

## RAIL NEEDS ASSESSMENT FOR THE NORTH AND MIDLANDS – RESPONSE TO CALL FOR EVIDENCE

This comprehensive response to the Call for Evidence is provided by the Sheffield City Region Mayoral Combined Authority (SCR MCA) with the endorsement of the four Constituent Authorities of Barnsley, Doncaster, Rotherham and Sheffield, along with the private sector Chair of the Local Enterprise Partnership.

We welcome the opportunity to respond at this point, and believe that the outcome we need from an Integrated Rail Plan for the Midlands and the North is an agreed, phased long term pipeline for major rail investment – that pipeline becomes even more urgent in the wake of the current COVID-19 pandemic.

The SCR's Integrated Rail Plan (SCR IRP), which has been provided to the NIC in advance of this response (and is attached at Appendix 1), recognises that the City Region needs a high speed network that is well connected to the conventional network through a series of planned hubs and interchanges, and which serves a wider spread of towns and cities.

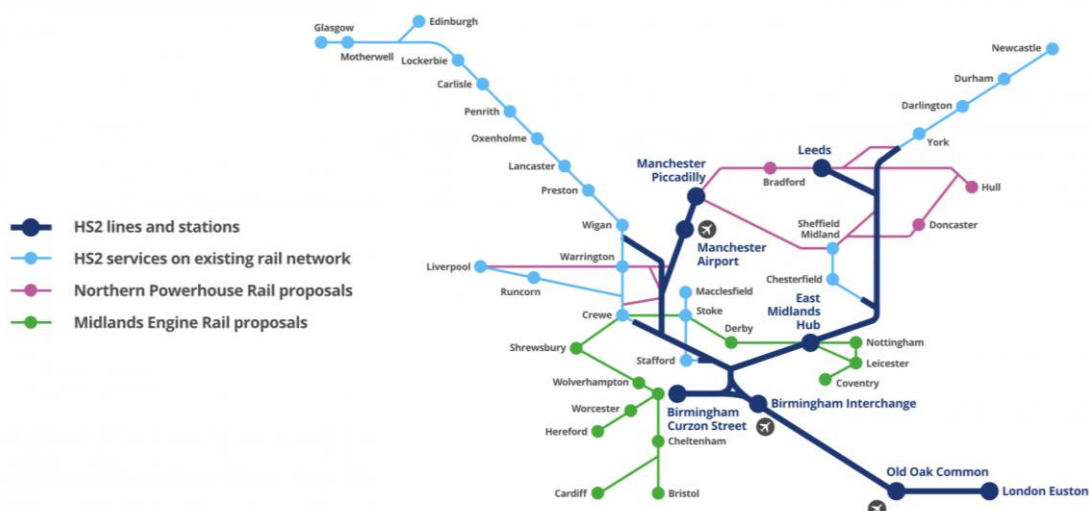
The SCR would also welcome the opportunity to discuss aspects of our response in more detail, and will continue to provide supporting information over the coming months to ensure that the optimum solution to support the SCR's long term economic, social and environmental ambitions can be articulated in the Plan.

**QUESTION 1** What potential investments should be in scope of the Commission's assessment of the rail needs of the Midlands and the north?

The Integrated Rail Plan for the Midlands and the North should set out the Government's commitment to bring forward as quickly as possible the plans for the full HS2 network integrated with the proposals for Northern Powerhouse Rail (NPR) and investments in the classic network to transform rail services and choices, under the banner of 'High Speed North'. The Plan will be informed by an assessment from the National Infrastructure Commission (NIC) looking at the rail needs of the Midlands and the North, which is the subject of this Call for Evidence.

Therefore, the SCR MCA considers that the scope of the NIC's assessment and a Baseline Plan should include both the eastern and western legs of HS2 Phase 2b and the whole NPR network, as shown overleaf, plus other strategic rail investments that facilitate or complement these projects – these are the national investments into the national rail network and will deliver long term benefits for the North, Midlands and the UK as a whole. This will address decades of underinvestment in strategic rail connectivity in the Midlands and the North and support the Government's wider plans for a more balanced low carbon and sustainable economy.

Such strategic investments will cover international connectivity, connections to London (and the wider South East), connections to other key complementary economic hubs across the UK (South West, Midlands, North East, North West and Scotland) and intra-City Region connections across the North. The planned investment in new infrastructure will also provide greater resilience to the classic rail network, and free up capacity for new local/regional passenger rail services as well as rail freight, which is fundamental to achieving our local transport objectives around social inclusion and environmental sustainability.



### HS2, NPR and Midlands Engine Rail Proposals

The Baseline Plan should not necessarily cover local rail schemes (both heavy and light rail) across the Midlands and the North – there is, and will remain, a clear role for Combined and Local Authorities to bring forward such proposals in conjunction with Network Rail and sub-National Transport Bodies such as Transport for the North (TfN), through further devolved funding and governance arrangements. However, how local and strategic rail is integrated to maximise the benefits of national investment is crucial.

The SCR IRP outlines the complementary investment required in the local and regional network to improve capacity, reliability, affordability, journey times and frequencies. It considers the range of rail interventions required to develop a holistic transport network that better connects the region's major urban and economic centres to enable a better flow of people, goods, businesses and ideas across the City Region, as well as promoting the rural and visitor economies. By doing so we will support the aims of our new Strategic Economic Plan (2020-2040) and help create jobs, secure new investment and grow our economy in an inclusive and environmentally sustainable way.

The SCR IRP contains a series of short, medium and long-term rail interventions that we believe from our evidence are necessary to achieve our social, environmental and economic objectives. Some of these will be led by national or sub-national agencies, some by the Combined Authority, some by our constituent Local Authorities and some by the private sector. All, however, are crucial to achieving our aims.

Therefore, we believe that the NIC's report should highlight the importance of the Government delivering the following interventions – these are not listed in any particular order, as explored further in our response to Question 3:

- The eastern leg of HS2 Phase 2b, linking Sheffield Midland (and Leeds / the North East) to the East Midlands, Birmingham and London – this should include a third track between Dore and Sheffield Midland and also that the junction between the HS2 spur and the Midland Mainline (MML) at Stonebroom is designed for 4tph operation
- The HS2/NPR 'Northern Loop' including Clayton Junction that will enable HS2 trains to continue north from Sheffield to Leeds, the North East and potentially Scotland

- Improving the journey time, capacity and frequency of trains from the SCR to the Greater Manchester and Liverpool City Regions through an improved NPR solution on these corridors along with a future-proofed solution at Manchester Piccadilly allowing onward connections to Lancashire and Cumbria
- Delivery of major improvements at Sheffield Midland station and capacity enhancements to the north and south of the station to accommodate HS2 and NPR
- Continued investment in upgrading the Midland Mainline (MML), including completion of electrification between Market Harborough and Sheffield
- A new NPR parkway station at Goldthorpe in the Dearne Valley on the proposed 'Northern Loop' that will significantly enhance the connectivity and economy of this former coal mining area and open up development opportunities
- A new NPR station on the Midland Mainline at Rotherham which will significantly enhance regional and national rail connectivity for Rotherham and open up development opportunities. This should be integrated with the tram-train network to connect to the town centre
- Continued capacity and line speed improvements on the East Coast Main Line (ECML) in advance of HS2 Phase 2b and the development of plans to use the released capacity on the ECML after the opening of HS2 Phase 2b to enhance the connectivity of Doncaster and its growing freight facilities (including iPort)
- Providing a direct national rail connection to Doncaster Sheffield Airport – the GatewayEast Rail proposal
- Introduction of new intercity and improved inter-regional rail connections to Barnsley, as outlined in the Barnsley Rail Vision (attached at Appendix 2)
- Delivering a permanent tram-train service between Sheffield and Rotherham, extending the network to Doncaster and Doncaster Sheffield Airport and future proofing and expanding the existing Supertram network.

The Baseline Plan should take account of rail schemes within committed programmes, particularly the long-awaited CP6 improvements to the Hope Valley Line to provide for a third fast train path in each hour, as well as line speed and capacity improvements between Doncaster and Leeds.

Schemes in the wider North that are currently under active consideration, such as addressing capacity constraints in Central Manchester, at Stockport and at Leeds station, should also be recognised within the Plan as these are vital to deliver service enhancements for SCR. We believe that the Baseline Plan should make recommendations for the accelerated delivery of some of these committed schemes, or an expansion in their scope, should this prove advantageous.

There is a role for the Baseline Plan to acknowledge the importance of a rolling programme of investment in renewals and enhancements coming out of Network Rail's Continuous Modular Strategic Planning (CMSP) process, particularly around Doncaster and Sheffield, as well as signalling, line speed and level crossings improvements, all of which can improve both capacity and connectivity, as well as our plans to make the SCR's rail network accessible to all.

Rail freight must form part of the needs assessment which must take account of the capacity needed to meet growing demand, especially as part of the move to decarbonise transport. The SCR rail freight network supports some of our key regional industries and permits the import and export of resources to and from our City Region, including through key connections to the Humber ports, power stations and centres of aggregate production. There remains no suitably gauge cleared route across the Pennines for container freight services and the SCR IRP identifies a number of potential constraints in the SCR where conflicts between freight and passenger services are expected to increase.

We also believe that the Baseline Plan should recognise some of the more local rail interventions proposed in the SCR IRP, and the NIC's assessment of overall rail need should account for these and help make the case for future investment, but we would suggest that the Plan itself should focus on the more strategic interventions that will help transform connectivity across the North.

QUESTION 2 Which set of rail investments do you believe would, together a. best unlock capacity within the Midlands and the north? b. best improve connectivity within the Midlands and the north?

Of the rail investments considered in scope by the SCR, HS2 will undoubtedly have the greatest impact on releasing capacity within the existing network across the Midlands and the North – therefore we consider HS2 Phase 2b to be an essential part of the Baseline Plan.

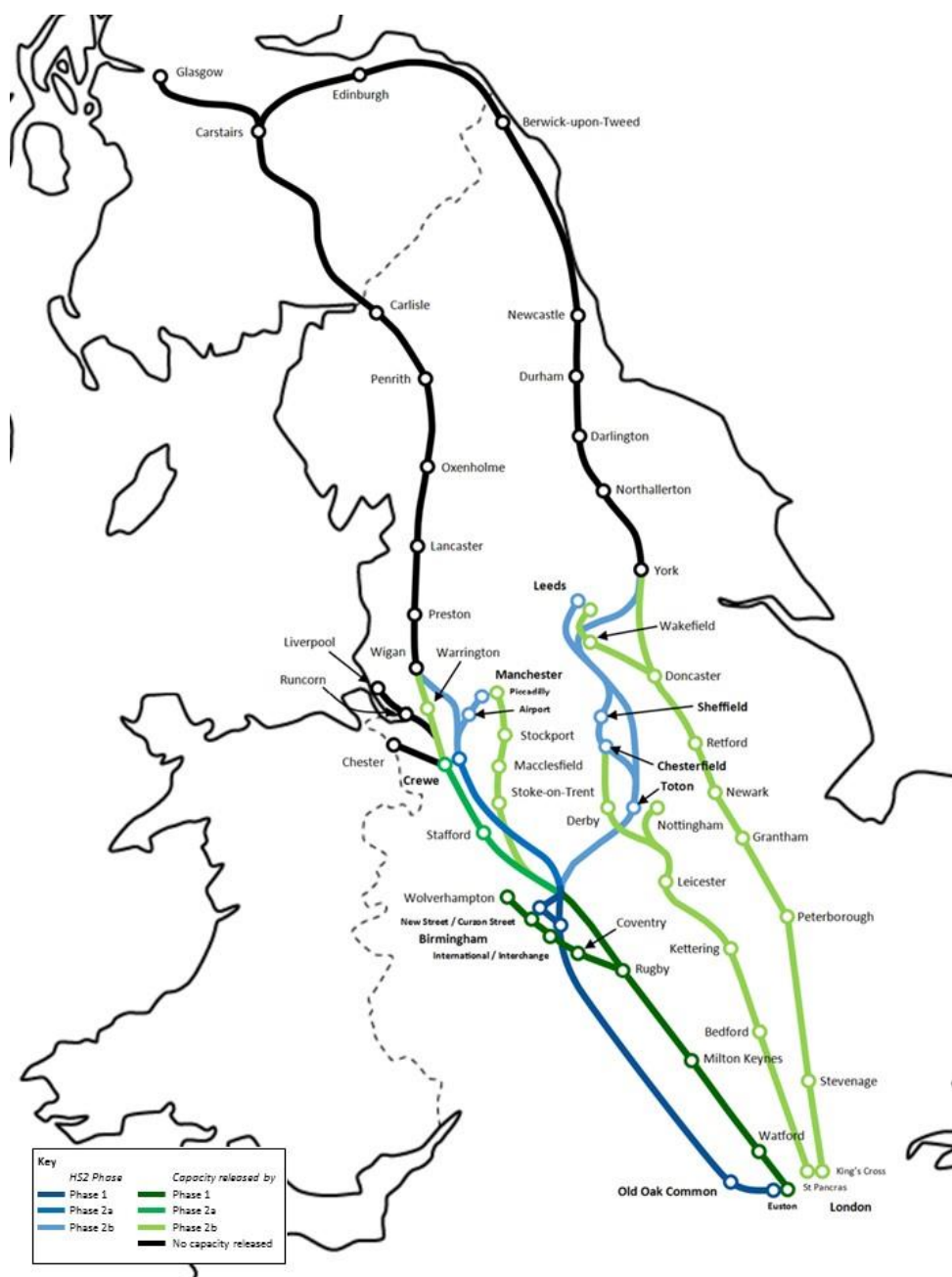
The *HS2 Released Capacity Study*<sup>1</sup>, published as an appendix to the HS2 Phase 2 Strategic Case, identified that, by establishing a new parallel route for faster, more efficient and more reliable long distance passenger travel, HS2 increases the overall capacity and capability of the rail network. This applies to the number of trains, both passenger and freight, that can run on existing lines, as well as the number of passengers that can be carried on current intercity services. The existing lines that will benefit from released capacity from HS2 are illustrated overleaf.

For the SCR, increased capacity on both the ECML and MML is important to our future aspirations, particularly full electrification of the latter as was originally planned. The CMSP work being undertaken by Network Rail in the Doncaster area is showing capacity constraints on the ECML at this time which is leading to some compromises for the 2021 timetable for the ECML. In advance of HS2 Phase 2b, there may need to be trade-offs in terms of stopping patterns and frequencies that undermine the town's and the SCR's growth potential, hence the need for incremental improvements on the ECML before HS2 Phase 2b comes on line.

The Sheffield CMSP work has also identified capacity issues in the Sheffield area at Wincobank and Dore junctions as well as at Sheffield Midland station. These issues need addressing in the short to medium term through the CMSP programme to meet existing franchise commitments and forecast growth.

---

<sup>1</sup> HS2 Released Capacity Study, Steer Davies Gleave (July 2017)



#### Existing Rail Lines Benefitting from Released Capacity

The complementary NPR proposals for an extension of the current Rotherham Parkgate tram-train services to Swinton and Doncaster, are also critical to releasing capacity. By replacing some existing local rail connections with a tram-train service, capacity is released at Sheffield Midland station, on the northern approach to the station and on the mainline between Sheffield and Swinton that can then serve the planned HS2 and NPR services. This offers a lower cost and potentially quicker way of creating capacity on the existing network whilst at the same time improving local connectivity.

An MML intercity service could be extended from Sheffield Midland to Barnsley in the future, again freeing up capacity at the former by reducing the volume of terminating and reversing services but also providing a boost to the promotion of significant housing and town centre regeneration within Barnsley. Without such future changes to the existing rail services,



existing capacity constraints at Midland station will be exacerbated and there will be the need for compromises around future connectivity.

In terms of connectivity, HS2 Phase 2b will result in a radical change in the connectivity of the SCR to adjacent and complementary city regions, particularly those with advanced manufacturing clusters in the Midlands (and onwards to the South West), Yorkshire and the North East. The CrossCountry services that provide these connections at present are often subject to delay (as the route to Birmingham is mainly a two-track railway with a mix of slow and fast trains and freight traffic) and can be overcrowded for large parts of the day. The reduced journey times to Birmingham and London with HS2 will also be welcomed by the SCR and the Local Enterprise Partnership.

NPR will achieve significant improvements in connectivity across the North, particularly between the SCR and the Leeds and Greater Manchester city regions, where average rail journey times between these important economic centres are slow and the frequencies low compared with those for other city pairs in the UK. We continue to work with TfN to develop proposals for the NPR network, which currently include enhanced connectivity from the SCR to Leeds, Manchester, Liverpool and Hull, as well as to Manchester Airport.

The emerging NPR proposals for the SCR include the provision of new stations on the Sheffield to Leeds corridor at Rotherham and in the Dearne Valley. The proposed Barnsley Dearne Valley station, located in a former coalfield regeneration area, in particular will offer both attractive commuting opportunities into strong employment markets in Sheffield, Leeds and York and longer distance connectivity, including potentially to Birmingham, London and Newcastle. The catchment area for this new station is therefore significant and considered further in our response to Question 8.

We believe that these connections to/from the SCR are fundamental to the NPR network. The full benefits of investment in NPR will only be delivered if there is improved connectivity between all of the major city regions and economic centres across the North, not just some of them, including by a single change at the key hubs where necessary, with enhanced interchange facilities. Therefore, the SCR wants to see the NPR network delivered in full and as one integrated programme.

The other SCR rail investment that can radically transform connectivity is the GatewayEast Rail proposal, centred around Doncaster Sheffield Airport – the SCR's largest strategic asset. In addition to serving the largest single growth area in the SCR, a new rail station and connection to the ECML and the Doncaster to Lincoln Line will provide a potential 90 minute journey time catchment of 8.8 million people in an area that is currently underserved by airline seat capacity. This will enable the Airport to achieve its growth ambitions for the next 30 years, but most importantly, also provide much needed capacity and resilience to the UK aviation sector.

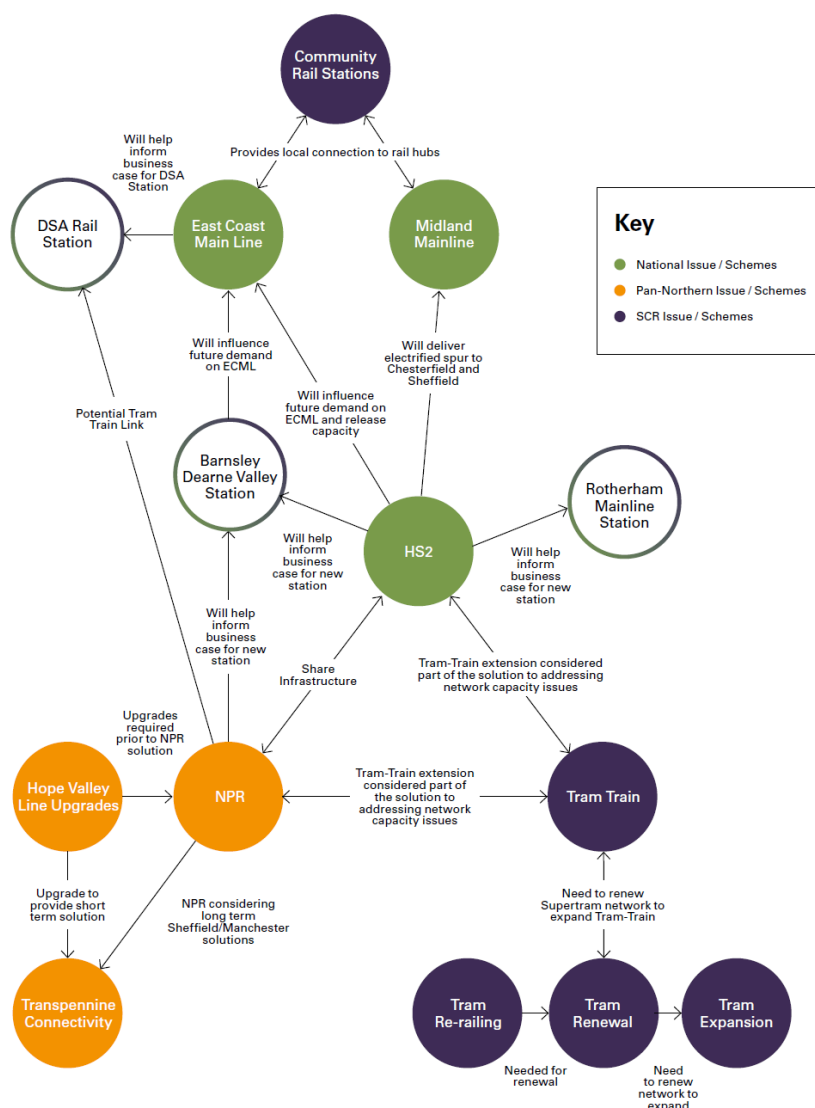
However, the SCR IRP states clearly that the SCR cannot afford simply to wait for HS2 and NPR to address current problems with capacity and connectivity. There will be interventions that achieve both of these that are required in advance, such as the Hope Valley Line CP6 improvements and interventions outside the SCR's boundary, such as those in Central Manchester, at Leeds station and on the ECML. Our local rail proposals are also critical, including selective line and station re-openings or new stations on existing lines, to improve local connections, some of which will release capacity on the main lines and at Sheffield Midland station.

**QUESTION 3** Within the set of investments you identified, which individual investment(s) should be the highest priority?

We believe that the concept of prioritising the investments identified as being in scope could actually undermine the principle of an integrated rail plan. The completion of HS2 Phase 2b, NPR and the committed national rail improvements should be the fundamentals of the Baseline Plan, complemented by all of those interventions that we set out in our response to Question 1.

Setting out “priorities” at this point could be counter-productive for two principal reasons. First, our response to Question 2 highlights the link between capacity and connectivity, particularly where there are existing constraints on the rail network – there is a clear need to improve capacity in order to enhance connectivity, given the current constraints on the rail network, but there can be connectivity improvements that free up capacity elsewhere. Both go hand-in-hand, rather than one being more important than the other.

Second, in the SCR IRP, there is a diagram that illustrates how the key rail interventions that we listed in response to Question 1 are all related to each other – this is replicated below.



**Key Rail Interventions in the SCR IRP**

We believe that the principle of “primacy” that has often been adopted in the past, particularly around the planning of HS2, has led to some sub-optimal solutions for the SCR which this process could address, at least in part.

The purpose of the SCR IRP (and we also believe the Integrated Rail Plan for the Midlands and the North) should be to set out the holistic set of improvements, all of which are required to achieve the desired outcomes. Drawing further on the example above, if we were to say, for example, that community rail stations across the SCR were a greater priority than HS2, then if HS2 did not get built, the role and demand for these stations would be diminished, and the case for investment undermined. Conversely, the improvement of community stations is vital to provide local access to HS2 and NPR services.

Where prioritisation may play a role is in the phasing of the delivery of the various interventions, and this is where we do believe that the SCR has an important role to play in providing early outputs and outcomes for the Baseline Plan. Sequencing of interventions should be informed by earliest possible delivery of economic benefits where they are most needed. In this way, we apply lessons learnt from historic service enhancements, notably on the West Coast Main Line, where applying standard appraisal methodologies, focusing investment where it has already taken place, fails to address less well-connected links.

We believe that there are five ‘early win’ opportunities to be considered as part of the Baseline Plan from the interventions listed in the response to Question 1:

- Full electrification of the MML north of Market Harborough (the section of the MML to be used by HS2 trains between Stonebroom junction and Sheffield Midland station should be electrified by HS2 Ltd), enhancing journey time and reliability on this existing key connection between SCR and London and accelerating the reduction in carbon emissions for intercity rail connections
- Upgrading and electrifying the ‘Northern Loop’ from Sheffield to the ECML at Moorthorpe (as part of the Sheffield to Leeds NPR proposals) could bring early connectivity benefits, particularly to Barnsley, Rotherham and the Dearne Valley with the proposed new stations, as well as to existing services, including allowing MML intercity services to be extended to Barnsley, the totality of which will widen access to labour markets into Sheffield
- Considering which elements of the Sheffield to Manchester NPR proposals could be delivered early, as well as delivery of the committed Hope Valley Line improvements scheme and introducing the third fast train each hour that the scheme would facilitate
- Renewal of the Sheffield Supertram system and confirmation of a permanent tram-train service to Rotherham Parkgate will allow more detailed planning of which local rail services could be converted to tram-train in the future, thereby freeing up capacity for HS2 and NPR services
- Delivering the GatewayEast Rail proposals will provide a direct rail connection to Doncaster Sheffield Airport and relieve some of the capacity constraints at Doncaster in advance of HS2 Phase 2b.

The SCR believes that improved rolling stock capacity and passenger offer, as well as an additional call at Chesterfield, on the core CrossCountry network between Birmingham and Leeds/York is deliverable in the short to medium term. The SCR also supports the consideration of potential re-mapping of parts of that network to determine the right level,



destinations served and type of service for this network in the future with HS2 in place, while maintaining the important connectivity that CrossCountry provides to SCR.

Finally, the rolling programme of investment in renewals and enhancements referenced in the response to Question 1 can also help deliver early benefits in capacity and connectivity, as could capacity improvements mentioned previously to Wincobank and Swinton Junctions, as well as at Doncaster station.

**QUESTION 4** What supporting policies need to be in place to deliver the benefits of the investments you identified? If there are any dependencies with other investments/policies, how confident are you that these supporting policies will be put in place?

Many of the overarching national policies that support the required strategic investments that we have identified are already in place, although how the Government's rebalancing agenda will be achieved in practice, along with further devolution opportunities, are likely to be firmed up in legislation that was planned to be brought forward later in 2020. The recent *Decarbonising Transport*<sup>2</sup> document is an important precursor to the Government's Transport Decarbonisation Plan later this year, which will set out how it intends to transform the movement of people, goods and services to reach the national net zero commitments.

It is vital that the commitment to rebalance the economy towards the Midlands and the North continues to be given prominence in Government funding allocations and decisions and that Combined and Local Authorities are afforded the powers and the funding to support the national investment with the required local connections, notably in sustainable and active transport. The complementary investment in local transport is fundamental to provide a holistic solution that improves the whole journey for everyone.

We are also encouraged by the consultation launched by the Government on the potential changes to the HM Treasury Green Book. In March 2018, the Green Book was revised to capture more detail around environmental appraisal (particularly the use of natural capital) and provide a greater focus on distributional impacts, as well as capturing more on how to monitor and evaluate policies. Now, we understand that the Government is seeking to review how the traditional appraisal process can be reviewed to support the rebalancing approach and to recognise the need to decarbonise transport, where rail will play a significant role in encouraging modal shift. The SCR has long argued, as with many others in the Midlands and the North, that the current approach has inherent disadvantages, and so we would wish to see this issue addressed in any reforms.

We also await the Government's response to the Williams Rail Review in the form of a White Paper. The review itself was established to look at the structure of the whole rail industry and the way passenger rail services are delivered and will make recommendations for reform that prioritise passengers' and taxpayers' interests.

We are broadly supportive of the indications from the review to date that a new national body, or "guiding mind", will be in charge of letting a series of passenger service contracts, with the Government only responsible in future for setting broad national railway strategy. This will need to dovetail with an enhanced role for Sub-National Transport Bodies,

---

<sup>2</sup> Decarbonising Transport, Department for Transport (March 2020)

Combined and Local Authorities over rail services and specifications in their local areas, as advocated in the SCR IRP.

At a pan-regional level, TfN's *Strategic Transport Plan*<sup>3</sup> and accompanying initial Investment Programme set out the priorities for transport infrastructure investment for the next 30 years (2020-2050). These documents encompass all of the strategic investments across the SCR that we outlined in our response to Question 1. The Investment Programme is built up from a series of TfN's work programmes and comprises TfN's advice to the Government on the long term, multimodal priorities for enhanced pan-Northern connectivity.

We would hope that the initial Investment Programme can be developed into a long-term transport investment pipeline for the North, alongside a dedicated Northern budget for transport improvements, agreed in suitable time periods with Government. TfN is taking forward this through the development of a new Northern Transport Charter, which the SCR is full involved in developing.

At a local level, the SCR is developing a new Strategic Economic Plan (SEP) to set out how we plan to grow our economy, create new jobs, and build an even better place in which to live, work and invest. Very good progress has been made against the ambitions in our current SEP, but there is more to do – we know that our poor productivity is constraining our potential for growth.

Our approach is underpinned by this vision – *“Sheffield City Region will grow an economy that works for everyone. We will develop inclusive and sustainable approaches that build on our innovation strengths and embrace the UK's 4th Industrial Revolution to contribute more to UK prosperity, and enhance quality of life for all.”*

We will not pursue growth at any cost. We will prioritise investment in generating growth, that helps respond to the national and global challenges of productivity, decarbonisation and tackling inequality. If we get this right:

- 1) We will be a net contributor to the national economy, retaining talent rather than exporting it, and attracting new investors to locate in the City Region;
- 2) Our people will be healthier, better qualified and better able to access good opportunities;
- 3) We will build a zero-carbon future through hydrogen, nuclear fusion, carbon capture utilisation and storage, and other clean energy technologies;
- 4) We will lead the world in testing, developing and commercialising ideas emerging from our research community and businesses;
- 5) We will have vibrant town and city centres with rich sporting, cultural and leisure offers attracting people and visitors from across the country.

One of the key pieces of evidence supporting our emerging SEP is a report into how inclusive growth can be embedded in strategies, policies and programmes within the SCR. It identifies that there are a number of ways in which the SCR can address its structural weaknesses and generate more inclusive forms of growth. The proposals coalesce around six core themes and related interventions, including Connecting residents to opportunities and Ensuring sustainable outcomes, that will guide the development of City Region policies

---

<sup>3</sup> Strategic Transport Plan, Transport for the North (February 2019)

and investment decisions, and our response to Question 8 explores how this applies to the strategic rail investments that we have identified.

The emerging SEP also recognises the SCR's Net Zero Framework – this sets out that the SCR should stay within a maximum cumulative CO<sub>2</sub> emissions budget of 44.7 MtCO<sub>2</sub> for the period 2020 to 2100 in order to ensure that the total of active removals from the atmosphere offsets any remaining emissions from the rest of the economy. Our response to Question 5 demonstrates how this new policy will guide our transport strategy and implementation plans.

The SCR Transport Strategy was published in January 2019 and sets out how we intend to better connect our major urban and economic centres to enable the better flow of people, goods, businesses and ideas across the City Region, as well as promoting our rural and visitor economies.

The Strategy also envisages a series of implementation plans, the first of which was the SCR IRP, with implementation plans around Active Travel and Roads due for publication in Summer 2020. As noted previously, the SCR IRP contains a series of short, medium and long term rail interventions that our evidence believes are necessary to achieve our social, environmental and economic objectives – all of these interventions are crucial to achieving our aims and those of the SCR's Constituent Authorities.

The recently published Sheffield Midland Station and Sheaf Valley Development Framework (attached at Appendix 3) sets out a vision for an area that offers a transformational regeneration opportunity to drive sustainable and inclusive growth, maximise the benefits of transport investments and improve the lives of people and communities. The Framework does not set out a fixed outcome but suggests the potential scope and scale of the vision that will continue to be developed in further detail by the partners involved as well as being shaped by engagement with the public, specialist interest groups and key stakeholders at the appropriate time. Similar urban centre development plans predicated on high quality rail connectivity already exist, or are in development, in Doncaster, Rotherham and Barnsley.

Therefore, we believe that the SCR is well-placed in terms of having the necessary policies in place to support what needs to be done locally to support the required national investments outlined.

**QUESTION 5** What impact would the investments you identified have on greenhouse gas emissions? In particular, how would they affect the UK's ability to meet its domestic and international targets, including the Paris Agreement and net-zero?

The *Working Draft Environmental Statement for HS2 Phase 2b*<sup>4</sup> sets out the assessment methodology to ascertain the likely impact of HS2 Phase 2b on greenhouse gas emissions, but no detailed assessment has yet been published for this intervention.

However, the *Environmental Statement for Phase 2a*<sup>5</sup> states that the proposed scheme “*will be an effective low carbon transport solution for travel between the West Midlands and Crewe in 2030*”. In terms of emissions per passenger kilometre, HS2 Phase 2a is estimated to emit 10 gCO<sub>2</sub>e/pkm compared with intercity rail (22 gCO<sub>2</sub>e/pkm<sup>68</sup>); interurban cars (67

<sup>4</sup> High Speed Rail (Crewe to Manchester and West Midlands to Leeds) Working Draft Environmental Statement, HS2 Ltd (October 2018)

<sup>5</sup> High Speed Rail (West Midlands - Crewe) Environmental Statement, HS2 Ltd (July 2017)

gCO<sub>2</sub>e/pkm); and UK domestic flights (170 gCO<sub>2</sub>e/pkm), based on projected carbon emissions in 2030.

Estimated operational carbon emissions for HS2 Phase 2a are less than 0.01% of UK total transport emissions in 2027 (the planned opening year at the time of assessment). It is likely that similar results, in terms of the comparison with the alternatives certainly, will result once the assessment for HS2 Phase 2b has been undertaken.

In terms of the NPR, increasing demand for rail as a result of the scheme means fewer trips by car, resulting in benefits from reduced emissions of air pollution and greenhouse gases.

The *Decarbonising Transport*<sup>6</sup> report recognises that rail is a relatively low-carbon form of transport and is one of the most efficient ways of moving high volumes of people into city centres and moving people over long distances. In 2018, greenhouse gas emissions from rail (passenger and freight) made up just 1.4% of the UK's domestic transport emissions, while 10% of passenger miles travelled in Great Britain were by rail. Therefore, the rail interventions set out in this Call for Evidence will be an essential part of the future transport network at all levels and will play a key role in the required reduction in greenhouse gas emissions. Crucially, the document also recognises that electrifying more of the railway is likely to be necessary to deliver decarbonisation.

Both HS2 and NPR proposals assume fully electrified networks, and further electrification will also benefit greenhouse gas emissions. Full electrification of the MML was estimated to contribute £500 million (present value benefits) through a reduction in greenhouse gases when the business case was previously examined in 2016. To this end, the SCR maintains that the full electrification of the MML, as well as an examination of the benefits of electrifying the CrossCountry network, will be crucial to achieving these aims.

Full electrification of the MML, would be more efficient and cost-effective in the long term than the current proposal to use bi-mode trains on the route. Whilst the rail industry's decarbonisation taskforce indicated that until 2050, bi-mode trains will have a useful transitional role, they concluded that diesel bi-mode trains could not be part of a permanent solution to achieve net zero. However, the use of other alternative fuels, particularly since the SCR has one of the world's leading hydrogen refuelling equipment companies is based in the City Region, will be important in meeting our net zero targets.

Although the industry's future plans will be informed by the cross-industry Traction Decarbonisation Network Strategy which is currently being prepared by Network Rail, the diagram overleaf shows the extent of electrification required to achieve a net zero carbon railway – all of the “definite” routes within the SCR are included within our suggested scope for the Baseline Plan, hence our position that a rolling programme of electrification is essential.

The SCR IRP did not include an overall assessment of the impact of the interventions within it in terms of greenhouse gas emissions, but some of the individual schemes have had a more detailed assessment undertaken. For example, the GatewayEast Rail proposal was estimated to have the potential to remove 80 million road miles created by people from within South Yorkshire travelling by car to more distant airports, taking around 23,000 tonnes of CO<sub>2</sub> off the UK's road network. The Outline Business Case for the renewal of the Supertram network shows a slight positive benefit in terms of greenhouse gas emissions for the proposal over the do minimum scenario.

---

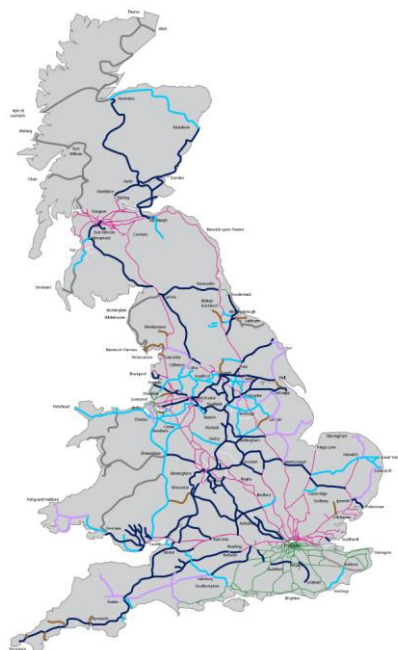
<sup>6</sup> ibid

## Electrification required for a net-zero carbon railway

- Definite
- Possible
- Unlikely
- Never
- Battery trains

### Existing Electrification

- 25 kV AC
- 750 V DC



The SCR's Net Zero Framework has estimated what the targets set to achieve net zero by 2040 mean for our transport network, including the need for a 25% reduction in total travel demand by 2030 and full railway decarbonisation by 2040 (including rail freight). The SCR's Constituent Authorities also have ambitious net zero commitments that will require a step-change in local public transport and active travel provision. Key to achieving the stated reductions will require investing in mass transit improvements within the SCR and supporting electrification programmes for our railways.

**QUESTION 6** In addition to greenhouse gas emissions, what are the potential environmental effects (positive and negative) of the investments you identified?

As noted in the response to Question 5, the Environmental Statement for HS2 Phase 2b has not yet been prepared, but *Volume 2*<sup>7</sup> of the Working Draft Statement does include some community area reports and maps that provide some indication of the potential impacts of the scheme as currently proposed.

As with any large-scale construction project, there are some significant localised environmental impacts, and those within the SCR have been set out previously. We do not feel that this response is the appropriate time to re-state these issues, but it is important to recognise the SCR's stated position that any national investment such as HS2 should be matched by the highest possible standard of environmental mitigation at all points in the delivery and operation of the scheme.

The significance of mitigation should not be underestimated and must seek to minimise impacts on property, employment, ancient woodland and wildlife habitats, community infrastructure and quality of life. This should include a review of the route alignment and the potential for project changes associated with decisions on the design or scope of HS2 Phase 2b as part of the Baseline Plan, that could avoid current environmental and community

<sup>7</sup> *ibid*



impacts. Environmental standards should support, not jeopardise, the ongoing process of environmental and economic recovery in the SCR and safeguard the City Region's distinctive sense of place and strong sense of cultural identity.

In addition, there is the need to minimise any adverse impacts of NPR through the Peak District National Park and other scenic/sensitive areas. The NPR Strategic Outline Business Case briefly considered other environmental impacts of the proposed network, with increasing demand for rail as a result of the scheme meaning fewer trips by car, resulting in benefits from reduced emissions of air pollution and greenhouse gases.

All of the interventions that we consider in scope will be subject to the appropriate level of environmental impact assessment in due course, and the SCR's Assurance Framework will take this into account when making locally funded decisions. However, we would re-iterate that rail is a form of transport for which many of the adverse impacts can be mitigated through good design, and whose overall impact on the environment is overwhelmingly positive.

We want to make sure that we can achieve a cleaner and greener City Region, moving towards a zero-carbon public transport network as fast as possible. Improvements to the rail network will make public transport and active travel options more attractive, which reduces congestion, improves our air quality and has a positive impact upon health. A step-change in how people travel into, around and beyond our City Region is required if we are to reduce harmful transport emissions that degrade the quality of our air.

Sheffield Midland Station has been identified as the worst area in Sheffield for NO<sub>x</sub> pollution, particularly on Platforms 3 and 4 where the local diesel trains often sit with their engines running. A move to more modern cleaner rolling stock, including tram-train, and a rolling programme of electrification across the rail network will help address these issues. Electrifying the taxi fleet will also help address poor air quality outside the station.

We want people and businesses to have confidence in using our rail network as a real alternative to the car, feeling safe and comfortable whilst doing so. We recognise that low perceptions of safety can be a barrier for older and vulnerable people accessing and using public transport. Additionally, perceptions of safety remain an important issue as some people choose not to travel in certain locations at certain times of the day. It is important that our rail network helps to offer sustainable and inclusive access for all to local services that matter to people's everyday lives.

We want all our residents to be able to enjoy the opportunities afforded by our green and recreational spaces, including the Peak District National Park. This is why the improvements that we are advocating between the SCR and Greater Manchester are of vital importance both now and in the future and will allow us to make the most appropriate decisions in providing additional trans-Pennine capacity for passengers and freight across different modes. For example, rail freight is important for transporting aggregates and cement from the Peak District, thereby reducing the number of heavy goods vehicles on the road network, but this can conflict with passenger capacity on the Hope Valley Line.

QUESTION 7 Aside from those delivered by improved connectivity and greater capacity, what broader impacts on people's quality of life could the investments you identified have?

The contribution of railway-related activity to the UK economy is significant. Activity supported, directly and indirectly, by the demand for rail-related goods and services has been calculated in 2018 as a £36.4 billion contribution to the UK economy in terms of 'gross value added', or GVA, and is associated with nearly 600,000 jobs. The improved journey times and reliability and potential for new services will expand labour markets creating better access to a greater range of jobs and, encourage growth by enabling businesses to access more talent.

Economic modelling undertaken for the SCR indicates that, even allowing for displacement and leakage, HS2 and NPR will stimulate significant economic growth in the City Region over the next 30 years. An additional 24,000 jobs (FTEs) could be created, contributing £13.6 billion in Gross Value Added (GVA) in 2018 prices, to the economy under a high growth scenario<sup>8</sup>.

The enhanced connectivity provided by HS2 at Sheffield Midland and Chesterfield stations is expected to generate an economic benefit to the SCR of £970 million in agglomeration and labour market impacts over the same period, based on the existing SCR transport network. These benefits primarily arise from the existing and future workforces being more productive with faster and more frequent transport connections.

With new stations at Barnsley Dearne Valley and Rotherham, this benefit increases to over £1 billion, based on an assessment of the connectivity between the growth areas and urban centres identified across the SCR to wider destinations served by HS2 and NPR. These benefits will increase even further with the enhanced local connections being promoted through the IRP and the Sheffield Midland Station Integrated Masterplan.

The planned investment in rail would also support the tourism and visitor economy, widening access to major cultural and tourism attractions across the SCR, including Chatsworth and Wentworth Woodhouse, and for sustainable travel choices to the Peak District National Park.

In terms of sectors, HS2 and NPR will have a major impact on white collar employment, much of it higher skilled and well paid – professional and other private services, finance and insurance, and information and communication (including digital industries), through improving access to such opportunities across a wider area in the Midlands and the North.

Whilst the employment impact is less pronounced in other sectors, there is likely to be a jobs increase and productivity uplift in other sectors which will benefit from access to markets and a wider labour pool, including:

- The procurement of billions of pounds worth of supply chain inputs, ranging from building materials, to rail components, to IT systems
- The job opportunities in rail engineering and construction required to build the new rail infrastructure, and then maintain the network once operational

---

<sup>8</sup> The Economic Contribution of UK Rail, Oxford Economics (February 2018)

- The construction opportunities arising from the scale of development activity which is expected to occur around the station locations as HS2 stimulates economic growth in specific sectors and leads to an uplift in demand for commercial property.

The rail industry is already important to the SCR – in 2017, between 3,400 and 5,910 people were employed in the rail industry in Doncaster, the higher figure representing 4.2% of total employment in the town at that time, generating around £898 million of economic output.

Delivery of HS2 and NPR is dependent on the skills system generating sufficient appropriately skilled workers, both to meet the increase in demand and to replace the high number of workers who will retire from relevant occupations by the time that they are operational. The potential for skills shortages to act as a constraint on infrastructure investment has been recognised nationally and actions have been taken, including the establishment of the National College for High Speed Rail (now renamed the National College for Advanced Transport and Infrastructure (NCATI)) in Doncaster and Birmingham.

The NCATI is one part of the response to the changing skills needs within the rail sector (also seen in engineering and construction more generally) – an increasing need for higher level skills, the growing use of digital technology and rise of automation, and a need to appeal to a larger workforce. Our University Technical Colleges and leading engineering departments at our universities will be fundamental to meeting these needs and the enhanced connectivity that the rail interventions set out in the SCR IRP will bring are essential in supporting the offer of our key educational and training establishments.

**QUESTION 8** How would the costs and benefits of the investments you identified be distributed economically, socially and geographically?

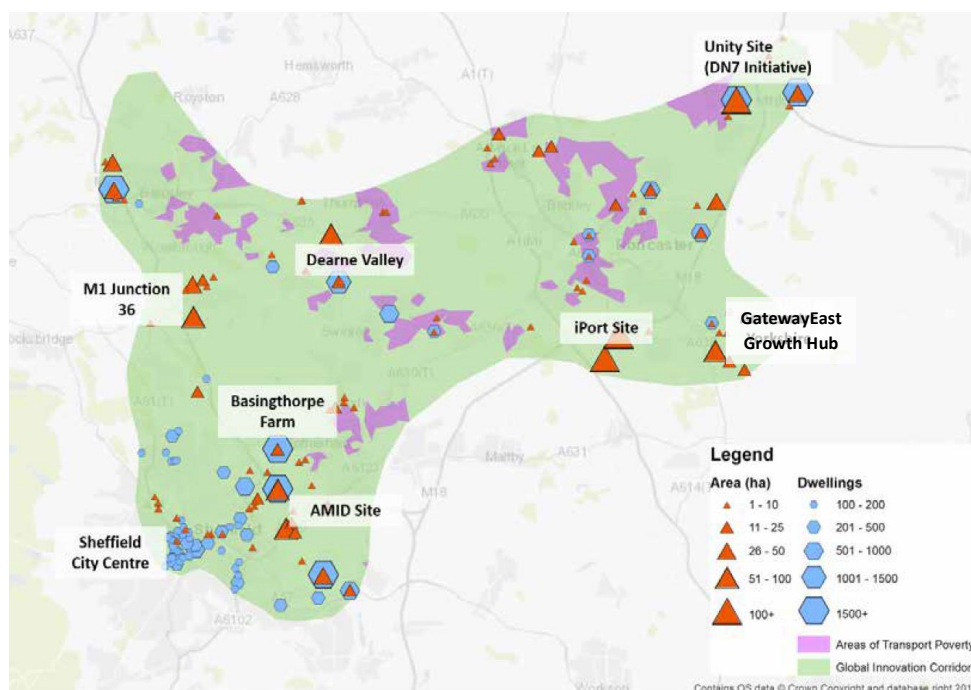
The ambition for the SCR is to build an economy characterised by global excellence in advanced manufacturing and engineering, superb national and international connectivity, with thriving urban centres and well-connected communities. The assets and capabilities within a Global Innovation Corridor identified in the SEP will provide strong foundations for further growth, if the sustainable transport connectivity is right, particularly intra-city region connections. Appreciating a national imperative to rebalance the economy, we have an ambition to rebalance our City Region too.

To unlock the economic opportunity of the SCR, the Mayor's Vision for Transport (included at Appendix 4) established a clear framework for integrating investment in national, regional and local transport improvements at three levels:

1. Residents able to walk, cycle, drive or use public transport from their home to their nearest town centre;
2. By using public or private transport, people should be able to travel between the region's major town and city centres of Barnsley, Doncaster, Rotherham and Sheffield;
3. Journey times to major cities and city regions across the North or Midlands to be reduced significantly.

Investment is needed at all these levels in order to maximise the benefits and ensure that they are distributed across the whole of SCR. However, there are a number of areas across

the City Region where the opportunities that have been identified could have the greatest impact on social cohesion – these are the areas that currently experience “transport poverty” (defined as an area of high deprivation where both public transport uptake and car ownership are low). Some 108,000 people in the SCR currently experience “transport poverty” and the figure below shows the relationship between the identified areas of transport poverty and some of the larger growth areas across the SCR.



**Areas of “Transport Poverty” in the SCR**

Therefore, our recent successful Transforming Cities Fund (TCF) funding package identified a particular focus in the short term on promoting a series of interventions that contribute towards the SCR’s objective to improve intra-city region connections that either:

- Connect areas of deprivation/transport poverty to areas of economic opportunity by public transport and active travel modes; or
- Seek to achieve significant mode shift away from the private car on key corridors and in areas where future growth ambitions and improved health and air quality would otherwise be compromised.

A key part of the TCF package was improving access to the rail network across the SCR, so as to provide a better public transport offer for everyone across the City Region – these are locally-led investments that will complement the more strategic investments that we feel are in scope for the Integrated Rail Plan for the Midlands and the North, but which are essential to deliver the outcomes to which we all aspire.

Whilst we do not think such improvements are in scope, their role in providing enhanced access to larger scale investments cannot be forgotten and are essential parts of an overall journey. Active travel networks are also key to achieving this, and help spread the benefits of the larger scale investment across the SCR.

It is acknowledged that there will be some more localised benefits of the investments that we are advocating for the Integrated Rail Plan for the Midland and the North.



The NPR network is predominantly about city to city connectivity and the existing business base in Sheffield, together with the investable proposition within the City Centre, means that there will inevitably be a significant opportunity across the City, the scale of which we identified in our response to Question 7. The diagram below from the Sheffield Midland Station and Sheaf Valley Development Framework shows the potential building massing opportunities in the vicinity of the new station.



**Extract from Sheffield Midland Station and Sheaf Valley Development Framework**

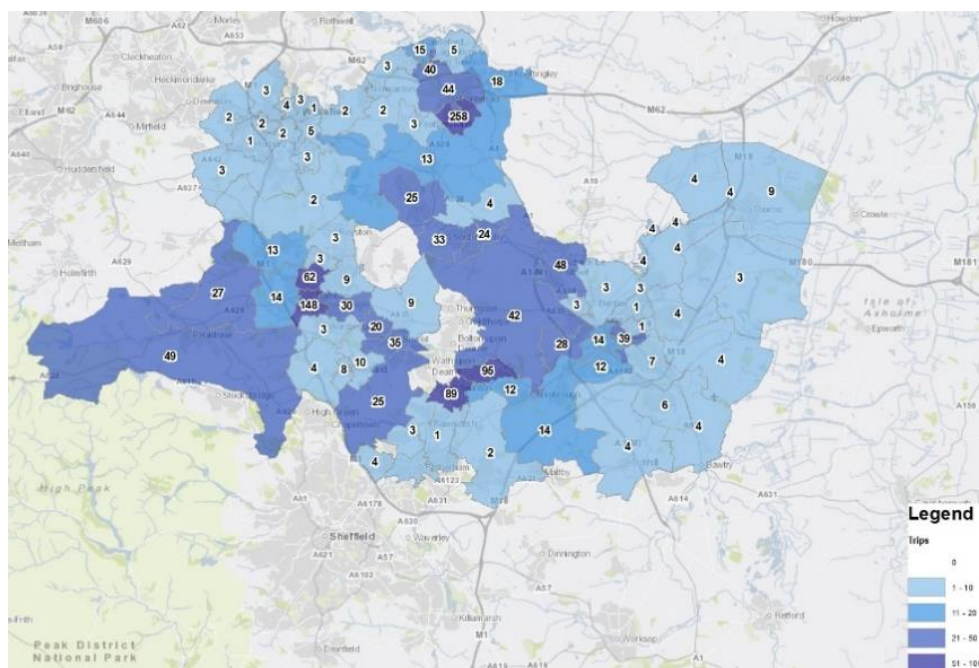
Through aligning land use planning, regeneration and local infrastructure interventions in the areas around the main HS2/NPR hub in Sheffield, as envisaged in the recently launched Midland Station and Sheaf Valley Development Framework, there is the potential to support significant intensification of commercial and residential development. There is a particularly significant opportunity to support the development of a larger and stronger cluster of knowledge intensive firms and jobs.

Delivery of the masterplan will also help ensure seamless interchange between HS2, NPR and other local public transport services, and will link the station better with the rest of the city. Enhanced local connections, including new stations such as that planned at Waverley and rail re-openings such as our successful Barrow Hill Line bid will further widen the labour market and employment opportunities across the SCR.

There is the opportunity through NPR to transform the connectivity of Rotherham and the Dearne Valley. New mainline stations at Rotherham and Barnsley Dearne Valley would transform their strategic connectivity, reconnecting Rotherham to the intercity rail network and achieving a step-change in accessibility to the labour markets of Leeds and Sheffield as well as the national network. By doing so they can also provide a catalyst for accelerated regeneration and housing growth in the surrounding areas.

Initial analysis by TfN shows how the Barnsley Dearne Valley and Rotherham stations can grow the rail market in South Yorkshire with around 3,500 additional passengers per day at Barnsley Dearne Valley – the indicative catchment area for the new station is shown overleaf. This will reduce the need for cars to travel into towns and cities and encourage sustainable travel, with approximately 1,000 fewer car trips per day.





**Potential Catchment of New Barnsley Dearne Valley Station**

The delivery of the masterplan for the GatewayEast growth hub and enhanced rail connectivity through GatewayEast Rail proposal could support between 30,000 and 52,800 gross new jobs distributed across the SCR by 2050, adding between £1.0 and £1.73 billion per year to the regional economy, as well as supporting around 11.5 million passengers per year at Doncaster Sheffield Airport.

**QUESTION 9** Which set of investments would best improve rail connectivity with Scotland?

The SCR's existing connectivity to Scotland is provided by LNER Anglo-Scots services on the ECML between London and Edinburgh (through Doncaster) and CrossCountry services between the South West and Edinburgh/Glasgow/Aberdeen that serve Sheffield/Wakefield/Leeds. The proposed HS2 Phase 2b spur south of Leeds to the ECML at Church Fenton that allows Newcastle services to bypass Leeds will help reduce journey times from the SCR to the North East and Scotland even further, whilst still allowing CrossCountry services to serve Wakefield and Leeds – the SCR IRP baseline position is that the current level of connectivity should not be compromised.

This is where the future role of the ECML to the SCR becomes important, both south of the connection at Church Fenton – our response to Question 2 has already outlined the existing and immediate capacity problems in the Doncaster area – as well as north of the HS2/ECML connection, where the aspiration is for up to 9 trains per hour (tph) to run on the ECML between York and Newcastle in the future. Of these future services, it is important to the SCR to maintain at least 1tph direct from Doncaster to Scotland and good connectivity from Sheffield at York from HS2/NPR onto Scottish services.

HS2 Phase 2b does not resolve capacity constraints north of York on the ECML, so some thought needs to be applied to how best to enable and utilise the required number of paths from/to Scotland as part of the development of the NPR Leeds to Newcastle proposals, as well as north of Newcastle, thereby allowing HS2 services to be extended to Edinburgh.

The *ECML Route Study*<sup>9</sup> provides a “menu” of enhancement options that have a strategic fit with the national network and can be progressed for further development. As well as a series of line speed improvements to allow 140mph running across this section, some key infrastructure interventions are identified to meet the service and journey time aspirations. These include:

- New platforms and an improved track layout at York station
- Increasing line capacity between York station and Skelton junction and at Northallerton
- Darlington station improvements
- Creating an additional rail route parallel to the ECML, utilising the Stillington branch re-instating Leamside Line, either in part or in full and new track near the Bensham Curve
- Newcastle station platform capacity.

All of these would be required to improve the SCR’s rail connectivity to Scotland as they provide the ability to operate the desired 9tph north of the HS2 connection at Church Fenton.

In future, a direct service from Sheffield to Preston would allow connections with West Coast Main Line HS2 services to Glasgow, and there may be opportunities for new regional connections, such as Nottingham to Glasgow via Sheffield, Leeds, Settle and Carlisle, as part of the post-HS2 network development.

There is also the opportunity to free up additional capacity on ECML through a small number of incremental schemes south of York, including improving freight capacity – in the shorter term this would address some of the current timetabling issues on the ECML and maintain the current level of station calls at Doncaster in advance of HS2 Phase 2b.

It is worth noting the work done by the HS2 East Consortium and the East Coast Main Line Authorities to demonstrate the value and potential of the eastern leg of HS2 Phase 2b and the ECML itself. For example, 12 million people live in the HS2 East region and HS2 East cities have a combined economy larger than Denmark’s, providing 27% of UK GDP. The eastern leg of HS2 Phase 2b promises £4.2bn in economic benefit, far more than the equivalent figure for the western leg<sup>10</sup>.

The value of recent and ongoing investment in the ECML to allow the new timetable to be introduced by 2021 will be worth a total of £1.35 billion over the period to 2033, when HS2 Phase 2b was originally intended to be complete. Investment in the complementary schemes on the ECML along the lines of those outlined above to further improve access to the North East and Scotland will add a further £1.62 billion to the economic benefits of HS2 Phase 2b, some 16.5% over the estimated HS2 Phase 2b benefits for the areas along the ECML<sup>11</sup>.

<sup>9</sup> East Coast Main Line Route Study, Network Rail (June 2018)

<sup>10</sup> HS2 East Economic Benefits, Systra (October 2017)

<sup>11</sup> ECML: Benefits of Investment, Systra (June 2019)

QUESTION 10 What would be the impact of the investments you identified on connectivity between the Midlands and the north, and other parts of the UK?

The current proposals for HS2 Phase 2b radically alter the connectivity of the main hub at Sheffield Midland. There will be a dedicated spur taking high speed trains off the main HS2 line near Clay Cross and running into Sheffield via Chesterfield on the Midland Mainline. – There will be up to four HS2 tph comprising 2tph from London and up to 2tph from Birmingham, with one of the former potentially stopping at Birmingham Interchange for access to Birmingham Airport.

Expected journey times on HS2 from Sheffield would be as follows:

- East Midlands Hub – 27 minutes (current fastest journey time to Derby is 30 minutes, to Nottingham is 49 minutes)
- Birmingham – 49 minutes (current fastest journey time 63 minutes)
- London – 87 minutes (current fastest journey time 121 minutes).

With NPR, journey times and frequencies between Sheffield and adjacent Northern city regions would be improved significantly, including:

- Leeds – 4tph and 27 minutes (current fastest journey time 40 minutes)
- Manchester – 4tph and 35-40 minutes journey time (compared with 2tph and 49 minutes at present)
- Hull – 2tph and less than 60 minutes journey time (1tph and around 80 minutes at present),

There is the potential for a 1tph Sheffield to Nottingham NPR service to use the HS2 network to reduce journey times even further with a new connection onto the classic network at Toton.

It is important to achieve a good clockface spread of services on all key intercity routes, especially as the current timings that the SCR is being offered on some HS2/NPR routes are unsatisfactory. This will also help achieve good connectivity between HS2/NPR and local/regional services at interchanges such as Sheffield Midland.

Both HS2 and NPR will also enhance connectivity to the North East and Scotland – onward connections to York and the North East via the ECML will bring Newcastle within around 80 minutes' journey time of Sheffield. It is estimated that over 100,000 more businesses and three million more people will be within 90 minutes' reach of Sheffield with the completion of HS2 Phase 2b and NPR.

Existing MML connections to Derby and Leicester and CrossCountry connections to the south and south west should be maintained and, where possible through future investment on these routes, enhanced.

In our response to Question 8, we outline the significant improvement in accessibility for Barnsley, Rotherham and the Dearne Valley as a result of the proposed new stations in those locations. Based on the current plans for services at the new Barnsley Dearne Valley

station, there would be significant improvements in journey times and connectivity as set out below:

- Leeds – 15 minutes
- Sheffield – 12 minutes
- York – 20 minutes
- Birmingham – 56 minutes
- London – 95 minutes.

The totality of the strategic rail interventions that we consider to be in scope will have a cumulative effect in terms of service frequency and journey times between the SCR and key connections. A relevant extract from the SCR IRP showing the aspirations and estimated benefits for the key connections is provided below.

Service	Frequency <i>Trains per hour</i>			Journey Time <i>Hours : Minutes</i>		
	Now		Aspiration	Now		Aspiration
London (via ECML/MML) to...						
Chesterfield	2	➡	2	1:44	➡	1:37
Doncaster	4	➡	6	1:36	➡	1:30
Sheffield	2	➡	2	2:00	➡	1:50
Barnsley	0	➡	1	--	➡	2:00
Rotherham	0	➡	1	--	➡	2:00
Barnsley to...						
Leeds	2	➡	2	0:35	➡	0:30
Nottingham	1	➡	2	1:15	➡	1:10
Huddersfield	1	➡	2	0:47	➡	0:40
Sheffield (semi-fast)	2	➡	2	0:22	➡	0:20
Sheffield (stopping)	2	➡	4	0:26 – 0:30	➡	0:25
Doncaster to...						
Sheffield (fast/semi-fast)	3	➡	4	0:22 – 0:28	➡	0:20
Sheffield via Rotherham	2	➡	2	0:38 – 0:40	➡	0:35
Leeds	2	➡	3	0:33	➡	0:25
Leeds (stopping)	1	➡	2	0:46	➡	0:40
Lincoln	5 per day	➡	1	0:50	➡	0:45
Manchester	1	➡	1	1:20	➡	1:00
Hull	2	➡	2	0:50 – 1:00	➡	0:30
Sheffield to...						
Barnsley (semi-fast)	2	➡	2	0:22	➡	0:20
Doncaster (fast/semi-fast)	3	➡	4	0:22 – 0:28	➡	0:20
Doncaster via Rotherham	2	➡	2	0:38 – 0:40	➡	0:30
Leeds (fast)	1	➡	2	0:40	➡	0:28
Leeds via Rotherham	1	➡	2	1:15	➡	1:00
Manchester (fast)	2	➡	4	0:48 – 0:51	➡	0:40
Worksop	2	➡	2	0:30	➡	0:20
Lincoln	1	➡	1	1:19	➡	1:00
Hull	2	➡	2	1:26	➡	0:50

Building on our response to Question 2 regarding the released capacity opportunities that will be afforded by HS2 and NPR, the SCR would like to see improved links to other cities

such as Bradford, Cambridge and Preston, as well as building on existing links to cities such as Leicester and Peterborough.

However, it is worth emphasising our response to Question 3 – these benefits will only accrue with the delivery of the totality of the interventions that we have outlined. Prioritising between them or picking “winners” will not deliver the outcomes necessary nor aspired to when advocating these significant investments.

**QUESTION 11** What would be the impact of the investments you identified on international connectivity across the Midlands and the north?

The GatewayEast growth hub is already home to 100 businesses; there is 1,600 acres of unconstrained land to accommodate an innovation cluster; 3.5 million sq ft of advanced manufacturing and logistics space has recently received outline planning, adding to previously consented 600,000 sq ft already under development; overall, there is the opportunity for around 6 million sq ft of further employment space over and above what currently exists; and there are plans for 3,000 homes, delivering a whole range of housing types, including affordable housing.

At the heart of GatewayEast is Doncaster Sheffield Airport, which is already contributing £67 million GVA per annum to the regional economy and is the fastest growing UK passenger airport carrying over 1 million passengers. The Airport acts as one of the two main economic catalysts of the emerging Global Innovation Corridor in the SCR. Its development provides a short-term deliverable solution towards current policy challenges whilst unlocking a centre of long term and sustainable economic opportunity for residents and businesses.

The sustainable future growth of Doncaster Sheffield Airport is a fundamental part of the GatewayEast growth hub proposition. Good surface access to an airport is critical for its success – in turn, an airport’s success is critical to the economic growth and vitality of the surrounding area. It is unquestionable that the Airport has the capacity to grow substantially in support of the Government’s Aviation Policy to make best use of latent existing runway capacity, however, a public transport connectivity solution beyond that which has already been provided, and that will be a catalyst for the planned transformational growth, needs to be found.

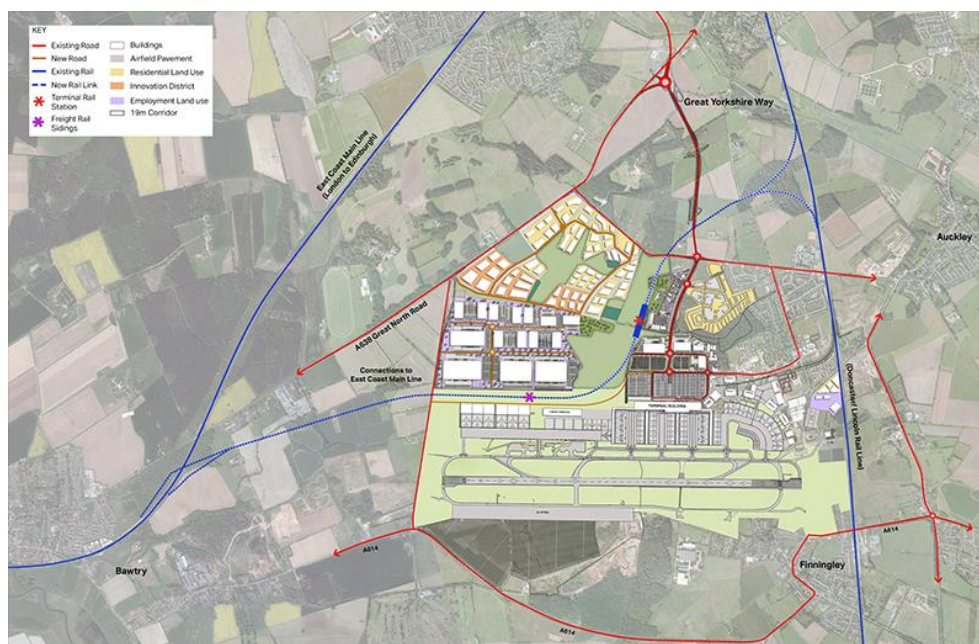
The Airport’s proximity to the ECML offers a deliverable short-term solution to accelerate the growth hub’s impact. Doncaster Council, the SCR and the airport’s owner the Peel Group are working alongside Network Rail and TfN to progress delivery of the GatewayEast Rail proposal, shown overleaf, requiring just 4.5 miles of new track off the mainline and rejoining via the existing Doncaster – Lincoln Line running adjacent to the top of the runway, with a new station at the heart of the growth hub adjacent to the Airport.

Improved rail surface access of this magnitude would more than treble the number of people within 90 minutes rail journey of DSA’s site from 2.4 million to 8.8 million people, enhancing passenger catchment access making further long haul destinations viable and as an extended labour market able to access the SCR.

Capacity assessment work undertaken on the operation of the local rail network has confirmed that a new rail connection and station can be provided, with an initial range of extended or diverted train services identified comprising both franchised services and open access operators. These initial services would provide a core level of train service to a range



of destinations across the SCR and also North Lincolnshire, North Nottinghamshire and South Humberside, allowing as many people as possible to access the opportunities within the growth hub, at the Airport and also allowing quick and convenient access to the wider national rail network.



**GatewayEast Growth Hub Proposals**

The initial range of services and the resulting rail demand has been used to assess the value for money of the scheme, and one of the preferred options shows a positive value for money in pure transport appraisal terms, although it is clear that the scheme will offer higher value for money when considering wider economic impacts. It is estimated that every £1 of investment could deliver around £22.58 in economic returns to the UK by 2050<sup>12</sup> and The recent Rail Network Enhancements Pipeline Supporting Statement (attached at Appendix 5) sets out the clear rationale for investing in this transformational rail project.

The GatewayEast Rail proposals will provide greater access to sustainable travel to the Airport whilst also reducing emissions and environmental impact from unnecessary travel outside the SCR and wider region – currently some 13,500 people per day travel to airports in the South East and 18,500 per day travel to the North West for the North East, Yorkshire and the Midlands.

However, we also recognise the importance of HS2 and NPR in providing enhanced connections from the SCR to other key international airports, notably Birmingham (through an HS2 stop at Birmingham Interchange) and London Heathrow (through HS2 via Old Oak Common), Manchester (through NPR) and East Midlands and Luton (via MML).

We support the need for the aviation sector to play its full role in reducing carbon emissions in line with new targets, but we also believe that there will still be an important role for aviation in our future economy. It is critical, therefore, that surface access to key international connections is undertaken in a sustainable and environmentally friendly way.

<sup>12</sup> <https://flydsa.co.uk/latest-news/delivery-of-33000-jobs-for-the-north-takes-a-major-step-forward-today-as-the-department-of-transport-receives-formal-proposals-for-a-major-yorkshire-rail-scheme/>

Both the HS2 and NPR proposals, as well as a number of the other interventions that we have identified, will also provide further opportunities to enhance connections to ports, notably towards the East Coast ports, supporting the ongoing development of rail freight terminals around Doncaster, most notably the iPort site, a 171 hectare intermodal rail terminal that is the largest rail terminal in Yorkshire.

### **Supporting Appendices**

Appendix 1 – Sheffield City Region Integrated Rail Plan

Appendix 2 – Barnsley Rail Vision

Appendix 3 – Sheffield Midland Station and Sheaf Valley Development Framework

Appendix 4 – Mayor's Vision for Transport

Appendix 5 – GatewayEast Rail Scheme Rail Network Enhancements Pipeline Supporting Statement