milestone’ they say, ‘required the whole team to buy into sustainability as a mantra that ran through every design decision.’

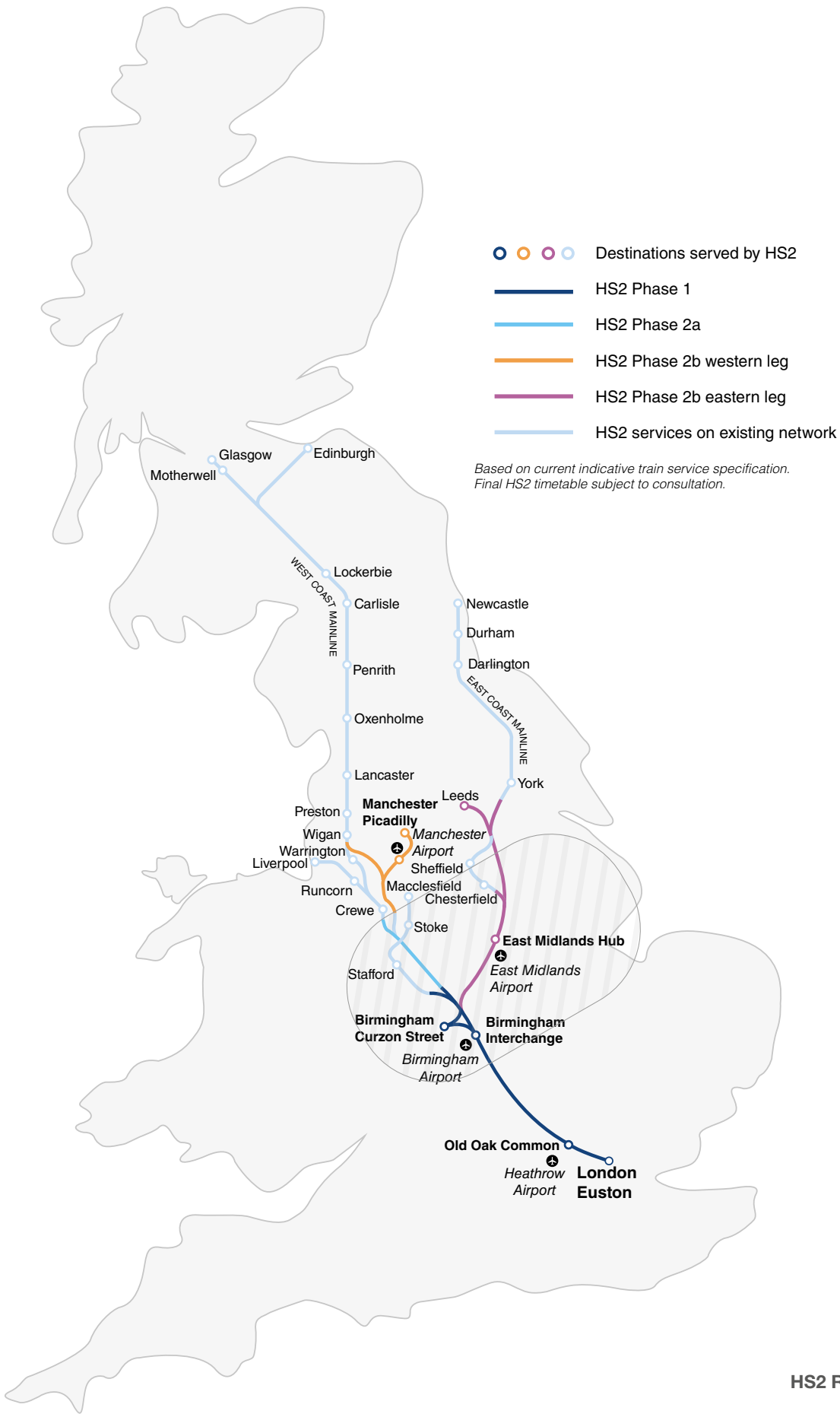
Sustainability and design and construction innovation can go hand in hand. Lloyd and Quazi describe how the central concept which dictated the design for the Birmingham Interchange was ‘touching the ground lightly’ - retaining and protecting the existing landscape and working within the site boundaries to maximise sustainability. They say that the Interchange ‘represents a once in a lifetime opportunity to drive innovation and



normalise' sustainable practices in the infrastructure industry. This will be a central tenet of the design job ahead, with Curzon Street also aiming for BREEAM status. Moving to construction, Simon Russell speaks to the innovative construction techniques employed by the LM joint venture, using 'digital design and offsite manufacturing capability' which has 'enabled the team to propose and deliver an innovative solution...that has reduced the time required on site, and more importantly for the public, kept the need for road closures to an absolute minimum and reduced the site traffic during construction.' Whilst Urban Growth Company Chairman Nick Brown discusses the 'innovative blueprint' for infrastructure funding and delivery that has been developed for The UK Central Hub at Solihull.

Finally, the essential relationship between HS2, and future regional infrastructure projects, most notably MER, is also made clear. As Maria Machancoses, Director of Midlands Connect, outlines in her article: 'Midlands Engine Rail integrates with the spine of HS2 and will improve the journeys of millions of people travelling across the region.' She points to Midlands Connect's evidence presented to the NIC as part of the Rail Needs Assessment as making 'clear that better integration will deliver benefits sooner, connect more communities, create more jobs and crucially, change more lives for the better.'

For too long, Britain has suffered from regional imbalances and poor productivity, and COVID-19 could only widen these differences. But what is clear from this publication is HS2 will play a significant role in levelling up and reducing these inequalities. The opportunity ahead as we enter into the 2020s and 2030s is to use HS2 to turn up the engine of the Midlands.



HS2 Route Map



Paul Faulkner,
CEO, Greater Birmingham Chambers
of Commerce

Paul took over as CEO of the Greater Birmingham Chambers of Commerce in June 2015, having previously been CEO of Nottingham Forest and Aston Villa. Since taking up his appointment the Chamber has seen significant growth in membership – now representing nearly 3,500 regional businesses – and strengthened its position as the leading independent support and voice for business in the area. Working closely with local, regional and national stakeholders, the Chamber also provides a range of international related services and support, including launching the Greater Birmingham Commonwealth Chamber in 2017 as the region gears up to host the Commonwealth Games in 2022. In 2018 the Chamber's growth and development was recognised when it was awarded the British Chambers Award for Excellence in Membership Service.

“We need HS2 more than ever - not just for the hundred thousand jobs it will create, not just for the thousands of apprenticeships and supply chain opportunities it will open up, but just as importantly its delivery will provide a much needed shot in the arm to business confidence and remind the world that the West Midlands is open for business.”

Why the West Midlands needs HS2 more than ever

Cast your mind back to the middle of April of this year and you will recall that Britain was entering the third week of a nationwide lockdown as the Government battled to overcome the most unprecedented crisis witnessed in a generation. Within this context, the long-term economic recovery prospects for the West Midlands were tinged with uncertainty as the fallout from COVID-19 continued to cast a deep and ominous shadow.

Yet within this period, the Government also made an announcement related to the technical provision of a large scale infrastructure project which helped to restore much needed confidence for the local business community. On 14th April, it was revealed that the Government had given HS2 ‘Notice to Proceed’ for the construction works amidst the ongoing coronavirus outbreak – in essence giving formal approval for the four main civils contractors to begin construction work on the largest infrastructure project in Europe.

As a business membership organisation that represents over three thousand firms across the region, the Greater Birmingham Chambers of Commerce have been long-standing supporters of HS2 since its inception. Back in 2016, our research revealed that 70% of businesses in the region felt that HS2 would be beneficial for the local economy and that support has endured over the years as the project was faced with numerous setbacks and in some cases, short sighted and myopic calls for it to be scrapped completely.

In the five years that I’ve been CEO of the Greater Birmingham Chamber, I’ve seen first hand the underlying resolve that companies in the region possess and the streak of pragmatism which characterises their approach to business. It was that clear-headed approach which meant they could understand and foresee the wider socio-economic

benefits that a project of HS2’s magnitude would bring to our region and beyond.

The economic case was clear – in the West Midlands alone, the project is expected to create over a 100,000 jobs and 2,000 much needed apprenticeships in a region which has been beset by issues related to low levels of productivity for a number of years. Local businesses could also see first hand the vast amount of investment in the region which had been predicated on the arrival of HS2 – the relocation of HSBC to Birmingham and the transformation of UK Central in Solihull perhaps the most pertinent examples.

Beyond the economics, businesses also recognised that wider benefits from HS2 would emerge as a result of increased network capacity, reduced waiting times, less cars on the road and more frequent services improving transport connectivity within the region. In particular, it was acknowledged that HS2 would play a fundamental part in realising the Government’s long held ambition to move away from a reliance on the South to drive economic growth and bring prosperity to all four corners of the country.

All of these arguments seemed to be swept aside last year when a number of Conservative politicians urged the newly anointed Prime Minister to conduct a review into the future of HS2. The reasons forwarded by detractors had been circling the project for a number of years. Spiralling costs and the destruction of England’s green and pleasant land were often held up as black marks against HS2 and Douglas Oakervee was given the unenviable task of overseeing a review which threatened the project’s very existence.

The day after the review was announced, Mr Oakervee’s office contacted the Chamber to ask us to convene key stakeholders from across the region to put forward their views on HS2. On the points related to the associated costs and the impact on the environment, it was made clear by various





business representatives at the meeting that we shouldn't forget that less than one ten thousandth of all woodland in the country would be impacted by HS2. Moreover, the released capacity that HS2 would bring would ultimately improve local services and reduce overall car usage – a key factor behind the dangerously high levels of air pollution which currently blight our society.

The issue of the rising cost of the project was also recognised and whilst there was a general agreement that delivering value for taxpayers money needed to be at the heart of a scheme of this size, it was also pointed out that by actually taking steps to upgrade a network reliant on creaking Victorian infrastructure, we would be making an investment which would benefit our country for the next century not just the next decade.

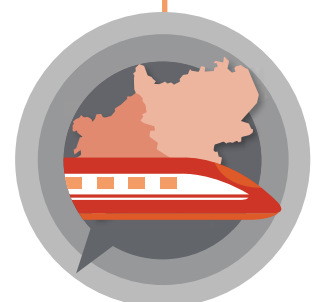
More importantly, the argument was consistently made around the degree to which the arrival of HS2 was central to the regeneration of parts of our region which had suffered from decades of underinvestment. Across the West Midlands, we have infrastructure investment plans in place worth billions that are all interlinked to the delivery of HS2 which we simply cannot afford to lose – the impact on our region would have been devastating.

During this period, I often met various Government officials to discuss the future of HS2 and what struck me was that many seemed to be paying lip service to the 'levelling up' mantra whilst questioning the need to invest in transport infrastructure across the UK as a whole. For many in Westminster, it seemed that upgrading transport networks was simply a binary choice to be made between the Midlands or the North, however, it's clear there is a practical

foundation which connects transport investment in both regions – notably, HS2 effectively dovetails the rationale behind Northern Powerhouse Rail – particularly as it will be using the new lines which will be built specifically for HS2.

Ultimately, the news delivered by Grant Shapps in February that HS2 would proceed in full brought a feeling of relief as stakeholders across the country had made their feelings perfectly clear to the Prime Minister and his senior advisors. As a Chamber, we could now look forward to helping local businesses secure access to the multitude of supply chain opportunities that would be linked to the delivery of Phase 1. But then we were struck by the most devastating health crisis we had experienced in over a century and the economy went into hibernation.

The devastating impact of COVID-19 on the economy is there for all to see. Our research has revealed that local businesses have experienced drastic falls in domestic and international demand, are facing severe cash flow shortages and business confidence is at an all time low. With employment rates expected to fall to a level not seen in 40 years, we need HS2 more than ever - not just for the 100,000 jobs it will create, not just for the thousands of apprenticeships and supply chain opportunities it will open up, but just as importantly its delivery will provide a much needed shot in the arm to business confidence and remind the world that the West Midlands is open for business. HS2 is an investment in Britain's future – not only will it help level up the country, but it will revolutionise the way we travel and play a vital role in reducing carbon emissions; all of which will help to create a more prosperous, united and healthier country. In such testing times, the radical importance of HS2 simply cannot be ignored.







Cllr Kay Cutts MBE,

Leader, Nottinghamshire County Council
and Co-leader, HS2 East

Kay is Leader of Nottinghamshire County Council, Chair of the East Midlands HS2 Executive Board and Toton Delivery Board, and an active member of the Midlands Engine.

Since resuming leadership of the Council in 2017, she has steered the development of the HS2 East Midlands Hub to include a revolutionary garden village and innovation campus.

Kay is also an advocate for Local Government reorganisation and devolution to the English regions – arguing that this will make local Government better, simpler, and save billions nationwide. With over 45 years' experience across all tiers of local Government, she is a strong advocate for Nottinghamshire and the East Midlands.

“We are an entrepreneurial people in the East Midlands, home to thousands of small businesses. We make planes, trains, and automobiles at Rolls Royce, Toyota and Bombardier, all of whom are based here and contribute an enormous amount to the wealth of the nation. It is now time to embrace the levelling up agenda and invest in the HS2 line.”

East must meet West, and North and South

There has been so little investment in the railways of the East Midlands for so many years. Indeed, we are still waiting for electrification of the Midland Main Line.

The cities of Nottingham, Derby, and Leicester are particularly badly served when it comes to connections to the UK's second city of Birmingham, as well as to Sheffield and Leeds. From Nottingham station it takes a good hour and twenty minutes to travel to Birmingham, which is only fifty miles away. To travel to Leeds, a large city with a population of over 700,000 in the heart of the North, it requires an equally byzantine journey.

Therefore, all the local leaders have come together irrespective of their political persuasion to speak with one voice to Government and demand proper investment in our railways across the Midlands and the North. We are not in competition with other cities, and we would welcome the investment in the western side through to Manchester and Liverpool. But we have complained for many years that we have all been left behind when it comes to connections in the country and investment, and that for too long the South and South East have had the lions' share. I do not begrudge the investment in the South, but I do resent not having equivalent investment in the East.

I have chaired the East Midlands HS2 Executive Board for the past two years. During that time, I have worked with my colleagues along the line, particularly those in Leicestershire, Derbyshire, and Leeds, and we have together developed a very strong offer around the proposed HS2 station at Toton. This includes cleaning up land used previously as railway sidings which is now no longer required, and the development of a 'garden village' which serves the station and the wider community.

Our plan is to have a railway station which serves as a hub to travel north, south, east, or west, with much improved road connections planned around the station itself. More importantly, we have taken the opportunity to develop an innovation campus at Toton working with the universities of Nottingham, Nottingham Trent and Derby. This campus will support the creation of new technology, where connections to the rest of the country – and indeed the world – will be vital.

We have been able to bring forward plans for a major new garden village with housing that is well-designed, well-built, well-insulated and well-connected. Families will be able to bring up children in an environment which allows them to play together in safety, have access to green spaces, and also be connected to the rest of the nation by railway and the world from nearby East Midlands Airport.

We are mindful that the environment is very important to our wellbeing. We plan to create a new country park, and to clean up the Erewash Canal and the River Erewash to make them more attractive to wildlife. This will allow us to develop a walk all the way through to the nearby Attenborough Nature Reserve, all of which adds to quality of life. This pleasant and attractive environment will be accessible to all without having to use your car, an attractive proposition for anyone considering living and working here.

Long Eaton, just over the border in Derbyshire, has for years suffered unduly with major congestion in the town centre. The low-level railway line and the through-traffic cause disruption to the town and frequent traffic jams. We have plans to address this through the creation of the new Toton Hub station, allowing free flow of travel over the Nottinghamshire-Derbyshire border.





Long Eaton has long been famous for the production of upholstered furniture, household names which are bought across the country and indeed the wider world, particularly in the United States. The connections that HS2 will bring will allow these historic industries to grow and develop at an accelerated pace, which is particularly important post-Brexit when manufacturing will become an important part of the national economy.

Colleagues in neighbouring Derbyshire have also been very active. As the line approaches the Derbyshire-Sheffield border, the town of Chesterfield has used the opportunity to create a business park and new roads into the town centre itself – with particular emphasis on the railway industry, its future, and the value which this can bring to the town.

It is very disappointing when I hear loud voices asking for HS2 to be cancelled. They perhaps haven't appreciated how little investment has come into the East Midlands over the last 50 years. Indeed, if you were to compare regional investment in transport, you would find that the East Midlands receives just £245 per head when compared with London which receives £1019, the West Midlands £412, and the North West £528. This is neither fair nor proportionate, and so the 'Y' shape of the line is particularly important to us – to cancel it would be a disaster.

The unique feature of the Eastern Leg is that it joins the East Coast Main Line, which is a good and fast route between London and Edinburgh. Connecting Birmingham, Chesterfield, and Leeds, through to York and the East Coast Mainline brings benefits that are greater than the sum of its parts.

Our request to the Government is this:

- **Deliver in Full:** The Eastern Leg of HS2 is critical to the long-term economic success of the East Midlands and UK plc and must be delivered in full. This must include the East Midlands Hub station at Toton (with provision for city centre HS2 services via a conventional compatible connection), HS2 connectivity for Chesterfield and Sheffield, the Infrastructure Maintenance Depot at Staveley and a fully upgraded HS2 Station in Leeds.
- **Deliver Early:** There are credible options for the incremental construction of the Eastern Leg of HS2 which would deliver wider network and local economic benefits much earlier than would otherwise be the case. These options should be developed further in close collaboration with regional and local stakeholders.
- **Invest Now:** Implement a '10 Year Plan' of investment that will improve local transport, support early development of key sites and prepare the way for HS2. This must include the full electrification of the Midland Main Line, removal of the low-level rail line in Long Eaton and delivery of the Phase 1 Package of the East Midlands Gateways Connectivity (Access to Toton) Study.

We are an entrepreneurial people in the East Midlands, home to thousands of small businesses. We make planes, trains, and automobiles at Rolls Royce, Toyota and Bombardier, all of whom are based here and contribute an enormous amount to the wealth of the nation.

It is now time to embrace the levelling up agenda and invest in the HS2 line.







Andrew Lloyd,
Director, Arup

Andrew is the Project Director for Arup's work on Interchange Station and has been responsible for all aspects of engineering design, project management and implementation of a wide range of small, medium and large infrastructure projects in connection with public, commercial and industrial developments. Notably, Andrew has also recently led the Arup multidisciplinary team engaged in the successful delivery of the West Midlands section of the HS2 Phase 1 Hybrid Bill and understands the importance of achieving the design vision while satisfying a balance between central Government and local stakeholder ambitions.



Kim Quazi,
Director, Arup

Kim leads Arup's Transport Architecture practice in the UK. He is a qualified architect with over 29 years' experience and has significant experience in brief development, client, stakeholder engagement and technical delivery; he has a deep interest in the design of aviation, transport buildings and urban realm infrastructure. In the rail sector, he is currently the Lead Architect for the new HS2 Interchange Station, the first rail station to achieve BREEAM Outstanding. His focus has been in the integration of rail infrastructure with multiple transport modes and high-quality urban realm.

“The Interchange represents a once in a lifetime opportunity to drive innovation and normalise sustainable, ‘touching the ground lightly’ practices in the industry – recalibrating construction, supply chains and mindsets.”

‘Touching the ground lightly’ to design the sustainable and beautiful public infrastructure of the future

Achieving BREEAM Outstanding status for the design of the HS2 Interchange station has been a huge achievement not only for the team at Arup, but the HS2 project more broadly. The sustainability award is expansive, covering a range of areas including process, health and wellbeing, and innovation. To reach this milestone required the whole team to buy into sustainability as a mantra that ran through every design decision – and given our team make 10, 20, 30, 40,000 over the life of a project – we had to be absolute in our commitment to these environmental goals.

When approaching the Interchange design, one of the enduring themes we sought to implement throughout the process was the concept of ‘touching the ground lightly.’ Put simply this means retaining and protecting the existing landscape by removing complexity and working within the site boundaries to maximise sustainability. In taking this approach, not only would carbon outputs be reduced, but the groundwork would be laid for a safer and more efficient build overall.

From the very beginning, it was important to determine a design that will stand the test of time. As such, a lot of work was done around proving resilience and durability, and ensuring material efficiency. Within this approach, we sought to integrate numerous features of sustainable design. Energy usage was key, as we looked to minimise solar gain by bringing as much natural light into the station as possible through a leaf-shaped design, also ventilating the station in a simple way, driven by opening doors as opposed to high level vents. Water has also been an important feature, with the roof designed to collect water through a trellis-like system which channels it for reuse. So too, timber glulam

beams were utilised in the design and allowed for simpler foundations, which in turn reduced embodied carbon. Ultimately, these decisions and others like them taken throughout the process sought to remove layers of complexity and make sure that simplicity lay at the heart of the station design.

To ensure the longevity of the building, it was also important to consider the infrastructure surrounding the station that will form the new Arden Cross development, maximising flexibility for future site use. Because as a critical mass forms, and the station becomes a destination in its own right, the site will evolve further still. For example, the original HS2 Hybrid Bill allowed for up to 7,500 surface level car parking spaces on site. The landowners don’t want to lose that space, but neither will they build out their whole development in the first phase of construction. So, we’ve developed plans that allow parts of the car park to change use over time, as a result of factors such as modal shift and increased station usage – especially when both north and south connections are running following the opening of HS2 Phases 1, 2a and 2b.

From the outset it was our intention to design a building for passengers and station inhabitants. It had to have clarity of use, perform in terms of quality, be safe and secure. One of the driving forces of HS2 has been to get people out of their cars to use the new railway as their first choice for long distance travel - so it’s been important to ensure the design is user friendly, attractive and comfortable through making all elements of the Interchange design seamless, intuitive and flowing. Stations are a rare building type in that they have an emotional content, providing a background to people’s lives through holidays and other significant journeys to see friends, loved ones, start new jobs. As such, the Interchange needed to represent the best kind of design that would sit appropriately within the fabric of people’s everyday lives.

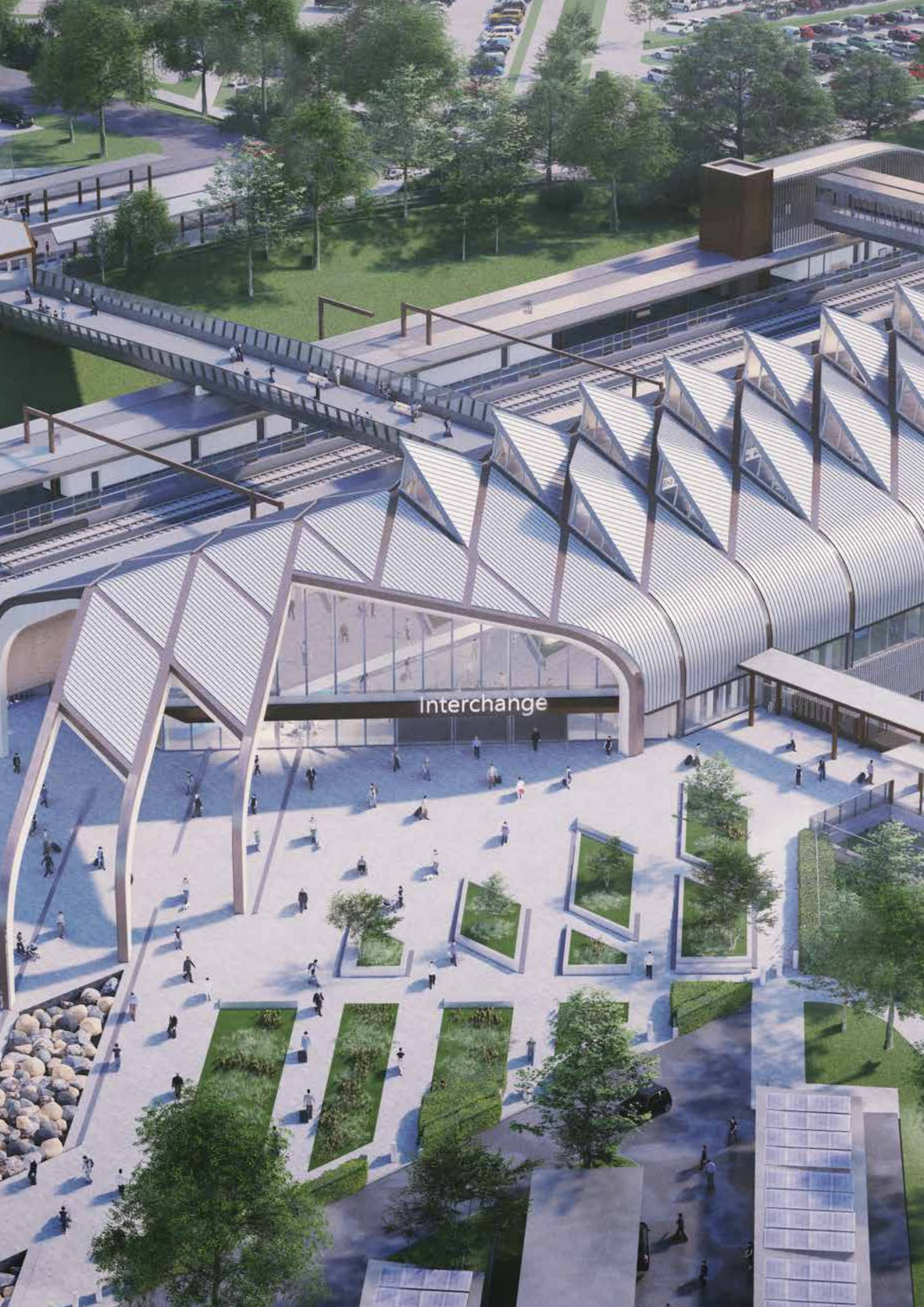




It goes without saying that relationships, whether with the client or your team, are central to such processes – in particular creating a collective sense of partnership. In doing so, we knew that we could achieve something truly outstanding, and there was a willingness and ambition which drove the whole project. We like to say that we inherited the attitude of the Team GB cycling team – we had a big target, and when heading towards it, it was all about securing marginal gains. There was a sense when you came into the office every day, you would deliver something just a little bit better. This was the key to taking the design to the next level and achieving the station's BREEAM Outstanding status.

The Interchange represents a once in a lifetime opportunity to drive innovation and normalise sustainable, 'touching the ground lightly' practices in the industry – recalibrating construction, supply chains and mindsets. Arup is a strong believer in the sustainable impact of the work that we do, and such a high profile project should be seen as leading the way on sustainable design practices, a yardstick for what we should be looking to deliver with all major infrastructure projects going forward. Through railways, the Victorians made this country and achieved huge social change by enabling access to better opportunities for people throughout the UK. With HS2 we have the opportunity to do the same, and can ensure that sustainability lies at the core of the new, green industrial revolution.





Interchange



Cllr Ian Courts, Leader, Solihull Metropolitan Borough Council and WMCA Portfolio Lead for Energy, Environment and HS2

Ian became a Solihull Councillor in 2003, Leader in 2019 and has had responsibility for economic development for many years, including the UK Central brand. A member of the West Midlands Combined Authority, he has responsibility for Environment, Energy and HS2; and is a Board Director at GBS LEP.

Ian studied law at Trinity Hall, Cambridge, joined the John Laing Group, initially as a solicitor, then went into business, development and management, until retirement in 2004, following 30 years' service. For several years Ian was a part-time lecturer / Visiting Fellow at Reading University and has particular interests in planning, climate change, environment and ecology.

“The impact that HS2 will have on the UK should not be understated. It is an investment in our nation’s infrastructure on a scale that no one alive has seen before. Once complete, HS2 will provide the backbone for an environmentally friendly mode of travel that will benefit Britain for more than a century.”

Regaining the growth momentum

At the start of the year, the Government announced its commitment to HS2, highlighting that delivering better, faster and more reliable transport connections is the way to close the opportunity gap across this country. Now as we look to deliver a recovery in response to the economic impact of COVID-19, the importance of HS2 has only increased.

The impact that HS2 will have on the UK should not be understated. It is an investment in our nation’s infrastructure on a scale that no one alive has seen before. Once complete, HS2 will provide the backbone for an environmentally friendly mode of travel that will benefit Britain for more than a century. But the improved intercity travel times are almost an ancillary benefit, it is the transformational impacts on local connectivity, investment, and jobs which make HS2 vital to the whole of the nation.

Investment in infrastructure enables the Government to directly address structural imbalances that hold back our regional economies. It is essential for building a better Britain. HS2 unlocks the enormous strengths of our economy, maximising opportunities across the nation, which is why HS2 is central to the UK’s post-COVID-19 recovery, and here in the West Midlands we are central to HS2.

Our region is at the strategic heart of the HS2 network, home to two new stations, the Rolling Stock Maintenance Depot and the Network Infrastructure Control Centre, our location helps establish the West Midlands at a global level, supporting new developments, new businesses, new high-skilled jobs and increased overseas investment.

Before the current crisis the West Midlands was the fastest-growing region outside London, since we created our first HS2 Growth Strategy five years ago we have seen our economic output increase by

25%. This translates to real benefits to our residents, resulting in more homes being built and more people in work. While the direct job creation from HS2 has yet to start in earnest, we have already seen a positive contribution to our economy, the confidence it provides business and investors, at home and abroad, has helped drive investment, adding to the region’s existing strengths, including world-leading automotive innovation and green technology to health and life sciences.

If we look to ensure a rapid recovery, it is critical that we quickly regain this growth momentum, to avoid a steep rise in unemployment and long-term economic scarring. As one of the fastest growing and most economically significant areas of the UK, the West Midlands will play a critical role in supporting an economic bounce back for the nation.

While the arrival of the first high speed service may be eight years away, HS2 is now an integral part of the region’s plans, for Government, local authorities and businesses. We now need to look to see how we can accelerate our plans to bring forward the transformational power it has to increase the pace and scale of development across the West Midlands, and ensure that we realise the social benefits that these will deliver. Not just in the future but now as an immediate response to COVID-19, HS2 will act as a catalyst to create new jobs not just in the construction industry and its supply chain but across an array of sectors that will support regional recovery.

Once complete, HS2 will make the country smaller, bringing the cities and economies of Manchester, Leeds and London within an hour of the West Midlands, creating new opportunities for people and businesses. However, it is the impact that will be delivered from the supporting infrastructure that will benefit our residents the most. Our HS2 Growth Strategy contains approximately £1.2 billion of transport connectivity investment to be delivered ahead of the arrival of HS2, providing massive improvements in intra-regional travel via new bus,



tram and rail routes, as well as the vast amount of capacity HS2 creates on local services. Improved connectivity will increase the region's productivity as it opens-up access to education, enlarges the jobs market and offers new leisure opportunities for residents, providing a vast range of wider economic benefits.

People arriving in the West Midlands will be welcomed at one of two new purpose-built high speed rail stations, Curzon Street Station in Birmingham, and Interchange in Solihull. We have ambitious plans for the areas around these stations, which will result in commercial development with hi-tech manufacturing and innovation facilities, including a world class Health & Innovation Campus, and the development of the Creative Content Hub and Studio UK - anchors to fuel high growth creative industries. Together our plans for wider development around the stations will deliver more than 70,000 jobs, more than 7,000 new homes and an economic uplift greater than £7 billion.

As the UK plans to rebuild the economy and deliver a better future, we are clear in the role that HS2 should play. The West Midlands has already seen the positive impact that HS2 will deliver, our economy has benefited from increased investor confidence, a step-change in the speed and scale of connectivity and development, we have seen more than 10,000 jobs created to date, with at least another 150,000 to come. We now look to the Government to speed up the delivery of HS2, to help us bring forward the benefits, to accelerate the ambitious development plans across the country and to recharge the national economy.







Rt Hon Liam Byrne, Member of Parliament for Birmingham Hodge Hill and Metro Mayor Candidate for the West Midlands

Liam is the Shadow Mayor for the West Midlands, MP for Birmingham Hodge Hill, Chair of the World Bank-IMF Global Parliamentary Network and Gwilym Gibbon Research Fellow at Nuffield College, Oxford.

A former Cabinet minister, Liam had a range of jobs in the last Labour Government at the Home Office, in 10 Downing Street where as Chancellor of the Duchy of Lancaster, he coordinated cross-government programmes to combat the 2008/9 financial crisis, and at the HM Treasury where, as Chief Secretary to the Treasury, he designed Labour's fiscal consolidation strategy. In Opposition, Liam served in a number of frontbench positions, chaired Labour's Policy Review, founded and chaired the All Party Parliamentary Group on Inclusive Growth, and served on the Council of Europe. He is running to be the Mayor of the West Midlands.

“We have one of the most centralised states in the world and we have very stubborn imbalances in regional growth, regional productivity, regional wealth. We’re not going to be able to rebalance our country until we get in place significant transport infrastructure like HS2. It’s critical to raising living standards in our region.”

Transforming opportunity across the West Midlands

What is your view of HS2 and what does it mean for the future direction of the West Midlands?

HS2 is probably the single most important piece of infrastructure we’re going to build in our country for the next 20 to 30 years. It is absolutely critical as it will begin to rebalance the economy. We have one of the most centralised states in the world and we have very stubborn imbalances in regional growth, regional productivity, regional wealth. We’re not going to be able to rebalance our country until we get in place significant transport infrastructure like HS2. It’s critical to raising living standards in our region.

Can you outline how the scheme is already shaping the future of the region?

We can already see significant inward investment coming into Birmingham and the wider West Midlands, and that is to be expected. But, I think that the pace of that inward investment is going to accelerate over the coming years despite the impact of COVID-19 that we are seeing now.

One of the reasons for that is something that I saw when Andrew Adonis [as Transport Secretary] presented the HS2 plans to Cabinet in 2009. Andrew told a powerful story about how a high speed network had always been envisaged by Churchill and British Governments after the Second World War. But the thing that struck me was the map of Birmingham International Airport, which through the connection to Crossrail, would basically bring the journey to Canary Wharf down to 65-70 mins. That for me was always the game changer. I’d seen what had happened in New York when Grand Central station had become about an hour to Stanford, Connecticut. You had the wholesale relocation of the back-office function of Wall Street into Connecticut,

and I’ve always argued that that is one of the most significant opportunities for us. Canary Wharf is one of the most significant areas of real estate in the world, and what we’re basically doing is connecting an economic cluster to that space where we have a cost structure in terms of business, finance and legal costs, that is about a third lighter than it is in Canary Wharf. So, I think you’ll begin to see significant relocation to our region over the next 5 to 10 years.

How do you see HS2 as part of an integrated transport system, helping to reduce carbon emissions and reach net zero?

The decision on HS2 has been made and construction is underway. We now need to ensure it is designed and delivered in the most environmentally friendly way and that it brings the greatest environmental benefits. I will be pushing for this. As a huge public transport project and an electrified railway, HS2 will be an important part of how we accelerate carbon emissions reduction.

I want us to set a target to be the first city region to become net zero, by around the mid-2030s. We can’t achieve this target unless we decarbonise our transport system which makes up the bulk of our emissions. We can’t cut those transport related emissions unless we take trucks off the very congested nexus of motorways which cuts through our region. We’ve been the crossroads of our country for a couple of millennia, which is a comparative advantage for us, but it also means very high emissions from the M4, M5 and M42. If we’re going to take a million trucks off those roads, then we need the capacity on the West Coast Main Line and connecting lines. That capacity is created by HS2, but requires strong integration with the plans developed by Midlands Connect. We do need HS2 to be far more assertive in pushing forward and accelerating those plans and that’s something I’ll help them do if I’m Mayor.



We also need the Government to bring a much more holistic approach to carbon pricing in the economy, and at the moment there isn't a strategy for this. There's currently very different carbon prices for different modes of transport. We need a strategy to get people and goods off domestic air, off roads and onto rail and high speed rail. HS2 creates the capacity and ability for people to travel by rail, one of the lowest emission forms of travel, and frees up the capacity for freight to move by rail too.

There will of course be impacts during construction. But, I think it is both welcome and necessary that HS2 is seeking to reduce the amount of carbon in delivering the scheme, including during construction. This is already happening with different methods of construction and given the scale of HS2, it can also have a positive influence on other projects ahead. HS2 will enable land around the scheme to be enhanced environmentally and ecologically. HS2 will also see brownfield sites in the West Midlands brought into use, including in my own constituency, and making these sites more environmental. In addition, HS2 supports how we develop our plan to enable our region to be the capital of green manufacturing.

What is needed to ensure communities across the West Midlands experience the benefits of HS2 both during construction and when the line opens?

Right now, we just don't have the public service infrastructure to effectively connect our communities to the opportunities that high speed rail brings. And ours is one of the most diverse in the world. The non-white British population of the West Midlands metro area is about 34%, with 35% in Wolverhampton, 34% in Sandwell, 33% in Coventry and rising to 47% in Birmingham. If you look at the stubborn patterns of deprivation, you can see this is concentrated in our BAME (Black, Asian and

Minority Ethnic) communities. The poorest areas in our country are those that have been hit hardest by austerity.

The way that you connect people with economic benefit is through something old fashioned called a job and given the level of skills that are needed on HS2, you need a highly skilled workforce. One of the areas where progress needs to be made on HS2 is its integration into regional economic development to bring the jobs and opportunities. This disconnect is not through any fault of the HS2 organisation. What HS2 needs to start doing though is thinking more broadly than its statutory business, which is building a railway, and get outside of the tramlines of the Bill. HS2 leaders need to think much more proactively about how they can provide leadership for regional economic development and skill strategies. It is much more than writing cheques for small community projects but also delivering economic transformation with a real strategy. The West Midlands Combined Authority (WMCA) and other organisations also need to link up much more effectively with HS2 and with more imaginative systems leadership.

Taking the Government's creation of the High Speed College [which has become the National College of Advanced Transport and Infrastructure] - this was set up as a standalone college but should have been well integrated into the local skills system. It needs to be much, much easier for a young person in my constituency to move from an inner city comprehensive to a well-paid job via HS2.

I do welcome that local businesses and SMEs are beginning to pick up contracts and hire significantly. As we look ahead to the ramp up in jobs, up to 35,000, we need a skills system in place that will provide an effective escalator to take people from inner city Birmingham, or any inner city in the West Midlands, and connect them to those jobs.



We need to recognise that my constituency and three of the next door constituencies, are in all in the top six in the highest levels of unemployment in the country. The jobs through HS2, the supply chain and developments in the area can make an important difference.

In some places we need stronger governance and structures to bring the benefits ahead. Take Arden Cross and the plans for the Birmingham Interchange, there are several actors - WMCA, Birmingham City Council, Solihull Council, the Urban Growth Company, Centro, the Airport and HS2 itself. It needs a proper holding of the ring to maximise the opportunity around HS2 and sell it internationally too.

As Mayor I would help fix the issues with skills and structures and set the ambition to maximise the opportunities and ensure that these are felt across our region.

How can local businesses benefit?

In some parts of the country, Preston for example, you have pioneering public leaders beginning to develop a new agenda around community wealth building - keeping the pound local and building more effective circular economies that keep wealth within communities. HS2 is one of the most significant bits of public spending we're going to see in our lifetime, and what it needs is a community wealth building project alongside it.

At the moment, I don't think that there is an effective community public procurement system in the West Midlands. We need the people that regularly work with HS2 to be asking the important questions, such as: what does the future for our contracts look like and how do we maximise the benefits?; What is our target for driving those contracts towards BAME owned businesses?; How can the power of our contracts fully help float some boats here in Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall, Wolverhampton - our council areas across the West Midlands?

This is absolutely critical and post-COVID it's never been more important. Our region will be the hardest hit in Britain, and if the Bank of England is right, we'll see unemployment potentially more than double to levels that we last saw back in 1987. So, this for us is one of the most significant economic shocks that we've had in living memory and we're going to need a response that reflects this. To deal with unemployment that doubles, the fiscal maths implies you need to put in place a capital kickstart of about £3.1 billion and that's why I'd argue that we should be bringing forward HS2. It has already been delayed by the Government, and now is the time to remedy this and look at what can be brought forward.

Resources should now be surged into the detail and technical design phase like the rolling stock maintenance yard in my constituency. We have to try and accelerate that technical design phase and begin looking at how we can actually start building as soon as we can, if necessary, off site.



Maria Machancoses,

Director, Midlands Connect

Maria is a leading transport professional with over 20 years' experience. After being appointed Director in 2014, Maria helped establish, develop and strengthen Midlands Connect's role as the sub-national Transport Body (STB) for the Midlands, uniting political, civic and business leaders with the aim of securing a greater investment deal for the region. In 2017, Maria and her team published a landmark 25 year regional transport strategy.

Prior to Midlands Connect, Maria worked on major projects including strategic master-planning activities around the Midlands, specifically integration plans with HS2. She has also served on many international platforms including EMTA (European Metropolitan Transport Association) and UITP (International Association of Public Transport) providing expertise on the role of transport in contributing to economic growth and social inclusion.

“We are fully committed to work with the Government so we can bring benefits to local communities sooner and provide businesses and investors (particularly along the Eastern Leg of HS2) the certainty they need to rebuild and flourish. In doing so the Midlands must not be short changed with a two-tier HS2 network.”

Why the Midlands needs an infrastructure revolution

Talk of reducing regional disparities by levelling up has finally found its way, quite rightly, into the national debate. The fact remains that wealth, employment opportunities, productivity and social mobility are all hugely influenced by regional geography – and the gap is widening.

In parts of the Midlands, this deprivation has far-reaching social and economic consequences, and is exacerbated by decades of chronic underinvestment in capital infrastructure. In 2017-18, the East Midlands had the lowest transport spend per head of any region in the UK (£245); receiving 49% less than the UK average (£483).

Redressing this imbalance is crucial to fulfilling the Government’s levelling up agenda. Using evidence-based studies produced by bodies like Midlands Connect, leaders, MPs and business groups must continue making the case for greater investment in infrastructure. There is also an ongoing need to press for the full delivery of major projects like HS2 which will unlock economic growth, increasing prosperity across the regions of the UK.

At the start of 2020, the Prime Minister signalled his commitment to the project, after months of uncertainty. With Phase 1 main construction commencing in September, the prospect of stepping on an HS2 train is now becoming a reality. In the years preceding this major milestone, the residents of the West Midlands and beyond have already experienced the transformative impact of HS2’s arrival into the region. From improved local public transport services through the extension of the West Midlands tram network to road upgrades including the recently installed bridge across the M42.

Now, while this progress is to be welcomed, our attention on the other phases of HS2 should not diminish. The legislation for Phase 2a continues to steer itself through the parliamentary process. However, it is the two legs of Phase 2b where we must still make the case to national decision-makers.

A recent report by HS2 East, a partnership of local authorities along the Eastern Leg, cited the economic and social disparities between the communities living along the Eastern and Western Legs of Phase 2b. The arguments for and against the ‘Y’-shaped HS2 network have sparked debate for years. To alleviate the east-west connectivity issues, transport proposals from the North and the Midlands have evolved and gathered pace with political and business leaders.

Midlands Engine Rail integrates with the spine of HS2 and will improve the journeys of millions of people travelling across the region. Our £3.5bn proposal comprising major projects like the Midlands Rail Hub and Access to Toton was the bedrock of our submission to the National Infrastructure Commission which is producing a Rail Needs Assessment ahead of the publication of the Government’s Integrated Rail Plan. At its heart, this plan is focusing on how to best integrate HS2 Phase 2b and wider transport plans in the North and Midlands. The evidence we presented is clear that better integration will deliver benefits sooner, connect more communities, create more jobs and crucially, change more lives for the better.

It’s very important that the Integrated Rail Plan does not descope, descale or delay Phase 2b, particularly the Eastern Leg, as it would have dire economic consequences, and disproportionately penalise the communities that need its benefits most and communities that have suffered from decades of underinvestment. Now more than ever, there is a



pressing need for game-changing projects with the potential to catapult communities out of recession and truly level up the nation.

After the Integrated Rail Plan is published, I hope it is the final review on HS2. Although the scrutiny is welcome on a project of this scale, I cannot remember a time when the future of the project was not in question. Holding it back further is preventing progress when there are tens of thousands of people ranging from civil engineers, building surveyors, construction managers and groundwork operatives who are ready to get going on Europe's largest infrastructure project.

There is no doubt that climate change, technological developments and, more recently, COVID-19, have dramatically changed the world in which we live. What remains unchanged is the important role HS2 is having in driving economic, environmental and social transformation in the Midlands and the North.

This is totally understood in the Midlands. This is why we are fully committed to work with the Government so we can bring benefits to local communities sooner and provide businesses and investors (particularly along the Eastern Leg of HS2) the certainty they need to rebuild and flourish.

In doing so the Midlands must not be short changed with a two-tier HS2 network. We must ultimately deliver the infrastructure revolution the region desperately needs, speeding our transition to a cleaner, greener transport network.







Simon Russell,
Project Director, LM

Simon is a highly regarded project director with Laing O'Rourke, and project director for LM. He has considerable experience in major infrastructure project delivery, and heavy civil engineering experience in the UK, having joined LM from Laing O'Rourke's Crossrail Station Project at Tottenham Court Road, where he was Project Director. He graduated from University of Birmingham in 1995 and has worked in major project delivery throughout his career to date.

“Railways don’t operate in isolation, they connect places, and as such places create communities. It is my belief that high speed rail is at its most successful when the community is viewed as an essential part of its development.”

The new building blocks for construction - delivering the enabling works for HS2 in the West Midlands

It’s been good to see the return to activity across the UK’s construction sector in recent months, and none more so than on major infrastructure projects. The enabling works for Phase 1 of HS2 were paused briefly in some areas due to the COVID-19 pandemic, but for LM, the joint venture of Laing O’Rourke and J. Murphy, working across the West Midlands, we quickly developed extensive safety measures on our sites to ensure it could be almost business as usual despite the challenges the virus presented.

LM has an 80km section covering the high speed line’s route, between Long Itchington Tunnel near Kenilworth, into Birmingham to the Curzon Street station area, and out again north towards Lichfield.

Our scope has involved a huge range of activities, from site clearance and demolition to ground investigation and remediation of contaminated industrial location, one of the largest archaeological studies the country has ever seen, detailed ecological surveys, new habitat creation for wildlife, rural clearance - as well as cutting edge construction and engineering.

Part of the remit for enabling works is to clear the way for others to follow later, and at the site of the future Interchange station in Solihull, LM has worked with stakeholders large and small to fulfil this requirement. With an eye to the future, a major recast of the local road network is planned, which means the construction of four new highway bridges, two of which pass over important strategic roads.

LM’s digital design and offsite manufacturing capability has enabled the team to propose and deliver an innovative solution to these challenges.

It has reduced the time required on site, and - more importantly for the public - kept the need for road closures to an absolute minimum and reduced the site traffic during construction. Through a modular construction strategy, major bridge components have been precision engineered and manufactured at Laing O’Rourke’s state of the art factory in Nottinghamshire, and transported to site for installation. They are, quite literally, the building blocks of a new construction methodology. This new, modern method of bridge construction is attracting considerable interest and it’s hoped that it can be incorporated into other infrastructure projects across the UK.

People are the heart and soul of our business, and we’re proud of the diversity and integration that we’ve built across our team, and our supply chain. LM has a project leading equality profile and won national recognition in 2019 with the Employers’ Network for Equality & Inclusion, as Team of the Year.

Our supply chain partners sign up to the same philosophy that we practice, and together we’ve created apprenticeships and opportunities for graduates, held community days, and worked with charities and good causes wherever possible to not just be a good neighbour, but to help others grow and be successful in a strong regional economy.

We worked with the client to replicate the procurement policies that ensured the on time delivery of the Olympic Park for London 2012 and other major projects since. In assessing potential suppliers, price was of course key, but the scoring also took into account attitudes to equality and diversity, creating opportunities for training, so that we could move forward together, and grow together.

We’ve built up an excellent dialogue with many businesses, and support networks, across the West Midlands (and beyond) and it’s been immensely satisfying to see them flourish. These relationships are continuously monitored, and we particularly



value 360-degree feedback sessions, where they tell us how we're performing. These conversations can only happen where there's a strong and trusting relationship on both sides, and we are proud that it's been one of our strongest business assets to date.

To the external world looking in, it's also important to address the stereotypes that some associate with our industry. Today's opportunities are a million miles from the 'boots and donkey jackets' image of the past. Today, young people looking for a stimulating and hi-tech career that could potentially take them across the world, can achieve all of this in the modern construction sector. The industry is now actively recruiting those with capabilities (and a willingness to learn) in planning, risk assessment, digital design, high precision manufacturing, and all of the associated skills. In the 21st century, we build everything twice - first in the virtual world and then, when we know everything works, we build it for real.

HS2 is a much needed investment in the UK's dated and busy transport network and will provide economic and social benefits for decades to come. Engineers and designers have shaped the world we live in today and will continue to do so as we seek to address some of humanity's most complex challenges such as climate change. The delivery of new, world class, sustainable infrastructure is critical to this, and there is no doubt that modern methods of construction (MMC) are key to increasing construction productivity, delivering these projects sooner and increasing the return on investment they offer society.

As we look towards an era of major infrastructure investment, it is time to embrace the use of MMC more widely to deliver the world-class infrastructure this country needs, to build better, and help ensure the UK's economic recovery is a green one.





Nick Brown,

Chairman, Urban Growth Company

Nick is Chair of the Urban Growth Company and has a reputation and track record in industry for leading and delivering complex operational projects and large-scale, world-class transport developments.

Nick has a wealth of experience, spanning almost 40 years, in the transport, infrastructure and professional services sectors. Formerly Chief Operating Officer and subsequently Managing Director of London Underground, Nick joined GTR in November 2016 as Chief Operating Officer to help resolve some of the rail industry challenges in South East England. He is the Independent Chair of the System Operator Advisory Board of Network Rail on behalf of the rail industry, and an Executive coach with Praesta.

“The UGC might well be an early adopter in this field but it is also the pen-holder of an innovative blueprint for others to use, not just along the HS2 route, but for any future transport or infrastructure projects.”

Creating a new blueprint for the future of public private partnerships in infrastructure

Even today, three years after Royal Assent, with a formal ‘Notice to Proceed’ safely in place and significant enabling works already completed, questions are still asked about HS2. Does it really provide anything except another route in and out of London? Should it even still go ahead, particularly in the current COVID climate?

But to ask these questions is to miss one of the most important things that HS2 will deliver – national and regional economic growth. This sort of growth and enhancement to productivity has always been important but, too often in the past, successive Governments have failed to really walk the walk. That is why it’s positive that the current Government has put the levelling up agenda at the heart of its manifesto and, more recently, its post-COVID recovery plan.

Nowhere is that regional growth opportunity more evident and compelling than in the West Midlands, and Solihull in particular.

When the possibility of a new high speed rail network was first mooted and it became clear that the proposed route would head through Solihull, Solihull Council was quick off the mark to capitalise on the prospect. It created the Urban Growth Company (UGC), a special-purpose vehicle charged with coordinating and delivering infrastructure investment and growth plans at ‘The UK Central Hub’.

The Hub is an area of land which already comprises heavy-hitting golden economic assets; Birmingham Airport, the National Exhibition Centre, Jaguar Land Rover, Birmingham Business Park and Birmingham International Station on the West Coast Mainline are all here. Crucially, The Hub also comprises Arden

Cross, a 340-acre development site adjacent to the M42 motorway which will be home to the HS2 Interchange Station. And this is where the regional growth opportunity becomes clear.

Solihull Council had a clear vision for this site, which was to create a new, sustainable, mixed-use destination in its own right, with the HS2 Interchange Station at its heart. However, HS2’s Hybrid Act only sought to deliver a parkway-style station with vast, land-consuming surface car parking provision for HS2 passengers. The constraints of the Act would severely limit the ability of the site to realise its full economic, social and environmental potential.

The only way to resolve this position would be through collaboration. As such we’ve been working on behalf of Solihull Council with HS2 Ltd for several years to ensure that we really make the most of the opportunities associated with the arrival of high speed rail in Solihull and the wider West Midlands region.

Neither party will say it’s been a stroll in the park! But neither should that have been the expectation. Infrastructure projects on the scale of HS2 are challenging at the best of times but when you throw regional public sector partners and private landowners into the mix, there will be challenges to overcome. And remember that this is something that hasn’t been done anywhere else on the HS2 route so far.

The partnership with HS2 has required flexibility and innovation. It has required trust and positivity. These aren’t achieved overnight but because both parties share the vision to deliver regional growth, they are now the ingredients for a shared basis for success. Take the breakthrough Construction Funding Agreement that the UGC has in place between the two parties. This is a first for HS2 and it sets out how construction work will be procured by HS2 on the region’s behalf.



The first activity under the Construction Funding Agreement was a change in the construction scope of a key roundabout at the Interchange site from the original three lane design to a four lane solution. This is to support regional ambitions for wider development in the area, encourage growth and bring forward some key development sites ahead of HS2's eventual arrival. The UGC secured £20m to make that design a reality.

As well as letting the UGC lead with its expertise and knowledge of what's best for the region, it's also a very efficient way for HS2 to work, because we have established the ground rules for situations where local funds are being awarded through HS2-managed contracts.

The UGC might well be an early adopter in this field but it is also the pen-holder of an innovative blueprint for others to use, not just along the HS2 route, but for any future transport or infrastructure projects. So let me answer the question about what HS2 delivers, other than very fast journeys and additional capacity. It acts as a catalyst and an enabler for the efficient delivery of thousands of homes and, critically, tens of thousands of jobs in new and high-value sectors, in regions up and down the country. This will drive economic growth and regional productivity from the nature and scale of the activities we aim to develop and the partners with which we work. That's something we need now, more than ever.





Birmingham Airport

✈ Birmingham International

Resorts World

NEC



Scott Knowles,

Chief Executive, East Midlands Chamber

Scott heads up the leadership team within the chamber of commerce for the East Midlands, representing its 4,300 members at senior level with stakeholders and partner organisations – including the D2N2 LEP Board, LLEP Board, Destination Chesterfield, Marketing Peak District & Derbyshire, and the Metro Strategy Board. He also manages various capital and revenue projects for the Chamber.

Having started his career in the ICT sector, Scott joined the North Derbyshire Chamber in 1999 with a mandate to advise businesses preparing for the impending “millennium bug” and supporting them to embrace emerging internet technologies. He has been Chief Executive of East Midlands Chamber since September 2015.

“The wider area served by the HS2 Eastern Leg is home to 13 million people and about six million jobs, equating to 20% of the UK – and larger than the economy of Denmark. HS2 presents a once-in-a-lifetime opportunity to harness these strengths and be a lever for housing growth, social mobility and the creation of value-jobs.”

The greatest return on investment across the whole high speed project

Unlike the heavyweight names of Manchester, Birmingham and Leeds, few people in Britain will have heard of Toton before HS2, but this small suburb stands to be one of the most connected locations in the country with HS2.

Set at the heart of the network and in the centre of the country, up to 14 high-speed trains will leave the East Midlands hub station every hour. It will connect Nottingham, Derby and Leicester – three of the UK’s 20 largest cities by population and GVA – with major cities across the North and Midlands in what will be a watershed moment for the region due to the agglomeration of opportunities that this will bring.

However, while journey times like 20 minutes to Birmingham, 27 minutes to Leeds and 52 minutes to London have occupied the headlines, HS2 isn’t about speed for us – and we believe it’s been damaging that this is where all the focus has been.

This also isn’t just about passengers, but freight too – something that’s incredibly important to us in the East Midlands, where we’ve built whole industries on our ability to make things and move things. East Midlands Airport, strategically located at the midway point between the region’s three cities, is the UK’s largest pure freight airport and the site of the SEGRO Logistics Park East Midlands Gateway – a 700-acre ‘inland port’ that is already a major logistics hub for brands including Amazon, Very and Kuehne+Nagel, with more in the pipeline. HS2 frees up capacity, which is full, on other routes – something that will allow us to continue growing our economy.

High speed rail will bring a new dawn for the region because it will be the starting gun for further infrastructure investment as part of the locally-led East Midlands Development Corporation, which

will be set up to maximise growth opportunities. This will be the vehicle for leaders from Derbyshire, Leicestershire and Nottinghamshire to work together in an unprecedented manner, and help spur other exciting development opportunities such as the former Chetwynd Barracks and Ratcliffe-on-Soar Power Station, which is due to close in 2025 in line with the UK’s coal phase-out.

Boots, Rolls-Royce and Next are just some of the internationally-renowned businesses based in the East Midlands, which has real expertise in industries ranging from advanced manufacturing and biosciences to textiles and food manufacturing. It is worth noting that the wider area served by the HS2 Eastern Leg is home to 13 million people and about six million jobs, equating to 20% of the UK – and larger than the economy of Denmark. HS2 presents a once-in-a-lifetime opportunity to harness these strengths and be a lever for housing growth, social mobility and the creation of value-jobs.

The HS2 project could have a transformational impact on areas like Toton by catalysing further infrastructure investment in the form of an innovation campus. This would create a zone of high growth right at the heart of the country that provides a focus for skills development and business competitiveness linked to the region’s other strategic regeneration sites. Bringing together universities, start-ups and established businesses, the campus will be a hotbed of technological advancement, creating up to 10,000 highly skilled jobs and a network of surrounding garden villages.

Economic benefits will not be exclusive to cities. Chesterfield, the gateway to the Peak District, will have a high speed rail stop that will be a magnet for new investment, while new connections between the hub station and towns like Loughborough, Alfreton and Mansfield – on the doorstep of another major tourist attraction in Sherwood Forest – could be equally significant drivers of growth.



Estimates suggest HS2 will create 74,000 jobs across the region and add £4bn to the economy. The Eastern Leg has been identified as delivering the biggest return on investment for the entire project by tackling some of the labour supply problems that have stifled business growth in the past.

Transport spend per head is the lowest in the East Midlands of any region at 49% below the UK average, while it also has the lowest levels of capital investment of anywhere in the country. Some 14% of the Eastern Leg's working population is in transport poverty, which puts many jobs out of reach and prohibits social mobility. Unreliable and overcrowded trains are cutting off communities from good transport links, meaning productivity per head in the region is 23% below the UK average and the region is missing out on billions in potential every year. If Westminster truly wants to level up the economy, here is a good starting point because bringing productivity back up to the national level would add £28bn to the UK economy annually.

For the past few decades we've been tinkering about with a railway system that is essentially Victorian in construct. We're then surprised when we experience the same old issues. We must get out of this mindset and embrace transformational investment, something that can mark us out as the kind of country we want to be in the future, regardless of everything else happening in the world at the moment.

Much has been made of a green recovery plan to jumpstart Britain out of the COVID-19 economic slump and HS2 should be a central plank of this given how it will help shift people away from mass

car usage. Almost three-quarters (72%) of commuter journeys in the Eastern Leg area are made by car, with only 3.5% by rail, despite rail demand doubling in the past 20 years. In contrast, 40% of London commuting is by rail and 30% is by car. Investing in vital transport infrastructure and increasing capacity will help trigger the changes that are needed for more people in the region to move away from cars. Again, these changes will not just happen in cities, as towns will benefit from improved local and regional services on existing tracks by moving intercity trains on to the HS2 line.

We see HS2 as an investment as opposed to a cost – investments pay back. Yes, some of the numbers being mentioned are significant, but we're talking about a transformational step change in our infrastructure, something that we're not used to doing as a country. And, crucially, this investment is needed right now. The East Midlands has been put on hold for too long and it has affected business confidence.

The Government needs to be brave and bold post-COVID if it's to truly realise Prime Minister Boris Johnson's stated aim to 'not just bounce back, but bounce forward stronger and better'. This means delivering HS2 in full, with work on the Eastern Leg beginning urgently and ahead of schedule to fast-track these benefits for the East Midlands and, ultimately, the UK economy. It's worth re-emphasising how the Eastern Leg has been earmarked for the greatest return on investment across the whole high speed project. As such, its development should be prioritised to usher in a new era of growth.







Andy Duggins,
Operations Director, SYSTRA

Andy is a bona fide Brummie. He is SYSTRA's Director of Operations, a rail engineer with over 30-years experience of delivering major rail projects in the UK, including the Chiltern mainline upgrade from Birmingham to London's Marylebone.

He lives and works in Birmingham, gained his MBA from the University of Leicester in the East Midlands, and has brought up his three children in Birmingham.

“Cities thrive on their interconnectedness with surrounding suburbs, villages, towns and other metropolitan areas. This is true for Birmingham as it is for London, Manchester, Leeds, Newcastle and Glasgow alike. We need good connections more than ever.”

Investment in HS2 can level up the UK once and for all

Birmingham is already experiencing the positive effects of regional rebalancing. The city has become a hotspot for companies relocating.

Last year, HSBC's UK headquarters moved from London to Birmingham creating 700 new jobs. Deutsche Bank and PwC have expanded their presence in the city creating much new employment. Significant moves like these have triggered property and cultural investment right across the city. The redevelopment of Typhoo Wharf in Birmingham City Centre located adjacent to the new HS2 station at Curzon Street will create a thriving new quarter for homes, artist studios, SME business units and cultural space. Similar redevelopment is planned for the Custard Factory neighbourhood in Digbeth - the birthplace of the Industrial Revolution, which will become a new centre for creative industries, and the 265,000 sq meters of new high quality industrial floorspace for manufacturing and logistics in Piddimore, north-east of the city, which is well underway. All these developments, Typhoo Wharf, the Custard Factory and Piddimore will create thousands of new jobs for Birmingham and the Midlands, sparking economic development further still.

It's no secret that one of the main reasons why Birmingham is consistently chosen as a business base is down to its central UK location and access to good transport connections. More recently, a huge contributing factor in decision making has and will continue to be HS2. Birmingham will be at the centre of the new high speed rail network and accessibility is paramount for every business and development decision.

Cities thrive on their interconnectedness with surrounding suburbs, villages, towns and other metropolitan areas. This is true for Birmingham as it

is for London, Manchester, Leeds, Newcastle and Glasgow alike. We need good connections more than ever.

Not long before the global pandemic hit the UK, the Government gave the go-ahead for HS2 Phase 1 from London to West Midlands, followed by the 'Notice to Proceed' in April this year. The Prime Minister said HS2 would act as one of the strongest mechanisms to level up the UK's regions 'doing away with the North-South divide once and for all'. And, crucially, HS2 will help aid our national recovery post COVID-19 by stimulating business confidence to invest in their people, their products, their services and importantly their local communities.

SYSTRA is actively involved in hiring, coaching and mentoring high speed rail apprentices in Birmingham. The National College for Advanced Transport & Infrastructure (formerly the National College for High Speed Rail) has one of its bases in Birmingham, giving businesses like ours a tangible incentive to invest in new talent.

SYSTRA were the first company to take on a high speed rail apprentice back in 2018. Birmingham is one of many HS2 offices for SYSTRA, and our team there has grown to over 100, attracting talent back to the UK from overseas. We have engineers returning from Canada, Spain and France and interestingly several shifting from other engineering sectors too. HS2 has unleashed a renewed sense of optimism that only world class projects can deliver. Each member of our teams want to be part of a project that will reduce fossil fuel dependency and create a greener future.

Where a person lives has an enormous impact on their life chances. Areas of deprivation exist in the East Midlands, in particular parts of Nottingham, Derby, Ashfield and the Amber Valley. All of these areas will benefit directly from HS2 and the resultant economic development and job creation.



HS2 is the right answer on every count - economically, socially and environmentally. HS2 Phase 2a West Midlands to Crewe had near unanimous political support during its last reading in Parliament with 263 votes in favour and 17 votes against. Likewise, Phase 2b, Crewe to Manchester and West Midlands to Leeds has similar support, and will create the Y-shaped network, simultaneously rewriting the socio-economic geography of the Midlands.

The East Midlands has been neglected in terms of transport investment for too long. This must change sooner rather than later. The planned HS2 East Midlands station at Toton will bring about this change, monumentally improving the life of hundreds of thousands of people across the East Midlands through unlocking land for economic development and job creation. Located north-east of Birmingham between Derby and Nottingham, Toton will become the East Midlands Transport Hub, acting as a catalyst for revitalising and expanding local transport improvements. Already, a hugely ambitious programme of conventional rail, bus, light rail, cycling and walking projects are being developed around the Toton HS2 Station. HS2 Phase 2b has inspired confidence and ambition back to the East Midlands, propelling projects like the expansion of the Nottingham Tram westwards connecting the city with fast links to Birmingham (20 minutes) and north to Leeds (29 minutes), and imaginatively extending the tram through Toton to Derby.

Our ageing 100+ year old Victorian rail asset is stretched and fragile. HS2 provides the additional capacity and breathing space to allow us to stand back and look at our existing network with fresh eyes. For example, during the height of the pandemic, rail freight kept goods moving around the country. We can be far more ambitious for rail freight, making more paths available that will take thousands of lorries off our congested motorways.

For UK plc, HS2 will connect our metropolitan areas once and for all, levelling up our regional economies and allowing them to work better together. For the Midlands, our re-found confidence is already bringing about a brand new low carbon industrial revolution. Through HS2, we will be inspiring future generations to come.





Jenny Illingsworth,

Deputy Director, Birmingham Centre for
Railway Research and Education (BCRRE)

Jenny looks after the Industrial Outreach, Marketing & Communications, and Operations teams in BCRRE and is a co-director of the BCRRE Rail Alliance. She will be supporting the Digi-Rail project by providing the team with management and oversight, support for strategy development and operational activities. For Digi-Rail clients she provides business support in the non-technical areas and support for product development strategy.

The West Midlands has an academic centre and network which enables it to consider how research and innovation can continue to support the development of high speed rail, on HS2 and beyond, widening the revolution in mobility and decarbonising transport systems globally and in the UK.

Inspiring rail innovation in the West Midlands

Large-scale projects such as HS2 drive innovation, and their success is often predicated on the wider application of new ideas and technologies. As home to HS2 operations, Birmingham has a central role to play in not only the future of the project itself, but railway innovation more broadly. At Birmingham Centre for Railway Research and Education (BCRRE) - one of the world's largest research, innovation and education centres focused on rail – we are closely connected to the scheme, both physically and through our world leading collaborations with industry and academia.

The West Midlands contributes its fair share to the UK's £36bn rail industry. With HS2 poised for further growth as construction commences, and with innovation lying at the heart of its development, the opportunity ahead is significant. From existing supply chain and new entrants, to upskilling and technological advancement for HS2 and other projects, there will be new ways of thinking and problem-solving, and new products, services and sales made available – in the region, the UK and internationally – as a result. At BCRRE, we provide an academic hub working across a number of networks and projects to ensure that these benefits resonate across the West Midlands and beyond.

Academic network

The UK Rail Research and Innovation Network (UKRRIN) brings together the UK's core rail-focused academic expertise into four centres of excellence in: digital systems, infrastructure, rolling stock, and testing. With over a dozen universities involved in the network it means ideas, research outputs and new technologies are shared across institutions and partners more quickly, more easily and more effectively. UKRRIN will help to ensure the reliability of the railway systems and infrastructure needed to support high speed rail travel.

Because the work is done in conjunction with key rail industry customers - including infrastructure owners, equipment manufacturers, Tier 1s and significant representation of the supply chain- it means an immediate audience for new ideas and access across the supply chain. Here in Birmingham, our newly opened Centre of Excellence in Digital Systems provides the opportunity to use brand-new facilities and work alongside our technical experts. Business incubation is more effective using the facilities to enable successful product and idea development rather than trying to do this in isolation. These new facilities provide a unique opportunity to collaborate with experts, mull over ideas and access specialist development, simulation and testing equipment as well as the Birmingham-based Rail Data Platform.

Business Network

BCRRE is also the home of the Rail Alliance, the UK's largest dedicated business-to-business networking organisation for connecting the rail industry and its supply chain, across the UK, Europe and world-wide. Rail Alliance works across the industry to drive growth; bringing customers, suppliers and supply chain opportunities together; enabling and supporting innovation; and, ultimately, supporting the entire rail supply chain to thrive.

With 25% of manufacturing-based UK SMEs reporting to the Manufacturing Growth Programme, supply chain advice will be needed as we exit from the COVID-19 lockdown. Initiatives such as the Rail Alliance support our region's businesses towards success and business growth. The network also provides a platform for supporting innovation on the HS2 project, most recently through their promotion of the 'Innovate at HS2 2020 Phase 1 Competition,' which will invest £300,000 to deliver innovative operational solutions.



Business and innovation support

Digi-Rail is a 3½-year project, part-funded by ERDF (European Regional Development Funding) and the University of Birmingham which supports business and technical development for SMEs in the Greater Birmingham & Solihull, Coventry & Warwickshire and Black Country Local Enterprise Partnership regions. It brings together national and international rail industry buyers with the region's businesses and BCRRE's technical and industry experts and complements BCRRE's contribution to the West Midlands Growth Hub's across the GBSLEP region. Projects will solve challenges, develop new, innovative digital products and services, and provide new business opportunities for the region's SME community. The Digi-Rail team will discuss with the SME their business objectives and technical challenges and how it can use digital technologies to bring its products, services and ideas into the rail industry. SMEs can access expert consultancy support in a range of digital and digital-related aspects for the mutual benefit of their business and the rail industry.

SMEs in the West Midlands regions stand to benefit significantly from HS2 design, development and implementation. According to HS2, 'we estimate that from every 10 of our main contracts, 10,000 supply chain opportunities will become available. We expect 60% of contracts to go to SME suppliers.' HS2 itself will be procuring design services; civil engineering solutions, stations, railway systems, rolling stock and corporate services. There are myriad opportunities for SMEs in HS2, where they can make use of their inherently agile nature, the lower barriers to innovation and the availability of support programme programmes such as Digi-Rail.

Much BCRRE work is already geared towards high speed rail and benefiting the West Midlands and surrounding region and our research can be broken down into two core themes: digitalisation and decarbonisation – fitting with long-term government and industrial strategies. Recent project themes at BCRRE include: artificial intelligence to support decision-making; crowd-collection of data on, for example: ride quality; blockchain technologies; international benchmarking of railway systems; effects of climate change on infrastructure and passenger behaviours; systems for power, energy, signalling and control; timetabling and optimising passenger flows; new infrastructure materials and design specifically for high speed lines; maintenance and monitoring technologies for infrastructure, operations and vehicles; aerodynamic effects of passing trains; tunnel and tunnel portal design; optimised energy and electrification systems; and making history by running HydroFLEX, the first hydrogen-powered train, on the UK mainline.

We believe that improved infrastructure – from design to materials, maintenance and aesthetics – can be used to benefit passengers in multiple ways. Through the work of the BCRRE, the West Midlands has an academic centre and network which enables it to consider how research and innovation can continue to support the development of high speed rail, on HS2 and beyond, widening the revolution in mobility and decarbonising transport systems globally and in the UK.







Paddy Patterson,

Skills, Employment & Education Manager,
EKFB

Paddy is Skills, Employment & Education Manager at EKFB JV with additional responsibility for learning and development within the business. Paddy has an extensive background in skills and education, having worked at central Government and local authority level, and successfully provided project management and consultancy services to a range of clients in the public and private sector before joining EKFB in June 2020. Paddy has experience of all major post-16 skills programmes in terms of funding, policy and delivery, with particular expertise and profile in the apprenticeship sector over the past decade.

“It is a shared responsibility for everyone involved in the project to draw on the skills from a universal talent pool and make sure that our employment policies and practices warrant equal opportunity and treatment for all.”

Leaving a legacy in the West Midlands after HS2

EKFB is a joint venture that brings together international, market leading expertise from four leading civil engineering and construction companies: Eiffage, Kier, Ferrovial Construction and BAM Nuttall. All four partners bring specialist expertise in the design, construction, operation, financing and maintenance of railway networks, including some of Europe's largest high speed rail projects. EKFB is proud to have been appointed by HS2 to deliver civil engineering works across an 80km section of the new high speed rail link between the Chiltern Tunnel and Long Itchington Wood. Our scope of the works includes 15 viaducts, 6.9km of green tunnels, 22km of road diversions, 81 bridges and around 30 million cubic metres of excavation.

We want to lead the transformation of our industry, influence future generations, support the UK economy and leave a legacy that improves people's lives.

As work ramps up on HS2, our organisation is growing rapidly – even during these most uncertain of times. We are aware that as our opportunities to provide local connections and benefit along the line of route increases, our responsibility to make these connections has never been more needed.

The impact of the COVID-19 pandemic is with us all in all respects. How we work, how we recruit and how we train has all been affected in an unprecedented way. And we are reminded that while, of course, the project is principally a transport one, it's also very much a people project. Successful project delivery simply isn't possible without a highly skilled and motivated workforce working together in an inclusive environment.

There is no escaping the damaging impact of the pandemic on our economy and it is clear we are yet

to see the full impact on the labour market. EKFB has a number of commitments, like all HS2 Main Works contractors, to deliver a range of benefits linked to skills, employment, education and wider community outreach. But it's not just about getting the job done: we are committed to leaving a positive legacy long after the project is finished. We can only do that by providing sustained employment and upskilling, supporting communities impacted by our works, inspiring younger generations and improving people's lives, particularly those groups who have been traditionally underrepresented in our sector. This in turn will raise the standards of the construction industry as a whole.

The skills 'challenge' within the construction sector is well-documented and discussed, and perhaps as we are seeing in many other areas of work or life, it takes a greater crisis to instigate different approaches and actions. It is apparent both at local and national level that certain sectors are being more adversely impacted by COVID-19, leaving a number of experienced and skilled workers with uncertain futures. So we must look, for example, at where our recruitment challenges exist and how a more diverse talent pool can help. We need to be clear on how to attract new people to the industry from other sectors. Working with local partners, such as those within the Buckinghamshire Redundancy Taskforce, for example, is key in that respect, to using local intelligence to match talent to opportunity where it is needed.

Fortunately, we have a good starting point, having already began this process before COVID-19 hit. Since 2019, using Construction Industry Training Board (CITB) Construction Skills Fund investment, we have trained over 400 local people along the length of the route to enable them to be employment 'ready' through a mix of 'entry to construction' and plant-based training courses, so much so that we have been awarded additional funding to train another 200 people up by 31st March 2021.

Training and professional development are key to our goals, and a key pillar of economic recovery for the country. There are fears that unemployment among young people could potentially reach levels unseen since the early 1980s. We are committed to providing high-quality apprenticeships, traineeships and other work placement opportunities to support those at the start of their careers, but also those mid-career or seeking a change of direction.

We will use procurement levers to create sustainable skills employment and education opportunities in our supply chain ensuring that our partners share and deliver our commitment in their recruitment and training activities, making valuable contribution towards our objectives and creating high-quality and accessible opportunities for local people.

Furthermore, we will ensure EKFB is a diverse and equal organisation which is at the forefront of our industry. At EKFB, we have a golden thread that runs through everything we do: FREDIE. Fairness. Respect. Equality. Diversity. Inclusion. Engagement. We want to ensure that FREDIE is embedded in our culture, reflected in our people and behaviours.

We are proactive in building relationships with key stakeholders along the length of route, from the Chiltern Hills in the south to Southam in the north, including Jobcentre Plus, Local Enterprise Partnerships and community and voluntary groups with the strongest relationships with local people including those most impacted by COVID-19 who unfortunately tend to be those most underrepresented in our sector. This includes workers who are female, BAME or have disabilities. We are also developing relationships with organisations supporting those reintegrating into the workforce including ex-offenders and military leavers.

We need to continue to reduce barriers into work, whilst raising the profile of a career in transport, engineering and construction. It is a shared responsibility for everyone involved in the project to draw on the skills from a universal talent pool and make sure that our employment policies and practices warrant equal opportunity and treatment for all.





