

South Yorkshire Integrated Transport Authority

# High Speed Rail Investing in Britain's Future

## Consultation response



**Evidence submitted by South Yorkshire Passenger Transport Executive (SYLTE) on behalf of South Yorkshire Integrated Transport Authority (ITA).**

This document forms the South Yorkshire Integrated Transport Authority (ITA) response to HS2 Ltd's July 2013 Consultation. This consultation response makes reference to the wider Sheffield City Region (SCR) where relevant or appropriate, but is a South Yorkshire response. Specific detail relating to route engineering is provided in Appendix A to this report. A report detailing connectivity requirements for the Sheffield Meadowhall station will be submitted independently, however the Executive Summary to this report forms Appendix B. A summary of the South Yorkshire Local Authorities and SCR Local Enterprise Partnership responses are summarised within this ITA consultation response. The SCR Local Enterprise Partnership will also be submitting a complementary response with a focus on the economic benefits to the SCR.

The response sets out the further work required with HS2 Ltd to ensure that the economic benefits of HS2 can be maximised. This includes ensuring that a comprehensive connectivity package is in place so that HS2 services can be easily accessed from across the region. It also means supporting the development of a clear and ambitious masterplan to guide the sustainable, high value growth resulting from the HS2 investment.



**South Yorkshire authorities are unanimously supportive of HS2 given the significant impact it will have on the region's economy.**

# Executive Summary

South Yorkshire partners are unanimously and enthusiastically supportive of the 'Y' network as it will have a transformational impact on our economy. HS2 is a comprehensive high speed connectivity solution for the UK and forms a key component of our growth strategy. Our research estimates that the eastern leg of Phase 2 delivers economic benefits of £4.2 billion<sup>1</sup>.



**South Yorkshire is part of the SCR which is home to:**

**1.8 million residents**

**700,000 employees**

**44,700 businesses.**

South Yorkshire is part of the SCR, which is home to 1.8 million residents, almost 700,000 employees and 44,700 businesses and generates an annual GVA of £28.2 billion<sup>2</sup>, South Yorkshire's contribution is £22.9 billion<sup>3</sup> of the city regions GVA. We fully support the inclusion of a HS2 station at Sheffield Meadowhall as part of the eastern leg of the 'Y' network.

We want to work closely with HS2 Ltd and London & Continental Railways involving the South Yorkshire public and private stakeholders to make the most of this economic opportunity. This means working in partnership to develop an integrated and ambitious Masterplan around the station site, forming a catalyst for the delivery of the SCR Strategic Economic Plan. A HS2 Steering Group will take forward further work on HS2 during 2014.

As a minimum, the eastern leg should be delivered at the same time as the western leg so that economic benefits are maximised for South Yorkshire, so that it is not disadvantaged when compared to the west of the country.

We will develop a Masterplan around the proposed station location at Sheffield Meadowhall, subject to the delivery of a comprehensive connectivity package to enable its efficient function and maximise surrounding growth. Our requirements regarding connectivity are set out in this document but reflect the following key principles.

- The HS2 station is integrated at a single location with heavy and light rail platforms; forms a bus interchange and has park and ride, parking, taxi and drop off facilities. All modes are complemented with high quality walking and cycling links.

- The station is supported by a regional tram train network, providing express links to Barnsley, Doncaster, Rotherham and Sheffield.
- The classic network timetable is modified to provide heavy rail services to the HS2 station throughout the city region and beyond.
- HS2 has rapid connections to Sheffield Midland station, providing a seamless link to Sheffield city centre and the Central Business District (CBD), which is the economic engine of the region, with a GVA of over £10m and forecast job growth within the inner ring road of 57,000<sup>4</sup>.
- Surrounding highway constraints are addressed to provide ample capacity for all network movements in 2033 and beyond. In particular, solutions are required for M1 Junctions 33 & 34, Meadowhall Way and Vulcan Road.
- In terms of released capacity, we have developed options and would welcome further liaison and discussion with HS2 Ltd in terms of implementation. We strongly recommend the establishment of a surrounding network investment funding pot – post-HS2 for 2019 and beyond, focussed on ensuring maximum benefits can be derived from the existing network.

Multi modal traffic modeling should be undertaken as early as possible to inform transport and land use planning around the Sheffield Meadowhall Station site. When the economic regeneration impacts are added to the station, the area would see a substantial increase in traffic movements and intervention is required. We look forward to working with HS2 and the Highways Agency on this in due course.

We have identified a number of challenges and impacts associated with the Sheffield Meadowhall station that need to be addressed. We will support HS2 Ltd, in the resolution of these issues and respond to further consultations as the detail is developed.

We support the location of the proposed Infrastructure Maintenance Depot at Staveley. There are some improvements that are required to approach lines and footprint, so that it facilitates, rather than compromises development of surrounding land, and is subject to guarantees regarding the utilisation of local expertise in its construction and operation.



**South Yorkshire generates an annual GVA of £22.9 billion.**

We support use of the proposed Infrastructure Maintenance Depot at Staveley as a construction base for the main line, subject to guarantees regarding the utilisation of SCR expertise in its operation.

HS2 will enhance the international travel opportunities available to South Yorkshire by providing faster connectivity to international gateways. In the long term, HS2 could become part of a wider, pan-European transport network, starting with a rail connection to HS1.

It is important that we maximise the readiness of the South Yorkshire workforce for the opportunities presented by HS2 and that local people can access the jobs that HS2 creates in their area. The ITA will work with HS2 Ltd, to maximise these opportunities.

South Yorkshire and the wider SCR is in a strong position to provide the workforce to plan, build and operate HS2. We would welcome a proactive dialogue on the potential for South Yorkshire to be the 'home' for a HS2 'Further Education College'.

When discussing the detail of the route proposals, our response focuses on South Yorkshire, but also includes some wider SCR information, where appropriate and relevant.

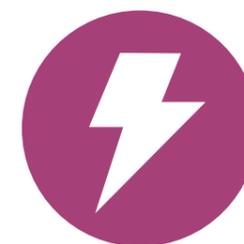


**South Yorkshire fully supports the 'Y' network as a comprehensive high speed connectivity solution for the UK. Our research estimates that the Eastern leg of Phase 2 delivers economic benefits of £4.2 billion.**

# 1. Route

## Eastern Leg

*(iv) "Do you agree or disagree with the Government's proposed route between West Midlands and Leeds? This includes the proposed route alignment, the location of tunnels, ventilation shafts, cuttings, viaducts and depots as well as how the high speed line will connect to the East Coast Main Line".*



**Lines north of Sheffield, to Leeds and Doncaster should be electrified as an extension of current MML plans before HS2 is delivered.**

**1.1** We strongly support the inclusion of South Yorkshire in the HS2 network because it will provide much needed capacity and will significantly enhance journey times to London, West Midlands, East Midlands, Leeds and the North East. The Eastern Network Partnership forecasts that HS2 will deliver wider economic benefits of £400m direct to the SCR<sup>5</sup>. This comprises productivity benefits of bringing businesses closer together, imperfect competition benefits and the economic benefits of enabling workers to access more productive jobs by releasing capacity on existing rail routes.

**1.2** In terms of the route selected to achieve this, we are broadly supportive. We support, in principle, the location of the infrastructure (including tunnels, viaducts and cuttings). We also fully support the inclusion of a connection between the 'Y' network and the East Coast Main Line.

**1.3** The following principles should be applied to development of the eastern leg to ensure that the economic potential of the scheme for South Yorkshire and the country as a whole is fully realised:

- HS2 should not negatively affect existing plans to upgrade and electrify the Midland Main Line (MML), including enhancements at Sheffield and line enhancements. e.g. Holmes Chord.
- HS2 should be fully integrated with connecting passenger services to the East Coast Main Line (ECML). Furthermore, investment is required to enable the effective movement of rail freight throughout the ECML, both before and after the opening of HS2.

- Lines north of Sheffield, to Leeds and Doncaster should be electrified as an extension of current MML plans before HS2 is delivered
- Existing rail capacity released by HS2 should be used to improve services at stations across South Yorkshire
- Adverse environmental impacts of the line, the new Sheffield Meadowhall station and the proposed Infrastructure Maintenance Depot at Staveley should be avoided where possible, or minimised and mitigated through excellent design
- Full compensation for people and businesses who are adversely affected by the new line, Sheffield Meadowhall station and Infrastructure Maintenance Depot (IMD) made available at the earliest opportunity
- High quality 'classic rail' services should be developed between Meadowhall and the SCR urban centres
- A comprehensive access package should be provided to the new Sheffield Meadowhall station by train, tram, bus, walking and cycling. Sustainable access for workers and construction workers to the Staveley Infrastructure Maintenance Depot should be similarly integrated
- Intervention is required to minimise the impact of the new Sheffield Meadowhall station on local and strategic roads
- Connectivity is required between HS2 and existing rail lines
- The infrastructure should have minimum negative impact on existing businesses & their supply chains
- Companies based in South Yorkshire should have a fair opportunity to win contracts to support construction and delivery
- Construction of the 'Y' network, and particularly the eastern leg, should be accelerated so that the economic benefits of HS2 can be realised earlier in the north
- Construction of the 'Y' network should be started in the north at the same time as the link into construction of Phase 1 to give business certainty and confidence to invest
- The proposed connectivity package should be constructed and operational in time for HS2 opening.



**Existing rail capacity released by HS2 should be used to improve services at stations across South Yorkshire.**

**1.4** There are a number of local impacts that HS2 Ltd need to consider and work with us to resolve, particularly where HS2 presents a risk to planned economic growth. We have summarised the key issues; with further detail, including specific locations provided in Appendix A.

- **Local Enterprise Zone (LEZ):** The proposed route impacts significantly on a number of key strategic sites, which have Local Enterprise Zone status, placing uncertainty and blight on these key development locations. The Government has acknowledged that this is a problem and provided flexibility in realigning the Local Enterprise Zone. Of course, any uncertainty to HS2 can constrain development, so we urge HS2 Ltd to proceed quickly in delivering the scheme as proposed. The flexible approach to LEZ allocations is set out below:

- The 'existing' LEZ Enhanced Capital Allowance (ECA) sites currently blighted by HS2 will form part of the LEZ 'long list'.
- The 'long list' of sites will be marketed as LEZ ECA eligible sites until the point at which the final decision on the route / station location for HS2 is made (current Government timetable: early 2015) or until the upper investment limit (£300m Capital Expenditure across the LEZ ECA sites) is reached. A final 'short list' of ECA sites (of around 60 hectares) will then be agreed.
- In the meantime, Her Majesty's Treasury have committed to 'fast-tracking' into legislation any sites which attract end users. This will give investors the confidence needed to progress with their plans, safe in the knowledge that they are able to secure the ECA incentives on their preferred site.



**High quality 'classic rail' services should be developed between Sheffield Meadowhall and urban centres.**

- **Waverley Community Development:** The route will impact one of South Yorkshire's key development sites, the Waverley New Community (WNC). Developer, Harworth Estates has considered the implications of the line of route as it passes through the eastern side of the WNC site and it is estimated that over 1,000 proposed homes may be affected. As a result of the change in alignment of the line of route immediately north of the proposed station at Sheffield Meadowhall (to avoid the Firth Rixon site), the proposed route now has a greater impact on WNC than the one announced in January's initial preference. Whilst the benefits associated with protecting Firth Rixon, particularly to the economy, are acknowledged and supported we urge the Government to consider changes to the proposed alignment to minimise the impact on the WNC development during the detailed engineering design process. Furthermore, Harworth Estate's own review of the planned route of HS2 indicates that the vertical alignment of the route across the former opencast site will be at current ground level and not require a viaduct or embankment.

- **Staveley Depot:** The proposals include the provision of an Infrastructure Maintenance Depot (IMD) at Staveley, which directly impacts on Chesterfield Borough Council plans to develop and regenerate the land surrounding the proposed depot.

*Improvements are required to approach lines and footprint so that HS2 facilitates, rather than compromises:*

- The construction of the Chesterfield-Staveley Regeneration Route and
- Re-opening of the Chesterfield Canal navigation; and subject to guarantees regarding employment of local workers.



**Infrastructure  
should not  
have a negative  
impact on  
existing South  
Yorkshire  
businesses  
and their  
supply chains.**

**1.5** As HS2 is designed and delivered there are a number of important considerations, which are set out below:

- **Road management:** It is vital that the construction and subsequent operation of HS2 does not have a negative impact on the highway network. Diversions need to be planned and communicated in advance and effectively phased to minimise disruption and support efficient business movements. Details of diversions, crossings and closures are in Appendix A.
  - **Public transport network:** It is essential that public transport can effectively function throughout the delivery and operation of HS2. It is inevitable that the network will need to change to allow construction, and to respond to HS2.
  - **Bridges:** Clearance should not be restricted. Where a road needs lowering, provision should be included to provide sufficient drainage and ensure there is no increase in flood risk
  - **Railway disruptions:** South Yorkshire supports the proposed railway realignment providing there is sufficient provision to manage the disruption.
- 1.6** To ensure fairness for those impacted, whilst seeking to maximise the benefits to the economy, it is important that compensation is provided where appropriate to residents and businesses that are unfavourably impacted by HS2:
- **Demolition of commercial properties:** All the affected companies should receive adequate compensation with a minimal level of disruption and uncertainty. There should also be a package of support for businesses to relocate within the South Yorkshire boundary, ensuring there is no further economic impact on our economy.
  - **Farmland:** It is important that the owners of farmland receive suitable and timely compensation and that the impact on the viability of the farm is recognised.
  - **Residential:** Although home owners will receive compensation, suitable solutions must be included for people who rent their homes to find similar accommodation without an adverse impact on their livelihood.
  - **Environmental:** A number of South Yorkshire green spaces as well as recreation, tourism and heritage sites will be affected by HS2. We also recognise that there will be an impact on the Chesterfield Canal Project, which is severed by the HS2 proposals, preventing the delivery of this important regeneration scheme and the economic benefits anticipated (estimated 1,163 jobs).
  - **Visual impact:** Consideration should be given to the aesthetic impact of the infrastructure along the full length or route. There is particular concern around the impact of HS2 on the heritage landscape in the vicinity of Bolsover Castle, Hardwick Hall and Sutton Scarsdale.

**1.7** HS2 Ltd also need to be aware of potential construction issues associated with the local geography, with key issues including;

- **Mining:** It is essential that HS2 Ltd carry out substantial detailed investigation and preparation in advance of the construction process to reduce the risk of delays, increased cost or additional disruption. One of the biggest concerns in South Yorkshire is the number of former mine workings, many of which are not mapped, which cover the area.
- **Flooding:** The route of HS2 through South Yorkshire involves crossing a number of rivers and flood plains. Although the published plans show that the areas of flood risk are recognised and the proposal includes substantial use of viaducts to mitigate this risk, care is necessary to ensure that any changes as a result of the constructing HS2 will not create problems elsewhere.

**1.8** There is a clear and well documented economic disparity between the north and south of the country. Historical underinvestment in infrastructure has created barriers to northern city regions realising their full potential to become self-sufficient, major economic competitors. As set out in the emerging SCR Strategic Economic Plan, we want the Government to accelerate investment in nationally important infrastructure in line with our growth priorities. We see clear benefit in revising the timescales associated with the project and have the following asks:

- Bring the legislative milestones forward, such that the northern sections can be delivered sooner, or ideally, at the same time as Phase 1.

- HM Treasury to release the funds to allow the operational date of the 'Y' network to be brought forward.

**1.9** The sooner the northern cities are effectively connected together; the sooner the UK can effectively and sustainably compete in the global market.



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## Western Leg

*(i): Do you agree or disagree with the Government's proposed route between the West Midlands and Manchester? This includes the proposed route alignment, the location of tunnels, ventilation shafts, cuttings, viaducts and depots as well as how the high speed line will connect to the West Coast Main Line".*



**South Yorkshire supports the full development of the 'Y' shaped network as a comprehensive measure to address UK rail capacity challenges.**

**1.10** We do not have detailed, specific comments on the route alignment or infrastructure associated with the western leg, however we support the full development of the 'Y' shaped network as a comprehensive measure to address UK rail capacity challenges.

**1.11** Current proposals are to serve Glasgow and Edinburgh via the western leg with services running on the classic network beyond Manchester. However we understand that the eastern leg is also an option (to better manage movements into Edinburgh). We could only support this option if eastern leg Scotland services stopped in South Yorkshire and there was no impact on the ECML services between South Yorkshire and other destinations. We would support the extension to Edinburgh of the planned Birmingham to Newcastle services, so long as they continue to call at the Sheffield Meadowhall station and with no capacity impacts.

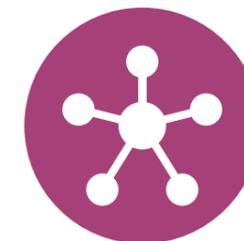
**1.12** It is essential that, as a minimum, the eastern leg is delivered at the same time as the western leg so that economic benefits are maximised. It is important that South Yorkshire and other city regions served by the eastern leg are not disadvantaged when compared to regions to the west of the country.

## 2. Station Location

### South Yorkshire

*Do you agree or disagree with the Government's proposals for a South Yorkshire station to be located at Sheffield Meadowhall?"*

**2.1** Meadowhall Interchange is well located on the existing transport network and already functions as an important multi-modal transport hub. There are currently approximately 300 heavy rail movements at Meadowhall per day, providing links north towards Barnsley, Wakefield, Huddersfield, Rotherham, Doncaster, Hull, and Cleethorpes, and south towards Sheffield, Manchester (city centre and airport) and Nottingham. The Interchange is served by frequent tram and bus services and is located near to Junction 34 of the M1 motorway, with connections to the local highway network from the A6109 and A6178. HS2 will further enhance the role of Meadowhall as a transport hub. We are supportive of the Sheffield Meadowhall station location, but only on the basis of a package of measures identified in this consultation response being provided to enable it to reach its full economic potential.



**Meadowhall Interchange is strategically located within South Yorkshire.**

### 2.2 Our Vision for Sheffield Meadowhall:

- A regional transport and economic hub
- An area recognised for innovative and productive business
- A secondary economic driver for the region with a complementary offer to Sheffield city centre
- First class business, shopping and leisure facilities
- A leading IT and multimedia centre
- Sophisticated and efficient transport systems
- A station that is seamlessly connected to all other modes, supported by a mass transit network
- A station that is rapidly accessible from across the region in a sustainable way
- A station that is integrated with the strategic highway network, and does not compromise its efficient flow
- A single station combining HS2, classic rail, tram train, tram and bus, supported by an integrated mass transit network.

**2.3** For Sheffield Meadowhall to work as a HS2 station there are a number of essential prerequisites and this includes connectivity to and from Sheffield city centre. We consider these fundamental components of the HS2 project, without which the infrastructure would be unfit for purpose.

**2.4 Connectivity:** Multi-modal interchange at the HS2 stations is key to improving connectivity. In the case of South Yorkshire this involves improving the connections between Sheffield Midland station, located in the city centre, and the proposed HS2 station at Sheffield Meadowhall. This will help to encourage mode shift (high speed rail counting as a distinct mode) and help overcome any perceived economic disbenefits of the HS2 station location.

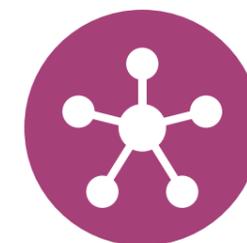
**2.5** A comprehensive connectivity package is required to ensure that Sheffield Meadowhall is accessible by all modes from across South Yorkshire. Our evidence suggests that Sheffield city centre is the economic engine of the city region and as such, connectivity

to Sheffield city centre is vital – as well as connectivity to key South Yorkshire settlements and urban centres. The table below highlights the key connectivity requirements, with further detail in Appendix B.

High Speed Rail Connectivity Requirements	
<b>Committed</b>	<ul style="list-style-type: none"> <li>BRT North – To be linked to HS2</li> <li>Tram-train between Sheffield and Rotherham (although a connection is needed at Meadowhall South to allow future access to the Interchange)</li> </ul>
<b>Likely in future Network Rail Control Periods</b>	<ul style="list-style-type: none"> <li>New, standardised three-car unit rolling stock across South Yorkshire network to provide more seating capacity from Barnsley and Rotherham/Doncaster. This may be delivered in the intervening period with electrification of the network and rolling stock renewal</li> <li>Heavy rail line speed improvements to provide more line capacity from Barnsley</li> </ul>
<b>Proposed by HS2 Ltd</b>	<ul style="list-style-type: none"> <li>Platform lengthening for Platforms 1 and 2 at Meadowhall Interchange</li> <li>New junction at Meadowhall Way/Alsing Road (current proposal needs review so as to negate any impact on operation of M1 Junction 34)</li> <li>Revised Midland Main Line / Cross Country services from Sheffield Midland to enhance connections to Barnsley, Leeds, Wakefield, Rotherham and Chesterfield, with a call at Meadowhall Interchange</li> <li>Additional 2 trains per hour Doncaster-Leeds semi-fast service</li> </ul>
<b>Additional elements</b>	<ul style="list-style-type: none"> <li>Incorporation of Meadowhall Interchange within the design of the high speed rail station to provide as 'seamless' journey opportunities as possible</li> <li>Meadowhall rail platforms relocated to serve HS2</li> <li>Heavy rail junction improvements at Wincobank (a grade separated junction) to enhance capacity of Barnsley services from Sheffield</li> <li>Extension of Derbyshire services (from Chesterfield and Peak District) to Meadowhall from Sheffield Midland</li> <li>Changes to the Worksop Line (including possible conversion to tram-train) to enable higher frequency heavy rail services to be introduced between Sheffield and Meadowhall</li> <li>Timetable recast to provide even greater capacity for feeder services</li> <li>To accommodate terminating services at Meadowhall would require track remodelling and signalling changes around the Brightside and Millrace area</li> <li>The capacity on the Meadowhall to Doncaster heavy rail corridor is constrained by a section of single track known as Holmes Chord. All services serving Rotherham Central Station have to use this single track either coming from or going towards Meadowhall. This limits the number of stopping services and capacity more widely on this important corridor. Currently the doubling of this chord is not included within a defined Control Period programme. We request that this essential improvement is introduced at the earliest opportunity</li> <li>Review the proposals for highway access to Meadowhall site</li> <li>Traffic signal/link capacity improvements along Meadowhall Way</li> <li>Significant improvements to M1 Junction 33 and 34</li> <li>Major capacity improvements along Meadowhall Way between HS2 station and A61 Inner Ring Road</li> <li>There is an opportunity to reconsider how the M1 crosses the valley, by constructing the HS2 viaduct well in advance and diverting the M1 onto this route the existing viaduct and junction could be remodelled and then the M1 diverted back onto its original alignment</li> <li>Tram-train connections from Barnsley, Doncaster and Rotherham and express services into Sheffield city centre and Central Business District</li> <li>Extension of tram-train network to South West Sheffield and Waverley and connectivity to the urban centres of South Yorkshire</li> </ul>

**2.6 Supporting mass transit network:** In preparation for HS2, and to maximise South Yorkshire's economic potential. We require a supporting mass transit network. Though there are many wider benefits, the enhancements in the table centre on providing HS2 connectivity.

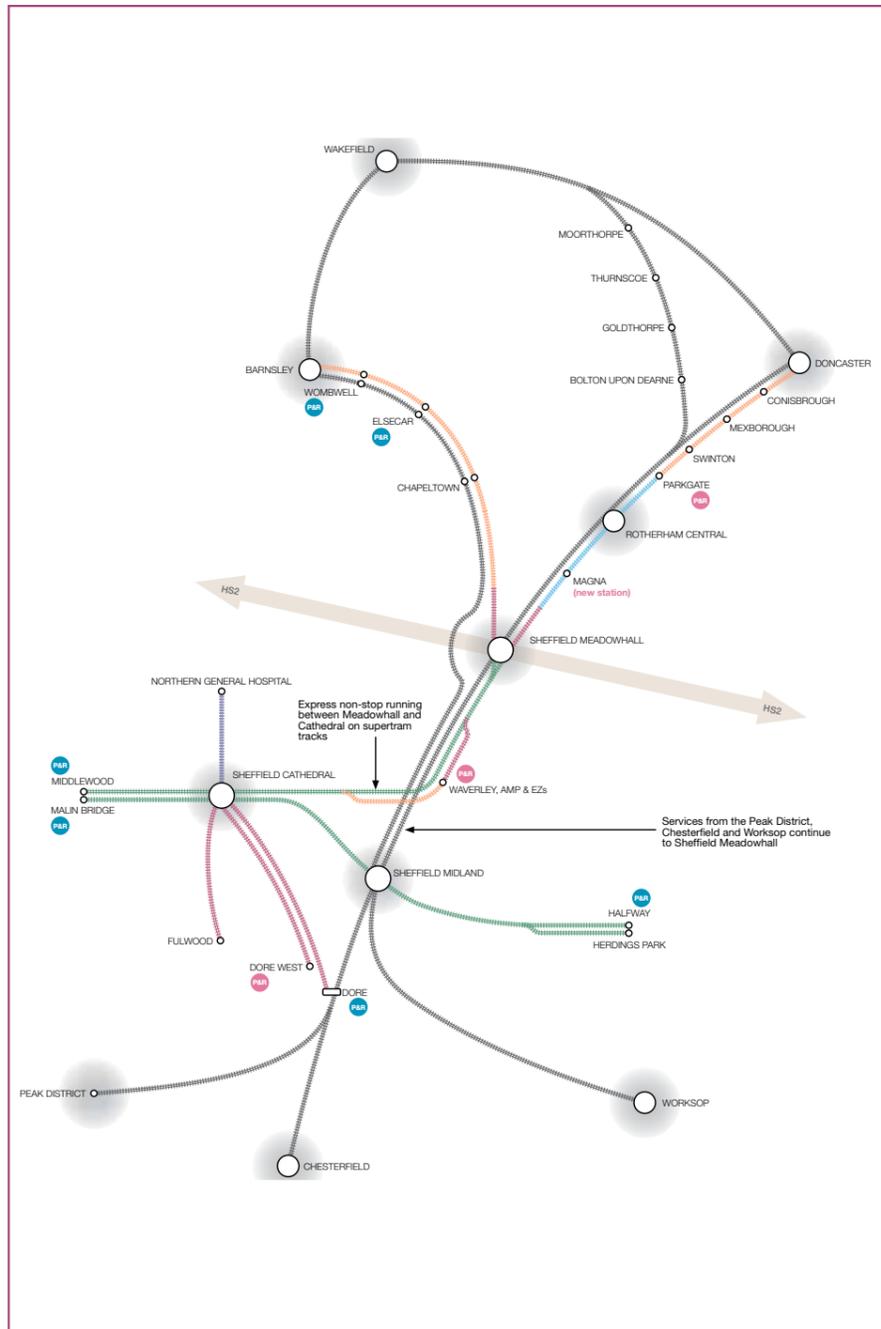
	Barnsley	Doncaster	Rotherham	Sheffield	Derbyshire	Bassetlaw	Peak District
Improved heavy rail connection to HS2	✓	✓	✓	✓	✓	✓	✓
Tram-train connection between South Yorkshire urban centres and HS2 station	✓	✓	✓	✓			
BRT connection with HS2			✓	✓			
Road network improvements			✓	✓			
Supertram Express with CBD				✓			
New tram-train/tram alignments serving South West Sheffield & Waverley			✓	✓			
Potential airport tram-train connection		✓					



**Sheffield city centre is the economic engine of the city region.**

**2.7** The connectivity package is an important part of ensuring that economic growth as a result of HS2 will be experienced across South Yorkshire. To examine the potential of this investment a further study will be commissioned to examine the potential economic contribution of the overall connectivity package, beyond the HS2 scheme. The assessment will be undertaken with the application of the FLUTE model, which has been recently used to underpin decisions on the prioritisation of major scheme investment, as part of devolution. We will look to optimise the connectivity package by further investigating the options and alternatives that can support the overall HS2 business case.

**Schematic demonstrating the proposed connectivity package**



**2.8 Quality of interchange:** The quality of interchange between different access modes will be key to the success of HS2. An optimal station interchange design would mean an integrated, multi-modal station at different levels, to minimise walking times and distances. When interchanging onto HS2, passengers should be protected from the elements. There should be sufficient automated facilities (escalators, lifts, and moving walkways) to effectively transport people between modes. It is also important that clear, safe, direct walking routes are established around the HS2 station to encourage walking trips from those in the area.

**2.9 Masterplanning:** We want to maximise the economic benefits of the HS2 station site, without damaging proposals for the development of the business districts in Sheffield city centre and the other urban cores in South Yorkshire, this is an important Masterplanning issue and forms an important component of the emerging SCR Strategic Economic Plan.

**2.10** The proposed station is four miles north east of central Sheffield, three miles south west of the centre of Rotherham, 20 miles south west of Doncaster and 11 miles south east of Barnsley. Current development in the vicinity is principally dominated by the Meadowhall Regional Shopping Centre and general employment areas, including designated Local Enterprise Zones. The area includes Sheffield's traditional manufacturing heart with both older and more modern industrial complexes. The current preferred through route passes directly through a number of major employment and residential development sites, including some of the area's Enterprise Zones, the Outokumpo site and the Waverley Housing Site (as discussed earlier).

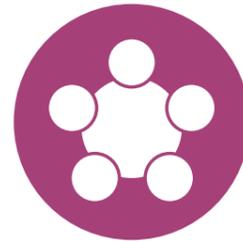


**It's important a comprehensive connectivity package is provided for onward journeys.**

**2.11** On behalf of HS2, Drivers Jonas Deloitte (DJD) and SKM Colin Buchanan estimate that 199,000 sq m of retail, leisure and office space would be delivered at Sheffield Meadowhall with HS2 compared to 137,000 sqm of floorspace without HS2. SKM also estimates that 384 new homes could be delivered with HS2.

**2.12** South Yorkshire partners will work with HS2 Ltd, to develop a compelling, cohesive Masterplan for the station site and surrounding area. It will also be necessary to look at mitigating the impact of congestion on the existing road infrastructure at an early stage so as not to restrict future development in the area and ensuring that all connecting public transport services are integrated and coordinated.

**2.13** There is currently a planning application for an IKEA store in the vicinity of the station development. If this application is approved major highway improvements will be required to the network, remodelling both junction 34 south and north and the local highway network adjacent to the station. If IKEA is approved it is important that these improvements are delivered to mitigate the impacts to enable future development.



**South Yorkshire partners will work with HS2 Ltd, to develop a compelling, cohesive Masterplan for the station site and surrounding area.**



**We want to maximise the economic benefits of the HS2 station site, without damaging proposals for the development of the business districts in Sheffield city centre and the other urban cores in South Yorkshire.**

**2.14** It is envisaged that the most effective approach to masterplanning and delivering the station and development in the wider area may be best done through the establishment of some kind of Special Purpose Vehicle (SPV). It could be expected that in the first instance the SPV would be made up of key public sector organisations (including HS2 Ltd) tasked with delivering the station and leveraging private sector investment and maximising the impact of HS2 on the South Yorkshire economy. Further consideration would need to be given to the most appropriate structure for the SPV including any powers it might require such as land acquisition and planning.

## Leeds City Region

*(v)a: "Do you agree or disagree with the Government's proposals for a Leeds station at Leeds New Lane?"*

**2.15** We support the Leeds New Lane location for a station within Leeds City Region as it serves the business sector and will enhance Leeds city centre as the heart of the Leeds City Region.

**2.16** It is important that onward journeys can be easily made from the HS2 station. Given its central location, some opportunities will already exist. However, HS2 as a project should have excellent information channels, supported by an integrated HS2 door to door ticketing solution.

**2.17** The proposed route and station configuration will allow for a direct, fast route between Leeds and London.

**2.19** As with all stations on the HS2 network, it is important that a comprehensive connectivity package is provided for onward journeys, including to the economic centres of Derby and Nottingham. It is essential that there is a national understanding of the options available for onward connections and this should form part of an integrated HS2 ticketing offer.



**The ITA want to ensure that South Yorkshire talent is utilised in delivering and operating HS2 and associated supply chains.**

## East Midlands

*(v)c: "Do you agree or disagree with the Government's proposals for an East Midlands station at Toton?"*

**2.18** The South Yorkshire ITA welcomes the enhanced connectivity that an East Midlands station will deliver. We recognise that the location of this station should facilitate economic growth in the East Midlands and would support the D2N2 LEP in its recommendation as to where the East Midlands station should be.

## Manchester

*(ii) Do you agree or disagree with the Government's proposals for: a. A Manchester station at Manchester Piccadilly?*

**2.20** The South Yorkshire ITA views Manchester as an important northern economy and one where business will thrive through improved connectivity. We have aspirations to enhance connections between our city regions and this is something we are currently actively pursuing. The 'Northern Hub' project is vital to providing these links, by reducing rail journey times between the economic drivers in the north.

**2.21** We support a station at Manchester Piccadilly, as it will become a key hub, connecting the existing network with HS2 and the economic centres on the western leg and Scotland, including connections to Manchester Airport.



**Stations on the existing network need to be fully integrated with HS2.**

*(ii) Do you agree or disagree with the Government's proposals for: b. A Manchester station at Manchester Airport?*

**2.22** Manchester Airport is an important international gateway. The South Yorkshire ITA is actively pursuing connectivity improvements to Manchester and the airport. The HS2 station will provide welcome interchange, with journey times enhanced by the 'Northern Hub' works.

**2.23** Though we support a Manchester Airport station, we would like HS2 Ltd to consider the delivery and connectivity of the key city region stations as a priority, if the overall cost of the project increases.

## Additional Stations

*(vi) Do you think that there should be any additional stations on the eastern leg between the West Midlands and Leeds?*

*(iii) Do you think that there should be any additional stations on the western leg between the West Midlands and Manchester?*

**2.24** In terms of the number and location of stations, the current 'Y' network proposals are supported. The major conurbations and economic centres between West Midlands and Leeds fall within the catchment of the proposed infrastructure. However, stations on the existing network need to be fully integrated with HS2.

**2.25** The proposals will allow HS2 to optimise journey time and cost whilst also satisfying economic need.

# 3. Released Capacity

*(viii) Please let us know your comments on how the capacity that would be freed up on the existing rail network by the introduction of the proposed Phase Two route could be used?*

**3.1** To support development of the business case, HS2 Ltd has made initial assumptions as to how services on the existing network could be modified following the introduction of HS2. These include reducing some service frequencies and re-routing some services in ways that may worsen connectivity to and from locations in Sheffield and Leeds City Regions.

**3.2** The SCR undertook a study<sup>6</sup> to consider an alternative approach to modifying services on the existing network that has the potential to:

- Generate economic benefits of between £300m and £800m (2010 present value)
- Provide benefits that are distributed across the SCR and LCR areas.

**3.3** These benefits relate solely to enhanced passenger and freight connectivity on the existing network following the introduction of HS2 and are additional to the benefits generated by HS2 itself. The additional benefit is created as a result of greater underlying rail demand generated by the enhanced 2032 timetable, more opportunities to enhance the service pattern post-HS2 including providing new direct journey opportunities, and the opportunity to accommodate additional freight traffic.



**Modifying services on the existing network has the potential to generate economic benefits of between £300m and £800m.**

**3.4** Consideration should be given to making better use of the HS2 infrastructure. We believe economic benefits are to be gained as a result of providing enhanced passenger and freight services on the existing network post-HS2.

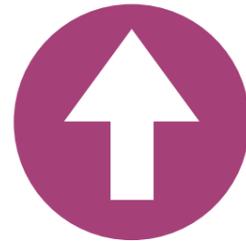
**3.5** We welcome engagement with HS2 Ltd and Network Rail to consider alternative options for use of the existing network to those currently included by HS2 Ltd in the economic case, based on proposals we have developed. For example, HS2 could enable the introduction of new passenger services on the ECML to destinations such as Harrogate and Hull. We strongly recommend the establishment of an “existing network investment funding pot – post-HS2” for 2019 and beyond, aimed at ensuring that maximum benefits can be derived from the existing network.

**3.6** Network rail are currently consulting on the released capacity options likely to arise from HS2, until 31 January 2014. The ITA views regarding released capacity are also included within this response.

**3.7** Through internal and external workshops, Network Rail has developed three key options:

- **Do Minimum:** The ‘Do Minimum Approach’ broadly maintains the 2032 train services that existed before HS2 Phase Two becomes operational. The ITA do not believe that this approach would provide additional benefits and is not supported.

- **Incremental Approach:** The ‘Incremental Approach’ identifies services on the existing network which are replicated to a greater or lesser extent by the new HS2 lines. An assessment of the transfer of passengers from the existing network to the high speed rail lines then allows for capacity released to be replaced aligning, as far as practicable with the market study conditional outputs. In most circumstances this would substitute long distance, fast services with inter-urban connectivity improvements or additional commuting capacity. The ITA support this approach in the short-medium term.



**We advocate the use of increasing capacity for commuter flows and accommodating future freight flows.**

- **Integrated Connectivity Approach:** An integrated, holistic approach to the introduction of HS2 Phase Two seeks to plan the services on the existing network to work in conjunction with HS2. The aspiration is that long distance high speed services would be provided by HS2, with services on the existing network set up in a feeder pattern to provide frequent connectivity between surrounding areas and the HS2 station (hub). This approach could potentially offer benefits to passengers from HS2 and the existing rail network by fully integrating them to operate seamlessly. For this to work, HS2 would have to be priced the same as current services. We don’t want to compromise existing urban centre – centre services. This option is something that should be considered in the long term.

**3.8** It is difficult at this time to advocate the particular, rather than generic, rail improvements we would see as beneficial after the advent of HS2. We would, however, advocate the use of the following criteria for new service selection and prioritisation that were agreed by parties in the recent Yorkshire Rail Network Study.

- No reduction of service quality to significant urban centres
- Improving regional centre connectivity
- Increasing capacity for commuter flows
- Accommodating future freight flows
- Advocating schemes to support improved service performance
- Improving links to regional airports.



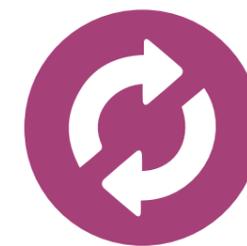
**We advocate the use of improving links to regional airports.**

# 4. Utilities

*(ix) Please let us know your comments on the introduction of other utilities along the proposed Phase Two line of route?*

**4.1** We are fully supportive of an approach which integrates the delivery of HS2 and that of other utilities. To best use resources and to facilitate efficient delivery, we encourage HS2 Ltd to optimise the use of the corridor, introducing other utilities along the line of route accordingly.

**4.2** However, this approach should only be applied where the introduction of other utilities does not have negative aesthetic impact and does not compromise railway operation, safety or round the clock access. The ITA and city region partners welcomes the opportunities for direct employment, during the construction and operational phases of HS2 and will work to ensure that these opportunities are realised, (infrastructure, skills/training, planning policies). We also acknowledge the increase in demand for indirect employment associated with business growth enabled by HS2.



**We are fully supportive of an approach which integrates the delivery of HS2 and that of other utilities.**

# 5. Sustainability

*(vii) Please let us know your comments on the Appraisal of Sustainability (as reported in the Sustainability Statement) of the Government's proposed Phase Two route, including the alternatives to the proposed route as described in Chapter 9.*



**South Yorkshire is committed to maximising the economic benefits of HS2.**

**5.1** The following comments relate to the Sustainability Statement non-technical summary:

**5.2 Planning and Development:** The ITA is committed to maximising the economic benefits of HS2. Working with HS2 Ltd we will develop a clear and ambitious Masterplan around the proposed station site to ensure that sustainable growth can be delivered in the area. As previously discussed, further planning is required with HS2 to ensure that the IMD at Staveley has minimum negative impact on the surrounding area. There will be further engagement with HS2 Ltd on specific developments in the future.

**5.3 Property and Community**

**Integrity:** The proposed HS2 route will blight, or require the demolition of a number of properties in the South Yorkshire; both domestic and commercial, including 60 residential properties in Sheffield alone. A number of communities affected within the city region are in areas of deprivation and would require reasonable compensation and advice to allow them to effectively re-house. Because of the low value of their properties relative to those of surrounding areas and the high incidence of private letting arrangements, normal compensation levels may well be too low to allow relocation. Specialist procedures for these instances may be required.

**5.4** Relocation of some commercial properties affected may also cause some difficulties. Many business owners have well established markets in their current locality. Relocation may result in a loss of part of their market. Equally, they may have heavily invested in specialist equipment which will be expensive

and difficult to move. Compensation packages should not only cover site purchase, but also the actual costs of moving. HS2 Ltd should offer businesses both support and advice to overcome any financial and planning issues that may arise so that financial loss and displacement of employment can be minimised.

**5.5** We would like assurances that any job displacements which do occur are kept to reasonable distances to minimise disruptions for employers and enhance the possibilities of retaining current staff.

**5.6 Employment and Housing:** Sheffield Meadowhall station is remote from established residential areas. This underpins the need for excellent connectivity from across the region. Connectivity is discussed in detail in Appendix B.

**5.7 Access Issues:** The ITA requires a comprehensive connectivity package to provide access to HS2. It is also important that access is provided to the jobs at the Staveley IMD.

**5.8** A key consideration for the ITA is that the access to and from the HS2 station should not lead to further highway congestion and increased vehicle emissions. The strategic network is already congested, especially around the junctions of the M1 which are at capacity at peak periods. This has already resulted in plans for implementing a managed motorway scheme in the near future. Junction 34 is also a key commuter route between Rotherham and Sheffield city centre.

**5.9** Our aspiration is that the majority of HS2 users will enter and exit the area by sustainable modes. An integral element of the design and development of the station will be the implementation of the connectivity package. We are strongly of the opinion that the development of the station design should be closely linked with the Local Transport Plan, which details how this modal aspiration can be achieved.



Noise levels  
can be greatly  
moderated  
through  
project design,  
landscaping  
and in the  
worse areas by  
dedicated noise  
barriers.

**5.10 Noise and Vibration:** One of the most intrusive environmental effects of HS2 will be the noise generated by its construction and on-going operation. It is in this area, more than any other, that HS2 is likely to get negative comment from local households, especially those near enough to be affected but not close enough to claim compensation.

**5.11** The sustainability report indicates that in excess of 6,000 households are likely to fall within the noise affected area along the corridor of the route. Noise levels can be greatly moderated through project design, landscaping and in the worse areas by dedicated noise barriers.



We believe  
that in the long  
term HS2 will  
contribute to a  
net reduction of  
emissions.

**5.12** Noise or visual impacts of the scheme, particularly on residential communities close or adjacent to the line of route and station, need to be fully assessed and appraised within the Environmental Impact Assessment (EIA) proposed. Adverse impacts will be subject to the location and proximity of properties to the line of route and should be mitigated against, including the potential for avoidance, and compensation where appropriate.

**5.13 Air Quality:** We believe that in the long term HS2 will contribute to a net reduction of emissions by encouraging more people to travel by less polluting modes. However, we do envisage that in locating near to the M1 (250 metres from junction 34) there will be an increased incentive to access rail travel by use of the private car. The area of the proposed station has been designated as part of the Sheffield Air Quality Management Area.

**5.14** In 2013 this part of the motorway was already exceeding at peak times the safe emission levels set by the EU. With increased traffic levels we would expect the length of the daily period when standards are exceeded to gradually increase. If the station does result in increased traffic on this part of the network we would expect that funds will be made available for mitigation works in this area to reduce the impact of this problem.

**5.15 Health, Wellbeing and Equality:** We recognise the work that HS2 Ltd have undertaken as regards these areas and will continue to work in partnership to mitigate issues and enhance benefits.

**5.16 Landscape and Visual Impacts:**

The ITA recognise that the proposed route makes good use of existing transport corridors, such as the M1, thereby reducing the visual environmental impacts of the HS2 infrastructure. The South Yorkshire and wider SCR includes considerable areas of outstanding natural beauty and concentrated elements of protected countryside. It is important that these remain protected and where HS2 is not able to use an existing transport corridor, efforts are made to ensure visual intrusion is limited as much as possible through mitigation works, such as cuttings and appropriate landscaping.

**5.17** There may be concerns about the visual impact of HS2 from key viewpoints, places of recreation and tourist attractions (for example, Hardwick Hall and Bolsover Castle). However, the majority of these places already suffer from the visual intrusion of the M1 and historical industrial impact on the landscape. There must be no worsening of visual intrusion however, and wherever possible the opportunity should be taken to make the landscaping and mitigation of the new works make up for the previous damage.

**5.18 Cultural Heritage:** The proposals do lead to new severance in Staveley, Renishaw, Killamarsh and Beighton and this will undoubtedly have an impact on how the towns function. We recognise the overall economic benefits are vital to these areas. Additional infrastructure needs to assist impacts on these towns.

**5.19 Biodiversity and Wildlife:** The ITA recognise that constructing something as large as HS2 is inevitably going to have an impact. It is important the EIA work identifies a package of mitigation and enhancement measures to address the impacts on habitats and species.



**South Yorkshire, Derbyshire and Nottinghamshire possess a large number of former colliery sites and land that has been used for both shallow and deep-mining activities.**

**5.20 Water Resources and Flood Risk:**

The Secretary of States preferred station location for the Sheffield City Region at Meadowhall is located on a flood plain. The station will be constructed on viaduct therefore decreasing the chances of the rail infrastructure being flooded. In the case of the proposed infrastructure maintenance depot at Staveley, evidence of significant surface water flooding from 2007 suggests that particular measures will be necessary to address this issue.



**The Secretary of State's preferred station location for the Sheffield City Region at Meadowhall is located on a flood plain.**

**5.21** In 2007 Meadowhall Interchange had to close for a number of days due to extensive flooding, when the River Don broke through its flood defences. This had a major impact on the local economy because of the need to reconstruct facilities and provide interim alternative transport services. Although HS2 is unlikely to be directly affected by the threat of flooding the transport facilities that offer access to the station site will be at flood risk. It will therefore be important to mitigate this problem when designing the access transport arrangements.

**5.22 Land Use Resources:**

South Yorkshire, Derbyshire and Nottinghamshire possess a large number of former colliery sites and land that has been used for both shallow and deep-mining activities. These areas need to be carefully surveyed because often the sub strata can have issues of stability or the land itself may contain toxic residues that present particular difficulties for excavation and construction. We acknowledge the work HS2 has done, but feel more detailed assessment is required of the mining issues associated with the area.

**5.23 Construction Waste and Material Use:**

It is not possible to comment until detailed plans are designed, but HS2 Ltd need to minimise as much as possible, the impact of construction works and should make as much use as practicable of sustainable means of moving construction materials and waste, such as water based and rail based transport.

# 6. Skills and Supply Chain

**6.1** It is important that we maximise the readiness of the South Yorkshire workforce for the opportunities presented by HS2 and that local people can access the jobs that HS2 creates in their area. The benefits of HS2 will extend much further than those purely associated with rail trips. We want the South Yorkshire workforce to benefit from the new construction, business, and supply chain opportunities that HS2 will stimulate. Furthermore, we want our entrepreneurs and innovators to access the full benefits of HS2 when growing businesses in South Yorkshire.

**6.2** Building HS2 will offer a significant opportunity for new jobs. As expected, there will be new demand for workers with engineering and construction skills. HS2 Ltd figures suggest that around 19,000 new jobs will be created during the construction of the railway (including stations, interchanges, track and infrastructure) and around 2,900 jobs in relation to operational employment opportunities (running stations and depots as well as staffing trains). HS2's impact on the labour market will, however, be far more wide reaching in terms of stimulating jobs in the supply chain and off-site (e.g. prefabrication of construction materials or building rolling stock).

**6.3** Calculations about how many jobs vary dramatically depending on how one assesses the impact of HS2 on the labour market. Some calculate around 100,000 jobs will be supported, some suggest that around 70,000 jobs could be sustained up to 2027, during the design, build and implementation of phase 1, and contribute around £4.2bn to UK GDP. By contrast, the Core Cities place the scale of jobs in the region of 400,000. In the West Midlands alone, this could amount to 22,000 permanent jobs. Whatever the actual number of new jobs, HS2 is a big opportunity to help invest in the labour market and UK businesses. It will be crucial for the UK economy that our workforce is ready, skilled and located in the right places to make the most of this investment.



**Building HS2 will offer a significant opportunity for new jobs.**

**6.4** In the case of Crossrail, a partnership with Jobcentre Plus (JCP) helped to ensure that local people along the route were informed of training and employment opportunities on the programme. In addition, all contractors working on Crossrail were required to advertise any new opportunities with the local Jobcentre Plus, 48 hours before they are advertised elsewhere. For their part, Jobcentre Plus, worked with a network of local job brokerages and outreach agencies to match vacancies to suitable candidates and prepare them for interview. Crossrail also committed to delivering at least 400 apprenticeships through its supply chain over the lifetime of the project (or equivalent to one apprentice per £3m of contract spend).

**6.5** The ITA is interested in how we can replicate positive examples and ensure that South Yorkshire based businesses and individuals benefit as much as possible from this investment. Integral to this, the ITA is interested in maximising the number of ways in which industry, local areas and individuals can profit before and during the construction phases of HS2 and also into the future.

**6.6** To take full advantage of the opportunities, we want to engage more widely with HS2 Ltd in the design and delivery of the railway and work with the Government to ensure that similar connections are made between opportunities and local businesses, labour markets, and skills investment.



**To take full advantage of the opportunities, we want to engage more widely with HS2 Ltd in the design and delivery of the railway.**

**6.7** The key focus of the ITA is to work with HS2 Ltd to:



**A key focus of the ITA is to work with HS2 to improve South Yorkshire's skills and knowledge base to maximise the readiness of the South Yorkshire's workforce for HS2.**

- Help deliver HS2 as soon as possible
- Improve the skills and knowledge base to maximise the readiness of South Yorkshire's workforce for HS2
- Consider how we utilise the buying power of HS2 to improve supply chains & manufacturing capacity. What can we do to anticipate UK supply bottlenecks?
- Consider how we ensure that HS2 leaves a knowledge and skills legacy that reaps economic rewards for individuals and businesses
- Develop University courses and other forms of professional training tailored towards supporting HS2
- Utilise the buying power of HS2 to improve supply chains & manufacturing capacity
- Ensure we are ready and have access to HS2 opportunities
- Develop and deliver an ambitious Masterplan for the station site and beyond
- Develop and deliver a comprehensive connectivity package.

# 7. References

## Complementary Consultation Responses

### Barnsley Metropolitan Borough Council

- Unequivocal support for Sheffield Meadowhall station and the proposed connectivity package
- Specific detail regarding route issues at Hoyland Tunnel, Swaithe House, Wombwell Wood, Carlton Marsh/ Rabbit Ings and Monkton Coke
- Request that mitigation to be implemented in advance of works starting, so that there is a reduction on the effect of the works on the environment
- Request that existing rail stations and services should be improved in advance of HS2 works
- Consideration to be given to the effect on the borough during the works and to mitigate disruption

### Doncaster Metropolitan Borough Council

- Support HS2 route and Sheffield Meadowhall Station location
- HS2 should not affect services on, or plans for current and future investment in the ECML
- Doncaster – Sheffield and Doncaster should be electrified before HS2 is opened
- Released capacity should be used to improve local connectivity across the SCR

### Rotherham Metropolitan Borough Council

- Support HS2 Sheffield Meadowhall station location and route in principle with concerns regarding impacts on existing development sites
- Strong emphasis on delivery time scales and balancing national benefits
- Would like to work with HS2 Ltd to resolve route and connectivity concerns
- Would like to see released capacity used sensibly to create growth
- Support calls for an 'existing network fund' to be established for classic rail investment

### SCR LEP

- Strong emphasis on the positive economic impacts of HS2 including analysis of supply chain, skills requirements and growth factors

### Sheffield City Council

- Strong emphasis on the economic impacts of a station located within the city centre

<sup>1</sup> Eastern Network Partnership, Arup, June 2011

<sup>2</sup> Sheffield City Region Independent Economic Review, Ekosgen, July 2013

<sup>3</sup> CEBR & DRI 2012

<sup>4</sup> Creative Sheffield, City Centre defined by LSOA based on BRES data

<sup>5</sup> Eastern Network Partnership, Arup, June 2011

<sup>6</sup> HS2 Timetable Options Study, Steer Davies Gleave, June 2013

