

# **EAST MIDLANDS HS2 GROWTH STRATEGY**

## **Emerging Strategy Submission**

### ***“FAST TRACK TO GROWTH”***

**September 2016**  
**East Midlands HS2 Strategic Board**

**DRAFT**

**East Midlands Councils**  
**D2N2 LEP**  
**Leicester & Leicestershire LEP**  
**Rail Forum East Midlands**  
**East Midlands Chamber of Commerce**

## **Foreword**

HS2 is a once in a generation opportunity for the communities and businesses we serve. At long last we will be able to benefit from the kind of world class transport infrastructure that other countries and cities have taken for granted.

HS2 will transform connectivity between our local economies and those of the West Midlands, the North of England and Scotland, as well as with London and the South East. It will release capacity from the existing rail network for more local services. It will open up new development opportunities for jobs and housing. It will provide massive business opportunities to our world class rail engineering sector and for firms working in the construction industry.

But this potential will not be realised without strong and consistent local leadership and a clear vision for what success looks like. That is why we have come together through the East Midlands HS2 Strategic Board to develop a comprehensive HS2 Growth Strategy, which will sit within the emerging Midlands Connect Strategy and the Midlands Engine initiative.

This document just represents work in progress. There is more to do before we finalise the Growth Strategy in 2017. However, it shows the scale of our ambition and the commitment of local leaders to make the most of this fantastic opportunity.

<p>Cllr Jon Collins Leader, Nottingham City Council Chair of East Midlands HS2 Strategic Board</p>	<p>Cllr Anne Western CBE Leader, Derbyshire County Council Vice Chair of East Midlands HS2 Strategic Board</p>
<p>Peter Richardson Chair of D2N2 LEP</p>	<p>Nick Pulley Chair of Leicester &amp; Leicestershire LEP</p>
<p>Michelle Craven-Faulkner Chair of Rail Forum East Midlands</p>	<p>Scott Knowles Chief Executive of EM Chamber of Commerce</p>

## Executive Summary

1. The development of HS2, including the development of an East Midlands Hub Station at Toton, the Maintenance Depot at Staveley and the potential for classic compatible trains serving Chesterfield, has huge economic potential for the East Midlands.
2. Independent research commissioned from KPMG by HS2 Ltd<sup>1</sup> suggested that an East Midlands Hub Station could have the greatest economic uplift of any of the proposed HS2 stations. Our own initial work confirmed this assessment<sup>2</sup>. This potential reflects the ability of HS2 to radically improve connectivity between the local economies of the East Midlands with those of the West Midlands, the North of England and Scotland - as well as London and the South East. In fact, East Midlands Hub will be the most connected HS2 station on the network outside of London, with at least seven HS2 trains per hour in each direction - and potential for additional 'classic compatible' services.

### Journey Time Savings by HS2<sup>3</sup>

HS2 Journey Time Savings from Nottingham			
Destination	Via HS2 (mins)	Current (mins)	Time Saving (mins)
Leeds	47	106	59
York	54	115	61
Birmingham	36	73	37
Newcastle	123	179	56
London	68	104	36
HS2 Journey Time Savings from Derby			
Destination	Via HS2 (mins)	Current (mins)	Time Saving (mins)
Leeds	50	77	27
York	57	86	29
Newcastle	126	150	24
London	71	91	20
HS2 Journey Time Savings from Leicester			
Destination	Via HS2 (mins)	Current (mins)	Time Saving (mins)
Leeds	66	117	51
York	71	145	74
Newcastle	141	205	64

<sup>1</sup> HS2 Regional Economic Impacts, KPMG for HS2 Ltd, September 2013.

<http://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/Documents/PDF/Market%20Sector/Builing%20and%20Construction/hs2-regional-economic-impact-1.pdf>

<sup>2</sup> Maximising the Economic Benefits of the East Midlands HS2 Station at Toton, Voterra Partners for Nottingham City Councils and Partners, November 2013.

<http://voterra.co.uk/wp-content/uploads/2014/03/Maximising-the-Economic-Benefits-of-the-East-Midlands-HS2-station-at-Toton.pdf>

<sup>3</sup> East Midlands Hub Station Fact Sheet, HS2 Ltd, July 2013.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/381963/HS2\\_Phase\\_Two\\_East\\_Midlands\\_Hub\\_station\\_factsheet.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/381963/HS2_Phase_Two_East_Midlands_Hub_station_factsheet.pdf)

3. But economic growth will not be realised without strong and consistent locally led action. That is why local leaders from the public and private sector have come together to develop an HS2 Growth Strategy for the East Midlands, which will complement the wider Midlands Connect Strategy and the work of the HS2 East Partnership.
4. The analysis we have done so far suggests that by targeting key sectors that can benefit from HS2 connectivity, in particular manufacturing, technology and high value services, we can boost employment growth from just below to above the projected UK trend - equivalent to an additional 74,000 jobs and almost £4 billion of GVA by 2042.

Economic Growth	Baseline	Matching UK Trend	Our Economic Vision
<b>Net Employment Growth (FTE)</b>	172,000	184,000	246,000
<b>GVA Uplift above Baseline</b>	-	£0.38 billion	£3.99 billion

5. Our work has highlighted opportunities to improve transport linkages between HS2 and key growth opportunities which will support our sector strategy – close to the Hub Station, in Derby, Leicester and Nottingham and in surrounding locations. We are proposing to develop Outline Business Cases for those improvements that show the greatest potential. Key emerging priorities include:
  - Development of a northern-facing ‘classic compatible’ link at the Hub Station to boost connectivity between the Midlands Engine and the Northern Powerhouse;
  - A comprehensive re-modelling of Trent Junction south of Nottingham to meet the long term passenger and freight requirements of both HS2 and Midlands Connect; and
  - The development of a ‘Mass Transit Strategy’ as part of the Derby-Nottingham Metro initiative, which could be broadened to include consideration of road access from A52 and wider impacts on the Strategic Road Network led by Highways England.
6. We believe there is a potentially strong economic case for advancing the construction of the East Midlands Hub Station and the recently proposed ‘classic compatible’ link to Sheffield Midland Station by three years to 2030.
7. The functional design of the Hub Station can either enable or frustrate accessibility to key growth opportunities. We have set out a series of functional design principles and a concept design for the Hub Station that would maximise accessibility and growth potential, to inform the work of HS2 Ltd and the Hybrid Bill process.



8. We have assessed the requirement for skills associated with construction of HS2, and have set out initial proposals to help local people access employment opportunities based on five key priorities:
  - Inspiring our young people;
  - Building Further Education (FE) capacity;
  - Harnessing the power of our Universities;
  - Support for individuals; and
  - Ensuring our businesses are 'HS2 Ready'.
9. We believe there are opportunities for some 'early wins' by aligning planned spending on apprenticeships with HS2 skills requirements.
10. We have signed a Collaboration Agreement with the Government's HS2 Growth Partnership and established a small Executive Team to drive forward the development of the Growth Strategy. We are looking at ways of accessing private sector funding to reduce the requirement for public investment, including from international markets targeted by the Midlands Engine - in particular China and India.
11. We intend to develop proposals for a Strategic Delivery Vehicle to promote the implementation of key development opportunities and connectivity improvements.
12. The Government has signalled its intention to make a formal Route Announcement on Phase 2b of HS2 in late 2016. Following this, we will publish our full East Midlands HS2 Growth Strategy in July 2017.

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## Section 1: Our Economic Vision

### Summary

We have gone back to first principles and looked at the economic drivers that are likely to shape economic growth over the coming decades. From this we have set out an economic vision for how we can use HS2 to deliver a more productive and resilient economy across the East Midlands, which we believe can deliver a 43% uplift in employment over the projected baseline by 2042, equivalent to an extra:

- 74,000 jobs; and
- £3.99 billion GVA

We have undertaken a comprehensive analysis of key sites and locations across the East Midlands which we believe have the potential to benefit either directly or indirectly from HS2. Locally owned spatial planning frameworks have been developed for the areas around the Hub Station and the Staveley Depot.

We are working through the Midlands Connect Partnership to identify additional opportunities to use HS2 to maximise 'agglomeration' benefits across the Midlands, to be published as part of the Midlands Connect Strategy in March 2017.

Working through the HS2 East Partnership, we have also made an assessment of the economic benefits of improving connectivity between the local economies of the East Midlands with the North East of England and with Scotland, maximising the economic potential of the Eastern Leg of HS2

### **A 'once in generation opportunity' for the East Midlands' economy**

- 1.1 HS2 will provide a major opportunities for businesses and institutions in the East Midlands to expand their horizons and to trade and compete in wider markets. Similarly high speed rail will connect the people of the East Midlands to new work, learning and leisure opportunities whilst opening up the region to new visitors. However these economic benefits will not happen automatically. Continued, strong and consistent local leadership will be required, working closely with Government and the private sector.
- 1.2 We have undertaken a comprehensive 'Economic Opportunities Assessment', underpinned by independent analysis from Cambridge Econometrics, to determine the best approach for maximising local growth opportunities. As a result our strategy for growth is distinctive, confident and ambitious.

## Baseline Economic Position

- 1.3 We have focussed our analysis on the area covered by the D2N2 LEP and the Leicester and Leicestershire LEP, which evidence suggests has greatest potential for direct local economic benefits from HS2.

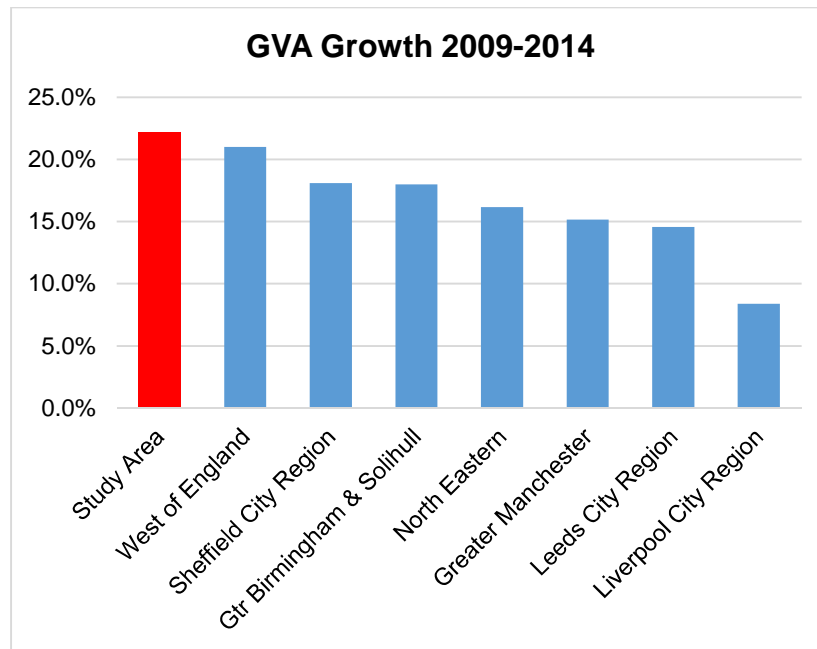
Figure 0: Study Area



- 1.4 This study area comprises:
- 3.15 million people;
  - 109,000 business;
  - £65 billion GVA; and
  - 1.45 million people in employment, with 76,000 unemployed and 473,000 'economically inactive'.<sup>4</sup>
- 1.5 Whilst GVA growth across the study area has been slower than the English average (which is skewed by London) over the last 20 years, it has been faster than other 'core city' LEP areas since 2009, due mainly to strong private sector growth.

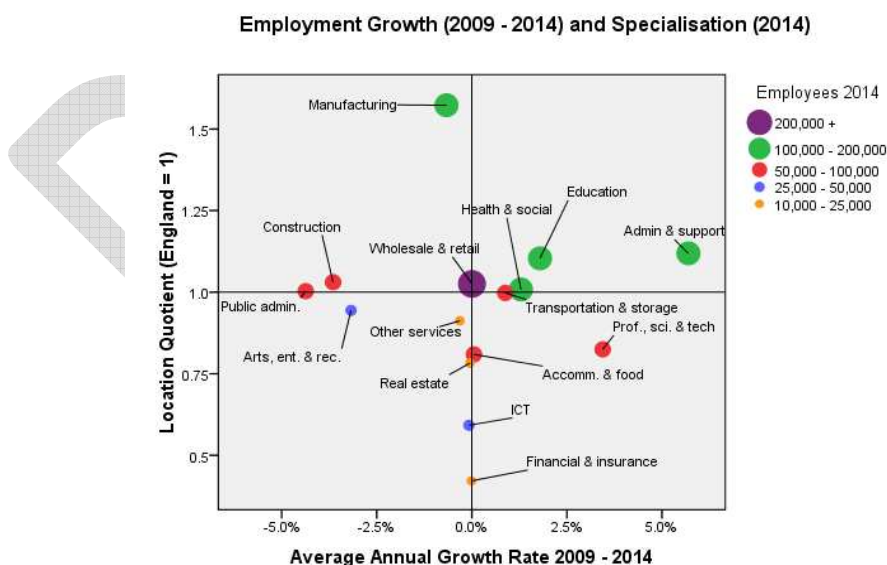
<sup>4</sup> HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016.





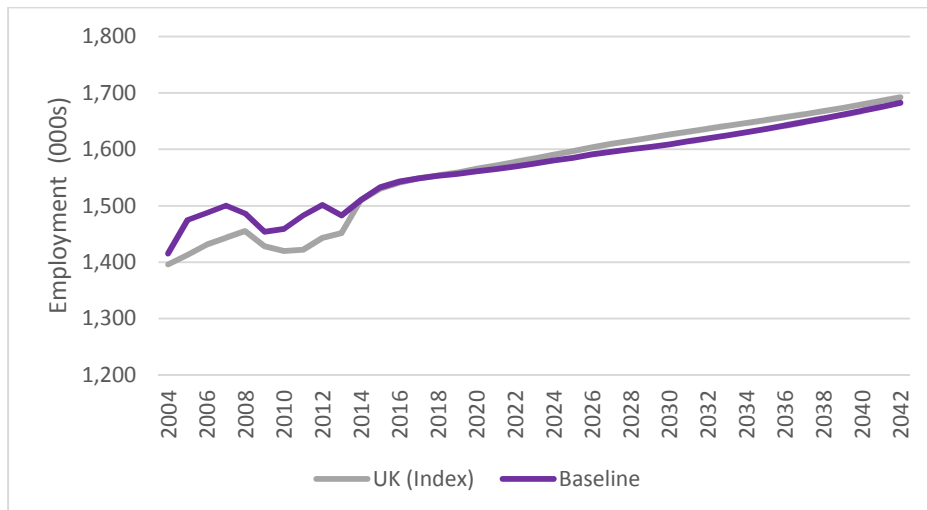
Source: Source: HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016

- 1.6 Manufacturing remains important to the local economy. Although lower value activity has tended to contract, high value and advanced manufacturing remains a key strength. The study area is relatively under-represented in financial and professional services compared to England as a whole.



Source: Source: HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016

- 1.7 In terms of future prospects, analysis from Cambridge Econometrics suggests that the study area will generate an additional 172,000 jobs (net) by 2042. Although substantial, this is below the projected trend for the UK as a whole.



Source: Source: HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016

### Our Economic Vision

1.8 As a result our key objective has been to develop a strategy that will use HS2 to deliver job and GVA growth across the study area at a rate **above**, rather than below, the UK trend. To achieve this, we will focus on maximising the following impacts of HS2:

- **Productivity & Direct employment** - journey time savings and new connections will allow firms and individuals to undertake business more efficiently, more quickly, with more people and in more markets. This will include businesses that are more dependent on public transport connectivity for accessing labour markets and accessing customers and markets.
- **Catalytic job growth** at the hub and connected Enterprise Zones, business parks, and University innovation districts. This will include the role of HS2 in unlocking wider improvements benefiting local businesses.
- **Indirect capacity improvements** – Use of HS2 will free up capacity on freight lines and roads which could support growth in the distribution, manufacturing and energy sectors. Freeing up capacity on commuter lines also enables options for improving access to employment centres in areas without HS2 connectivity
- **Procurement and supply chain benefits** – benefits linked specifically to the design, construction and delivery of HS2 which could support engineering and rail engineering sectors.

1.9 From our Baseline analysis and examination of the Strategic Economic Plans for D2N2 and the Leicester and Leicestershire LEP, we have identified those sectors in the local economy which can most benefit from HS2.

<b>Direct Impact Sectors</b> These will benefit directly from HS2 through productivity and direct employment impacts.	<b>Wider Impact Sectors</b> These will benefit more widely from HS2 through catalytic job growth (i.e. the unlocking of wider infrastructure investment), wider capacity improvements across the road and rail network or through procurement and supply chain benefits.
<ul style="list-style-type: none"> <li>• Accommodation</li> <li>• Media</li> <li>• IT Services</li> <li>• Financial &amp; Insurance,</li> <li>• Real Estate,</li> <li>• Legal &amp; accounting</li> <li>• Head Offices &amp; Management Consultancies</li> <li>• Architectural &amp; Engineering Services</li> <li>• Other Professional Services (including R&amp;D)</li> <li>• Business Services &amp; Administration</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceuticals</li> <li>• Electronics &amp; Electrical Equipment</li> <li>• Motor vehicles</li> <li>• Construction</li> <li>• Wholesale Trade</li> <li>• Retail Trade</li> <li>• Land Transport</li> <li>• Logistics &amp; Distribution,</li> <li>• Food &amp; Beverage Services,</li> <li>• Education</li> <li>• Arts</li> <li>• Other Services</li> </ul>

1.10 We have worked closely with local stakeholders to establish a series of alternative growth scenarios based around these sectors. From further analysis and stakeholder engagement, we have developed an 'Economic Vision' for HS2 in the East Midlands that is distinctive, confident and ambitious.

<b>Our Economic Vision</b>
<p><i>We will use HS2 to amplify our acknowledged regional strengths in advanced manufacturing, engineering, science, technology and innovation.</i></p> <p><i>We will use the super-connectivity of East Midlands Hub Station and the close proximity of strategic sites for growth, infrastructure and leading edge science and technology assets to attract global talent and investment, by creating an internationally competitive location for high value manufacturing, engineering, reinforced by world class innovation support.</i></p> <p><i>Through enhanced connectivity to our urban centres, we will use HS2 to develop a higher value service economy, capturing a competitive share of the strong national growth forecast in these sectors, driving up productivity and job creation, and helping to retain skills.</i></p> <p><i>The East Midlands Hub Station itself will be both gateway and destination bringing a new generation of visitors to the East Midlands, and becoming a place to do business at the heart of UK's strategic transport network.</i></p>

Key Drivers		
<b>Manufacturing Engine</b> The UK's most competitive location for high value engineering and manufacturing	<b>Technology</b> A fertile innovation eco-system attracting global talent in research strengths	<b>High Value Services</b> Delivering a step change in high value services
Enablers		
<b>Smart Growth</b> Creating the conditions to compete for investment, talent and knowledge nationally and internationally, including excellence in logistics and distribution capacity		
<b>A dynamic entrepreneurial economy</b> One of the best places to start and grow a business in the UK, high quality business space reinforced by world class business support and access to funding and investment		
<b>Galvanised visitor economy and distinctive gateway</b> A transformed and expanded visitor economy, bringing a new generation of visitors to established and new attractions		

- 1.11 If we can deliver our Economic Vision in full, analysis by Cambridge Econometrics suggests that we could boost growth across the study area by 43% above the baseline by 2042.<sup>5</sup>

Economic Growth	Baseline	Matching UK Trend	Our Economic Vision
Net Employment Growth (FTE)	172,000	184,000	246,000
GVA Uplift above Baseline	-	£0.38 billion	£3.99 billion

- 1.12 To deliver our Economic Vision we will first of all need to align our sector priorities with local opportunities for development and regeneration, both close to the Hub Station and beyond.

<sup>5</sup> HS2 in the East Midlands Assessment of the Economic Opportunities: Final Report, Ekosgen & Fore Consulting, September 2016.

### Development around the Hub Station Site

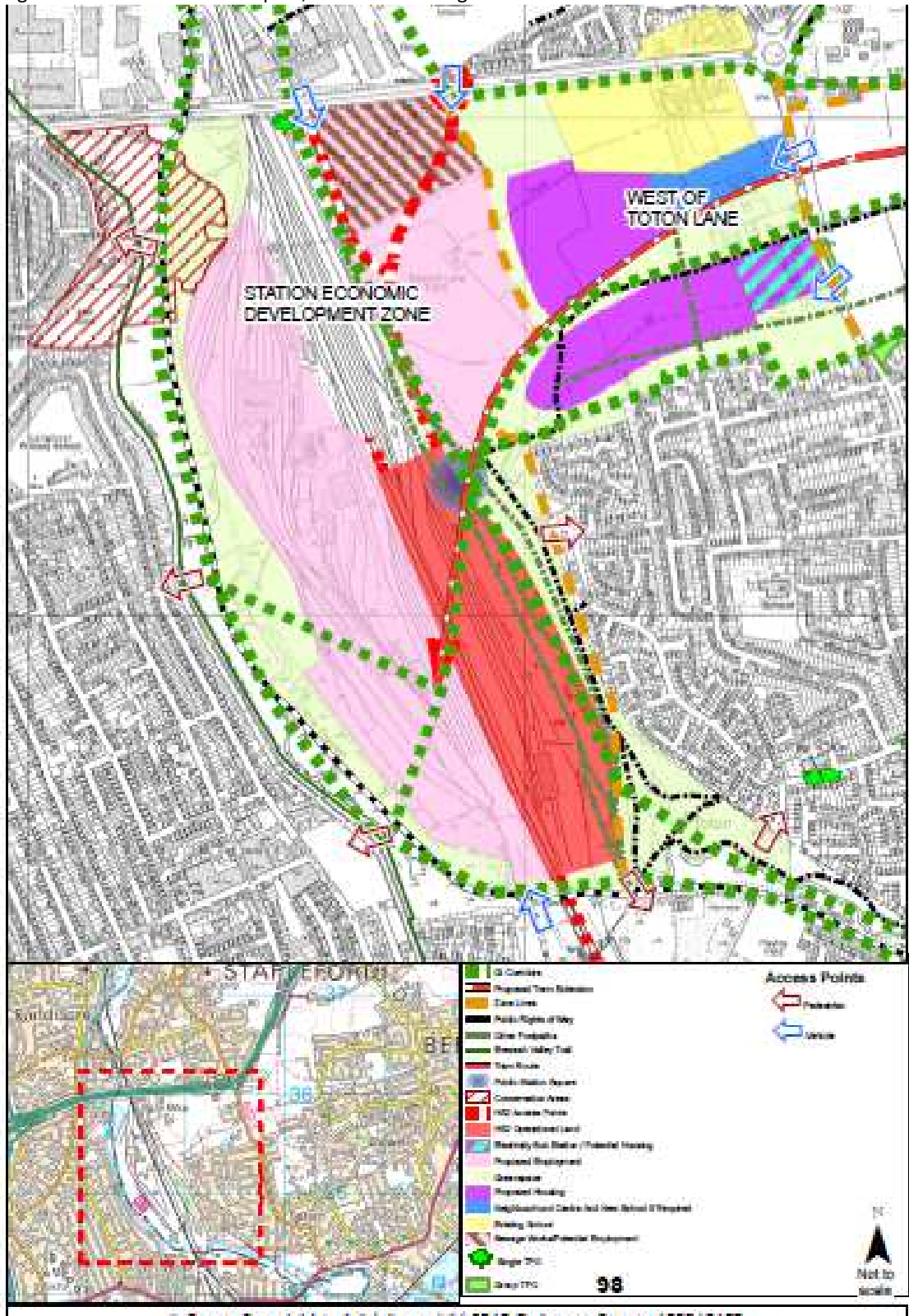
- 1.13 The East Midlands Hub Station will be built on existing railway land near the town of Toton in the Borough of Broxtowe, within the built-up area of Greater Nottingham and 11km southwest of the city centre. It would lie to the east of the M1, north of Long Eaton, 14km east of Derby and 40km north of Leicester. East Midlands Hub will be both an HS2 and a 'classic' rail station with four platforms and two high speed through lines. It has the potential to be a 'super-connected location' for economic growth.

Figure 0: Location of East Midlands Hub Station



- 1.14 The local Planning Authority, Broxtowe Borough Council has agreed a strategic master plan for mixed use development around the Hub Station which will deliver up 43 hectares of land for economic development (with a further 28 hectares contingency) and 13 hectares of housing with provision for highway access from the A52, education and community uses and green infrastructure.

Figure 0: Hub Station Masterplan, Broxtowe Borough Council

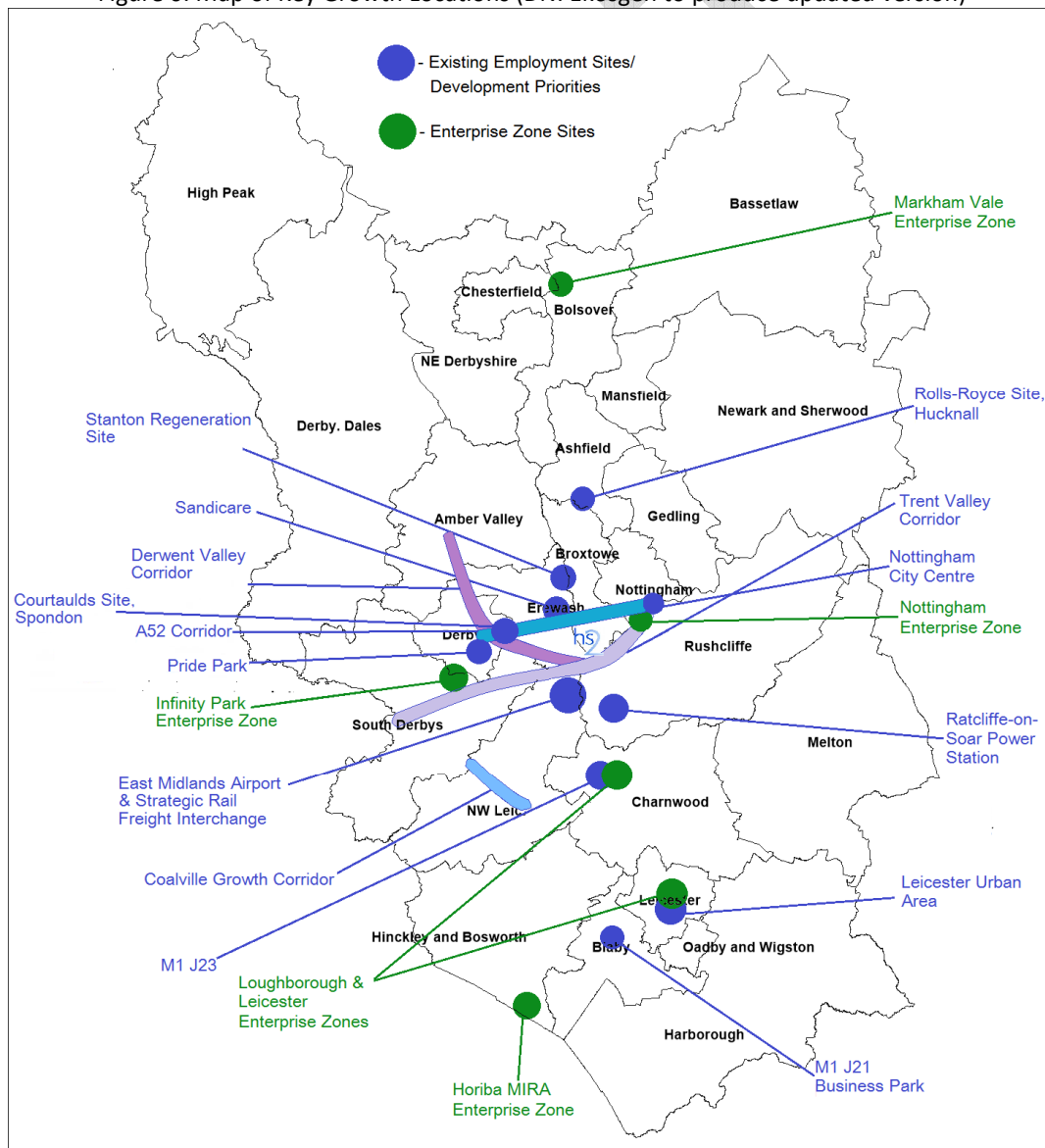


- 1.15 The development of the employment land will need to be consistent with our economic vision for growth and make best use of the super-connectivity offered by HS2. We are currently evaluating a number of options, including the potential for a teaching and research facility that could support the growth of business services in the city centres and advanced manufacturing in surrounding areas, and facilities for business exhibitions and meetings.

### Thinking beyond the Hub Station

- 1.16 We have undertaken a comprehensive assessment of sites and locations across the study area that have the potential to deliver our sector strategy. There is massive potential for growth in the three city centres, around East Midlands Airport, the Enterprise Zones and in key regeneration opportunities such as the former Stanton Ironworks and the Chetwyn Barracks site.

Figure 0: Map of Key Growth Locations (DN: Ekosgen to produce updated version)



Source: HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016



- 1.17 Our strategy for the East Midlands is one which looks to maximise the growth potential for all these locations – not just at the Hub Station.

**Infrastructure Maintenance Depot (IMD) at Staveley**

- 1.18 Proposals for an HS2 Maintenance Depot at Staveley near Chesterfield offer major opportunities to the communities in the north of the study area, both in terms of job creation and training opportunities linked to the High Speed College facilities at Birmingham and Doncaster. Chesterfield Borough Council's emerging masterplan for Staveley includes provision for:

- remediation of 150 hectares of brownfield land
- 1,500 new homes
- 30 hectares of new employment floorspace
- Up to 800 new jobs on site (supporting 100-125 in wider area)

(DN: insert latest masterplan from Chesterfield BC)

**Connectivity across the Midlands**

- 1.19 HS2 will have wider connectivity benefits to the East Midlands economy. We are working through the Midlands Connect Partnership to identify additional opportunities to use HS2 to maximise 'agglomeration benefits' across the Midlands, to be published as part of the Midlands Connect Strategy in March 2017.

**Midlands Connect & the 'Midlands Engine'**

Midlands Connect is a partnership of 28 local transport authorities and 11 Local Enterprise Partnerships from across the Midlands that have come together to develop a strategic transport strategy by March 2017, which will support economic growth and in particular the objectives of the Government's 'Midlands Engine' initiative.

The final Midlands Connect strategy will set out a 20 year programme of investment in strategic road and rail improvements that will benefit the whole of the Midlands.

The Midlands will form the heart of the nation's HS2 Network and will effectively be served by four HS2 Stations: Birmingham Curzon Street, UK Central (Solihull), Crewe Hub and East Midlands Hub. As a result, a key theme of the Midlands Connect Strategy will be to ensure the Midlands is 'HS2 Ready'. In particular the strategy will consider:

- opportunities to advance investment to deliver greater economic benefits;
- priorities for making use of classic rail capacity released by HS2; and
- opportunities to integrate HS2 more fully into the Midlands' strategic transport network



The East Midlands HS2 Growth Strategy and the Midlands Connect Strategy are being developed in parallel using a common evidence base, and will be mutually re-enforcing.



For more information, please visit: [www.midlandsconnect.uk](http://www.midlandsconnect.uk)

### **Connectivity to the Northern Powerhouse and Scotland**

- 1.20 Working through the HS2 East Partnership, we have also made an assessment of the economic benefits of improving connectivity between the local economies of the East Midlands with the North East of England and with Scotland, maximising the economic potential of the Eastern Leg of HS2 as a whole.

#### **HS2 East**

HS2 East is a partnership of councils, local enterprise partnerships and chambers of commerce from the Midlands, Yorkshire, the North East and Scotland that have come together to promote the delivery of the Eastern Leg of HS2.

The Eastern Leg of HS2 runs from Birmingham to Leeds via the East Midlands Hub Station and South Yorkshire. It has the best business case of any part of the proposed HS2, with a benefit to cost ratio of over 5 to 1<sup>6</sup>.

However, the economic impact of the Eastern Leg extends further than Leeds. The proposed 'classic compatible' link to the East Coast Main line will enable high speed rail services to serve the North East of England and Scotland – linking six of the UK's top ten cities and 20% of national GVA.

This will result in 'agglomeration' impacts of over £700 million GVA and some major journey time savings:

- Leeds to Glasgow: reduction of 90 minutes
- Sheffield to Edinburgh: reduction of 90 minutes
- Newcastle to Birmingham: reduction of 85 minutes

Together the Eastern Leg of HS2 and an enhanced East Coast Main Line provide the obvious route for reducing journey times from Scotland to London towards the three hour mark – the point at which rail becomes competitive with air travel.

<sup>6</sup> Technical Business Case Work in High Speed Rail, Arup for Eastern Network Partnership, July 2011.  
<http://www.syltp.org.uk/documents/Final%20Report%20ENP.pdf>

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## Section 2: Emerging Connectivity Priorities

### Summary

The Economic Opportunities Assessment has confirmed that the key to unlocking the economic potential of the Hub Station will be the extent to which it can be connected to key areas of economic potential that will deliver our sector strategy.

We have undertaken initial assessments of a range of options for improving connectivity to the Hub Station, including:

- options for heavy rail connectivity, including dedicated shuttle and classic compatible services;
- options for strategic tram (NET) extensions or Bus Rapid Transit linkages; and
- options for bus/taxi, cycling and pedestrian access from surrounding communities.

We will produce Outline Business Cases for those that have the greatest potential as part of the final Growth Strategy in 2017.

We are very keen to work with Highways England and HS2 Ltd to identify a preferred option for direct access from the A52 to the Hub Station and proposals to mitigate pressure on strategic and local roads. We believe that there are opportunities integrate this work into proposals to develop an area-wide 'Mass Transit Strategy' that would help to reduce the number of journeys made by the private car.

### **An integrated approach to connectivity**

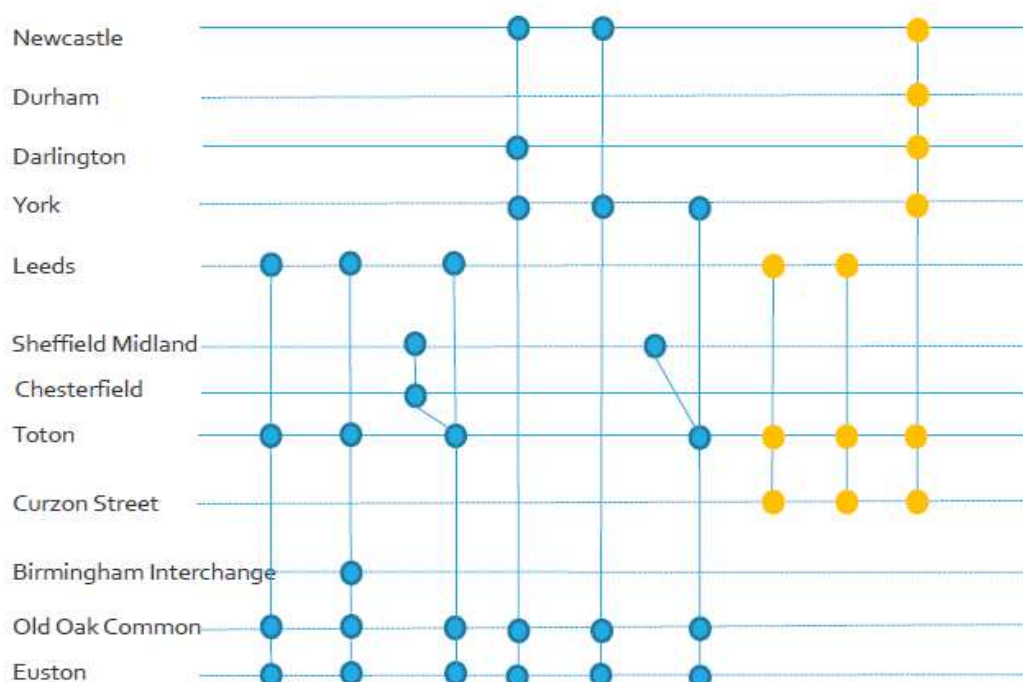
- 2.1 The Economic Opportunities Assessment has confirmed that the key to unlocking the economic potential of the Hub Station will be the extent to which it can be connected to areas of economic potential linked to our sector strategy. There are significant opportunities in the immediate vicinity of the Hub Station. However these are exceeded by those in the cities of Derby, Leicester and Nottingham and on strategic sites in surrounding locations. There is also potential for major 'agglomeration' benefits resulting from reducing the effective distance between centres of economic activity in East Midlands and those elsewhere.
- 2.2 Our connectivity plans must relate to these different opportunities and the geographies they represent. As a result we need an integrated approach which addresses strategic, sub-regional and local connectivity requirements, to form a comprehensive transport 'mesh' which will support economic growth and regeneration. We believe that improving public transport access to the Hub Station will help to reduce the number of journeys made by the private car.

- 2.3 We have undertaken an initial assessment of a range of connectivity options. We will produce Outline Business Cases for those that have the greatest potential as part of the final Growth Strategy in 2017.

#### Strategic connectivity to major urban centres

- 2.4 East Midlands Hub Station will be both a HS2 and a 'classic' rail station, with four platforms and two high speed through lines. HS2 Ltd's revised business assumes that there will be seven HS2 trains per hour serving the Hub Station - ***making it the most connected HS2 station outside of London.***

Figure 0: Hourly Service Pattern for the Eastern Leg based on HS2 Ltd revised proposals for Sheffield.



#### The economic case for advancing the HS2 Link between UK Central and East Midlands Hub Station

It is currently proposed that the Eastern Leg of HS2 including the East Midlands Hub Station will not be operational until 2033 - seven years after Birmingham Curzon Street and UK Central and six years after Crewe Hub. Given the economic potential of the Hub Station, this would seem to represent a huge missed opportunity.

Through Midlands Connect, we are looking at the economic and practical case for delivering the link to East Midlands Hub Station by 2030 in order to boost east-west connectivity across the Midlands prior to the completion of the full Eastern Leg to Leeds. There may also be potential to extend the link far as the recently proposed classic compatible connection to Sheffield Midland Station.

- 2.5 Currently there are proposed to be nine trains per hour using the Eastern Leg of HS2 – with potential for two more if the Sheffield trains split at the Hub Station. Given the line will be constructed to a standard equivalent to eighteen trains per hour, there is at least the potential to run an additional seven services along the Eastern leg.
- 2.6 We believe that there is a strong business case to use some of this spare capacity north of the Hub Station to develop two additional ‘classic compatible services’. In particular, to directly link stations on the Midlands Main Line to the south of the Hub Station, such as Leicester, to major urban centres in the north that are currently very difficult to reach via the current network - such as Leeds and Manchester. To run such services, a ‘classic compatible connection’ would need to be built into the East Midlands Hub Station, providing a physical link between the HS2 line and the Midland Main Line – similar to that planned for the East Coast Main Line further north.

#### **A ‘Northern Facing’ Classic Compatible Connection at the Hub Station**

A northern facing ‘classic compatible’ connection at the Hub Station would allow some high speed trains to serve locations to the south of the Hub Station on the Midland Main Line (in particular Leicester), transfer on to the HS2 line, and then access key urban centres in the north of England which are currently very difficult to serve via the classic rail network – such as Leeds and Manchester.

Network Rail have estimated the capital cost of providing such a link at the Hub Station would be between £60 and £95 million – although other estimates have suggested a lower figure.

Consultants SLC Rail<sup>7</sup> have looked at the economic benefits that could be achieved by services using this connection. There are a number of potential service patterns serving Derby, Leicester and Nottingham that could generate strong economic benefits. The analysis to date shows that the best results could be achieved by:

- a service connecting the southern end of the Midland Main Line with Manchester via the proposed ‘Northern Powerhouse Rail’, which would deliver a GVA uplift of £1 billion; and
- a service connecting the Thames Valley, Midland Main Line and Leeds via the proposed ‘East-West Rail’, which would deliver a GVA uplift of £0.9 billion.

These new services would replace the two trains per hour shuttle service between Leicester and East Midlands Hub and the service between Reading and Nottingham, both of which are proposed in Network Rail’s East Midlands Route Study.

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<sup>7</sup> Toton HS2 Classic Connectivity, SLC Rail Ltd for EMC and Leicestershire County Council, August 2016.

- 2.7 Strategic connectivity to major urban centres in the East Midlands from the Hub Station will be secured by classic rail services and via the Strategic Road network (SRN) – in particular the M1 and the A52.

#### **Classic Rail Connectivity to Derby, Leicester and Nottingham**

- 2.8 The Hub Station will have both classic rail and HS2 connectivity. In order to maximise the transport benefits of HS2 to the city centres of Derby, Leicester and Nottingham, high quality fast reliable rail services to the Hub Station will be essential. Such connectivity cannot be achieved by diverting existing long distance classic rail services via the Hub Station. These services do not have the capacity or reliability to integrate with HS2 effectively. To make the most of the potential offered by HS2, passengers in Derby, Leicester and Nottingham should feel they are effectively starting their HS2 journeys when boarding a connecting service.
- 2.9 That is why Network Rail's East Midlands Route Study<sup>8</sup> has set out options to serve the Hub Station from Derby, Leicester and Nottingham by a series of 'shuttle services', which would be timed to connect with the HS2 timetable. Through Midlands Connect we are evaluating the economic benefits of these services. With Network Rail, we are looking at the need for any consequential infrastructure improvements, such as additional platform capacity at city centre stations and improved junctions. As set out above, there is the potential to develop the shuttles from Leicester into longer distance 'classic compatible' services.

#### **Classic Rail Released Capacity**

- 2.11 Analysis set out in Network Rail's East Midlands Route Study<sup>9</sup> confirms that without HS2, the Midland Main Line will become increasingly overcrowded – even with the additional capacity provided by upgrade and electrification of the Midland Main line which will be completed by 2023.
- 2.12 A major benefit to the whole of the East Midlands from HS2 will be capacity released by HS2 from the classic rail network that can be used to deliver improved and additional services. For example there is the potential to move towards an even 'clock-face' for services between Leicester and London as opposed the 'bunching' that currently exists. Midlands Connect is currently assessing the economic benefits a range of potential new services enabled by released capacity that would improve east-west connectivity across the Midlands, including:
- Nottingham – Birmingham
  - East Midlands Hub - Derby - Crewe Hub
  - Derby - East Anglia

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<sup>8</sup> East Midlands Route Study, Network Rail, March 2016: <https://www.networkrail.co.uk/long-term-planning-process/east-midlands-route-study/>

<sup>9</sup> East Midlands Route Study, Network Rail, March 2016: <https://www.networkrail.co.uk/long-term-planning-process/east-midlands-route-study/>

- Leicester – Birmingham

#### **Trent Junction: a key constraint on the rail network**

Insufficient capacity exists on the rail network between Sheet Stores Junction and Trent South and East Junctions south of Nottingham to meet projected passenger growth on the rail network as well as the additional HS2 shuttle services. This is because of convergence of multiple local and strategic routes resulting from the rail closures in the 1960s.

That is why Network Rail's East Midlands Route Study includes an option<sup>10</sup> to re-model the existing junction through grade separation to remove key conflicts.

Midlands Connect is assessing the economic benefits of a comprehensive enhancement for Trent Junction which would meet the needs of both the HS2 and future growth on the classic rail network.

#### **New Opportunities for Chesterfield**

- 2.14 The recent proposal from HS2 Ltd to serve Sheffield Midland Station with classic compatible services via an electrified Erewash Valley Line (in preference to a new station at Meadowhall) raises the exciting opportunity of Chesterfield being served by high speed rail services – reducing journey times to London by half to 71 minutes. There are already proposals for major housing and employment development around Chesterfield Station. We will produce a comprehensive strategy for maximising local economic benefits to Chesterfield and surrounding areas of both connectivity to the HS2 network and the proposed HS2 Maintenance Depot at nearby Staveley.

#### **Rail Connectivity from Mansfield/Ashfield**

- 2.15 Mansfield/Ashfield currently has a very poor train service to and from both London and Birmingham, with very slow journey times. HS2 offers the opportunity to transform this situation and provide a major boost to the regeneration of the area. This would be possible because of a rail link that leads directly from the Robin Hood line at Kirkby in Ashfield down into the Erewash Valley where it joins the Chesterfield - Toton route. Currently the line from Kirkby-in-Ashfield is only used by freight, but it would also be capable of use by passenger trains. We will evaluate options for new services in the context of HS2 Ltd's proposals to serve Sheffield Midland Station.

#### **Access from the M1 and A52**

- 2.16 To be successful, East Midlands Hub Station must be an iconic Multi-Modal Transport Interchange - not a 'parkway station'. However, good access from the strategic trunk road network will still be crucial for many passengers.

<sup>10</sup> East Midlands Route Study, Network Rail, March 2016: <https://www.networkrail.co.uk/long-term-planning-process/east-midlands-route-study/>

- 2.17 Although the scale of additional trips directly associated with accessing HS2 services will be a small proportion of total road journeys, both the M1 and A52 between Derby and Nottingham are already congested at peak hours. The Government has confirmed support for completing the upgrade of the whole of the M1 in the East Midlands to 'smart motorway' standard. This will help secure additional capacity from existing infrastructure, but is unlikely to be a long term solution given the scale of expected background traffic growth.
- 2.18 As a result Midlands Connect is assessing longer term strategic options to improve connectivity to Derby and Nottingham via the M1 and A52, including M1 J25. This will need to include the impact of the proposed direct access from the A52 to the Hub Station.
- 2.19 Highways England has undertaken a high level assessment of the potential impacts of HS2 East Midlands hub station proposals on the SRN and given early consideration to a range of potential options such as widening of sections of the A52, new junction forms (including grade separation of existing junctions) and additional provision for local traffic. Derby City Council is looking at road options for improved access from key strategic sites along the A52 corridor to the Hub Station.
- 2.20 Substantial further work is required in conjunction with HS2 Ltd in order secure effective solutions for the strategic road network as part of an overall transport strategy for the area. Highways England is committed to taking this work forward as part of its current Route Strategy refresh. However, a proposed access solution will need to be set out in the Phase 2b Hybrid bill, which is due to be deposited in 2019.
- 2.21 There is an opportunity to integrate consideration of strategic highway solutions with opportunities for public transport improvements that will mitigate the impact on highway infrastructure.

#### **Sub-regional connectivity to major economic opportunities**

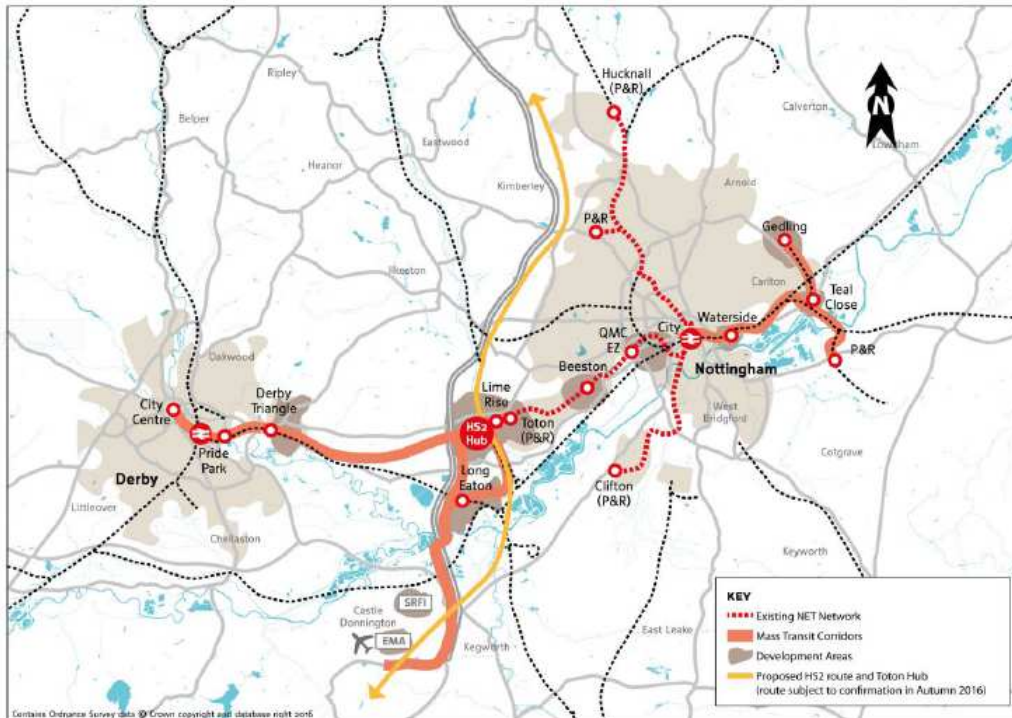
- 2.22 Whilst classic rail will be the most effective way to reach the Hub Station from the city centres of Derby, Leicester and Nottingham, the Economic Opportunities Assessment has highlighted a number of intermediate sites and locations which would benefit from direct connectivity to the HS2 network.
- 2.23 The Government's 2013 proposition includes the extension of the existing Nottingham Express Transit (NET) tram from the Toton Park and Ride site to the Hub Station, directly connecting HS2 to the Queens Medical Centre, Boots Enterprise Zone and the Nottingham University Campus. However are also opportunities to connect to key locations to west of the Hub Station in Derby and Derbyshire, and south towards East Midlands Airport and the East Midlands Gateway Freight Interchange.



## Development of a 'Mass Transit Strategy'

- 2.24 To maximise the economic potential of HS2 and realise existing growth aspirations as the wider area, we are working together to develop an integrated 'Mass Transit Strategy' - with the East Midlands Hub Station at its heart.

Figure 0: Proposed 'Mass Transit Strategy'



- 2.25 We have undertaken an engineering assessment on the potential for extending the NET system, which has demonstrated the feasibility of a number of alternative alignments serving key locations<sup>11</sup>. However, we are also looking at other potential modes. An initial study into the feasibility of Bus Rapid Transit (BRT) between Derby and the HS2 Hub will be completed shortly. Tram-Train is likely to be a medium to long term option for some locations and will also be assessed. There may be potential to utilise existing or former freight routes to connect to new developments, and to provide improved public transport services along existing rail corridors in the area.
- 2.26 In order to develop full Outline Business Cases for the best performing combination of options, Nottingham City Council on behalf of the relevant councils and LEs as submitted a bid for development costs to Department for Transport's fund for Large Local Major Transport Schemes. There is an opportunity to link this work

<sup>11</sup> NET Extensions to East Midlands Hub, Long Eaton, East Midlands Airport & Derby, NET & Mott MacDonald for Nottingham City Council, May 2016.

more closely to consideration of impacts on the Strategic Road Network led by Highways England and HS2 Ltd.

### **Derby & Nottingham Metropolitan Strategy 2030**

The opportunity presented by the East Midlands Hub Station has been a catalyst for greater joint working between councils. In particular Derby City Council and Nottingham City Council launched the 'Nottingham and Derby Metropolitan Strategy' in July 2016.

The first draft of the Metropolitan Strategy Action Plan outlines what the two councils will work together on over the next three years. It is based on the four themes:

- Enterprise;
- Talent;
- Connectivity and;
- City Living.

For more information please visit:

<http://www.derby.gov.uk/media/derbycitycouncil/contentassets/documents/consultationpapers/consultationdocuments/metro-strategy-action-plan.pdf>

Proposals for a 'Mass Transit Strategy' provide the major component of the connectivity strand. There is an opportunity to link this work more closely to consideration of impacts on the Strategic Road Network led by Highways England and HS2 Ltd, and to develop integrated multimodal approach that will mitigate the impact on highway infrastructure.

### **Local Connectivity to surrounding communities**

- 2.27 Local connectivity to the towns and villages surrounding the Hub Station, such as Toton, Long Eaton and Stapleford will help to maximise the economic benefits for those people most effected by the environmental impacts of HS2. Good local accessibility by bus, taxi, cycling and walking will also help to reduce reliance on the private car.
- 2.28 We have looked at the potential for reconfiguring local and sub-regional bus services to incorporate the Hub Station into the existing local public transport network. Key to achieving this from a commercial perspective will be to ensure access for buses 'through' the Hub Station - rather than it becoming a terminus destination<sup>12</sup>.

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<sup>12</sup> HS2 East Midlands (Toton), Connectivity & Mobility – A Bus Operators Perspective, Trent Barton, February 2016. <http://www.emcouncils.gov.uk/write/Connectivity and Mobility - A Bus Operator Persepctive.pdf>

[illegible]

- To achieve through connectivity for buses and accessible off/pick up and cyclists from both the Derbyshire and Nottingham, it will be necessary to configure the local road network. We believe that the A52 Road from Long Eaton and Bessel Road from Toton to connect to the Hub Station could meet these objectives. Access to the Hub Station must be from the A52 only to prevent local road congestion.
- Finally, pedestrian access to the station from local commercial and residential car park and other modes connecting with the Hub Station must be attractive for passengers. The masterplan for the Hub Station by Broxtowe Borough Council establishes a series of green corridors and paths as the 'first infrastructure'.

## Section 3: Hub Station Design Principles

### Summary

The functional design of the Hub Station can either enable or frustrate connectivity to key economic opportunities, particularly by public transport.

We have set out a series of design principles for the Hub Station that would maximise accessibility and economic growth potential. We want to use these principles as a basis for working in partnership with HS2 Ltd on the development of the Hybrid Bill and the detailed station design.

We want the Hub Station to become an inspiring 21<sup>st</sup> Century Gateway to the towns and cities of the East Midlands.

### **Maximising the economic potential of the Hub Station.**

- 3.1 The Economic Opportunities Assessment has confirmed that the key to unlocking the economic potential of the Hub Station will be the extent to which it can be connected to areas of economic potential that will deliver our sector strategy. There are significant opportunities in the immediate vicinity of the Hub Station. However these are exceeded by those which exist in the cities of Derby, Leicester and Nottingham and on strategic sites in surrounding locations.
- 3.2 We have set out initial options for linking the Hub Station to the economic opportunities that have the greatest potential to deliver jobs and homes. Not all of this connectivity will be delivered on 'day one'. Rather, it is likely to be an incremental process linked to the implementation of key developments.
- 3.3 It is clear that the functional design of the Hub Station can either enable or frustrate connectivity to the key economic opportunities, particularly by public transport. Making major changes once the Hub Station is built will be difficult and expensive. We therefore need to make sure that the design is 'future proofed' to enable connectivity improvements to be made over time as opportunities arise.
- 3.4 That is why we commissioned international architects Farrells to work with us to develop a series of functional principles for the Hub Station that would maximise accessibility and economic growth potential<sup>13</sup>. We want to use these principles as a basis for working in partnership with HS2 Ltd on the development of the Hybrid Bill and the detailed station design

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<sup>13</sup> East Midlands HS2 Hub, Maximising the Wider Regional Benefits, Farrells & PBA Associates for EMC, November 2015. [http://www.emcouncils.gov.uk/write/Final\\_Farrells\\_Report.pdf](http://www.emcouncils.gov.uk/write/Final_Farrells_Report.pdf)

### **An Iconic Multi-Modal Transport Interchange – not a ‘parkway’ station**

- 3.5 The Hub Station cannot be a traditional ‘parkway’ station. Although it will have car parking facilities, to be economically transformational the Hub Station must be an *iconic multimodal transport interchange, a destination station, and act as a catalytic hub for economic growth across the whole East Midlands*. To achieve this outcome we have set out ten key functional design principles for the Hub Station.

#### **East Midlands Hub Station Design Principles**

1. Provide High Speed and ‘classic compatible’ connectivity from the Hub Station, not only to London, but also to Birmingham, Sheffield, Leeds, York - and on to the North East and Scotland.
2. Create efficient rail connections with the principal East Midlands stations – including Derby, Leicester, Nottingham, Chesterfield, Mansfield/Ashfield, Loughborough, Long Eaton and Beeston.
3. Make changing between modes and between HS2 and classic trains as easy and convenient as possible for passengers at the Hub Station, for example through the provision of ‘cross platform interchange’.
4. Extend the existing tram network from the existing Toton Park and Ride site to the Hub Station.
5. Make provision for future extensions of the tram network west of the Hub Station, potentially to Long Eaton, East Midlands Airport and Derby.
6. Provide efficient access from the Strategic Road Network, without adding to local congestion.
7. Provision for ‘through’ bus and coach services serving the Hub Station as part of wider public transport networks.
8. Maximise land available for economic development around the station, for example by provision of efficient multi-storey underground car parking.
9. Achieve high quality cycle and walking connectivity to and through the Hub Station from surrounding communities east and west of the Hub Station.
10. Maintain and improve local connectivity across the rail alignments from surrounding communities – particularly in Long Eaton.

### **Applying the Design Principles**

- 3.6 There are a number of ways in which these principles could be applied in the design of the Hub Station. From the work we have done so far, our preferred scenario would



involve integrating both a northern facing ‘classic compatible’ connection and a ‘single crossing’ shared between public transport, pedestrians and cyclists into the design of the Hub Station. Past Toton Yard, the tram/bus link could split to head out to Long Eaton, East Midlands Airport and Derby as required.

- 3.7 Due to the single crossing being above the HS2 and classic rail platforms, later delivery would present a significant risk of disruption to services and additional costs – even if so called ‘passive provision’ was made. As a result it would be more efficient and cheaper to deliver the single crossing as part of the construction of the Hub Station itself.
- 3.8 The provision of an integrated single crossing also provides an opportunity to create a high quality public square in front of the Hub Station, making it more of a ‘place’ and a destination in its own right.

Figure 0: Single Crossing Layout

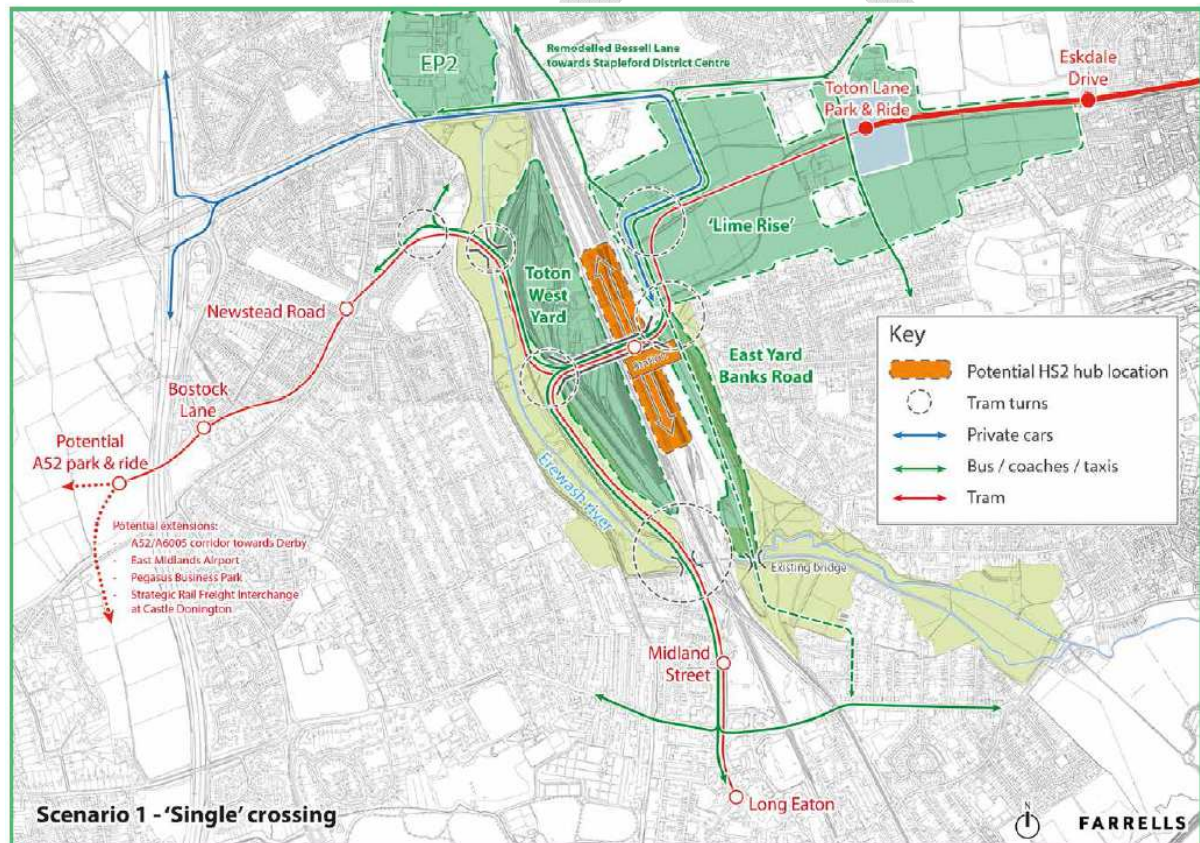
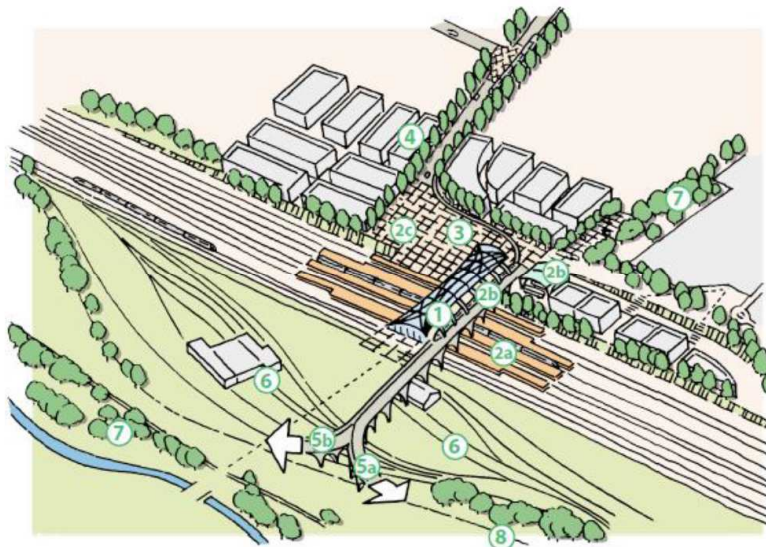


Figure 0: Single Crossing Concept Design

### East Midlands Hub Station: Concept Design



Commissioned by East Midlands Councils from Farrells & Peter Brett Associates  
November 2015

- 1** An iconic, world class destination station
- 2** Efficient interchange and attractive regional & national connectivity with capacity for growth
  - 2a HS2 & classic rail services cross-platform connectivity
  - 2b Nottingham Express Transit 'The Tram' & buses/coaches/taxis
  - 2c Car parking underground, not occupying developable land
- 3** High quality public 'station square' as the gateway to the area...
- 4** ...and the heart of the development of a new 'destination'
- 5** Day one (a) and future (b) track alignment crossings for NET, buses taxis, cyclists and pedestrians towards Long Eaton & beyond
- 6** Allow for future development potential west of the station
- 7** Green corridors in the Landscape as the 'first infrastructure'
- 8** Ensure connections to the south, and to all surrounding communities

- 3.9 The opportunities for cross-platform interchange will be intrinsically linked to the layout of the station approaches. As a result, an area-wide integrated design approach will be required which considers station layout, Trent Junction re-modelling and classic compatible connectivity together.

## Section 4: Skills & Supply Chain Opportunities

### Summary

We have undertaken an assessment of the local skills requirements result from the construction of both phases of HS2, and set out some initial proposals to ensure local people receive the necessary training to access employment opportunities.

We will work industry bodies to develop a comprehensive approach to supply chain development that our world class rail engineering sector can fully benefit from HS2 investment.

We will develop a comprehensive East Midlands employment and skills plan as part of our final Growth Strategy in July 2017.

### Job Opportunities across the East Midlands

- 4.1 HS2 has the potential to create new jobs in the East Midlands on an unprecedented scale; from the construction and operation of the railway together with the wider regeneration and economic development that the arrival of HS2 will drive.
- 4.2 The East Midlands sits at the heart of the UK rail industry and is uniquely placed to provide the skilled workforce to both develop the rail infrastructure and to provide the trains that will run on it. The area has a long and deep rail heritage dating back 180 years, home to international companies like Bombardier. It is vital to our region's economic wellbeing that we take every opportunity to build on our rail heritage by investing in the skills of the existing and future workforce. We aspire to meet the needs of both a new emerging high speed rail industry and a rapidly evolving and changing conventional rail industry. This change will not happen without a focused approach and appropriate levels of investment.
- 4.3 The work to date on employment and skills is centred on the construction and railway engineering associated with HS2, further work will be undertaken as part of the full Growth Strategy for submission in 2017.

### Construction

- 4.4 The National Infrastructure Plan for Skills (NIPS) models the £411bn National Infrastructure Pipeline. Within the NIPS, the Midlands has a projected pipeline of infrastructure works for 2015-20 of £11billion; most of that spend is in transport, energy and water. The NIPS considers both construction and engineering skills requirements and the data includes HS2.
- 4.4 The skills demand in the Midlands required to deliver the pipeline of work is a current workforce of 43,700 peaking at 56,500 people by 2020.



Figure 0: National Infrastructure Plan for Skills workforce requirements in the Midlands

Occupational group	Current workforce (2015)	Peak workforce (2020)	Absolute Increase	% increase
Client & project leadership	3,600 (8.2%)	4,800 (8.5%)	1,200	33%
Engineering & technical	12,500 (28.6%)	15,500 (27.4%)	3,000	24%
Construction management	9,000 (20.6%)	10,800 (19.1%)	1,800	20%
Skilled trade & labour	18,600 (42.6%)	25,400 (45.0%)	6,800	37%
<b>Total</b>	<b>43,700 (100%)</b>	<b>56,500 (100%)</b>	<b>12,800</b>	<b>29%</b>

Source: DN to complete

- 4.5 Around 45% of the labour demand is within skilled trades and labour. The remainder is split between the three other groups with almost 30% in engineering and technical skills occupations. The Midlands has the highest skills gap in all four occupational groups of any of the English regions considered in the NIPS, this presents a significant opportunity for the East Midlands to develop a labour force plan to capitalise on the investment in HS2.
- 4.6 A key point to note is that the construction workforce increases rapidly with mobilisation from 2017 reaching a peak of up to around 30,000 in 2020 before dropping off to a low in 2023 then rising to a second somewhat lower peak associated with Phase 2 construction in the mid 2020's<sup>14</sup>. It is therefore important that the East Midlands acts now to ensure local people are aware of and can prepare for jobs associated with HS2.
- 4.7 Construction employment in the East Midlands region increased steadily from just over 135,000 in 2002 to 180,000 in 2008. Although impacted by the recession, in 2015 the number of construction workers in the region had climbed to 164,000 and the current Construction Skills Network (CSN) forecast is for continued employment growth. The arrival of HS2 in the East Midlands will help to support the growth and vibrancy of this key sector.
- 4.8 In terms of assessing where potential skills gaps and shortages may occur, it is only possible to make a number of observations at this stage. Factors noted such as the mobility and fluidity of the construction labour market are key, many workers may follow HS2 related work 'up the line' as the project progresses.
- 4.9 In terms of construction occupational 'gaps', there are some notable gaps in the wider Midlands and the infrastructure sector. Looking at the high level demand forecasts for the HS2 project occupations in the categories of Construction Project Managers, Construction Trade Supervisors, Steel Erectors/Structural, Scaffolders, Labourers, Logistics and Civil Engineers are all running close to or above capacity. Comparisons across the wider Sheffield and Leeds City Regions also indicate that Labourers, Logistics and both Civil Engineers and Civil Engineering Operatives are also running 'hot' from a capacity perspective and therefore drawing on skilled resources from a wider geographical area may prove challenging.

<sup>14</sup> North West High Speed Rail Skills Strategy and Implementation Plan, Atkins for Greater Manchester Combined Authority, July 2016 · <https://www.greatermanchester-ca.gov.uk/download/meetings/id/1071/26-nw-high-speed-rail-regional-skills>

- 4.10 This indicates an opportunity for the East Midlands to ensure that the right provision is in place to support local people and maximise the economic value that HS2 brings to the local area.

### **Railway Engineering**

- 4.11 Rail throughout the UK is enjoying a sustained period of significant growth: passengers and freight, renewal investment and major new projects. The National Skills Academy for Rail (NSAR) forecasts the need for 10,000 new engineering and technical entrants to the national rail industry by 2019 to cater for growth in demand, new investment, and replacement of an ageing workforce. In Traction and Rolling Stock alone, 8,200 new entrants are needed by 2025 to replace an ageing workforce, new replacement vehicles and growth of 25% in the national fleet.
- 4.12 The average skill level is currently under level 3. With the advent and deployment of new technologies and systems new roles within the rail industry will require level 3 skills development and qualifications at the very least with significantly more people qualified to higher skill levels of 4 and above than at present.
- 4.13 Demand forecasts associated with rolling stock manufacture are particularly complex as they depend on the procurement strategy adopted. One of the strengths of the East Midlands is in rolling stock supply chain. Therefore this component has the potential to create or secure hundreds if not thousands of jobs in the region.

### **Infrastructure Maintenance Depot (IMD) at Staveley**

- 4.14 A vital component of HS2 in the East Midlands will be the Infrastructure Maintenance Depot at Staveley. Research commissioned by Derbyshire County Council from Volterra & Partners<sup>15</sup> suggests that following completion of HS2, between 200 and 250 full time equivalent jobs will be created. In addition, HS2 have published their initial thoughts on how the first IMD (to be based at Calvert and serving Phase 1) will operate. It is reasonable to assume that Staveley will operate in a similar way:
- A 24 hour/7 day a week operational facility with the majority of work being carried out at night;
  - The IMD will service the line from Birmingham through to Leeds covering almost 120 miles. There are likely to be rapid response teams located at the far ends of the line to provide a quick response;
  - The IMD at Staveley is likely to be responsible for managing and providing preventative and predictive maintenance. Staff will use active monitoring systems with data obtained from both the fixed infrastructure and from passenger trains being fed back electronically;
  - The depot will house dedicated inspection trains with specialist on-board measuring equipment

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<sup>15</sup> Economic Impacts of the HS2 Infrastructure Maintenance Depot at Staveley, Volterra Partners for Derbyshire County Council, July 2014. <http://volterra.co.uk/wp-content/uploads/2014/03/ECONOMIC-IMPACT-OF-STAVELEY-DEPOT.pdf>

- 4.15 Staveley will offer a range of jobs from ‘operatives’ (level 2) through to higher skilled jobs such as the operation of highly sophisticated inspection trains (level 4 or above). The IMD at Staveley means that there will be a significant opportunity for local people who may have been involved in aspects of the construction work to progress into higher level roles supporting the wider regeneration opportunities associated with HS2 in the East Midlands.

Figure 0: Job Creation at the Staveley IMD

Job Type	Number
Managers	25-30
Elementary	65-80
Process, Plant, Machine Operatives	115- 140
<b>Total</b>	<b>205 – 250</b>

Source: Volterra Partners

### Priorities for Intervention

- 4.16 As a result of the opportunities linked with HS2 in the East Midlands, five areas have been identified for intervention to make a significant and sustained uplift to the East Midlands economy:
- 4.17 ***Inspiring Our Young People.*** HS2 provides the opportunity to inspire young people to pursue a career in the rail industry. Examples of interventions to enable this to happen include:
- A programme of activities to ensure that all primary and secondary schools benefit from ‘HS2 outreach activity’
  - Work with the rail industry to develop an ‘Inspirational Teachers’ programme to support STEM teachers and facilitate industry links
  - Support future ‘RailWeek’ activities to showcase industry opportunities to parents as well as young people and to encourage wider participation by under-represented groups e.g. women
  - Identify ways to build on the successful Glen Parva Young Offenders Institute Trackwork programme to provide more opportunities for these young people
- 4.18 ***Building Further Education (FE) Capacity.*** In order for local people to be prepared for the job opportunities associated with investment in HS2, it will be vital that FE Colleges can deliver HS2 relevant qualifications and work collaboratively with specialist centres such as the National College for High Speed Rail in Doncaster and Birmingham. Specialist local provision such as an East Midlands Institute of Technology could be developed as a flagship regional centre and link with infrastructure such as Staveley to provide a pipeline of talented local people.
- 4.19 ***Harnessing the Power of our Universities.*** One of the challenges facing the East Midlands is low levels of graduate retention. The opportunities associated with long-term HS2 investment will almost certainly provide an up-lift in the number of graduates retained in the local area. Examples of initiatives that will harness the power of our universities in achieving this goal are:

- Support the creation of a Rail Research and Innovation Centre to re-inforce the region as a 'centre of rail excellence';
- Encourage employer and university collaboration on specific research projects and work placements; and
- Ensure that our universities are involved with the development of new degree level rail and construction apprenticeships.

4.20 ***Support for Individuals.*** Local people deserve the best support to ensure that they can benefit from jobs that will be associated with HS2. In order to make sure this this happens, the following interventions are proposed:

- Tailored support for disadvantaged individuals to develop skills and qualifications that will help them to become 'HS2 ready'; and
- Provide a specific mechanism that links local people to future job opportunities with HS2 and the associated local supply chains.

4.21 ***Ensuring our Businesses are 'HS2 Ready'.*** The majority of jobs associated with the construction of HS2 will be created in the supply chain of consultancies, contractors and rolling stock manufacture. For local people to be successful in securing jobs, East Midlands employers need to be ready to win contracts. Examples of proposed interventions include:

- Provide opportunities for East Midlands' employers to learn about and understand the expectations and requirements of HS2 well in advance so that they can capitalise on them;
- Consideration of tailored business support e.g. Leadership and Management 'HS2 Readiness' module, access to growth finance for companies wishing to gear up for HS2;
- A mechanism to link local employers to people who are equipped with the appropriate HS2 skills; and
- Make sure that key transport documents are updated to include rail infrastructure opportunities associated with HS2.

#### **Next Steps**

4.22 The employment and skills information presented to date is indicative and centred on construction and rail engineering. In order to capitalise on these opportunities, we will develop a comprehensive East Midlands employment and skills plan as part of our final Growth Strategy in July 2017. In the short term the potential to align planned spending on apprenticeships with HS2 related skills.

4.23 Further in depth work will also be required to develop an holistic approach to the employment and skills opportunities associated with the development of the rail cluster, transport connectivity and the East Midlands Hub Station.

## Section 5: Developing an Investment Proposition

### Summary

For the final Growth Strategy in 2017, we will develop a clear Implementation Plan, including Outline Business Cases for key interventions and proposals for new funding and delivery mechanisms that can help to unlock private sector funding.

We have signed a Collaboration Agreement with the Government's HS2 Growth Partnership to help develop a commercial case for investment in key development opportunities related to HS2.

We intend to develop a proposal for a Strategic Delivery Vehicle to promote the implementation of key developments and connectivity improvements.

### Definition of the investment proposition

5.1 We are working to identify and agree the scope, timing and scale of the investment programme to deliver our Growth Strategy. This will be divided into three elements:

- strategic sites – the delivery of a series of key sites and developments throughout the study area that will implement our sector strategy;
- delivering the connectivity package – connectivity, including classic compatible connectivity, is the key to unlock the economic opportunities in key locations; and
- HS2 Hub Station and its environs – delivering the station masterplan at and immediately adjacent to the station to deliver a destination in its own right

5.2 The final Growth Strategy will develop a set of costs, funding and financing scenarios that will be evaluated through the financial model. The approach to delivery and local appetite for risk be explored and used to inform scenario development. This will should have the potential to be attractive to a wide range of potential investors, including international markets targeted by the Midland Engine, including China and India.

### Developing a financial model

5.3 Whilst the Government will fund the core infrastructure required to deliver HS2, we are clear that the Growth Strategy will need to secure a mix funding from the private sector to be fully implemented. As a result, the final Growth Strategy will be underpinned by a financial model that will:

- demonstrate potential cost, programme and funding, financing and risk allocation scenarios that would allow the Growth Strategy to be delivered;

- reflect the different potential delivery models that will secure the local and national economic benefits that the Growth Strategy would deliver; and
- provide a robust evidence base and platform for discussions with key public and private sector stakeholders.

5.4 The financial model will need to be capable of producing outputs in the form that key stakeholders and potential funders will require, including:

- whole life costs, including acquisition, construction, operations and maintenance;
- local, national and third party funding sources;
- borrowing totals and balance sheet impacts;
- optimism bias and contingency;
- indexation assumptions; and
- financing assumptions

5.5 In addition we will:

- assess the key risks/uncertainties within the base input data and develop a core set of sensitivity tests; and
- engage effectively with relevant Central Government partners on the identified financing structures, the appropriateness of the financial assumptions used in the model, and the implications of different approaches for the delivery of the Growth Strategy objectives and the overall business case.

5.6 This analysis will be consistent with the HMT Green Book and the latest appraisal guidance from relevant Government departments.

#### **Options for alternative funding mechanisms**

5.7 Alongside the structuring of cost and financing scenarios, the options for alternative funding mechanisms will be identified and assessed in terms of revenue potential, viability, risk and impact on the outcomes being targeted by the HS2 Growth Strategy. This will include:

- an assessment of the different approaches to value capture, including drawing on models that have been successfully developed, or are in development, for similar investment programmes elsewhere in the UK, such as other HS2 Growth Strategies, Devolution Deals and major transport projects;
- an assessment of the applicability of these models to support the delivery of the East Midlands HS2 Growth Strategy;
- quantification of the scale and timing of new funding that could be raised from alternative sources for the East Midlands HS2 Growth Strategy;
- consideration of the different approaches to allocating risk between the various public and private stakeholders.

5.8 The East Midlands has signed a partnership agreement with the Government's HS2 Growth Partnership to develop a clear investment proposition for the land around

the Hub Station (set out in Appendix 7.2). The Growth Strategy will clearly provide the basis for this work.

**Establishing Strategic Delivery Vehicle**

- 5.9 There is an emerging consensus that a Strategic Delivery Vehicle will be required to implement the East Midlands HS2 Growth Strategy. A co-ordinated and strategic approach to planning, site assembly, infrastructure prioritisation and delivery will be required to deliver growth in the right opportunities and ensure the right connections are in place. We will set out our proposals for a Strategic Delivery Vehicle in the final Growth Strategy in 2017.

DRAFT

## Section 6: Governance & Next Steps

### Summary

We have established a broadly based and inclusive East Midlands HS2 Strategic Board chaired by Cllr Jon Collins, to provide strategic leadership for the delivery of HS2 in the East Midlands. We have also established Delivery Boards for the Hub Station and the Staveley Maintenance Depot which will play a more prominent role as the work progresses.

We have established a small HS2 Executive Team to drive forward the development of the Growth Strategy, reporting to the East Midlands HS2 Strategic Board, and supported by a wider Growth Strategy Officer Group.

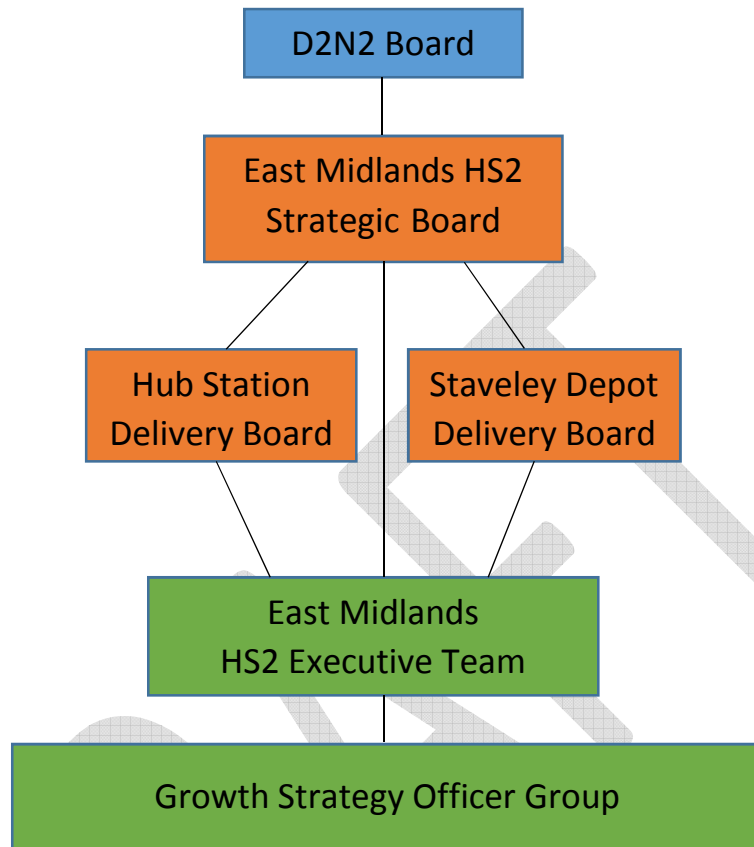
The Government has signalled its intention to make a formal Route Announcement on Phase 2b of HS2 in late 2016. Following this, we shall will publish our full East Midlands HS2 Growth Strategy in July 2017.

- 6.1 We have established a broadly based and inclusive East Midlands HS2 Strategic Board chaired by Cllr Jon Collins, to provide strategic leadership for the delivery of HS2 in the East Midlands. Terms of reference and full membership is set out in Appendix 7.3.
- 6.2 The HS2 Strategic Board meets on regular a basis and makes reports to the D2N2 LEP Board. The Strategic Board membership reflects the complex geography of the area and the range of legitimate interests involved and has proved successful in securing consensus on key issues to date, not least station location. The Strategic Board is supported by two Delivery Boards focussed on the Hub Station and the Staveley Maintenance Depot respectively, which will play a more prominent role as the Growth Strategy develops and moves towards implementation.
- 6.3 We have established a small HS2 Executive Team to drive forward the development of the Growth Strategy, reporting to the East Midlands HS2 Strategic Board. This is supported by a wider Growth Strategy Officer Group drawn from the relevant councils, public bodies and private sector partners.
- 6.4 Derbyshire County Council acts as the accountable body the Growth Strategy funding on behalf of D2N2. Expenditure is certified jointly by the D2N2 Chief Executive and the Derbyshire County Council S151 officer in line with arrangements for the Local Growth Fund.



- 6.5 Our HS2 governance structures will work closely with new arrangements resulting from the ongoing devolution agenda and other relevant Government initiatives.

Figure 0: East Midlands HS2 Growth Strategy Governance Structure



- 6.6 The Government has signalled its intention to make a formal Route Announcement on Phase 2b of HS2 in late 2016. Following this, we will publish our full East Midlands HS2 Growth Strategy in July 2017.

## **Section 7: Appendices**

- 7.1 East Midlands HS2 Strategic Vision
- 7.2 Collaboration Agreement with the HS2 Growth Partnership
- 7.3 East Midlands HS2 Strategic Board Membership

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**Appendix 7.1 Strategic Vision & Principles: Agreed by the East Midlands HS2 Strategic Board in September 2014**

***Councils, LEPs, universities and colleges will work in partnership with the Government to ensure that high speed rail in the East Midlands delivers unique and sustainable places that are well connected by high quality infrastructure, for people who will benefit from enhanced employment prospects resulting from targeted investment in skills and business support.***

***'...unique and sustainable places...'***

1. High quality design that achieves an inspiring 21<sup>st</sup> Century Gateway to the towns and cities of the East Midlands:
  - an iconic yet highly functional Hub Station, with provision for business meeting space and surrounded by excellent public realm and accessible green infrastructure;
  - viaducts and bridges which have architectural merit but are designed to minimise the impact of noise;
  - cuttings and embankments which are well integrated into the natural environment and provide opportunities to improve biodiversity.
2. Planned development that uses the locational advantages of the Hub Station to strengthen and re-enforce the roles of existing settlements across the East Midlands:
  - establishment of a major new high tech research/HQ institution adjacent to the Hub Station which adds value to the existing East Midlands offer;
  - well integrated, high quality, mixed tenure housing and employment development (including provision for relocated businesses), which makes best use of the land around the Hub Station and reflects the recently agreed Joint Core Strategy;
  - avoiding major retail development that would undermine the roles of existing centres;
  - maintaining the integrity of the Derby-Nottingham Greenbelt west of the M1;
  - continuing to invest in infrastructure elsewhere that supports the roles of existing settlements.
3. Making use of innovative and effective engineering solutions that avoid or mitigate the severance of communities and businesses in Long Eaton, Mansfield/Ashfield, Worksop and Chesterfield.
4. Using land value/business rate uplift and increased investor confidence around the Hub Station to address local regeneration priorities and to improve areas of low quality housing stock.

***'...that are well connected by high quality infrastructure...'***

5. Ensuring that HS2 is additional to current levels of classic service provision and using released classic rail capacity to significantly improve connectivity:
  - post HS2, MML services should be re-orientated around an even 'clock face' service pattern that would benefit Leicester and other stations along the line;
  - capacity released from the Midland Main Line must enable further improvements to connectivity between Derby, Leicester and Nottingham and the northern 'core cities', and enhanced services for Chesterfield, Loughborough, Market Harborough, Corby, Kettering and Wellingborough;
  - capacity released from the East Coast Main Line must enable enhanced services for Retford, Newark, Grantham and Lincoln;
  - capacity released from the West Coast Main Line must enable enhanced services for Northampton to both Birmingham and London.
6. Constructing direct links between HS2 and the Midland Main Line to allow some trains to run on both lines, increasing connectivity to Birmingham, the North of England and Scotland:
  - a link at the Hub Station to allow for direct services from Derby, Leicester and Nottingham to Leeds, Newcastle and Scotland via HS2;
  - provision for direct services from Nottingham to Birmingham via HS2.
7. Ensuring effective local multi-modal accessibility to the Hub Station:
  - regular and reliable heavy rail services from Derby, Leicester and Nottingham that do not compromise existing levels of connectivity between the three cities; and also from Mansfield/Ashfield & Worksop (via the Robin Hood Line) and local stations on the west of Nottingham and beyond;
  - extending NET to serve areas west of the proposed Hub station at Toton;
  - provision for direct access from Long Eaton, Toton and Stapleford for pedestrians, cyclists, buses, taxis and local car pick-up/drop off facilities, and effective public transport connectivity to the rest of the Greater Nottingham area;
  - access from the strategic road network which does not result in additional traffic congestion and associated environmental problems;
  - providing appropriate levels of well-designed station car parking, whilst avoiding the development of a 'parkway station';
  - ensuring that communities in northern Derbyshire and Nottinghamshire also have effective access to HS2 stations in Sheffield and Manchester.
8. Using innovative technology, such as Integrated flexible ticketing to allow people to undertake 'seamless' multi-modal journeys via HS2, classic rail and other forms of public transport at reasonable prices and without booking on a specific service – reducing reliance on the private car.

***'...for people who will benefit from enhanced employment prospects resulting from targeted investment in skills and business support.'***

9. Rebuilding pride and excellence in the construction and manufacturing sectors through the development of a highly skilled local workforce:

- working with established centres of excellence to train the next generation of engineers, working with the High Speed Skills college;
- establishing apprenticeships for HS2 construction and engineering jobs; and
- focusing on STEM subjects in schools to help local children access such opportunities.

10. Maximising the economic potential of the Staveley Maintenance Depot, building on the established strengths of the local rail supply sector to create and maintain high value manufacturing and engineering jobs across the East Midlands.

11. Increasing connectivity to new and existing major employment opportunities, including:

- East Midlands Airport
- East Midlands Gateway (Freight Interchange)
- the former Stanton Iron Works site

12. Ensuring that local companies have a fair chance to win contracts to design and build HS2 and the required rolling stock:

- establishing a dedicated rail engineering support initiative to further boost the competitiveness of the sector;
- encouraging local participation at HS2 procurement events.

## Appendix 7.2 East Midlands - HS2GP Collaboration Agreement

### PARTIES

East Midlands HS2 Strategic Board and HS2 Growth Partnership (HS2GP)

HS2GP is a partnership between LCR and HS2 Ltd bringing together LCR's station development and regeneration capability and HS2 Ltd's station delivery programme to support the regeneration objectives of the East Midlands HS2 Strategic Board and other Local Places. LCR will act as the contracting entity on behalf of HS2GP as and when necessary.

### Collaboration Agreement

HS2GP will work collaboratively with the East Midlands HS2 Strategic Board and its members over the next 12-18 months to support them in delivery of their HS2 Growth Strategy, including:

- **The production of an investable masterplan for the Toton station area.**  
This masterplan will aim to deliver the strategic vision and objectives as set out in the East Midlands HS2 Growth Strategy submission 28<sup>th</sup> January 2016. It will plan for high quality local development and public realm, with the integration of a high quality HS2 station design, in a way that will take advantage of the enhanced connectivity, to strengthen and reinforce the roles of existing settlements.  
  
HS2GP can bring LCR's development expertise as necessary to advise and support this workstream, including links to the development industry. HS2GP can also facilitate HS2 Ltd's engagement in this work as and when necessary, to engage the HS2 Design Panel and bring lessons learnt from HS2 Phase 1, and from comparable stations across Europe and elsewhere.
- **Station Commercialisation Plans**  
HS2GP to engage the local authorities in planning the commercialisation of the HS2 station, with the aim of providing a retail offer that supports and fits with the local planning policy and strategy, and local area development plans, as well as serving interchanging passengers. This will include the transfer of LCR experience from St Pancras station development.
- **Connectivity**  
HS2GP will provide support as appropriate to the ongoing connectivity workstreams, focusing on optimisation of the route alignments into the HS2 Hub, and integration of these in a way that supports local development values and enhances interchange and public realm.
- **Land Strategy**  
HS2GP will support the formulation of a land strategy that will identify strategic opportunity sites and key landowners, locally in the HS2 station area, and in the

wider region. This will enable the identification of land assembly opportunities, including land-pooling and land acquisition opportunities.

In the Toton area, priority sites for investigation include the railway land to the west of the HS2 station site, in particular the possibility of relocating the DB Schenker facility, and the MoD's Chetwynd Barracks site.

In the wider region, HS2GP will work with local partners in the identification and investigation of strategic sites in the areas of East Midlands Airport, East Midlands Gateway, Staveley HS2 IMD and the former Stanton Ironworks Site, and in local town centres including Long Eaton and Toton, and the city centres of Nottingham, Derby & Leicester.

- **Investment Strategy**

HS2GP will draw on its investment portfolio planning work with RIO to target and attract private sector investment into the area. This will build on the strength of the East Midlands HS2 Growth Strategy and the HS2 brand. In the interim, HS2GP will consider appropriate contributions to the cost of studies that support the local HS2 Growth objectives.

- **Governance**

HS2GP will support the shaping and optimising of local governance arrangements, in accordance with devolution policy. This will include optimised engagement of HS2 Ltd., HCA, RIO, Network Rail and Highways England as appropriate.

HS2GP will work with the local partners to explore the need and opportunity for the establishment of future joint ventures with specific authorities for the development of specific sites.

Approved:	Approved:
East Midlands HS2 Strategic Board	HS2 Growth Partnership Programme Board
25 May 2016	7 June 2016
Signed:	Signed:
Cllr Jon Collins	Lorraine Baldry
Chair of East Midlands HS2 Strategic Board	Chair of HS2 Growth Partnership



## Appendix 7.3 East Midlands HS2 Strategic Board

### Terms of Reference

- to provide leadership and direction on strategic issues relating to HS2;
- to act as the 'place to go' for business leaders and local authorities on matters relating to HS2;
- to liaise at a strategic level with HS2 Ltd, the proposed national regeneration company and other government agencies;
- to receive and consider reports from the Station and Maintenance Depot Delivery Boards;
- to develop close links with local authorities and organisations outside the East Midlands to build support for the eastern arm;
- to consider and provide a co-ordinated response to initiatives and proposals from HS2 Ltd, DfT and other relevant organisations;
- to work with Network Rail and the rail industry to achieve closer integration of the high speed and 'classic' rail networks, ensure effective use of released capacity for passenger and freight services, and to protect and promote the interests of existing rail users;
- to secure the resources necessary to support the work of the Strategic Board and the two Delivery Boards;
- to provide a focus for media enquiries and develop a strategy to promote the interests of the region and the Board's constituent members.

### Membership

- |  |  |
|--|--|
| • Derby City Council                       | • Nottingham Trent University          |
| • Nottingham City Council (Chair)          | • D2N2 LEP                             |
| • Leicester City Council                   | • Leicester & Leicestershire LEP       |
| • Derbyshire County Council (Vice Chair)   | • East Midlands Chamber                |
| • Leicestershire County Council            | • Rail Forum East Midlands             |
| • Nottinghamshire County Council           | • East Midlands TUC                    |
| • Northamptonshire County Council          | • Institution of Civil Engineers       |
| • Ashfield District Council                | • NET                                  |
| • Chesterfield Borough Council             | • HS2 Ltd                              |
| • Broxtowe Borough Council                 | • Department for Transport             |
| • Erewash Borough Council                  | • Network Rail                         |
| • NW Leicestershire District Council       | • Highways England                     |
| • East Midlands Airport                    | • HMG Cities & Local Growth Unit       |
| • East Midlands Further Education Colleges | • East Midlands Councils (Secretariat) |

## Section 8: Links to Key Supporting Documentation

HS2 Regional Economic Impacts, KPMG for HS2 Ltd, September 2013.

<http://www.kpmg.com/UK/en/IssuesAndInsights/ArticlesPublications/Documents/PDF/Market%20Sector/Builing%20and%20Construction/hs2-regional-economic-impact-1.pdf>

Maximising the Economic Benefits of the East Midlands HS2 Station at Toton, Voterra Partners for Nottingham City Councils & Partners, November 2013.

<http://volterra.co.uk/wp-content/uploads/2014/03/Maximising-the-Economic-Benefits-of-the-East-Midlands-HS2-station-at-Toton.pdf>

East Midlands Hub Station Fact Sheet, HS2 Ltd, July 2013.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/381963/HS2\\_Phase\\_Two\\_East\\_Midlands\\_Hub\\_station\\_factsheet.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/381963/HS2_Phase_Two_East_Midlands_Hub_station_factsheet.pdf)

HS2 in the East Midlands Assessment of the Economic Opportunities: Position Statement, Ekosgen & Fore Consulting, August 2016.

HS2 in the East Midlands Assessment of the Economic Opportunities: Final Report, Ekosgen & Fore Consulting, September 2016.

East Midlands Route Study, Network Rail, March 2016. <https://www.networkrail.co.uk/long-term-planning-process/east-midlands-route-study/>

Heavy Rail Connectivity to East Midlands Hub, Network Rail, February 2016

Toton HS2 Classic Connectivity, SLC Rail Ltd for EMC and Leicestershire County Council, August 2016

NET Extensions to East Midlands Hub, Long Eaton, East Midlands Airport & Derby, NET & Mott MacDonald for Nottingham City Council, May 2016.

East Midlands HS2 Hub, Maximising the Wider Regional Benefits, Farrells & PBA Associates for EMC, November 2015. [http://www.emcouncils.gov.uk/write/Final\\_Farrells\\_Report.pdf](http://www.emcouncils.gov.uk/write/Final_Farrells_Report.pdf)

HS2 East Midlands (Toton), Connectivity & Mobility – A Bus Operators Perspective, Trent Barton, February 2016. [http://www.emcouncils.gov.uk/write/Connectivity\\_and\\_Mobility\\_-\\_A\\_Bus\\_Operator\\_Perspective.pdf](http://www.emcouncils.gov.uk/write/Connectivity_and_Mobility_-_A_Bus_Operator_Perspective.pdf)

Development of a High Level Skills Strategy for the Construction of HS2 in the East Midlands, Rail Forum East Midlands & Partners for Nottinghamshire County Council, September 2016

Economic Impacts of the HS2 Infrastructure Maintenance Depot at Staveley, Voterra Partners for Derbyshire County Council, July 2014. <http://volterra.co.uk/wp-content/uploads/2014/03/ECONOMIC-IMPACT-OF-STAVELEY-DEPOT.pdf>