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# High Speed Rail & Connected Cities



#### **Foreword**

High Speed 2 (HS2) is the biggest infrastructure project in Europe and the importance of this investment for the economic future of Britain is clear. The improved connectivity and rail capacity that will come from its services between London, the Midlands and Northern England, will help our rail system cope with rapidly rising demand, and free other parts of our network for enhanced passenger and freight services. However, the case for such investment goes well beyond rail transport improvements. We know from evidence in other countries where High Speed Rail has been built that it can, with the right supplementary initiatives, help to revitalise cities, act as an engine for their regeneration, and enhance their international competitiveness. The challenge now is for our great cities and city regions to capture the opportunities that HS2 investment will bring.

As a Patron of the Independent Transport Commission (ITC), I am very pleased therefore to commend this new report, which explores how the benefits of HS2 can be captured by the city regions it will serve. Drawing from the evidence and insights captured in the ITC's 2014 report *Ambitions and Opportunities*, which explored the impacts of HSR in various European countries, this report uses those findings and applies them to the cities in Britain that will be connected by HS2. Several recurring themes emerge. First, successful cities have a coherent sense of identity and a shared ambition of what they wish to achieve from enhanced connectivity. Second, investment in improving local transport connectivity is vital if the benefits of HSR investment are to be shared throughout a whole region. And third, these benefits are more easily captured when there is widespread cooperation and collaborative working, ensuring that not only local government but also civic society and citizens are able to contribute and take a central role in the redevelopment of their city regions.

The message from this report is clear – there is no reason why our great cities in Britain cannot enjoy the same benefits from HSR that cities in other countries around the world have enjoyed. As the transport infrastructure begins to be built, I recommend that our great cities and their citizens use this ITC report to help plan for the arrival of HS2, ensuring that this major investment better enables our cities to compete on a global stage to the benefit of all.

The Rt Hon Lord Adonis PC



High Speed Rail and the existing rail network, Source: HS2 Ltd and NetworkRail

# High Speed Rail & Connected Cities

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### **Executive Summary**

This report expands on the learning and insights from the ITC's *Ambitions and Opportunities* report (2014), which drew lessons from past experiences of High Speed Rail (HSR) investment in the UK and mainland Europe on how to capture the benefits from such infrastructure investment.

High Speed Rail and Connected Cities: Accessible Places for Growing Economies reviews current proposals for the British city regions that will be served by High Speed 2 (HS2) and provides guidance on ways to enhance the process of urban change by maximising the benefits that arise from creating an integrated transport system.

There are a number of key reports and programmes that have been launched over the past three years that have also contributed to framing the HS2 debate. These include *One North*, Sir David Higgins' reports HS2 Plus and Rebalancing Britain, the development of local Growth Strategies, the creation of the National Infrastructure Commission (NIC), and the Shaw Report: The Future Shape and Financing of Network Rail. We recognize that our great city regions are already taking major steps towards thinking about their future and how to plan for HS2.

The ITC recognised, therefore, that publishing another report was simply not going far enough, and embarked on an ambitious workshop programme throughout 2015, taking the insights from our European case studies examined in *Ambitions and Opportunities* to help the UK city regions take action locally by exploring the lessons relevant to their current situation.

This report explains the lessons learned from those workshops and provides a set of recommendations based on those principles. The ITC placed the HS2 debate in the context of 30 years of experience in Europe and demonstrated how the benefits arising from good connectivity and placemaking can effectively serve local and national needs.

The experience from High Speed One (HS1) and HSR elsewhere in Europe shows that rail infrastructure can act as a catalyst for economic growth, but seldom is its only driver. In Section 2 of this report, we identify three key drivers – technology, lifestyle and governance – that can support growth, provided the necessary spatial conditions are met.

The ITC has also formulated a number of principles in order to review the current proposals for the HS2 stations and associated local planning initiatives. By understanding the particular context in each city region, it is possible to tailor initiatives so that they capture the strengths of each place. The principles below have been identified as essential for getting the UK's city regions 'HS2 Ready':

- Be responsive to change over time, infrastructure needs to adapt to changing lifestyles, expectations and modes of operation
- Make the place a catalyst for growth –
  the full benefits of major infrastructure
  investment will only be realised by each
  place if it serves as a place of vitality,
  where people want to come and stay.
- Be connected and accessible strong interconnectivity between High Speed and classic rail networks will allow for longterm operational flexibility and the ease of interchange for passengers.
- 4. Make stations as places of arrival and exchange the station should be a place of interchange, exchange and transition that has the potential to generate income and contribute to non-operational functions such as retail and public services.
- 5. Collaborate to succeed city regions gain distinct advantages when they have internally shared economic interests and values; this is often enhanced by working together through a combined transport authority.

In Section 3, we explore the potential opportunities for each city region that may arise as a result of HS2 investment, including connectivity, accessibility, development potential, distinctiveness, competitiveness, agents of change and initiatives for action. In this section, policies, actions and initiatives are connected to relevant examples in the UK and Europe, thereby providing an opportunity to improve the process of urban change through collaboration.

In many ways, **Greater Manchester** city region is ahead of the game, having established control over the city region's transport network through the early creation of a Combined Authority. Through its *2040 Transport Vision Strategy*, Greater

Manchester is addressing both transport and spatial development, and is paving the way forward for capturing wider regeneration, economic, social and environmental benefits from HS2 through integrated planning. As a frontrunner, Greater Manchester should support the distinct economic successes of other Northern cities by sharing its experience and expertise.

The Greater Birmingham and West Midlands region has significant challenges to overcome in effectively integrating HS2 with local and regional transport networks. Midlands Connect is a positive step forwards to realising a strategic transport vision for the area that will maximise growth potential across the region. With improved connectivity to London and their own International Airport, Birmingham can boost the regions' economic offering and continue to attract an international labour market by positioning itself as a desirable destination both as an alternative and a complement to the London economic region.

By integrating the HS2 station with the existing classic rail station, **Leeds and West Yorkshire City Region** can create a single iconic station that represents the wider area within a 'Yorkshire Rail Hub'. Developing a narrative for the region, alongside the creation of a long-term vision, can help to frame the role of the HS2 station as a place of that everyone in the region can be proud. In addition, with the opportunity for much-needed local transport improvements across the region, Leeds and West Yorkshire can strengthen its position as an accessible point of connection (hub) between the UK and mainland Europe.

The **Sheffield City Region** is a disparate amalgamation of distinct cities and towns, but the region's success hinges on the ability of these distinct places to work together to create mutual benefits in order to compete on a national and European level. With the decision on station location still unconfirmed, there are varied opinions on the expectations and opportunities of the new HS2 station: yet regardless of where the station ends up, the Sheffield City Region needs to understand the importance of having a strong local and regional transport network to feed into the city centre, thereby creating a meaningful and prosperous place.

In order to capture the added value from the arrival of HS2, Crewe and the Cheshire Region must intensify and improve the region's local connectivity,

which will prove a difficult task due to the disparate nature of settlements in the area. This should span all modes of transport to include shared transport schemes, cycling, walking and road travel – not merely rail. It will be crucial for Crewe, with its 'HS2 Superhub' to collaborate closely with Manchester Airport and UK Central/Birmingham Interchange both to prevent economic competition, and to develop a well-considered economic programme. It should understand that mutual interests, that transcend political boundaries, stem from the effective development of both passenger and freight transport.

As a regional hub station at Toton, the East Midlands will need to make essential improvements to their heavy rail and local/regional transport links in order to ensure that the economic benefits associated with the arrival of HS2 are equitably spread across the region. However, due to the dispersed nature of the surrounding settlements, adequate car parking facilities at the new HS2 station will be required to feed passengers into the train services, which will require extra attention given to the spatial attractiveness of the station environment. Midlands Connect and the creation of an HS2 Strategic Board for the area will support collaborative working across the cities in the region, ensuring that they maintain their distinctive characteristics whilst simultaneously working together as a cohesive region.

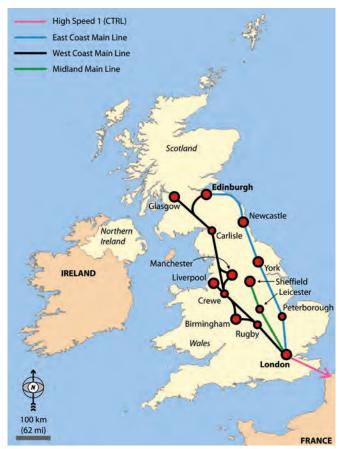
Acting as a major interchange between HS2, Crossrail, the Great Western Main Line and London Overground/Underground services, **Old Oak Common in London** is set to become one of the best-connected development sites in the UK. The challenge at Old Oak is to develop into a distinct "village" of London with its own recognisable character, providing a gateway to the Midlands and the North.

Our recommendations focus on the need to collaborate to enable better integration in order to support the development of successful places. The value of integrating systems and including flexibility in design so that it can adapt to future needs is crucial. Cooperation between central and local government, as well as with civil society, will help city regions to maximise the benefits from their plans. Finally, the need to change perceptions is essential, such as realising that transport is a means, not an end, to better cities, as well as understanding the power of intermediate initiatives, and adequate funding to prevent greater costs at a later stage.

With these lessons in mind, the ITC recommends a number of initiatives as part of a wider agenda for action:

- 1. From central Government, we recommend:
  - a. An independent review of the initial lessons learnt from HS2 Phase 1, in order to apply these to the planning for Phase 2 of the project.
  - b. Support for a range of field trips that will stimulate learning from best practice and international collaboration. Such visits are valuable for helping to evaluate the success of initiatives in those cities that have already experienced HSR connectivity.
- 2. For the City regions, we recommend:
  - a. The creation of an HS2 Cities Forum, owned and managed by local stakeholders, both public and private sector. The Forum will help to support collaboration and share knowledge about planning for HS2's arrival.
  - b. A collaborative programme to understand the future of the UK's urban economy, particularly investigating how the relationships between the 'Northern Powerhouse', the 'Midlands Engine', and London will develop over the next 50 years.
  - c. Nurturing civil society by involving pro-active local organisations in the design and planning process for HS2's arrival. This can involve open engagement, permission to create small-scale initiatives such as intermediate uses of development sites, and modest grants to encourage civic leadership and initiatives.

This work concludes the ITC's work on High Speed Rail and Cities, but we anticipate that the reports published will be a lasting resource for our city regions as they plan for the arrival of HS2.



Existing main rail lines between London and the North, Source: NetworkRail



High Speed Rail in Great Britain (planned) 2032 (January 2016), Source: HS2 Ltd

### 1. Introduction

The Independent Transport Commission (ITC), based on an initial call for evidence in 2012, identified a need to understand the spatial impacts of High Speed Rail (HSR) in order for UK cities and regions to capture the opportunities from major investment in High Speed 2 (HS2). The aim of the project was to collect evidence and draw lessons from past experience of investing in HSR in mainland Europe and the UK's own High Speed One (HS1). The resulting report, Ambitions and Opportunities1 published in November 2014, reported on the gradual process of urban change and explored how economic benefits are often only realised over decades when undertaking such transformational infrastructure projects.

Since the publication of *Ambitions and Opportunities*, the understanding of the impacts of HSR on our cities has evolved and the processes involved in integrating HSR are becoming more concrete. The debate throughout the various UK city regions demonstrates an increasing richness and interest in the topic, resulting in more clearly articulated ambitions and strategic plans.

High Speed Rail and Connected Cities: Accessible Places for Growing Economies reports on the findings from a series of regional workshops that the ITC held with local authorities, institutions, businesses and civil society groups in England throughout 2015. Participants were invited to present their current plans and vision for their city region as well as their specific aspirations for HS2. They were then asked to reflect on the insights from the ITC's previous publication Ambitions and Opportunities. The discussions in the workshops capture a key moment in time from a continuous process of changing perceptions, framing opportunities, communicating expectations and creating initiatives for transformational urban change.

This publication reviews current proposals for the city regions served by HS2 using the insights drawn from *Ambitions and Opportunities* and the regional workshops. It provides guidance on ways to enhance the process of urban change in order to maximise the eco-

 Ambitions and Opportunities: Understanding the Spatial Effects of High Speed Rail, ITC (November 2014) nomic and social benefits that arise when HSR is integrated within the wider UK rail network, improving connectivity both within and between the city regions. Our objective is that the two ITC reports will be a resource for our cities and regions as they prepare for the arrival of HS2.

### 1.1 Framing the Discussion

Ambitions and Opportunities identified a number of key themes that affect the successful planning and delivery of HSR infrastructure. Insights from exemplar cases in Europe helped to illustrate these themes. The first four themes are primarily related to rail transportation in general:

- Releasing Capacity on existing transport networks;
- Increasing Connectivity to effectively integrate national and local transport systems;
- The importance of the Convenience provided ed by a frequent, affordable, reliable and comfortable service;
- And Continuity of flow between modes and levels of travel.

Learning from experience in Europe, it became clear that there were much wider impacts associated with the development of HSR infrastructure, and four additional themes were added to address the context in which the socio-economic benefits from HSR can be captured. These include:

- Understanding continuous Change in the process of planning and delivery to allow for adaptability over time;
- The need for commitment and Collaboration through recognising the roles that different levels of government can effectively play when working with business and civil society in order to jointly create a prosperous future;
- Continuous Communication, by clearly articulating aspirations and managing expectations, combined with;
- Strong leadership to establish enhanced ways of Controlling the process of visioning and delivery through appropriate governance and delivery structures.

In the ITC city region workshops, with the above themes as a starting point, the discussions explored the unique attributes of each place within the context of their new HS2 station. This allowed the ITC to glean critical perspective from the workshop participants in order to better understand the characteristics of each city region and the place-specific challenges and opportunities they face when investing in new infrastructure.

Based on some of the recurring issues discussed in the workshops, a number of principles have been formulated to provide a background for reviewing the current HS2 station proposals and local planning initiatives. In this report, we explore the current situation in each city region and identify initiatives and actions that extend beyond formal planning procedures. In order to capture the greatest value for each place, initiatives and actions outlined in this report are tailored to the specific needs and desires of each city region. The discussions that the ITC facilitated during the city region workshops have helped to shift perceptions of the full effects of the planned investment in HSR and its associated infrastructure. They presented a way forward for each city region, uncovering concrete actions for today that will support the process of continuous urban change, and underscoring the importance of collaboration. Over the past year, the work of the ITC has focused on how to capture the indirect benefits of HSR by engaging with the landholders and civil society in small-scale transitional initiatives that can be undertaken ahead of the arrival of HS2.

### 1.2 A Guide to this Report

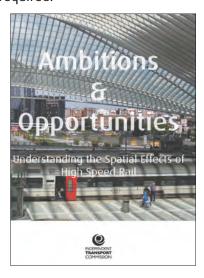
This publication shares the insights collected over the last year at our city region workshops and explores existing and future initiatives that can help each place prepare for the arrival of HS2.

To set the scene for the specific city region analysis, **Section 2. HS2: Capturing the Opportunities**, provides context for the debates surrounding HS2 and outlines the principles that can be used to capture the wider benefits from HSR investment. As HS2 aims to support economic growth, we explain the key drivers

of economic growth relevant to understanding the opportunities that exist for the cities and regions that will be served – directly or indirectly – by HS2. Section 2 concludes by exploring the ways in which cities and their regions can capture the opportunities from major transport investment.

Based on the conversations during our regional workshop programme, **Section 3. Exploring** the City Regions outlines the main findings for each of the cities and regions that HS2 will serve, providing insights that can be used to fully capture the potential benefits. In each case, we identify the unique characteristics of the particular region and the key drivers for economic growth that are relevant to their situation. We then explore the current HS2 proposals, reviewing the potential effects of the new infrastructure, looking beyond formal planning procedures. At the end of this section, we describe five key principles that have been developed based on the workshop discussions, drawing reference to our European examples.

In **Section 4. Agenda for Action** we explore steps that can be taken to capture the full value from HSR investment, and make recommendations for action. These recommendations for both central government and the city regions, support the principles identified and can help ensure that our cities are best placed to benefit from enhanced connectivity. Finally, a set of Appendices at the back of this publication outlines key reports, references, glossary and links for your reference, as and when required.



## 2. HS2 - Capturing the Opportunities

### 2.1 HS2 and the Growth Agenda

### Two Projects, One Programme

When the ITC launched its exploration of the spatial impacts of HSR in 2012, the official rationale of HS2 was speed: providing a fast shuttle between the UK's regional cities and London. By positioning the discussion of HS2 within the wider context of the nature of HSR investment, and engaging with the public, private and not-for-profit sectors, the opportunities and indirect transformational benefits became apparent<sup>2</sup>. The ITC placed the HS2 debate in the context of 30 years of experience of High Speed Trains (HST) in Europe, including the TGV in France. It demonstrated the benefits that good connectivity, improved capacity, quality placemaking and an inclusive strategic vision can have when formulating plans that serve both national and local needs.

Sir David Higgins' report *HS2 Plus*, published soon after his appointment as Chairman of HS2 Ltd³, reframed the case for HS2. He looked at the fundamental challenges facing the UK's rail infrastructure: a lack of rail capacity in London and the South East, alongside poor connectivity between cities and regions in the North of England and the Midlands. He noted that HS2 would not only provide faster journeys itself but would also free additional capacity on the existing lines. To assess proposals for HS2, Sir David Higgins proposed the use of five key principles:

- 1. Standing the test of time;
- 2. Being the right strategic answer;
- 3. Being integrated with existing and future transport services;
- 4. Maximising the value added to local and national economies;
- 5. Being a catalyst for change.
- 2. The Spatial Effects of High Speed Rail: Capturing the Opportunity, ITC Study Paper (October 2013)
- 3. *HS2 Plus*: A Report by David Higgins, HS2 Ltd (March 2014)
- High Speed North, National Infrastructure Commission, (March 2016)

The Northern cities grasped the opportunity that HS2 was offering, and in *One North*, (July 2014) set out a proposition for an interconnected North with the cities of Liverpool, Manchester, Leeds, Sheffield and Newcastle working together to "develop a coherent strategic transport plan integrating HS2 with the existing rail network transforming connectivity across the North". Improved transport for freight and passenger movements was seen as central to economic success.

Sir David Higgins' second report, Rebalancing Britain: From HS2 Towards a National Transport Strategy (October 2014), supported the wider perspective for bringing together economic success as set out in Lord Deighton's task force report, HS2: Get Ready (March 2014) and the rail agenda.

The central finding of the National Infrastructure Commission's (NIC) recent report *High Speed North*<sup>4</sup> is "that the North needs immediate and very significant investment for action and a plan for longer-term transformation to reduce journey times, increase capacity and improve reliability. On rail, this means kick-starting High Speed 3 (HS3, connecting Manchester and Leeds), integrating it with HS2 and planning for the redevelopment of the North's gateway stations".

The HS2 cities have recently developed, or are in the process of developing Growth Strategies that identify strategic opportunities for economic growth. The HS2 Growth Taskforce, created in 2013, comprises a group of independent experts from different fields to advise the Government on how best to unlock the economic potential of HS2 and support the UK's city regions to deliver their Growth Strategies. At the time of the publication of this report (May 2016), some city regions have completed their Growth Strategy documents and others are well underway (see box). This report supports these Growth Strategies since they take a long-term view on capturing the opportunities from HSR. At the same time, this report recommends looking beyond the tangible aspects of economic growth to capture intangible benefits that will pay dividends in the long run.



Phasing HS2, Source: HS2 Ltd

# Growth Strategies HS2 Phase 1

- Euston HS2 Growth Strategy completed.
- Old Oak Common HS2 Growth Strategy completed and submitted to the Government in April 2015. The Government is responding by working with Old Oak and Park Royal Development Corporation (OPDC) on the transfer of government-owned land into local ownership in order to give them the leverage to deliver their strategic vision.
- West Midlands (Curzon and Interchange)
   HS2 Growth Strategy completed and submitted to the Government in April 2015. The Government has responded in the 2015 Spending Review and through the West Midlands devolution deal.

### HS2 Phase 2 (a and b)

- Crewe and East Midlands HS2 Growth Strategies in development. The Government is providing support and revenue funding.
- Leeds and Manchester (Piccadilly and Airport) - HS2 Growth Strategies in development. They are just beginning dialogue about Government support and revenue funding to be provided.
- Sheffield HS2 Growth Strategy development will begin when the Government has confirmed the station location. Preliminary work undertaken by local partners for both potential station locations.

The HS2 Growth Strategies are locally developed and owned. As such, the Government does not approve them, but rather considers how best to provide support for delivering these strategies, which forms the core of their response.

### Integrated thinking

Since the ITC's Ambitions and Opportunities report was published in late 2014, there have been three significant developments in the UK's approach to managing infrastructure and the rail network:

- 1. The creation of the National Infrastructure Commission (NIC) in October 2015. The purpose of the NIC is to "identify the UK's strategic infrastructure needs over the next 10-30 years and propose solutions to the most pressing infrastructure issues, in order to: foster long-term and sustainable economic growth across all regions of the UK, improve the UK's international competitiveness and serve the well-being of UK citizens"5. The NIC was created in response to the need for national infrastructure to be considered as a strategic asset with long-range planning timescales that extend beyond the life of one Governmental term. In particular, it recognises that rail assets can last for 10-30 years in the case of intensively used track, to over 150 years for some signalling and structures such as bridges and viaducts.
- 2. The Shaw report, *The Future Shape and Financing of Network Rail* (March 2016)<sup>6</sup> explored various options for the ownership and structure of Network Rail Routes. Some of the early steps taken by Network Rail Chief Executive Mark Carne have pre-empted this report, particularly moves to devolve more activity from the central headquarters to the Routes in order to align more closely with customers both within the train operating companies and the regions. The Shaw report has recommended some experimental and staged steps towards possible vertical integration and a reshaping of route boundaries to create a Northern route.

3. Regional devolution in England has developed further. The Shaw report recommended the Northern Routes of Network Rail should be aligned with Transport for the North (TfN), which will be managing two rail franchises devolved from the Department for Transport (DfT). This new single route will be similar to the Wales Route (created in 2010) that aligns with the 'Wales and Borders' franchise and the area of Welsh Government influence. The next 'Wales and Borders' franchise will be let by the Welsh Government, with powers expected to devolve from DfT during 2016. In Scotland there is an Alliance that covers the Network Rail activity and the new ScotRail train operator franchise into a single organisational structure, which works directly with Transport Scotland as their client for funding, specification and forward planning and investment. This regional alignment should support much better integration of rail planning with wider transport, land use and spatial planning. All three of these changes support the approach recommended in this report of learning from the European experience and the approaches advocated by successful places to capture the wider benefits of HSR investment.



- www.gov.uk/government/organisations/national-infrastructure-commission
- www.gov.uk/government/collections/shaw-report-intonetwork-rail
- Delivering a Sustainable Transport System: Main Report, Department for Transport (2008)
- 8. *UK Rail Scenarios and Urban Patterns 2065*, Government Office for Science Foresight Future of Cities, Bouwman and Worthington (November 2015)

#### 2.2 Drivers for Economic Growth

In order to continue the learning from the ITC's Ambitions and Opportunities report, we recognised that publishing another report was not going far enough; it was important to take the insights from our European case studies and help set these in action by exploring relevant lessons with each city region that will be served by HS2. By inviting civic leaders, businesses and citizens to explore their own identities and ambitions, we aimed – through the regional workshop programme – to identify initiatives for action and collaboration relevant to each city region.

The experience from High Speed One (HS1) and HSR elsewhere in Europe shows that rail infrastructure can be a catalyst for economic growth, but seldom the driver. The investments in HS2 and its associated infrastructure are led by ambitions for economic growth<sup>7</sup>. This section focuses on the (spatial) conditions needed in each city region to achieve growth based on three key drivers: technology, lifestyles and governance<sup>8</sup>.

### Technology

Technology can drive economic growth in two main ways. First, improvements in the production process can generate short-term growth cycles. Second, technological innovation can generate longer-term structural impacts. For both of these two processes to succeed they rely on:

### Improved connectivity:

- Necessary for developing better supply chain integration and market access (improving the production process).
- Key for accessing intellectual capital, global decision makers and financial centres, all of which can encourage innovation. For instance, hi-tech industries and their labour are footloose, but tend to cluster around existing agglomerations with a high skill-base.

### Available and affordable space:

- Necessary for expanding both work sites and living areas (impacting on production).
- Offering attractive and distinctive places to live and work (impacting on innovation).

### Lifestyles

In the UK, 85% of the population lives in an 'urban economy', a polycentric city region offering employment in an urban setting (rather than rural and/or agricultural). In recent decades car use has significantly influenced the place where people chose to live and work. Certainly, the draw of urban centres as places of opportunity has simultaneously caused both densification and sprawl throughout many of the UK's city regions, each offering its own distinct setting and lifestyle. In many cases, conurbations have developed haphazardly as adjacent towns have grown and merged into one another. However, this has also impacted on the increasing complexity of road networks within these city regions. In some European countries, this process was accompanied by additional public transport connections, offering a similar degree of connectivity, as is the case with Randstad Rail in the Netherlands and various train and swift-tram lines in German metropolitan regions. The extent to which this conurbation growth has occurred in some city regions throughout the UK (where there has been a tendency to favour low-density low-rise housing and industrial estates) complicates the viability of regional public transport networks.

Given the conurbation growth evident in metropolitan areas in the North, it is crucial to focus on **how** to create (internationally) attractive places for industries and their workers, thereby supporting economic growth. Two conditions for success are:

- Improving Accessibility both physically (public transport network, road network, freight, aviation) and mentally (availability, convenience, affordability, reliability);
- Creating **Distinctiveness** by understanding each city region's assets and creating a common and unique city region narrative supporting an international brand for the city region as a desirable place to live.

#### Governance

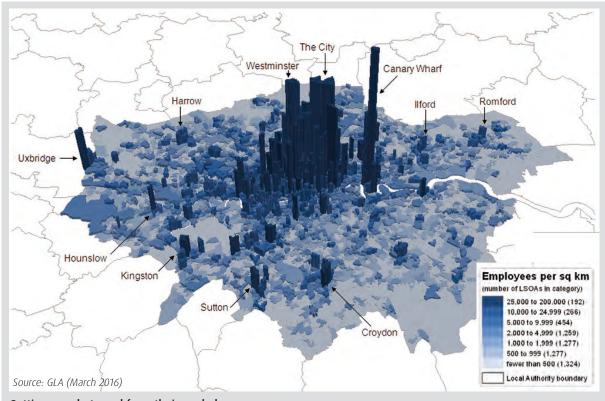
As can be seen in other parts of Europe, the impact of major changes in economic development and infrastructure often only becomes



Urbanisation in the UK 2014, Source: UK Rail Scenarios & Urban Pattern, and ONS

measurable after a generation. Managing the process of urban change requires both a long-term bold vision and an inclusive plan for developing incremental steps to achieve that vision.

- Communicating and Cooperating with businesses, industries, and civil society will establish confidence that they are 'allowed' to take part in and contribute to the further development of their own region. Ultimately, people drive change and innovation.
- Many UK city regions are collaborating by combining the efforts of various Local Authorities or developing loose ways of working together to exchange knowledge and expertise. In the process of urban change, collaboration is a necessary condition for successful region-wide economic growth.
- Attention should shift from planning procedures to the process of urban change.
   This should allow for adaptation over time, without losing sight of the initial ambitions. There is no procedure for innovation; rather, governance should be focused on finding ways to develop and deliver a vision to allow change to happen.



#### Getting people to and from their workplaces

The London agglomeration is atypical in the sense that the extensive public transport network (rail) has supported a central jobs powerhouse with huge productivity in the city centre (double the UK average, and paying four times the average tax contribution) and 90% of these jobs being high value. Rail connections allow huge volumes of workers to travel in and out of the city centre with relative ease<sup>9</sup>.

## 2.3 Capturing the Benefits from Transport Investment

As an independent body focused on both transport and land use, the ITC has focused its attention on what can be done to capture the indirect benefits from HS2 and its associated infrastructure, rather than solely on the transport-related benefits of station development or potential economic value.

Capturing additional value requires it initially to be created. Looking at past infrastructure investments, it is clear that the construction of new infrastructure is insufficient in itself to create value unless it is serving somewhere that people want to live and work, it improves livelihoods and results in sustainable prosperity.

www.london.gov.uk/what-we-do/research-and-analysis/people-and-communities/population-projections

### Sharing Experience: Creating a Platform for Revival

In an era of rapid change, mega infrastructure projects like HS2 have the potential to become a powerful device for managing progressive urban transformation through a process of commitment, collaboration and cooperation. The European field trips<sup>10</sup> identified four main agents that need to work together in the process of urban revival:

 The National Government: responsible for providing the national infrastructure for cities and their citizens to thrive, and to make decisions in a timely manner.

In the Netherlands, the Government's regularly updated National Spatial Plan provides regional and local authorities with a coherent spatial framework and certainty on national infrastructure planning.

2. Cities: responsible for providing a long-term vision through effective leadership and also supporting the success of their citizens by widespread sharing of economic benefits. Local authorities and development companies have active and direct roles to play in setting the strategic framework, controlling quality and attracting inward investment. In addition, they can embrace the role of enabler by engaging proactive and responsible civil groups in framing requirements during the early stages of the process.

Antwerp developed such a vision for the city centre and installed a Quality Team to support the process of realisation.

3. Civil society and the citizens: responsible for contributing to the ambitions of the city through their innovation, and for growing prosperity through small-scale interventions that create a distinctive identity through incremental improvement of the quality of place<sup>11</sup>. At the early stage of inception, active civil groups can help set ambitions, define expectations, create proposals and communicate outcomes to the wider community.

At Old Oak and Park Royal, the Grand Union Alliance organised workshops and hands-on planning groups to shape a future strategy for community participation over the next 20-30 years to ensure "opportunity for all" 12.

Initially the process is one of co-creation but this later becomes one of co-production with the city leadership, such that local people are involved in decisions on governance, use and management, until in some cases a trust might be created to take responsibility for specific community assets.



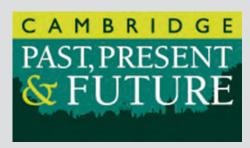
- 10. Ambitions and Opportunities, Chapter 6, ITC (November 2014)
- I1. Urban Design Group Journal, *The City as Master Developer*, John Worthington MBE (Summer Issue 2015)
- 12. Old Oak and Park Royal Community Charrette, John Thompson Partners (5 December 2015)
- 13. www.cambridgeppf.org
- 14. Impact Hub Birmingham www.birmingham.impacthub.net
- 15. Impact Hub Global Community http://www.impacthub.net
- 16. An economic region of potentially 20 million within an hour's journey time of Central London: www.london.gov. uk/what-we-do/research-and-analysis/people-and-communities/population-projections
- 17. The Image and the Region- Making Mega-City Regions Visible!, Thierstein and Förster (Lars Muller 2008)
- 18. One North A Proposition for an Interconnected North. (July 2014)

### **Cambridge Past Present and Future**

### Civic amenity trusts can both value the past and look to the future

Civic amenity trusts have a long tradition of providing a voice for the community. Cambridge Past Present and Future (PPF)<sup>13.</sup> founded in 1928 as the Cambridge Preservation Society, has adapted and changed its name to reflect the growth of the city and it's sub region. Today Cambridge PPF plays a key role collaboratively working with others to envision a future for the city in its region and providing leadership for the wider area while supporting the sustainable growth agenda, including transport. The 2030 Cambridge Vision, (www.cambridgePPF. org/vision) envisioned higher density neighbourhoods accessible by integrated public transport.

Cambridge is well prepared for the future as the wider connectivity issue of the east-west rail link between Oxford and Cambridge joins the agenda.



### Impact Hub Birmingham

In Digbeth, Birmingham, within the Curzon Urban Regeneration area, the Impact Hub¹⁴ hosts a growing and continuously changing community of "makers, doers, entrepreneurs, activists and dreamers". Linked to the Impact Hub in London and the wider Impact Hub global network¹⁵, the Hub in Birmingham and the energy of similar social enterprises are likely to have a strong role to play in the long-term success of Birmingham and the wider region.

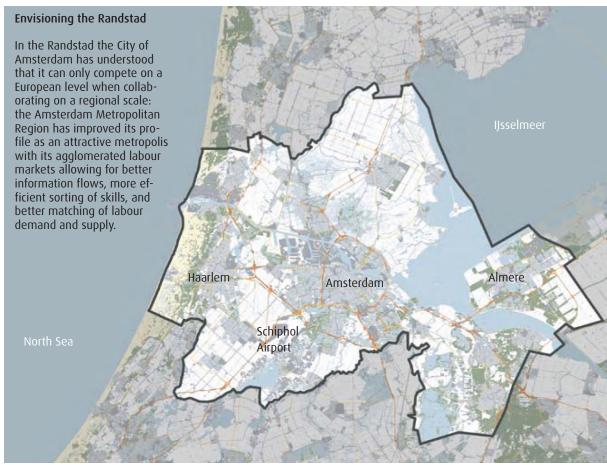


- The Midlands Engine for Growth: Prospectus Midlands Connect (Strategy to be published March 2017) https:// www.midlandconnect.uk/
- 20. Peak Ring Conurbation of 15 million who live within 50 km distance of the Peak District (Geoff Woodling) *Ambitions and Opportunities* ITC, page 25 (November 2014).

### **Working Across Boundaries**

The English cities outside the global megacity of "Greater London"<sup>16</sup> are increasingly competing in a global market against other European city regions, such as the Randstad, Ruhrgebiet, Oresund, and Flanders, Munich and the cities of western Switzerland with Zurich at the core<sup>17</sup>.

To capture the full value of infrastructure investment requires not only greater interconnectivity within each city region but also between city regions and amongst the Northern Powerhouse<sup>18</sup> and the Midlands Engine<sup>19</sup> represented by the Peak-Ring [the 15 million who live in the conurbations that surround the Peak District]<sup>20</sup>.



The Metropolitan Region Amsterdam (MRA), Source: MRA

### **Enhancing Place and Creating Awareness**

Creating vital, enjoyable places is the starting point. Place is much more than a collection of bricks and mortar – places are shaped by the institutions and individuals that own and cherish them<sup>21</sup>. Successful places reflect diversity, opportunity, ambiguity and anonymity bound together by a strong sense of civic pride and responsibility.

Cities are organic, never complete, always adapting and self-organising over time.

Individuals, through civil institutions and in partnership with the city and national government, can be the catalyst for organic place-shaping. This is especially important when commerce and industry have moved on, and there is a need for new initiatives to fill the void. The High Line Park in Lower Manhattan is an inspirational example, from which others have learned<sup>22</sup>. Transforming a disused railway viaduct into an urban park has stimu-

lated wider regeneration and the construction of nearby residential and public amenities, such as Renzo Piano's New Whitney Museum. The lesson is clear: create public spaces first through community ownership, and quality development will follow.

In addition, events and festivals can transform perceptions of a neighbourhood and as the festival grows, these can help to define the character of a city<sup>23</sup>. City walks, "open house" days, arts trails that feature local artists' work, and treasure hunts for urban explorers can all generate a greater understanding of neighbourhoods and encourage a sense of ownership over a place.



High Line, Lower Manhattan, Photo: Iwan Baan



21. Learning from Place 182, The Academy of Urbanism, (Routledge 2011)

- 22. High Line: The Inside Story of New York City's Park in the Sky, David and Hammond (Farrar, Straus & Giroux. New York 2011)
- 23. Glasgow Development Agency had a 10 year development programme with milestones related to major events. Starting with the Glasgow Garden Festival in 1988, followed by Glasgow European City of Culture, 1990 and leading to Glasgow City of Architecture and Design 1999. Today Glasgow is a major cultural destination.

### Identifying Hidden Assets and Unlocking Resources

By viewing the city as an organic, continuously adapting landscape we can redefine the development process as one that begins to nurture the specific site and surrounding neighbourhoods well before construction begins. Local groups and long-term landholders, together with the authorities and developers, can identify and initiate intermediate uses and attract valuable new functions with the potential over the longer term to generate a network of users.

All such initiatives require individuals and organisations with a deep commitment to their wider community, a desire for improvement and a passion to make a difference. In the last decade, these committed and passionate people have been a growing cohort, seen in the rise of community volunteers, professionals, and retirees acting in a pro-bono capacity.

Within a climate of austerity and shrinking Local Authority budgets, significant resources for community initiatives are few and far between. New sources of funding and resourcing have appeared such as crowd sourcing, "sweat equity", and facilitating organisations such as UK Community Foundations (UKCF). The Internet (via channels like Facebook) provides new ways of supporting and even building communities through instant updates, accessible information, participatory surveys and active involvement.



HS2 railway lines and its connections to the classic rail network (January 2016), Source: HS2 Ltd

# 3. Exploring the City Regions

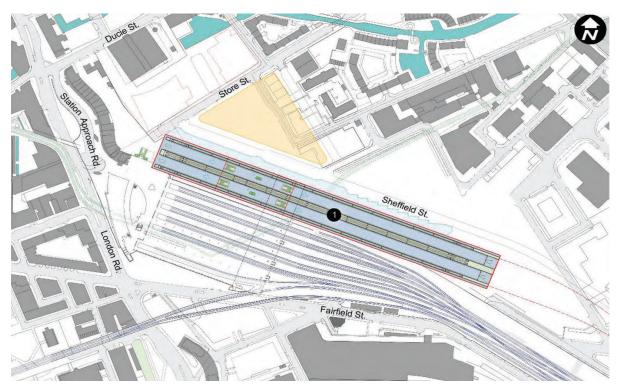
In this section the opportunities in each city region that can arise from High Speed 2 (HS2) investment are explored. We describe each city region to reflect:

- How it is planned to be connected with HS2;
- How accessible the city region will become in connecting key nodes of activity and future sites of opportunity;
- If there is available (and affordable) land and space to develop adequately;
- How each area's distinctiveness can support economic competitiveness and success, in order to capture the potential value;
- Who is taking the lead in this long-term process of change;
- Examples of cooperation between and collaboration within the city regions; and,
- How initiatives are communicated to ensure an inclusive process for change.

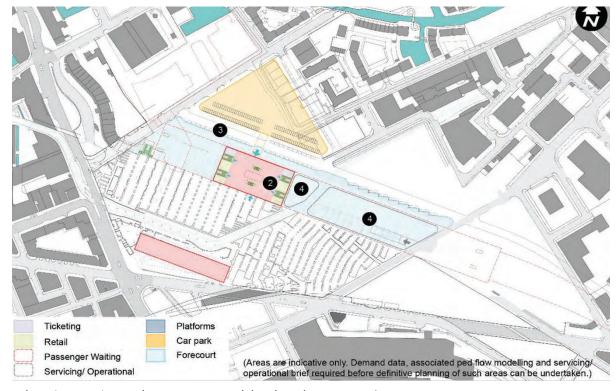
Not all points are relevant to every city region, and in some cases they apply multiple times. We have therefore included only the most appropriate cases as examples to learn from.

This exploration of each city region aims to connect policies, actions and initiatives to relevant examples in the UK and Europe, thereby providing an opportunity to improve the process of urban change through collaboration. The ITC is deliberately not addressing issues surrounding station location and route alignments, but are rather focusing on exploring the wider social and economic benefits that stem from major infrastructure investment, such as HS2. This is an important aspect of the discussion that the ITC is contributing to in order to support local and national governments in getting the most value out of this rail project.

Learning from the resources we have collected and the insights from the workshop discussions, we have drawn together five key principles for action that are illustrated at the end of this Section with relevant examples from Europe.



Schematic HS2 Station Manchester Platform Level, (March 2012) Source: HS2 Ltd



Schematic HS2 Station Manchester Concourse Level, (March 2012) Source: HS2 Ltd

### 3.1 Greater Manchester

### Spider in the Web - Improving Connectivity

The 2040 Transport Strategy takes a long-term view of the city region's transport requirements highlighting the key opportunities and challenges of fully integrating HS2 into Greater Manchester's transport network. It also considers how the benefits of such major investment can be maximised not only in terms of improved connectivity, but also through wider regeneration, economic, social and environmental benefits.

Manchester Airport can expand its position as the main airport for Northern England provided the new HS2 station is fully integrated into the existing road and rail networks in order to ensure seamless connectivity and the necessary passenger convenience across the region.

In terms of the role of a future HS2 station at Piccadilly in Manchester City Centre, more detailed analysis is underway as part of the development of a new long-term City Centre Transport Strategy with a key focus on major new inter-city rail links (both HS2 and Northern Hub rail schemes). This work is reviewing the future capacity and coverage requirements of transport networks into and across Manchester City Centre, as well as on the fringes of the core as peripheral regeneration sites are re-developed. This work, together with ongoing masterplanning work at Piccadilly, focuses on the need for improved access arrangements for heavy rail and rapid transit services (supported by bus and coach improvements) as well as transformed walking and cycling connections, public realm improvements and investment in new wayfinding systems. Piccadilly will play a critical role in the future success of the city centre, not just as a major transport hub which must provide seamless interchanges between national, regional and local transport services, but also as a key gateway to the city region, and a highly accessible location for high-density development.

#### Context

Greater Manchester will be connected with HS2 via two stations: Manchester Airport HS2 station (a separate entity to the existing airport railway station), and Manchester Piccadilly station in the city centre, where transformational subsurface/split-level infrastructure is needed to accommodate HS2 and existing services.

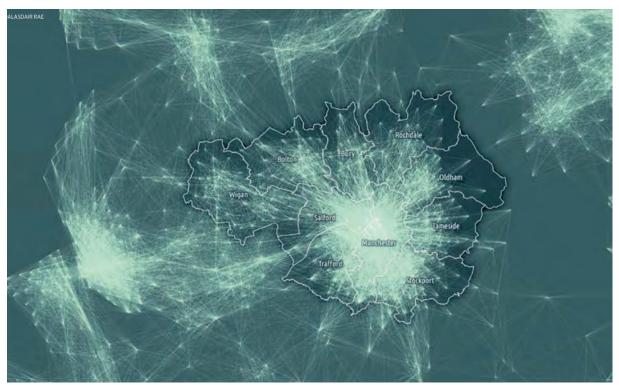
It will bring Manchester to within approximately one-hour's travel distance from London by direct train. This is comparable with the travel time between Central London and Heathrow Airport on the Piccadilly line Underground service. Manchester is at the heart of the Northern Hub<sup>24</sup> and a rail project to improve the links between major cities and towns in Northern England. Part of this project involves the construction of two extra platforms at Manchester Piccadilly station, alongside the four new platforms for HS2, to be built at the north eastern side of the existing station.

During the ITC's Greater Manchester workshop (October 2015) the following aspirations for the city centre and region were expressed:

- Develop transformational connectivity so that people choose to locate and stay in the North;
- Develop a long-term spatial framework to enable a more integrated approach to spatial and transport planning ambitions;
- Create places, rather than just completing developments, to accommodate projected population growth;
- Position Greater Manchester on a European and Global stage; and,
- Remember the human elements when delivering major transport infrastructure.

Greater Manchester is, realistically, taking a long-term view of the opportunities arising from investment in nationally significant transport infrastructure projects such as HS2, by planning 25 years ahead. In July 2015, Transport for Greater Manchester (TfGM), on behalf of the Greater Manchester Combined Authority (GMCA) and the Greater Manchester Local Enterprise Partnership (GMLEP) published its long-term Vision for Transport, which focused on how Greater Manchester can deliver its ambition for "world class connections that support long-term sustainable economic growth and access to opportunities for all".

Greater Manchester is now completing a full 2040 Transport Strategy (due to be published in Spring 2016) that sets out more detailed proposals for achieving the ambitions identified in the Vision document. This new strategy, together with accompanying 5-year delivery plans, will form Greater Manchester's new statutory Local Transport Plan (LTP).



Growth of number of commuters now living within 10 mile radius from Manchester city centre, Source: 2040 Greater Manchester Transport Vision

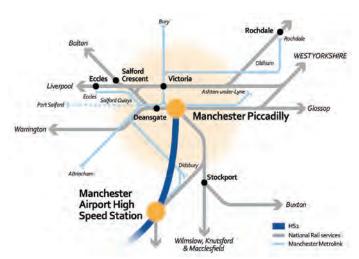


Station proposal for Manchester Piccadilly envisioning the opportunities to create a station neighbourhood, (2013) Source: Bennetts Associates



### Bordeaux - Year of the Cooperative, 2012

The demand for 50,000 homes in the Bordeaux city region was approached by launching a collaborative design process with professionals (world-class architecture and urbanism practices) and citizens. Five practices were each apportioned an area and had to jointly draw a vision on how to implement these new homes. One of the important conditions was that the homes had to be within a walkable distance from the newly opened tramway. Using the citizens' knowledge of their own neighbourhoods and of how the city functions, unexpected solutions were found and widespread support was established for this vast development.



Manchester Rail Connectivity, Source: HS2 Ltd

The Northern Hub also highlights the importance of improving freight transport for economic growth. Once High Speed Rail (HSR) has been added to the rail network, re-programming of existing routes could allow for improved or dedicated rail freight channels that will enhance the commercial capabilities of the region in a sustainable way.

Further improvements in completing the network for passengers, as well as integrating the various modes and developing passenger convenience, will open the city region to the world and provide its residents with improved accessibility to employment, education, accommodation and recreation.

The development of the long-term spatial plan, supporting the city region's Transport Strategy, can help to strengthen further the (international) image of Greater Manchester.

### Mapping the Opportunities – Exploring the Unknown

Greater Manchester needs to be conscious of its geographical and spatial advantages when 'programming the city region' in order that it complements rather than competes with other city regions. Greater Manchester offers a wide range of opportunities to regenerate and develop new and existing sites scattered around the city region, particularly in city centre locations (ie. next to the new HS2 station) and within the Greater Manchester Enterprise Zone (GMEZ), which is located across from a number of major development sites around the Airport.

Aside from identifying available redevelopment space, it is also crucial to define specific neighbourhood characteristics not only in the centre, but further out as well. Engaging communities of all kinds to map the city's spatial opportunities and explore local talent can help to establish distinct, desirable and prosperous places where people want to come, stay, live and work. Greater Manchester can build on its deep past experience of redevelopment in the city centre and the vast Brownfield areas within the region.

Mapping available space and explore talent to create places of excellence



Comprehensive Spatial Plan 2035 for the Metropolitan Region Amsterdam in the North-Wing of the Randstad, Source: Metropolitan Region Amsterdam

#### Comprehensive Planning

The Metropolitan regions of Greater Paris, GrandLyon and the Randstad have produced comprehensive spatial plans over the years to express their ambitions for economic growth, housing and transportation. By doing so, they became an equivalent partner for the national government, which enabled them to fine-tune local developments, creating distinct roles for each place in the region, therefore balancing economic growth throughout the whole region.

# Bringing the North Together – A Spatial Strategy for the North

Greater Manchester is in many ways ahead of the game, having established a Combined Authority early and assuming control over the city region's transportation network. It has now developed a 2040 Transport Vision Strategy that not only addresses the transportation issues within the city region but also spatial development issues.

Transport for Greater Manchester (TfGM) could take a lead in creating a spatial plan for the North, using the various transport strategies and other city region plans to establish a well-balanced programme and vision for the next 30 years as a sequel to the Northern Hub vision.



Bringing the North Together – IPPR Northern Summit, Leeds 14 January 2016

IPPR North in association with the RTPI organised a series of workshops across the North of England in the Autumn of 2015 to explore the need for a strategic plan for the Northern Powerhouse. The culmination was a lively summit with participants from central and local Government, business, the universities and civil society.

The need for a plan was endorsed. The proposition was that this plan should not be statutory or comprehensive, but rather evolutionary by adding to existing plans and acting as a framework for bottom-up participation. The response was positive and the foundations were laid for developing an inclusive, holistic and adaptive "Great North Plan".

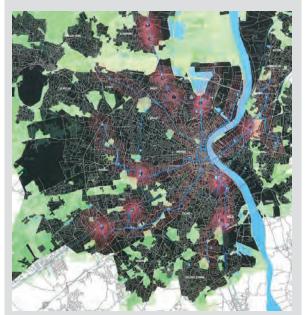
#### Managing Change

Both Utrecht and Bordeaux have benefited from developing an 'open' system of dialogue through which communities and stakeholders are involved in the process of urban change.

In **Utrecht** this new direction was chosen after the failure of many years of top-down planning followed by rejections of those plans after often acrimonious political debates. Utrecht organised a referendum of city residents to determine the long-term values from which design principles could be used to integrate a major transportation hub into the city centre, including the development of housing, retail, office and leisure space. The values chosen through the referendum provided direction for the character of change by identifying the speed and scale of development as well as the level of public involvement in the process. The outcome was the basis for an 'open plan', with the support of all stakeholders, 'demanding' a commitment for success.

**Bordeaux** initially used a competition to find the best way to incorporate 50,000 new homes in the city region. This was turned into a process of public involvement whereby the competing firms were each allocated a specific neighbourhood and asked to collaborate with the local communities in designing ways to integrate new homes. A new tramway provided the main connection to and from the city centre (this is 2km in length and currently being extended), creating improved accessibility, and reducing private car usage.

Both initiatives required sufficient time to build the necessary local collaboration and trust, but resulted in long-term local support and commitment to the process of urban change.



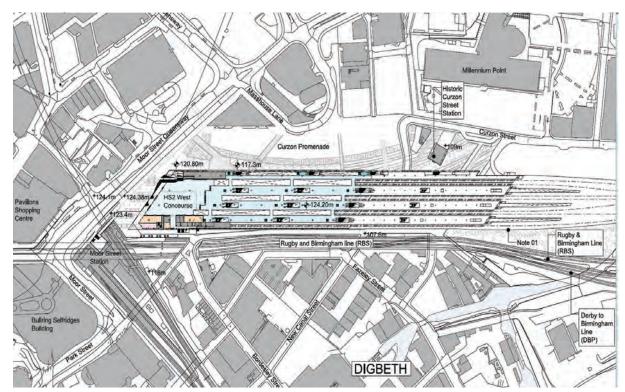
Plan for 50,000 homes in LaCUB (Conurbation Urbaine de Bordeaux / Greater Bordeaux Region) following the Tramway routes, Source LaCUB

### Benefit from Each Other's Skills – Greater Manchester as the Frontrunner

Having undertaken successful city centre regeneration and establishing a strong public transport network, Greater Manchester has the experience to guide the North through learning and testing, to spread knowledge and expertise and create a competitive, attractive European metropolitan region. As a frontrunner Greater Manchester should also value and support the distinct economic successes of other city regions in the North.

### Beyond 2040 - Managing Change

The 2040 Transport Vision Strategy shows ambition, direction and, importantly, a programme of 5-year steps within a 25-year horizon. With such long-term developments it is crucial to carefully manage urban change and minimise disruption while continuing to grow the vitality of the city's core and mitigate planning blight.



Scheme of Curzon Street HS2 Station, (April 2015) Source: HS2 Ltd



Vision for Birmingham Eastside Regeneration, Glenn Howell's Architects and Birmingham City Council, (December 2011) Source: BigCity Plan

## 3.2 Greater Birmingham & West Midlands

### Birmingham as an Interchange – England's Central Station

Greater Birmingham sits at the core of an extensive rail network connecting in all directions to other major UK cities and into the wider region (North Wales, Black Country, Midlands, Coventry, etc.). With HS2, capacity will be released on the north-south main lines. It can offer opportunities to intensify the passenger connections between London and Birmingham as well as opportunities for freight between the South of England and the manufacturing industries in Greater Birmingham, the Midlands and the North.

The wider Midlands region has a dense rail network but the services offered are in need of improvement given overcrowding on rush-hour trains and slow journey times. The opportunities provided by the diversity of economic activity in the wider region, from Derby, the Midlands and Birmingham into Wales and towards Bristol, should be reflected in improvements of the classic rail network. Such improvements would be highly beneficial for the HS2 network since it will feed passengers into and from the network. Midlands Connect (see above) has understood these opportunities and is exploring ways of maximising regional growth potential by improving all modes of transportation.

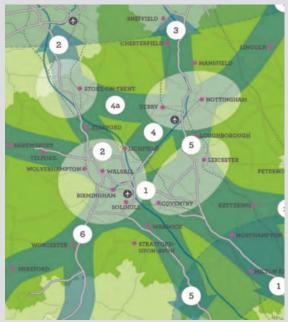
The maximum economic benefits of HSR can only be reached when embedded in a supportive and sufficient underlying network.

The opportunities for increasing freight by rail as promoted in the Midlands Connect Transport Strategy will be essential for both the region's industries and national importance. There are competing demands on capacity for freight and passenger rail services, which needs to be integrated into transport strategies and plans.

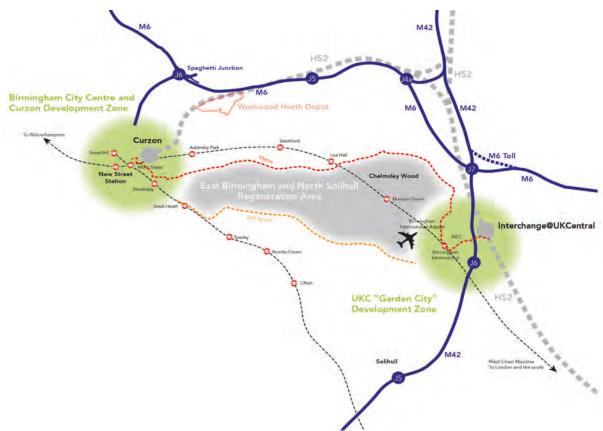
#### Context

Greater Birmingham and the West Midlands are located in the heart of England. The city region has an extensive rail network, however the services on offer do not always meet the expectations of such an important metropolitan region. In October 2015 Midlands Connect was launched as a collaboration between the Local Enterprise Partnerships (LEPs) and Local Authorities in an effort to reach a unified position on what strategic transport interventions are required to maximise the growth potential of the area. Midlands Connect will also act as a platform for engagement with Government, taking forward both Sir David Higgins' recommendation to develop a joint HS2/Network Rail Integrated Plan alongside the work by Lord Deighton's HS2 Growth Task Force and the emerging HS2 Growth Strategies. It will also act as a vehicle for the delivery of emerging proposals for a devolved local rail network in the Midlands.

HS2 cuts through the city region with two stations. The first, **Birmingham Interchange**, at Solihull and Birmingham International Airport, will be part of the through-line to the North, and the second, a terminus station at **Curzon Street**, will be a spur line coming of the main HS2 line at Coleshill. Curzon Street station will be situated adjacent to the current Birmingham City Centre and would be the city's fourth central railway station after Moor Street, New Street and Snow Hill, but unlike the others it will be a terminus station. Both the Curzon Street and Solihull stations are HSR-dedicated and do not offer direct passenger interchanges between HSR and classic rail, and neither will have High Speed Trains (HSTs) come off the HS2 line to use the classic rail network.



Midlands Connect Corridors and Hubs, (December 2015), Source: Atkins Report



Creating two HS2 Development Zones, Greater Birmingham and Solihull LEP (April 2015) Source: The Midlands HS2 Growth Strategy

### Greater Birmingham – The Need for Seamless Connectivity

Birmingham Curzon Street will be a dedicated HSR train station. Direct interchange with other classic rail lines has been deemed not possible. However, a tramway is proposed as part of the METRO network extension in order to integrate the new station with the other city centre stations. For people arriving on HS2 this might be sufficient if the tram network properly covers the wider city region. However, we must beware of the inconvenience caused to passengers by having to change services too frequently.

In Solihull, where the main HS2 line to the north passes through, an interchange between the HS2 and classic rail stations will be possible via a 'travelator' system<sup>25</sup>.

Although the region will be served by two HS2 stations, there are reasons for concern. Without a direct rail link and a cross-platform connection between classic and HSR, excellent passenger information and education will

be essential alongside conveniences such as smart and integrated ticketing. Compared to European examples we have explored where classic rail and HSR services are often directly linked, this lack of immediate rail-to-rail connectivity is less than ideal in supporting economic growth in the wider city region including the Midlands, the Black Country and cities like Wolverhampton and Coventry.

The METRO cannot sufficiently cover the whole city region since the main population centres are scattered. Increasing the density of existing living areas can support the viability of METRO as a link to both classic and HSR.

The upcoming phase of planning, design and construction should include studies for the better integration of HSR and classic rail networks and/or studies on how to make the network malleable for future adaptations.

- 25. Travelator is a people-mover or moving sidewalk, such as those found in airports.
- 26. Brindley Place was in 2006 nominated for the Best Place Award by The Academy of Urbanism.

Midlands Connect is an excellent platform to study how to combine existing and new regional transport networks with new living areas and denser existing settlements.

Based on existing proposals for the HSR network, the image of Greater Birmingham, being super accessible by public transport is best served by integrating HSR and classic rail stations. Otherwise, Birmingham Interchange risks being used as an 'old school' parkway station where people arrive by car to access the train. In so doing, the station becomes merely a point of departure where people simply pass through and not stay. By contrast, as an attractive place of arrival Birmingham Airport is well-connected with the existing railway station. With improved integration with the airport and classic rail network, the HS2 station at Birmingham Interchange, like Amsterdam Schiphol Airport, could better deliver the convenience that is expected from an HSR network.

The door-to-door concept should be a basic principle when thinking about the public transport network.

#### Understanding the Assets to Support your Image

Rotterdam is known for its 'rolled up sleeves' attitude, referring to its heritage as a major international port, and it has used that image to attract a new generation of 'movers and shakers' to support the station area development. Young people are stimulated to start up new businesses linked to other companies and universities in Rotterdam (business and medical) and Delft (technology). The city's creation of this environment attracted in July 2015 the Cambridge Innovation Centre (CIC) to open its first incubator outside the USA. They decided to use the iconic post-war Trade Centre, right next to the new Rotterdam Central Station.

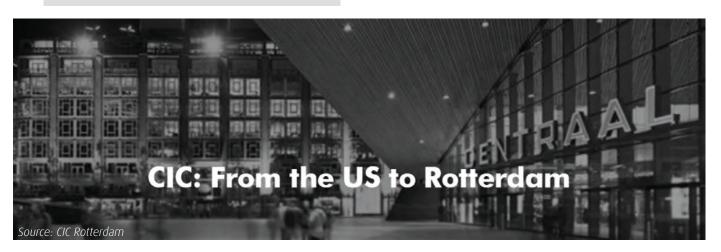
### Innovators and Makers – Understanding Greater Birmingham's Resources

The Greater Birmingham and West Midlands city region offers a range of distinct living areas and work places, in terms of both existing and new development. The attractive Brindley Wharf area is an excellent example of what can be achieved by redeveloping a derelict industrial area into a successful place<sup>26</sup>. The choices vary from dense city centre living quarters to Garden City style settlements, and from highly sensitive and innovative urban workplaces to classic out-of-town commercial sites.

By positioning itself closer to London via HS2, the city region will attract a wider cohort of people to work, live and raise their children. The attractive offerings of a variety of work and living environments, as well as local educational excellence (both academic and vocational linked with specific industries), should be developed, emphasised and communicated as an alternative to the Greater London region.

Nurturing the city region's valuable legacy of 'inventors' during the Industrial Revolution, of 'manufacturers' in the Black Country, and cultural connections to Shakespeare and Samuel Johnson among others, as well as utilising the region's hands-on spirit set within its distinct landscape, can all be used to embed HSR connectivity and create a highly desirable destination. Greater Lille is an excellent example of this.

Understand and use the assets from the legacy of Birmingham, the Black Country and Midlands to create a distinctive place to live and work.



### Cooperating with Other City Regions for Mutual Benefit

The HS2 journey between Birmingham and London will be less than one hour, which positions Birmingham City Centre within the Greater London 'ambit'. This should not be seen as a threat but as an opportunity for both city regions in regards to:

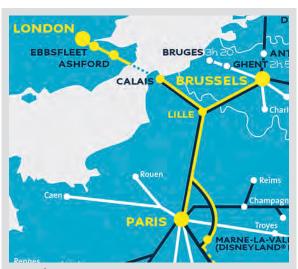
- Attracting an extended international labour market;
- Extending the variety of living environments on offer;
- Additional opportunities for collaboration on education (universities, vocational schools) and for specialisation of institutions supporting distinctiveness between the regions;
- Extra opportunities for collaboration between businesses and especially between various levels of operation (from start-up to established manufacturing industries) and where there are complementary specialisms (e.g. the Jewellery Quarter in Birmingham).

Understanding these opportunities enables the creation of an optimal environment for innovators and makers: the direct availability of thinkers, manufacturers and enablers, and access to finance, decision makers and intellectual capital.

Balancing both city regions' economies and programming economic activities collaboratively can boost economic activities for both.

# Acupuncture Development – Available and Affordable Spaces

Greater Birmingham and the Midlands offer a range of places that are ready for re-use and regeneration. One of the assets of this availability of space for living and working is that they are not only situated on the fringes of the city region, but also are scattered around throughout the City Centre. Next to the new Curzon Street station, space is available for regeneration; for example, the car parking areas and redundant buildings between the new



Second City - Every City is a First City

After years of competing with Paris, the Lille metropolitan region (less than one hour from Paris centre) has specialised itself and now forms a distinct market and place to live within the orbit of Greater Paris. Through collaboration, the region now benefits from the economic vitality of neighbouring world-class cities like Paris, London and Brussels.



Black Country Garden City: A Prospectus for House Builders and Investors

In response to the 2014 Wolfson Economic Prize competition on how to deliver a Garden City, Made, the Design centre for the West Midlands, coordinated a multi-disciplinary group of built environment professionals to develop a submission (http://made.org.uk/communities/black-country-garden-city). The submission was for a distributed Garden City spread across the Black County LEP area using a variety of redundant industrial sites. The submission did not win but the work was praised and used as the basis for the Black Country Garden City prospectus presented by the LEP at MIPIM 2016.

The submission was commended by the Wolfson Prize assessors, and is an example of professionals giving their time to a well-coordinated submission (http://blackcountrygardencity.tumblr.com) which has stimulated a proposition for 45,000 homes spread over 31 sites in Dudley, Sandwell, Walsall and Wolverhampton.

### Place Alliance: The Big Midlands Meet

Stimulated by HS2, two initiatives have emerged in the Midlands that have brought together local authorities, business, built environment professionals and civil society to explore how design thinking can be applied at a regional level.

First, Professor Kathryn Moore of Birmingham City University with WSP convened a workshop in February 2015 with support from the University, Birmingham City Council, and Solihull Metropolitan Borough Council in order to stimulate thinking about the future by using the transport routes in their landscape settings as a starting point. The workshop began the process of defining what makes a great city, as well as outlining their ambitions and aspirations for the city region 20 years ahead.

Second, The Place Alliance in association with the Midlands region RTPI convened the Big Midlands Meet at The Nest@ Glenn Howells in March 2015. This event brought together representatives from local authorities and agencies in the region, built environment professionals, academics and civil society with a strong emphasis on urban design thinking applied to placeshaping at both a local and regional scale. The day opened debate on how to integrate transport and spatial planning as well as the value of mapping and models in developing a dynamic planning process for the future.



City-Acupuncture in Antwerp: Not only were 316 sites developed for housing, the key aim was to positively impact on the neighbourhoods. *Source: AG Vespa* 

- 27. Both Jewellery Quarter (Great Neighbourhood 2009) and the Custard Factory in Digbeth, (Great Place 2014) Great Places in The Academy of Urbanism Awards programme.
- Urban Acupuncture, Jamie Lerner, (Island Press September 2014)

station and the City Centre. But it also has the huge Digbeth Quarter with its industrial heritage buildings such as the Custard Factory<sup>27</sup> as well as open spaces. There are also potential development sites around Birmingham International Airport that offer space for a variety of users, from small start-up fashion designers to automotive industries. The application of 'City Acupuncture'<sup>28</sup> – the use of existing structures and 'gap sites' – could deliver thousands of small and large places of improvement.

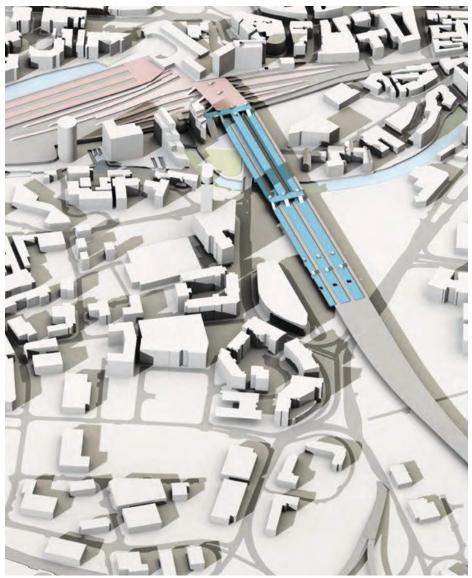
A city region wide spatial plan, built on the Midlands Connect Transport Strategy, should survey the available spaces and existing and upcoming activities, and formulate a long-term vision for the city region and its opportunities.

## The Birmingham Brand – On Communicating and Collaborating

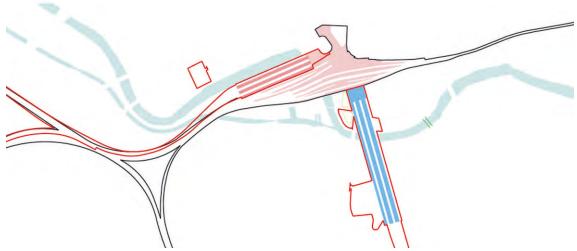
In recent years we have seen strong views expressed over whether the city region should re-brand itself as Greater Birmingham, and questions over which places belong in the city region. Looking at numerous examples elsewhere in the UK and Europe it is clear that collaboration within and between city regions supports economic growth and can unlock new opportunities: 'L'Union Fait La Force' [Unity makes Strength].

But apart from economic reasoning it is important for communities to search for common ground – not so much to replace the individual identity of each place but to find shared values that can position a city region strongly in the global economy. Greater Birmingham, with its manufacturing industries, would be especially helped by a clear and bold international brand to sell its products all over the world. And part of that brand is, naturally, the rich collection of distinct places it holds.

Starting an open debate, inclusive to all, on what the shared values are and how to communicate them, can enrich the city's image and will be of benefit for all.



**Impression Yorkshire Hub, (2015)** Source: The Yorkshire Hub Interim Report on the Redevelopment of Leeds Station



Schematic plan for the Yorkshire Hub, (2015) Source: The Yorkshire Hub Interim Report on the Redevelopment of Leeds Station

### 3.3 Leeds & West Yorkshire

### Leeds Hub Connecting North-South-East-West

The authorities and civil society in Leeds, in collaboration with HS2 Ltd, agreed to alter the original proposal which isolated the HS2 station and created a disconnect between it and the existing rail station. The new proposed HS2 station is now much more integrated with the existing city centre station. Together with the investments in classic rail from TfN, the HS2 station proposal for the Leeds City Region offers enhanced connectivity to strengthen the city region's economic and cultural standing on a European level. This improved connectivity will contribute to the attractiveness of the region and will act as a starting point to access other European and UK regions. However, to effectively attract new activities and businesses and provide skills for a younger generation, the city region needs more than mere connectivity: it also needs to be a great place to live, work, learn, and grow talent. For example, Greater Lille and Liege focused on attracting young people by catering to their specific needs in terms of providing affordable housing, employment and start-up opportunities, and by organising appealing festivals for that demographic.

Integrating classic and HSR networks within one iconic station in Leeds can transform the station into a 'Yorkshire Rail Hub' representing the wider Yorkshire region including York and Bradford.

# The Leeds Node – Throughway and Terminus for the Region

Leeds and West Yorkshire is a polycentric city region in which housing and employment is scattered throughout. The current HSR proposals and the improved east-west connectivity are aiming to foster conditions for economic growth. However, in order to create optimum accessibility to all residents, the development of the underlying (public) transport network is key. A transport strategy detailing the overall TfN vision – including all modes of regional transport – should set a long-term agenda of investment and production. The opportunities for intensifying use of the existing rail network with swift light-rail alongside intercity

29. www.gov.uk/government/publications/ high-speed-north-a-national-infrastructure-commission-report

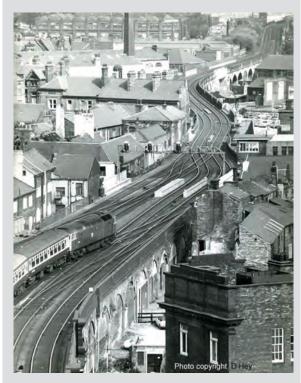
#### Context

With its east-west and north-south connections, Leeds station is already one of the major hubs of the Northern UK rail network. With an expected 60 million annual passengers by 2040, the combination of HS2 and the improved east-west connection (TransNorth) are developments of national significance.

Leeds station is situated adjacent to the city centre and has rail connections into its wider region including York, Bradford and Sheffield, although these services do suffer from low frequency and long journey times. The connections to Manchester are already improving, but Leeds still has poor connectivity to Birmingham with just one train per hour. The underlying public transport network consists mainly of buses. There have been plans for a new tram and trolley bus network, but these have not yet come to fruition.

The proposed HS2 station is perpendicular to the existing station combining the station concourses and thus offering the opportunity to create a pedestrian link between the surrounding city neighbourhoods.

A link between High Speed and classic is proposed, connecting HS2 with the improved east-west rail link<sup>29</sup>.



Leeds eastern exit of Leeds Railway Station (1983), *Photo:* 

trains can create attractive transfer hubs for people changing from bicycle or car to train when travelling into the city centres and other regional places of interest.

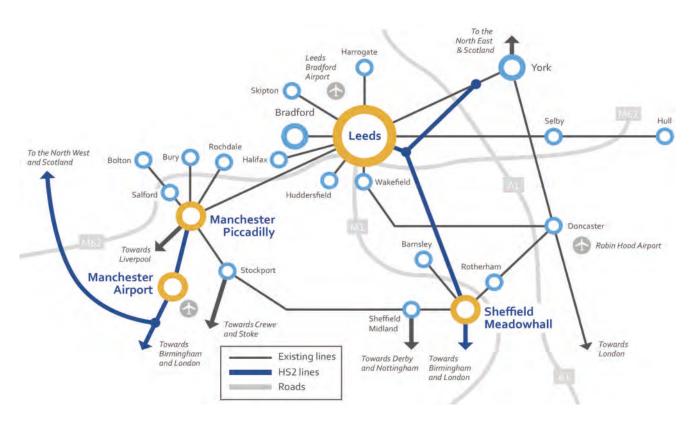
The West Yorkshire Combined Authority (WYCA) is developing a new *Single Transport Plan* (STP) that spans from 2016 to 2036. The WYCA brings together the economic development and strategic transport roles from across West Yorkshire on behalf of the five West Yorkshire Local Authorities of Bradford, Calderdale, Kirklees, Leeds and Wakefield, plus the City of York. The development of HSR infrastructure and its impact on the region will probably take much longer than 20 years, as is evident in other European examples (Lille, Bordeaux, Lyon).

Embedding HSR in the local and regional transport network has proved to be a necessary condition for maximising the benefit from this investment. A visionary 30-year transport strategy to develop this kind of network is needed to create better accessibility both at

an intra-regional (within the region) and inter-regional (connections with HS2 and the proposed TfN network) scale. The transport of freight should be included as well, since this can significantly impact passenger rail capacity.

The HS2 station will be situated at the South Bank, a former industrial area rife for regeneration. Initiatives and plans are already afoot to redevelop the site, and HS2 can be a catalyst for this. A Transport Strategy for Leeds can positively impact on the development of the South Bank:

- For Leeds, the best possible integration of an HS2 station is one that is future-proofed for developments in city transportation (buses, bicycles, cars);
- A brief for the South Bank should be defined in relation to other existing areas and potential development sites in the city region, and based on the accessibility of each site, as planned in the Transport Strategy.



Connectivity Yorkshire Hub, (2015) Source: The Yorkshire Hub Interim Report on the Redevelopment of Leeds Station

#### Station as Connector

The Utrecht Central Station is not only a place to catch trains, but also an important connector between the historic city centre and the former western brownfield site now hosting the National Exhibition and Fair Centre. Alongside the existing main entrance from the city centre side, a new entrance has been added on the west side, which now forms an important 'bridge head' for the development of this western area. The station itself has a publicly accessible east-west pedestrian link parallel to the station concourse.



Utrecht Station, new west entry connecting western Brownfield area (2015) Photo: Henk Bouwman



Utrecht Station connecting east and west, Source:

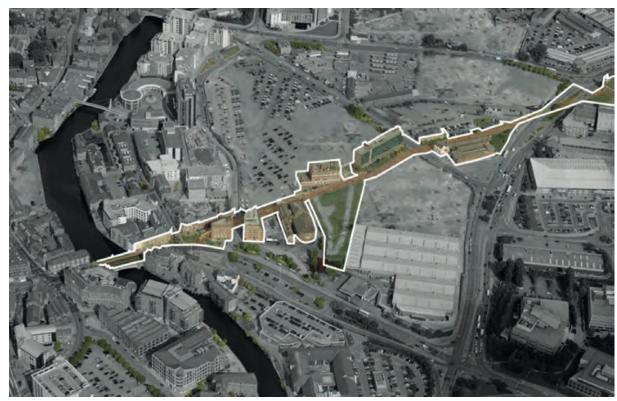
#### The Distinctiveness of Leeds - High Heels, **Black Suits and Sneakers**

The Leeds and West Yorkshire city region displays a wide variety of economic activities. The financial, insurance, legal, and retail sectors have particularly shaped the image of Leeds, whereas in the wider region 50% of the UK's manufacturing is within a two-hour drive from Leeds30.

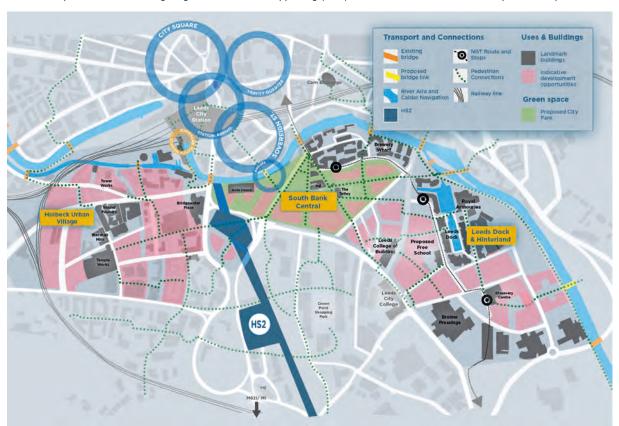
In the workshop discussions that the ITC held with various stakeholders in Leeds, it was clear that the real aspiration is to use the HS2 and TransNorth connections as catalysts for generating economic benefits for the whole region. But it was also clear that there should be something to 'catalyse'. There is a good understanding of the region's assets, but what was seen to be missing was something binding those assets and translating them into a comprehensive story: the narrative of Leeds City Region based on the past, being told in the present and opening the future.

This narrative for Leeds City Region can form the basis for a long-term city region brand, comparable with the spirit of Yorkshire Cycling stemming from the Grand Départ event of the Tour de France in 2014. In parallel, the narrative can also be a starting point in creating a long-term vision for the city region. It can frame the role of the HS2 station in tandem with the revised Leeds station to create a place of arrival that everyone in the region can be proud of and to which they want to invite people.





Leeds South Bank - Hunslet Stray: a practical first step towards a greener, more animated, safer city centre south. This pedestrian and cycle route links Leeds Bridge and the new colleges, UTC and academy school, via aql's data centre, the Tetley art gallery and Duke Studios. Proposed artworks and lighting will make it more appealing (2014). Source: Leeds Sustainable Development Group



Vision for the South Bank in Leeds (with former HS2 Station scheme), (November 2014) Source: LSB Prospectus Leeds City Council

#### Leeds City Centre – Incremental Change in a Strong Regional Capital

On a strongly coherent city centre structure, developments over the last 30 years in Leeds have gradually improved the urban fabric, streetscape and squares, enhanced connectivity, made more of the waterfront on both sides of the River Aire, created more covered space to add to the historic arcades, delivered some new and improved cultural venues and welcomed other dramatic elements of the skyline. The Leeds Civic Trust has been the foremost group involved in encouraging high standards of placemaking throughout this period.

The area south of the river, so close to the old city centre and including the site of the potential HS2 terminal still has much potential to become a sustainable neighbourhood for the long term, developed within a strong aspirational framework. Some areas within that site have been regenerated already, with admirable reuse of historic structures and the emergence of a new education quarter that will be a strong attractor for other occupiers. Much remains to be done to re-work the many vacant or under-used sites and to make the whole area better connected to the surrounding communities, greener, less car-dominated and more appealing to pedestrians and cyclists. Civil society groups will continue to play a part in persuading all parties to take an holistic approach.

### South Bank: Expanding Leeds Centre – On Available Space and Changemakers

By integrating a major station into the existing urban fabric we can create somewhere that is more than a place of departure. It can grow into a destination in its own right, rather like St. Pancras International and Rotterdam Central Station linking local activities and businesses in new ways, thereby creating new opportunities and unforeseen additional economic development.

Leeds station has the potential to link the city centre to the South Bank, enhancing Network Rail's current attempts to reduce the physical barrier formed by the existing railway, which offers a 'bridge head' for the new development. The new south entrance to the existing station is a first step in this process. In one of the schematic proposals for the station<sup>31</sup>, the arcades under the railway viaduct are used as a concourse for both stations, cleaning up the current, unattractive situation and creating a new link between the city centre and the South Bank. Utrecht Central Station, which

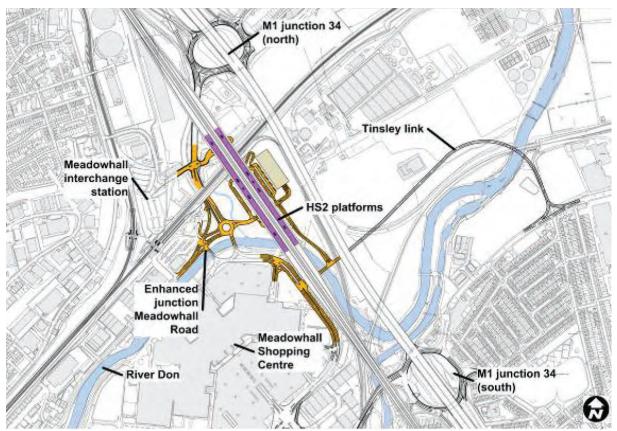
links the existing historic city centre and the western brownfield area, is an example of successfully achieving these goals.

Together with the new station, the South Bank should represent both Leeds and West Yorkshire on an international level offering an environment where changemakers, innovators and start-ups can flourish, where the assets of Leeds can be displayed, and where young people can live. It has the opportunity to grow into a 'European Quarter', positioning itself in parallel to cities like Amsterdam whose strengths are similar in terms of economic sectors and academic institutions, as well as in size and distance to London.

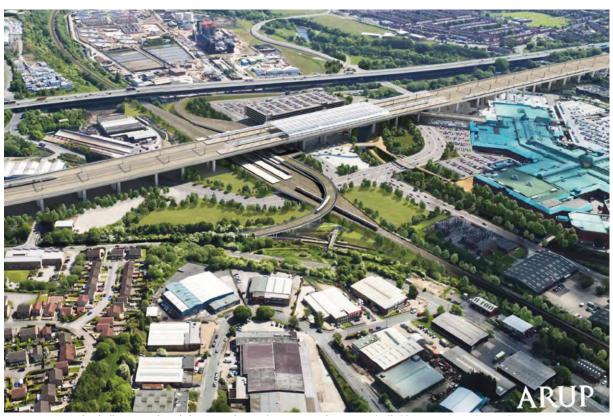
### The Yorkshire Connection – On Controlling the Process and Collaboration

The engagement of various groups from civil society in West Yorkshire and Leeds has already successfully influenced the debate around the position and impact of the station. Bringing together the forces within local communities, both formal (Local Authorities and institutions) and informal (community groups, SMEs, individuals), can strengthen a city region's position in discussions with the Government bodies responsible for HS2 and wider economic programmes. The important work undertaken by the West and North Yorkshire Chamber of Commerce should be seen as a positive and constructive engagement and has already led to changes in the decision making process.

31. One of the proposals of Arup for the Leeds HS2 station



HS2 South-Yorkshire Interchange at Meadowhall, Source HS2 Ltd



Impression Meadowhall HS2 South Yorkshire Interchange (January 2014), Source: Sheffield City Region High Speed 2 Connectivity, Connectivity Study Report

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### 3.4 Sheffield City Region & South Yorkshire

#### Where to Arrive in the Sheffield City Region

The HS2 station proposals indicate that Birmingham Curzon Street, Manchester Piccadilly and Leeds will be city centre stations, and East Midlands and Crewe will be regional rail hubs. The name 'HS2 South Yorkshire Hub' seems to imply that the station will be a regional hub. Based on European examples elsewhere, the primary function of a regional HSR station is to provide high frequency HSR links to major centres of agglomerations and their wider regional economy (in the case of England: London, Manchester, Leeds and Birmingham). In this case one could characterise the station as a place of departure. The SCR conurbation and its important economic profile, however, lead one to expect the station to be a destination in its own right with all the implicit characteristics of a place of arrival and exchange.

The division within the region over whether the future HS2 station location should be at Victoria Street or Meadowhall demonstrates an ambiguity over what the region perceives itself to be: an urban region with a spread of equivalent cities and towns, or an urban agglomeration with a core city and distinct and respected sub centres.

The option currently preferred by HS2 Ltd is Meadowhall since the technical implementation of the HSR infrastructure would be easier and the location occupies a more 'central' geographic position in the region.

#### Context

Sheffield City Region (SCR) is bisected by the eastern leg of the HS2 connection to Leeds. SCR is a polycentric region comprised of distinct cities and boroughs. Although easy to point out geographically on a map, the SCR is difficult to define mentally as one metropolitan region. There are three distinct parts:

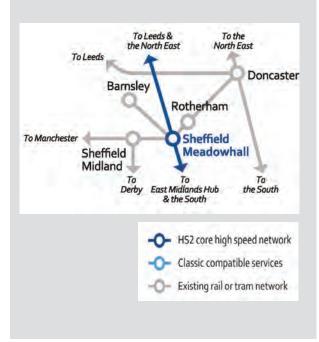
- The eastern part with Doncaster on the East Coast Mainline;
- The northern part of South Yorkshire facing York and Leeds; and,
- The southern part with Sheffield and its connections to London and the Midlands.

The arrival of HS2 can help in defining this area as one polycentric region. It has, from a European point of view, a distinct character with its economic activities, universities and culture. Geographically the region then sits between the North Sea and the Peak District linked via an airport (Doncaster Robin Hood Airport), HSR, the two main north-south rail lines and the link to the Northern Hub.

The city region was given two options for their HS2 station:

- 1. Meadowhall "HS2 South Yorkshire Interchange" (the HS2 Ltd preferred option)
- 2. Sheffield Victoria, near the city centre

These two locations are set in very different contexts, the first located in what can be described as a regional centre and the second closer to Sheffield City Centre on the site of a former station.



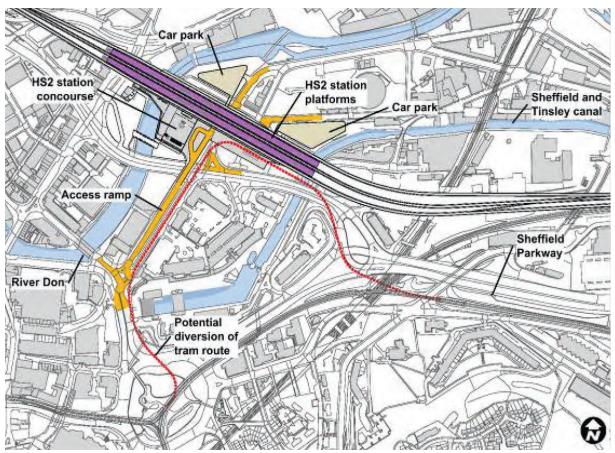
#### Think about Inter- and Intra-regional Connectivity First and then Answer the Question of Where and How to Interface with HS2

Many European examples show that the benefits of an HSR interface are only fully captured when it is embedded in an effective local and regional public transport network. When these are not properly linked the HSR station can remain a parkway development, as in Avignon, without capturing the full opportunity to regenerate the city and region. Sheffield is a scattered conurbation, like Liege or Lille who both understood the importance of having an internal public transport network to bring visitors to their final destination, and the importance of a wider regional network to feed into the city centre and its station thus creating a meaningful and prosperous place. Scenarios for improving and extending the Sheffield tram and classic rail network to become HS2 ready should be developed together alongside forming the arguments for the HS2 station location.

#### Sheffield Summit 16 February 2016

The Sheffield Chamber of Commerce and Industry organised a conference on 18 February 2016 to review the process of choosing the best station location. Amongst other conclusions the conference found that:

- The location of the HSR station should not be chosen solely on the basis of technical and rail operational issues;
- Prior to making a choice on the location the region should better define the region as a whole and set priorities for supporting the region's economy; and.
- Widespread support is important, as seen with the HS2 station location in Leeds, where civil society managed to change plans in order to achieve the desired integration with the existing station. Without wider regional support for the location of the HS2 station, like in Leeds, it could weaken the opportunities of a successful HS2 station neighbourhood.



HS2 South-Yorkshire Interchange at Victoria Street close to Sheffield city centre, Source HS2 Ltd

#### **Industrial Legacy as Distinct Landscape**

Organised by the state of North Rhine-Westphalia, the Federal Government and local authorities, the International Building Exhibition Emscher Park (IBA) was developed between 1990 and 1999 and used the concept of drawing from the natural landscape (which in this case had to be developed) to achieve the ecological, economic and social renewal of the Ruhr District. This led to the creation of the Emscher Landscape Park between Duisburg and Dortmund. For those former industrial sites within the present Landscape Park area, economically sustainable new usages have been devised which are compatible with IBA's economic, social and cultural ambitions as well as the ecological programme. Today these projects are landmarks in their region and it is impossible to picture the modern townscape without them.



Photo: Christa Panick



Invest in Quality of Place

Sheaf Square, Sheffield, winner of the 2010 Great Place Award - The Academy of Urbanism, Photo: Henk Bouwman In the ITC workshop discussions it was clear that expectations of the new HSR station and its potential opportunities vary, partly as a result of the difficulty in defining what the region is and in expressing its values and character.

Develop a stronger regional transportation network to take advantage of the demographics of the region. When this is supported by better connectivity to other city regions (Leeds and Manchester, Birmingham and London), people are more likely to use the train<sup>32</sup>.

#### Sheffield's Legacy – A Gateway to the Peak District

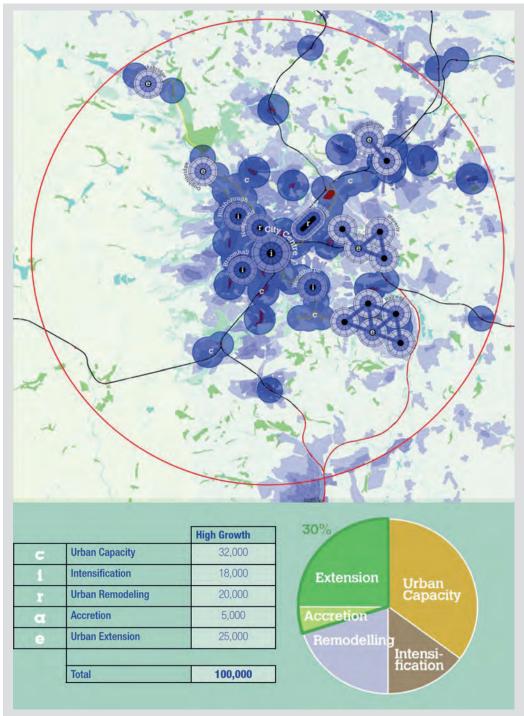
SCR offers great opportunities for people to work in an environment on a human scale while being on the doorstep of one of Britain's most beautiful national parks. Developing and strengthening the city region's vibrant natural environment as a human-scale city centre filled with a range of services can turn SCR into an even more desirable place.

Sheffield is in the process of shifting from a manufacturing city into a creative city. Addressing this through the type of developments permitted and relating it to other economic activities in the wider region can help define the region's image. Sheffield should become a proud hallmark to be used on the CVs of young people.

#### Sheffield City Region as a Place to Live

The region offers a richness of opportunity for different ways of living. It will be important to link new and existing settlements, as well as places of work and learning, with an extended tramway to the HSR and classic rail stations. The centrality of the region between employment centres in the Midlands and Leeds West Yorkshire regions can support an attractive living environment for all ages.

Sheffield as an Icon for the Wider Region: Collaborating, Cooperating, Communicating Combined with South Yorkshire, the SCR is a polycentric region with Sheffield at its core, alongside established towns and villages and the neighbouring Peak District National Park.



#### Sheffield Garden City: Options for Long Term Urban Growth

Urbed, winners of the 2014 Wolfson Economics Prize, used some of their prize money to work jointly with Sheffield City Council to explore how Sheffield might grow by intensifying land use and use existing resources more effectively. Their starting hypothesis was the fact that existing UK cities are underperforming compared with their Western European counterparts. The objective set was to build 100,000 new homes in 20 years. The study provides a vision of how Sheffield could maximise its assets, focused on utilising rail, tram and bus networks. It has opened the debate in Sheffield and is an excellent example of how an outside, independent voice can raise awareness of these issues.

Source: Urbed - Sheffield Garden City - Options for long term urban growth, Urbed 2014

Working across the city boundaries, whilst understanding each other's distinctiveness, can create mutual benefits in order to compete on a national and European level. Sheffield and South Yorkshire combines great assets in its landscape setting, its (shared) history, its distinctive and rich living environment, and its industrial activities and great universities. It is, however, important to understand the way people view the city region from the outside. From this viewpoint, it is Sheffield which is the best known urban brand for the region. The process of matching image (or outside perception) with local identity (chosen) is an integral part of the first point, where to arrive in Sheffield City region.

#### Developing a Vision for Sheffield City Region

SCR Vision is an initiative which aims to complement and go beyond existing projects, policies and plans, to generate a refreshed and compelling long term (25 year) vision for the Sheffield City Region. SCR Vision has the support of the region's local authorities, the Combined Authority and the Local Enterprise Partnership, and is being lead and coordinated by some of the major institutions in the region, including both universities and the hospitals.

The initiative is designed to harness the capabilities within the region's major institutions in order to facilitate greater collaboration and ambition both geographically and also across the public, private and community sectors. It is supported by expert advice from Kevin Murray Associates and adopts a co-production approach. Evidence and ideas have been sought in response to an inspiring set of prompt questions, and through individual meetings and workshops, the initiative is raising awareness, bringing parties together and supporting the existing agencies in developing an ambitious, coherent and challenging vision for the city region. (www.scrvision.com).

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The participants in this process should come from all parts of the region. Collaborating on a shared narrative can create a common ground for further partnerships that can capture the value of improved connectivity and accessibility. Key for achieving such success will be:

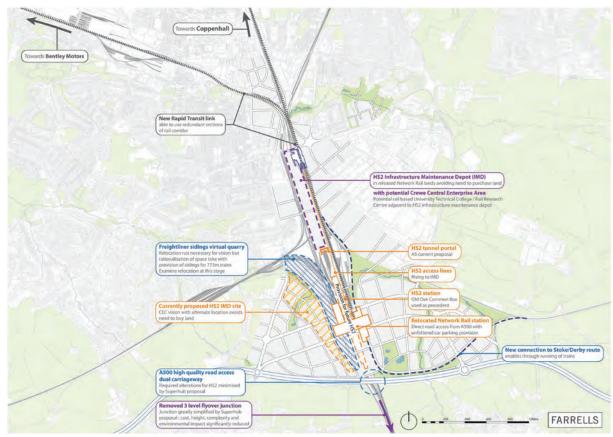
- Strengthening the character of each place and landscape and investing to improve those qualities;
- Identifying common aspirations in order to act as one partner for government in the delivery of HSR and supporting infrastructure; and,
- Enabling clear communication within and outside the city region about the assets, opportunities and connectivity. The key players in the region (the LEP, industries, education, authorities, SME's, communities) should be involved and contribute.

#### Euregion Meuse-Rhin

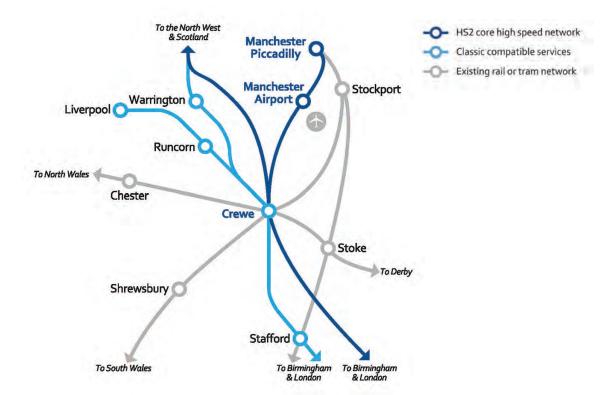
Established in 1991, the Euregion Meuse-Rhin is a cross-border collaboration between the cities Maastricht, Liege and Aachenwith a population of almost 4 million.

Collaboration focuses on linking education (the region's four universities) to business, improving the environment, addressing the legacy of its industrial past, and improving public transportation. The collaboration is crossing national borders, provinces and municipalities and involves various interest groups. The overall aim is to improve the socio-economic condition of the area by capturing the added value of the combined area's assets.





Two Locations: at the existing station site and (shown in image) at a new location south from existing station (February 2014), Source: Cheshire East 'High Growth Region', Farrells



Crewe Connectivity (March 2012), Source: Options for Phase 2 of the High Speed rail network, HS2 Ltd

### 3.5 Crewe & East Cheshire

#### The Crewe Junction

Crewe has rail connections to Liverpool, Manchester, Stoke and Birmingham and into the North of Wales. These connections also feed into local services. The connectivity, however, is not as strong as the rail network could potentially offer – fast trains from London pass through Crewe and services into the wider region are relatively infrequent. One of the reasons is that settlements are scattered widely around the region, which makes provision of commercially viable services difficult. Improving the region's connectivity must happen prior to the arrival of the HS2 station if the added value and economic benefit from this investment is to be captured.

On accessibility to and from the Crewe HSR station there are two issues that need to be understood:

- In the wider region the car is often the only means of transport due to regional sprawl and, in some cases, a lack of public transport provision; and,
- Because of the car-orientated character of the region the station could easily develop into an 'old style' parkway station, becoming a place of departure only, since on arrival one needs a car for further connections.

Developing a clear vision for inter- and intra-regional connectivity should help delivery bodies to understand better the interface with HS2. The ITC has explored many European examples that demonstrate how the benefits of a successful HSR interface are only captured when it is embedded within an effective local and regional public transport network. If not properly linked, Crewe runs the risk of remaining a parkway station development like in Avignon, without becoming a core place of arrival that can help to define the city and region. The Cheshire region is a rather scattered conurbation, like Liege and Lille. These cities, with their history of industrial decline and massive unemployment in the 1980s, understood the importance of having an internal public transport network in order to bring visitors to their final destination, and a wider

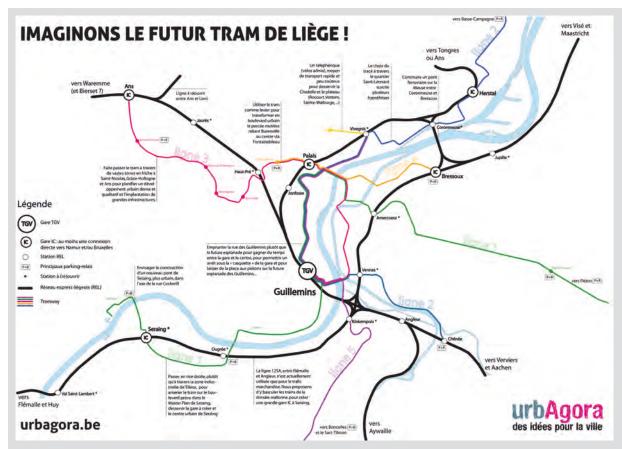
#### Context

Crewe and East Cheshire are situated in the triangle linking Birmingham to the south, Manchester to the north east and Liverpool to the north west. Crewe as an industrial town developed because of the local railway junction and works, connecting it to the cities mentioned above as well as to Stoke, East Midlands and the North of Wales. Crewe is a town that flourished around the rail industry. The legacy of manufacturing is still present in the manufacturing industries both in Crewe and the surrounding region.

An HS2 station in Crewe has been moved forward and confirmed as Phase 2a. There are two potential locations: either integrated into the existing classic rail station, or situated south of it. The existing station comprises a railway junction and could become an important interchange on the West Coast Main Line connecting to North Wales and the West Midlands. For the proposed HS2 connection, this interchange function is the main reason for bringing it to Crewe. It will also serve as a regional station comparable to the East Midlands hub, feeding passengers into the HSR network from the Cheshire 'urban landscape' with a population of 700,000 (2001 census). However, the proximity of the HS2 station at Manchester Airport could be more attractive for some parts of the region since it will offer a higher frequency of train services.



**45** ITC



#### Forming a Region

Liege and its region has some similarities with Crewe. The region has a very scattered urban pattern of housing, industries and services in low densities and car use is extremely dominating the modal split<sup>34</sup>. In 2009 the new Liege-Guillemins station was opened on the HSR line between Brussels and Cologne. It was necessary to reposition the station several hundred metres further down the line (still in the city centre) in order to accommodate the much longer High Speed Trains (HSTs). The neighbourhood around the new station was non-existent and had to be built completely from scratch. It was clear to the city region that, on its own, the new HST connection and interchange with classic rail would not be strong enough to support substantial new development and attract new businesses. Instead, others were fears that businesses would leave for the Brussels region since journey times had reduced (similar to what initially happened in Lille). Therefore, the city decided to create a new tramway connection that integrated the new station with the wider polycentric city region using the valley of the River Meuse as route. This tramway is designed not only to feed passengers into the HSR network but also to attract new businesses around the station. The network, as in Bordeaux, will be built in phases. During the first phase of constructing the tramway numerous employers have already seen the benefit of being close to a major railway hub allowing accessibility to a wider labour market. *Source images: urbagora.be* 



regional network to feed into the city centre and its station, thereby creating an attractive and meaningful place for new businesses to establish.

In the case of Cheshire and Staffordshire studies should be undertaken similar to that in the East Midlands on how use of existing rail network can be intensified and connectivity improved. An overview of existing rail stock, rail planning and the development of a joint classic and HSR strategy are needed to ensure a comprehensive understanding of the wider connectivity and economic benefits. Alongside passenger transportation, the development of improved freight transportation is another key economic aspect which should be explored in this strategy.

### Forming a Region – Developing a Vision for a Regional Transport Strategy

Cheshire and Staffordshire can be viewed as a polycentric urban landscape<sup>33</sup> with comparatively modest centres of population. With the addition of new housing stock spread throughout the existing settlements in the region, there will need to be a fresh consideration of other modes of movement such as shared transport schemes. Furthermore, by adding new cycling and walking routes to create a multi-modal transportation network, connectivity within the region will significantly improve, resulting in a wider spread of the benefits from HS2.

In conjunction with an improved public transport network the road network also needs to be considered as an inseparable and complementary part of the regional transportation network.

#### Crewe - Too Much Available Space?

Crewe offers a considerable area of available and affordable space around the potential station sites. This is linked with the current economic situation of Crewe itself, which declined as rail manufacturing and other industries shrank, so that today existing commerce is scattered around the region instead of concentrated in Crewe. To benefit from the economic potential of an HSR station, it is necessary to create an attractive place parallel to the development of the rail infrastructure. Based on experiences elsewhere in Europe an HSR station itself cannot on its own generate substantial economic development.

In terms of HS2 journey time, the 'HS2 Crewe Superhub' is situated close to Manchester Airport (under 20 minutes) and to the Birmingham Interchange hub station near Birmingham Airport. The frequency of HS2 stops will be higher in the two latter stations than in Crewe. In order to prevent economic competition between these HS2 stations and the Crewe Superhub, it will be necessary to collaborate with Greater Manchester on a well-considered economic programme alongside development phasing.

<sup>33.</sup> Small scale urban settlements scattered around the region

<sup>34.</sup> A modal share (also called mode split, mode-share, or modal split) is the percentage of travellers using a particular type of transportation or number of trips using said type.



#### Understand your position in the network

Although the city of Avignon has a very different historical character to Crewe, the region displays similarities with the Cheshire region with its scattering of settlements. The dedicated HSR station is located on the fringes of the city just south of where the TGV line splits into routes to Marseille-Nice and Montpellier-Spain. Avignon TGV station is on the Marseille branch, and because it was originally not linked to classic rail it is a typical parkway station surrounded by extensive car parks. The expected commercial development has not yet appeared leaving vast empty spaces around the station. Only recently has the new station been linked to the classic rail network via a shortcut (La Virgule). This has created much improved rail accessibility into the region (eg. to Carpentras). This line brings passengers to the HSR station, but also has created a splendid environment for new economic activities around the station. The City of Avignon has reviewed its masterplan for the area allowing for a more incremental development and slowly changing the station from a classic parkway-type station into a destination itself. The city also put a temporary freeze on permissions for other development sites, in order to create a scarcity of available land. With growing passenger numbers the station's importance will increase, attracting further economic activities. Recently the Council of Grand Avignon has decided to build a regional tram network in the coming decade.

## Crewe Station as a Distinct Place – A Vision for a New Type of Station and Station Neighbourhood

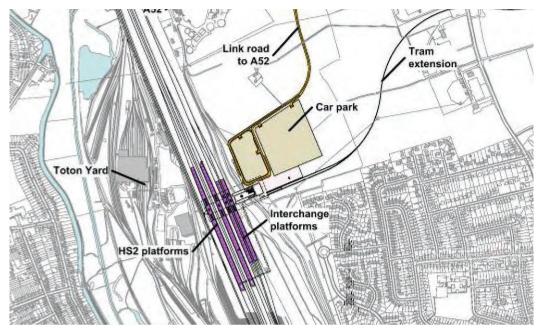
The Crewe HS2 Superhub will be different than the city centre stations seen elsewhere on the line. The region offers a lifestyle that does not require an inner-city station typology, but it does have the potential to be more than merely a parkway station. Developing a new type of station, a place of exchange, can support the specific lifestyle that the region offers and makes the region more attractive to younger people and families. This will depend on the quality of connections to larger commercial cities, allowing people to take advantage of the space, quality of life and affordability that the Cheshire region offers, whilst simultaneously ensuring that they have easy access to client and office facilities in major UK cities. Industries and schools can use the station hub to showcase their programmes, and businesses and can be offered accessible places for training and exchange.

#### Intensify Existing Settlements and Using Brownfield Land to Increase New Housing Stock

In a wider context the Cheshire region offers a lifestyle that cannot be found in the bigger cities such as Birmingham, Manchester or Liverpool. The nearby Potteries in and around Stoke provide developable low-value land in an area with distinct character. This quality of life exists due to a combination of modest human-scale settlements set within an accessible, green and pleasant landscape. To maintain and improve this quality it is important to find a balanced solution when increasing the stock of new housing. Intensifying existing settlements and using brownfield land can offer great opportunities to support existing services within the population centres, while 'cleaning-up' the brownfield areas and giving them new meaning. In this way new settlements could support a shared transport scheme without 'eating' the green landscape and damaging the region's greatest asset.

## Collaborate Within the Region to Strengthen its Position with National Partners and to Ensure a Balanced Spread of Growth and Wealth

The individual authorities within the region represent distinct places, but they also have a joint agenda when it comes to constructing and benefiting from HS2. Understanding the mutual interests that lie behind the development of passenger and freight transport transcends political boundaries. This understanding should inform the creation of a collaborative body designed to strengthen the region's position when planning, negotiating and maximising benefits. In the case of Crewe, this means collaborating with Greater Manchester on the economic programming around the HSR stations in order to avoid direct competition and supporting the development of complementary economic activities that will allow the region to compete on a European level.



East Midlands HS2 station at Toton, Source: HS2 Ltd



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 alignement crossing for NET, buses, taxis, cyclists and pedestrians towards Long eaton and 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.

**Commissioned by East Midlands Councils** from Farrells and Peter Brett Associates, (November 2015)

### 3.6 East Midlands

#### East Midlands Connected to London

The proposed East Midlands HS2 station at Toton, unlike the other proposed HS2 stations, is not serving a single city centre but has the opportunity to grow into a regional hub. Although the station will offer passengers an interchange with classic rail-to-rail connectivity into the region, it cannot compete with the car since the existing train services are underperforming and some rail network connections are sub-optimal for running better services.

Heavy rail infrastructure connectivity needs to improve in addition to extending the Nottingham Express Transit (NET) tram system. These improvements are essential to ensuring the equitable spread of economic benefits throughout the region, allowing the East Midlands HS2 hub to develop into an excellent interchange between HSTs, classic trains, the tramway, buses, cars and bicycles.

Midlands Connect can act as an important platform to address these challenges using the knowledge built up in the joint Local Transport Plans of Derby, Nottingham and Leicester.

#### Toton and the City Region

As illustrated by the European examples the ITC has explored<sup>36</sup>, the primary function of a regional station is to offer high frequency HSR links to major centres of agglomeration and



- 35. Midlands Connect, see page 27
- 36. See footnote 1

#### Context

The proposed East Midlands HS2 hub is located on the western edge of Nottingham. Like Crewe this station can be characterised as a regional station since it does not stop in a city centre but it is able to serve three major East Midlands cities: Nottingham, Derby and Leicester to the south. Together these cities possess great assets in terms of their advanced manufacturing and transport industries, universities, landscape setting, and their history

The existing rail infrastructure connects the two cities of Nottingham and Derby to other UK regions via the Midland Mainline and East Midlands train services, offering direct links to London via St. Pancras and King's Cross railway stations. The rail infrastructure in the region was also designed for freight transportation, and there is scope to improve this.

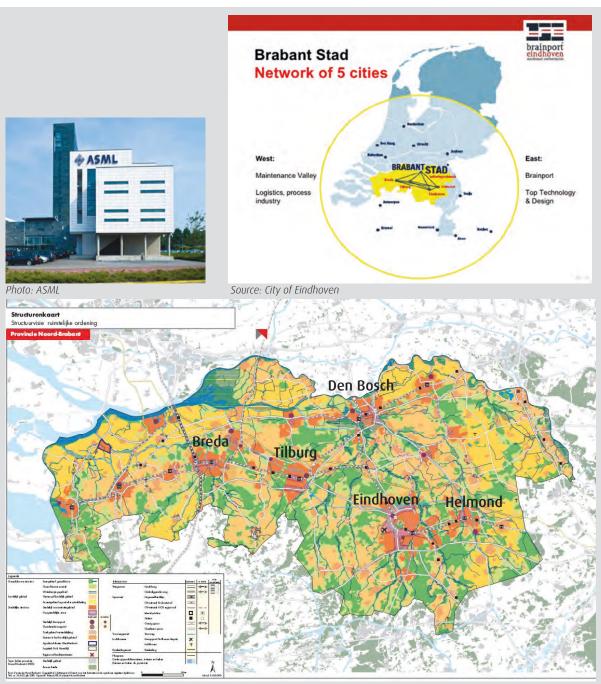
The location offers the opportunity for passengers to interchange with classic rail services, although time distances by rail from stations in the region to Toton are not (yet) competitive with travelling by car (40 minutes for 16 kilometres (10 miles).

The East Midlands authorities are taking part in the Midlands Connect<sup>35</sup> collaboration on transportation.

The East Midlands has a lot of rail infrastructure built for freight with a scope to improve it. Midlands Connect can explore the opportunities of this network.



"The new East Midlands Hub will vastly improve connections across the East Midlands", Source: HS2 Ltd



Source: Provincie Noord-Brabant

#### Collaborative Planning in Poly-centric City Regions

The Province of Brabant in the South of the Netherlands contains four equally sized cities, each with their own employment base, education and distinct city centres. With the loss of their former industries (Philips electronics, textiles, leather, and arms) in the 1960s and 70s, they each competed in trying to attract new businesses in the services sector, high-tech and computing. After none were terribly successful they decided to create a collaborative economic development strategy in the 1990s, resulting in a regional spatial plan. The cities emphasised their distinctiveness in heritage, living environment, education (resulting in complementary specialisms in their schools and universities) and business opportunities. Together, they were able to lobby for much better transportation links into the Randstad and Belgium, a special link into the HSR connection between Rotterdam and Antwerp, improved direct rail connections to Schiphol Airport and Amsterdam, and a new autonomous vehicle pilot to Hasselt in Belgium. Together they participated in a representative but informal board to negotiate with the national government and started branding their region as Brabant Stad.

the wider regional economy. This requires excellent accessibility from throughout the region, connecting to the new HSR hub, which serves as a place of departure. But to allow further economic benefits to be equitably spread into the region it is necessary to maximise the accessibility of the core city centres from the HSR hub, establishing a new Place of Arrival. As explained in 3.8 Concluding Principles, for the East Midlands it is important to understand the difference in characteristics:

- The first a Place of Departure is relatively easy to achieve and can draw from the existing experience of developing parkway stations. These are mainly car-orientated stations that risk undermining the viability of surrounding public transport links: in the case of East Midlands, the station is located in close proximity to the M1 and existing train services are slow. A Place of Departure means that it will not be a destination in its own right but a place to depart from either by train or car, rather than stay.
- The second a Place of Arrival has few exemplar cases elsewhere, but seems possible in this specific case once the existing regional assets are further developed. Understanding that HSR passengers arriving by long-distance trains expect to transfer easily to regional modes of transport, an integrated and well functioning local transport network will be essential to develop in parallel to the construction of HS2. When Toton is able to develop specific services such as short-term workspaces, meeting places and specific business services (showcase space, meeting rooms, printshops), it can become a destination in its own right and also serve the region with additional, complementary services, centrally located and accessible. Amsterdam Schiphol Airport could be studied as an example of how it has become a Place of Arrival – a destination in its own right offering complementary services to the surrounding cities and businesses.

Since 75% of the population of the East Midlands lives in smaller settlements often lacking good train services, the car will remain

#### Incremental development

As explained on page 48, Avignon is only now entering the second phase of its station area development. The first stage involved building the new HSR station, which was unconnected with any other mode of transport beside the car. The design of the station was excellent, using glass as if resembling a conservatory in Kew Gardens, and set within a beautifully landscaped garden. By improving the conditions for development around the station and creating better links into the classic (regional) rail network the station area becomes increasingly attractive for situating workplaces and housing. The design of the original, seemingly oversized, station and the high level of commercial activity inside the station help to support the attractiveness of the area. The design was not one of a city centre station, but set the tone as a proud and luxurious regional station, used now extensively by people travelling to their weekend houses in Provence.

a key 'feeder' of passengers into the classic and HSR services. Adequate parking space around the HS2 and classic rail stations will therefore be essential in the near future. This will impact on the spatial attractiveness of the station environment and therefore extra attention should be given to how to blend such parking provision into this environment.

### How to Avoid Internal Development Competition: Intensifying the East Midlands

The HS2 station site at Toton is surrounded by considerable space available for development.

The site is located at the western edge of Nottingham and an extension of the tramway is planned. It will create the opportunity to develop this area with direct accessibility to the Nottingham city centre. But the other cities – Derby, Leicester, Loughborough and other smaller places – offer space for development as well.

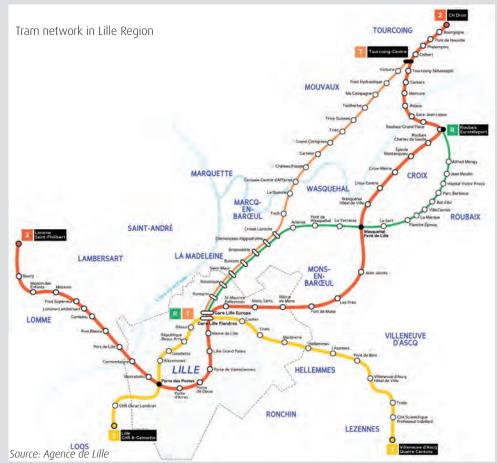
Against a background of spreading equally the economic benefits expected from HS2 across this polycentric city region, it will be important to prevent internal economic competition. Mapping the available space in the region as part of a well-considered regional economic vision can help to prevent overly scattered competitive development which might result in no real beneficiary. The strict phasing of availability of land should be part of such vision.

### East Midlands as a Polycentric City Region: Enhancing the City's Distinctiveness

As mentioned above, the East Midlands offers a variety of assets from its specialised manufacturing industries, transport industries, space science centre, universities and the cities' distinct heritage. Although the East Midlands has about 4.5 million inhabitants<sup>37</sup> the four principal cities of Derby, Leicester, Lincoln and Nottingham comprise only 1 million of that, because the region is one of a scattered rural landscape with urban nodes. Places of employment are relatively equally spread throughout the region. Consequently, the car use is high and people are not focused on one 'central' city but travel criss-cross throughout

the region and beyond.

Creating a narrative for the East Midlands that expresses each city's distinct characteristics, opportunities and talents can help to communicate these distinctions and build new economic and cultural activities. 'Re-inventing' the intrinsic value of each place and collaborating on a common narrative instead of competing over similar functions could lead to a more prosperous region. Developing the distinctiveness of city centres can support a stronger economic profile in each place and create competition based on their intrinsic values rather than on the price of land or mere accessibility. This will enhance the benefits from classic rail and HSR connectivity.



#### Collaboration in a polycentric region

Lille is the label and capital city of the Lille Region, a polycentric region with five cities and numerous towns and villages with a total population of over 1 million. All places are very distinct, however they share a history of industrialisation, mining and of its decline in the 1970s. Collaborating on various themes and litterally connecting all the places in the region to the Lille TGV stations delivered a renewal in economic activities. Although still a long way to go is this collaboration has already led to growth in prosperity. and led to prosperity again.



Midlands Connect - Delivering a Transport Strategy for The Midlands (October 2015)

- 37. www.ons.gov.uk/ons/rel/regional-trends/region-and-country-profiles/key-statistics-and-profiles--august-2012/key-statistics---east-midlands--august-2012.html
- 38. See: www.emcouncils.gov.uk

### East Midlands – Collaborating Beyond Transportation

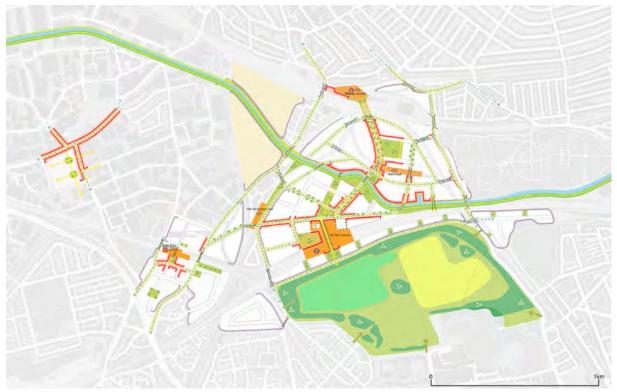
In the East Midlands two relevant platforms for collaboration on transportation have been established in recent years:

- The East Midlands HS2 Strategic Board, which has been working for over two years to develop regional consensus on the implementation of HS2. This board is comprised of 43 Local Authorities in the East Midlands and its purpose is 'to provide strategic political guidance for the delivery of HS2 with the aim of maximising the economic benefit for the region'<sup>38</sup>. Achieving consensus from such a high number of stakeholders is challenging.
- In October 2015 Midlands Connect was launched as a collaboration between LEPs and Local Authorities throughout the Midlands (West and East) in an effort to reach a unified position on the strategic transport interventions required to maximise the growth potential of the area. Midlands Connect will act as a platform for engagement with Government, taking forward both Sir David Higgins' recommendation to develop a joint HS2/Network Rail Integrated Plan and the work undertaken by Lord Deighton's Growth Taskforce with its resulting HS2 Growth Strategies. It will also act as a vehicle for the delivery of emerging proposals for a devolved local rail network in the Midlands.

As elsewhere in England, city and regional collaboration on transportation can lead to a more holistic approach for achieving better integration of different modes of transport. Especially in London (Transport for London) and Greater Manchester (Transport for Greater Manchester) the combined transport authorities can also deliver spatial plans using transportation as one of the key drivers for urban development. In the case of East Midlands this approach of combining transportation and urban planning is highly recommended and the initiative of Midlands Connect is therefore promising.



Old Oak and Park Royal Project boundary projected on the existing situation, Source: OPDC



Old Oak Masterplan, Source: OPDC

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### 3.7 London Old Oak Common

In November 2015 the ITC, in partnership with Transport for London (TfL), hosted a symposium<sup>40</sup> focusing on Phase 1 of HS2 that explored the relationship between London and Birmingham and the opportunities for supporting each other through collaborative working in order to capture the direct and indirect opportunities created by transport infrastructure investment.

The objectives of the Symposium were fourfold:

- Reinforce London's role as a world-class city by looking at how it can support the UK's regional cities when competing with their European peers and in so doing enhance London's reputation as a global capital;
- Identify the opportunities arising from connectivity, collaboration and cooperation within and between regions to improve and enhance livelihoods;
- Articulate shared goals and actions and the added value that inter regional investment and collaboration might bring; and,
- Develop relationships and build networks to share experience over the early stages of the project.

#### Old Oak Common as a Distinct Place

London is very distinct from other smaller European cities since it contains within its city centre multiple 'villages' with unique identities and characteristics (The City, the Inns of Court, 'Clubland', Westminster, the West End). The size of London's agglomeration might be the reason for this since it functions not only as the capital of the UK, but also as a Global Capital. Interestingly, most boroughs, often originally independent villages and towns, have kept their distinct character, whereas in other European cities these city extensions are sometimes rather indistinct. For Old Oak Common the challenge is to develop into a distinct

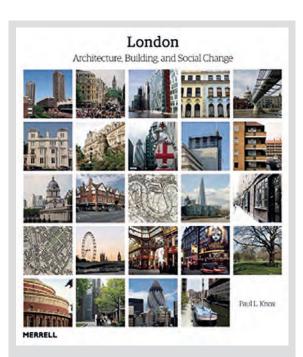
- 39. www.Crossrail.co.uk
- 40. ITC HSR London Symposium: Increasing Competitiveness by Collaborating Across Boundaries, 11 November 2016

#### Context

Old Oak Common, situated in Northwest London, is set to become one of the best connected development sites in the UK. This location will provide an interchange between HS2, Crossrail<sup>39</sup> and Great Western Main Line services, including those operated by Heathrow Express and Great Western Railways. The HS2 station will be linked closely to stations on the London Overground and London Underground networks and Govia Thameslink Railway Southern.

Old Oak Common as a development area is a major transport hub even without HS2, but its development will surely be accelerated by the arrival of the HS2 station.

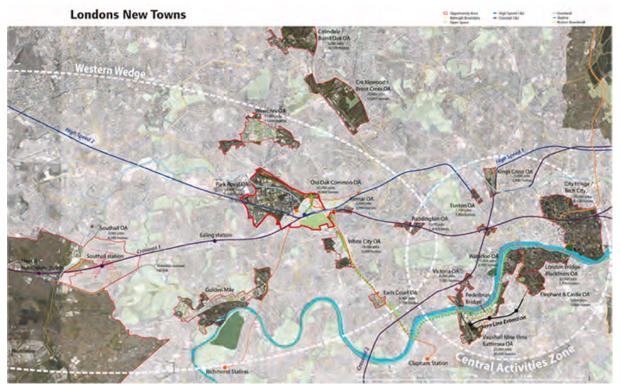
The area, located to the north of Wormwood Scrubs, is known for its railway depots and train maintenance sites. Old Oak Common is the last HS2 stop before terminating at Euston station in the heart of London.



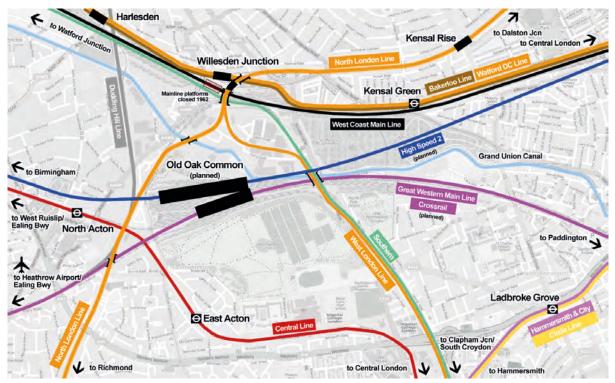
#### Distinct Place in London

"London, a fascinating metropolis not just in terms of its history and landmark buildings, is also a city that grew out of villages. Its unique geography is expressed in a mosaic of districts, each with its own distinctive character and pedigree."

London - Architecture, Building and Social Change, Paul L. Knox, Merrell London New York (March 2015)



London New Towns, Old Oak Common relative to the Central Activities Zone and in the Western Edge, Source: OPDC



"Old Oak Common is one of the best connected places in London", Source: OPDC

### An Inclusive Process Over a 30-year Period: Beginning with a Charrette

Around 50 members and contacts of the Grand Union Alliance participated in workshops and planning sessions at the Old Oak and Park Royal Charrette on 5 December 2015<sup>41</sup>. Through workshops and hands-on planning groups they discussed key issues in relation to the development of Old Oak and Park Royal including how to shape a future strategy for community participation over the next 20-30 years to ensure "opportunity for all". A key aim was to enable the community to better and more positively respond to the forthcoming Old Oak and Park Royal Development Corporation Local Plan consultations.

#### Key outcomes included;

- The need for effective community and business involvement in developing the proposals and in using the new developments;
- The need to balance the global city development values with appropriate local neighbourhood aspirations;
- The importance of protecting existing facilities and land uses while at the same time delivering a balance of employment space, housing, green spaces and amenities to serve local needs; and,
- The importance of developing walkable neighbourhoods and a sustainable movement network within the Opportunity Area and connecting neighbouring communities.

area of London with its own character while spanning three boroughs – where, in 30-years' time, people will recognise immediately when they disembark from the train. The opportunities are evident from the site's fantastic connectivity to places in Greater London, as well as to Birmingham and the North via HS2. Unlike examples of generic city extensions, Paris Austerlitz and HafenCity Hamburg have established their own distinctive city characters, creating a sense of permanence and a brand new city quarter. Similar developments are the IJ-Islands in Amsterdam and Malmö Western harbour, although these examples are much smaller and lower density.

#### Old Oak Common as a Gateway for the North

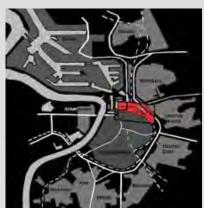
Where the grand stations in London once proudly represented the regions they serve, and with St. Pancras International and King's Cross seeing a revival of this 'grandeur', Old Oak Common has the opportunity to also become a gateway for the North. This representation does not exist in a station building, but can be expressed by activities (businesses, education, culture). Similarly this can happen at the other end of the line where London presents itself in each HSR station neighbourhood. Showing mutual respect whilst enhancing the local economies by showcasing each other's assets.



Impression of the HS2 station at Old Oak Common, Source: OPDC



Impression of the Underground and HS2 station at Old Oak Common, Source: OPDC



Derelict railway yards in the northeastern part of the city centre, Source: City of Antwerp



Site in 1990, Source: City of Antwerp

#### Turning Rail Investments into City Renewal Opportunties

From the 1990s the City of Antwerp decided to regenerate the northeastern part of the city centre to attract people into the centre again. Parallel to the development of the Antwerp Central Station into a through station and its consequent reorganisation of the railway routes around the city centre, 24 hectares of derelict railway yards could be redeveloped into a 18 hectares park and 6 hectares for new highrise housing development. Together with the 'acupuncture housing project' (see page 31) and the redevelopment of the riverside a huge number of houses was added to the city centre. The new Park Spoor Noord offers the necessary recreational space to the intensified city centre.

Source: City Planning Administration City of Antwerp



Park Spoor Noord at the opening in 2009 (design Secchi and Viganò, Milan), Source: City of Antwerp

# 3.8. Learning from Experience: Concluding Principles

From the workshop discussions, the ITC has drawn together five principles that are essential for getting the UK's city regions 'HS2 Ready':

#### 1. Be Responsive to Change

In the UK, HS2 is expected to be a catalyst for economic growth in our cities and regions. With time, the investment in HSR throughout Europe is perceived to have benefitted the locations served. It has been over 50 years since the HSR network in France was first conceived, when the first line between Paris and Lyon began operation in 1981. Both the network and the way it is used have changed dramatically since that time due to changes in society. Changes have included: a growing population leading to growing conurbations, changes in the way we work, the growth in car and aviation travel which in turn impacts rail travel, and the emergence of the Internet which has led to a new interface with passengers via the smart phone. Building major infrastructure is a long and gradual process resulting in a fixed physical infrastructure network. Cities, however, are continuously changing. Over time the fixed infrastructure needs to be adaptable to changing lifestyles, expectations and ways of operating.

To better understand the process of continuous change, it is important to draw on this valuable experience if the UK city regions are to achieve successful economic growth from HS2. The two key actors to respond to change are:

- The rail providers and operators and the station area developers. They need to collaborate and cooperate to create a 'malleable system' that:
  - can adapt to future changes in demand and operations;
  - permits adaptations in order to integrate with the existing rail network that in turn improves transportation in the wider region; and
  - creates opportunities for spatial developments around the stations that will benefit the city region and beyond.

2. The city and its region. They need to provide a long-term perspective to start capturing the benefits from HSR today, setting the principles and values along which future developments can happen, and creating an open, flexible plan allowing for future integration. In Bordeaux and Utrecht we have seen that, by planning regeneration projects early, these cities have reaped dividends well before the arrival of HSR infrastructure. Bordeaux enjoyed a High Speed Train (HST) connection (TGV) to Paris two decades before it got an HSR (LGV) line.

These actors have to agree on the authority or body that will lead and manage the process of delivery through a combination of regulatory controls and an inclusive process of coproduction.

#### Managing Change

In the City of Utrecht, the renewal of the station area (including building a new station, the renewal of a 1980s shopping mall and the redevelopment of the national exhibition centre, including the necessary improvements of infrastructure and public realm) is a process of change that started in 2000 and will continue until at least 2020 before major construction will be finished. The Project Management Office for the development area designed a strategy to address this lengthy period of political and economic uncertainty, disruption, speculation and blight. This example illustrates the importance of managing expectations by involving people in the process, identifying the steps required, addressing the (temporary) consequences felt, offering the opportunity to take site walks, and explaining and celebrating the highlights of the development. All of these actions have helped to facilitate a better understanding of and stronger support for the lengthy development process.

The relationship between city authorities and landowners has evolved into what can be described as 'a loyalty-card type agreement'. This involves the city encouraging landowners to support the city's longterm strategy by offering short-term development opportunities including temporary uses of buildings and land.

#### 2. Make the Place a Catalyst for Growth

The full benefits from major infrastructure investment<sup>42</sup> will not be captured unless it serves a place that has vitality – a place where people want to visit and stay. In Birmingham and Sheffield, major regeneration projects have already been initiated<sup>43</sup> that aimed to trigger an urban renaissance and that have supported a major restructuring of the public realm. However, in both cases there is still much to be done, including repurposing under-utilised buildings, and completing well-formulated plans. Places we enjoy and return to have a sense of continuity whilst adapting and being refreshed by the changing activities around them. The arrival of HS2 may still be 10-15 years away, but now is the time to develop the identity and quality of the existing destinations with small-scale initiatives that will strengthen a sense of local pride, broaden the diversity of city activities and accelerate structural socio-economic change by the time HS2 arrives.

In assessing the economic viability of proposed infrastructure investment, the additional value captured through the uplift in real estate value is often cited as evidence. However, before such value is captured it must first be created, not merely through construction but also by nurturing the sense and quality of place, and identifying what is distinctive about each city and region.

This is supported by developing a stronger understanding of a place's heritage and history in order to define its special identity and to establish a shared vision for the future.

#### 3. Be Connected and Accessible

From the perspective of the city regions, the importance of good connectivity between HS2 and local and inter-regional transport was seen as a high priority if the added value from constructing HS2 was to be captured. Good connectivity was recognised as strong interconnectivity between the High Speed and classic rail networks to allow for long-term operational flexibility, and also the ease by which passengers could move between different modes of transport. In Leeds, the Chamber of Commerce and Civic Trust (Connecting the

#### Value of Place

Peter Saville, Creative Director to the City of Manchester, suggests that "unless you can articulate the value of a place in the now, then it will not have a future and it will be on the road towards a gradually declining sense of relevance". When he began this innovative role with Manchester the city took pride in its heritage as the "first industrial city" which "was the essential provenance of the city". Today, from its origin as the world's first industrial city, Manchester has developed an ambition to become the "original modern city" as it faces the future<sup>44</sup>.

#### **Invest in Place**

Although Bordeaux had been connected with High Speed Trains to Paris since 1989 (using the slower classic rail line from Tours onwards) it struggled to attract investors from further afield. The lack of developable land and the car-dominated public realm hampered Bordeaux's attractiveness. The city then understood that it first had to invest itself in improving its public realm and public transport system, thereby creating an interesting and attractive place for people to come and stay. By investing in a whole new tramway network, which necessitated a redesign of the squares and streets and allowed for intensification of development alongside the tramline, the city created more attractive conditions for private investors and developers. The city's strategy and its growing popularity as a place to invest have come to validate the decision to complete the HSR infrastructure from Tours to Bordeaux.



Photo: Henk Bouwman

#### Station Connecting Classic and High Speed Rail

The City of Antwerp insisted on integrating its new HSR line into the existing terminus station in the city centre. It has led to a station that is operational on three levels with the terminating classic rail services using the existing elevated level, a through-line (HSR) using a tunnel situated underneath the station and the city, and new street-level platforms for additional classic rail lines. This solution has created an excellent interchange for regional, intercity and High Speed connections.



Source: City of Antwerner



Photo: Henk Bouwman

- 42. High Speed North, Part 1: The North in Perspective, National Infrastructure Commission, (March 2016)
- 43. Birmingham, Highbury Initiative, (1989) and Sheffield, Heart of the City, (1998)
- 44. 'Peter Saville in conversation with Matthew Taylor', RSA Journal, (Issue 3, 2015)
- 45. Connecting the Northern Powerhouse High Speed Rail for Leeds City Region: Rethinking Leeds HS2 Station, West and North Yorkshire Chamber of Commerce (July 2015)

Northern Powerhouse<sup>45</sup>), in dialogue with the city and region, applied these principles in their well-considered proposition to integrate HS2 with the existing rail station. The principles proposed have also been considered by HS2 Ltd in selecting a preferred HS2 station location.

The discussion on the location of the HS2 station in Leeds demonstrates a heartening recognition of the importance of integrating various types and modes of transport in the interest of both customers and train operators, and reflects many of the principles discussed in the ITC's report *Ambitions and Opportunities*.

In Sweden and the Netherlands an active Public Transport Passengers Board exists, supported by the rail network owner and the department for transport, which acts as a sounding board in planning processes and changing connectivity (new lines or change in operations).

Both examples, Leeds and the Swedish and Dutch Passengers Boards, support involving operators and passengers in a Design Review Panel to integrate their perspectives on travel into station design, which can potentially lead to the establishment of a permanent 'board'.

The discussions with both Manchester and Birmingham emphasised their interest in the integration of HS1 and HS2 to allow continuing services between UK cities and European destinations. In France, connecting Lille to Lyon bypassing Paris through Charles de Gaulle Airport has created new business opportunities in logistics for both cities.

The Crewe-Stoke branch has been brought forward in the construction programme as Phase 2a, thereby providing an opportunity to connect with the classic rail network at Stoke. Crewe will be an integrated throughway station for both HS2 and Network Rail infrastructure providing seamless passenger interchange onto classic rail services to Liverpool, Preston, North Wales and Scotland.

### 4. Make Stations as Places of Arrival and Exchange

A new station typology is emerging as a place of interchange, exchange and transition. When located in the centre of a city, the station acts as an icon for the city and region (as in Rotterdam), a throughway, and a place of exchange (in Antwerp and St. Pancras over 30% of the footfall is from those who are not travellers). The station is one of the most densely used places in the city and its immediate surroundings are a prime location for the exchange of goods, ideas, services and public engagement (Antwerp). The central city station, similar to an airport terminal, has the potential to generate income and contribute to funding non-operational functions like shops, services and child day-care that enhance the quality of place and the identity of the city.

Good examples of well-integrated and enjoyable stations as a place in their own right are Antwerp and Rotterdam Central Stations, both offering fantastic interchange facilities and widely recognised as great places to come and dwell. Also, St. Pancras International has become a destination in its own right, although the integration with its surrounding neighbourhood is somewhat constrained by road traffic.

At the periphery of the city, the station – unlike some current parkway models (Ebbsfleet or Avignon) which are merely giant car parks – should aim to provide excellent public transport connections, be conveniently linked to a variety of modes, and act as a place of interchange and exchange.

#### 5. Collaborate to Succeed

From the regional workshops, it was clear that city regions gained distinct advantages when they had common economic interests, shared values and an integrated transport authority. These attributes were particularly recognised by the business community and by city officers. It was also understood that greater collaboration would be necessary in order to persuade central Government to give them more control over their resources. Some local stakeholders in the wider regions, however, were concerned at the potential loss of identi-

#### **Understanding Place**

In the HSR workshop at The Academy of Urbanism Annual Congress in June 2015, Bob van der Lee, Director of Total Identity (an international branding consultancy) stated that the quality of the station as a Place of Arrival and Exchange is more important for creating a lasting positive image of the city the station serves than the use of that station as a Place of Departure. Quality of design, ease of wayfinding, convenience, and how the station is integrated into the surrounding urban structure are all crucial elements in developing a positive image of the station and city. Manchester, Leeds and Birmingham will each have a city centre station, and one of the key challenges will be to optimise their station's functionality as an interchange between various modes of transport. The new stations should celebrate the city region's assets and communicate the opportunities of the wider region as a quality place to work, learn, enjoy and live.

We have defined two types of stations in terms of Place:

The first – a **Place of Departure** – is relatively easy to achieve and can draw from the existing experience of developing parkway stations. These are mainly car-orientated stations that risk undermining the viability of surrounding public transport links. A Place of Departure means that it will not be a destination in its own right but a place to depart from either by train or car, rather than stay. In most examples around Europe this model has not resulted in sustainable economic development for the region. Examples of this station typology are: Lyon Airport St Exupéry, Lorraine TGV, and Paris Charles de Gaulle Airport TGV Station.

The second – a **Place of Arrival** – understands that HSR passengers arriving by long-distance trains expect to transfer easily to regional modes of transport. An integrated and well functioning local travel network will be essential in parallel to the construction of HS2. This type of station offers specific services such as shortterm workspaces, meeting places and bespoke business services (showcase space, meeting rooms, printshops, etc.). It can become a destination in its own right whilst also serving the region with additional complementary services that are centrally located and super accessible. Many European city centre stations like Gare du Lyon, Rotterdam Central, Antwerp Central and St. Pancras are Places of Arrival. But also Amsterdam Schiphol Airport has developed into a Place of Arrival - a destination in its own right offering complementary services to the surrounding cities and businesses.

There are many examples of stations where all modes of transport are integrated effectively, thereby offering the convenience and reliability of 'getting around' the region while offering a viable alternative for the car. Examples include: St. Pancras/King's Cross with its interconnecting HSR, classic rail, Underground and taxis; the 'Public Transport Terminals' in the Netherlands with all means of transport 'under one roof'; Amsterdam Schiphol and Charles de Gaulle Paris Airports which combine within the airport High Speed and classic rail as well as regional metro and bus links.

#### **Successful Collaboration**

Lyon as the French twin-city of Birmingham has established a metropolitan structure, Métropole de Lyon (also known as GrandLyon), since it realised the benefits of collaborating with its neighbouring municipalities. This involves:

- Bringing together the various distinct municipalities thereby offering a richness in quality of life;
- Developing shared policies on affordable housing, education, services, and specifically on a regional public transport network;
- Being able to carry a stronger voice as France's second city to central Government;
- Establishing a distinct economic and cultural position compared to Paris, not competing but being complementary to Paris; and,
- Creating improved opportunities to apply for European funding/subsidies.

Lyon has become the icon for the region, as a result of the process of collaboration, but also as a result of continuously adapting and improving its long-term vision for the region and its distinct cores since the 1970s. GrandLyon has managed to reinvent itself time after time and it sees an increasing number of international tourists celebrating the great places that are spread around the region.



ty that could arise from decisions being made in the city that now represented their region. In some cases, the administrative boundaries proposed do not always reflect how the region is perceived by its residents (Sheffield and East Midlands). For example, people from Nottingham may not identify with an East Midlands region, or people from just outside Sheffield might identify with the rural Peak District rather than a South Yorkshire city region. A further complication is that many administrative boundaries have frequently changed, thereby blurring the lines that carve up geographies into administrative areas. Based on European experience, a coherent city region 'label' that encourages economic and cultural collaboration between places has widespread benefits. In many of the continental European examples we explored, the fact that administrative boundaries exist over centuries rather than decades offer certainty in decision making for both businesses and authorities.





Fieldtrip to The Netherlands February 2014, Photo: Honoré van Rijswijk

ITC **66** 

### 4. An Agenda for Action

The ITC's report Ambitions and Opportunities explored the experience of HSR in Europe and highlighted the differences between High Speed Trains (HST, ie. the TGV service in France) and High Speed infrastructure (ie. the French LGV network). Our report concluded that the construction of High Speed 2 (HS2) should be framed as a means of improving the UK's rail network in order to meet the challenges of the next hundred years<sup>46</sup>. This was placed in the context of Britain's changing urban geography, which is increasingly centred on two mega conurbations: London (and its hinterland in the South East), and the 'Peak Ring' to the North<sup>47</sup>. The report concluded that "HSR has brought economic growth and prosperity only when it was locally embedded in a long-term greater vision, supported by local stakeholders, communities and government institutions, often as part of a wider regional planning agency, such as the Northern wing of the Randstad or the Metropole agency of Grand Lyon".

Our conclusions on issues to be addressed and actions to be considered focus on the need to **collaborate** to enable better **integration** that supports the development of **successful places**.

This section concludes with some recommended actions that central Government, regions, cities and their citizens might initiate to capture the direct and indirect value from infrastructure investment.

#### 4.1 Integrating Systems

Experience from Europe shows us the value of thinking holistically when planning transport connectivity. In France SNCF was responsible for both High Speed and classic rail infrastructure and stations, whilst also operating train services with other European operators. In the Netherlands Prorail is, like Network Rail, responsible for the rail infrastructure and station buildings. But there is also close collaboration between the service operators (trains, stations, other services like taxi and bicycles) on

various issues including safety, checking tickets and developing passenger interfaces (such as apps and public relations).

Integrated thinking provides opportunities both in the construction of the infrastructure and the operation of the systems. What opportunities are there for existing Network Rail infrastructure, railways and stations to be utilised, and how can we ensure that the rail system has the flexibility it needs to be 'future proof'? There is a danger that severe cost-cutting at the outset of a major infrastructure project reduces future adaptability in the network, resulting in high costs later. How can the services provided by new station development be used by other developers who come later?

### Rotterdam Central Station City Lounge as Result of Integrated Thinking

Rotterdam central station provides an example of a station that has successfully integrated two separate sources of funding, operations and ownership into one coherent design. The existing station platform area has been upgraded and enlarged for use by both international High Speed Trains as well as local and regional services funded by Prorail and the state. The "City Lounge" at the front was jointly funded by the state and city governments and provides a symbol for the city and its wider region.





<sup>46.</sup> Ambitions and Opportunities, chapter 2. Investing in Rail Infrastructure, ITC (November 2014)

<sup>47.</sup> Ambitions and Opportunities, page 24-25, ITC (November 2014)

#### 4.2 Collaborate to Compete

To achieve the full value and long-term benefits from investment in HS2, inter-regional cooperation to support collaborative working will be required in order to provide integrated connectivity between and within the regions.

**Cooperating** Working together towards common goals

To ensure that the insights and energy generated by *Ambitions and Opportunities* and the subsequent dissemination phase are realised, the ITC proposes the establishment of an HS2 Cities Forum to provide a "platform" for open dialogue as well as collecting examples of best practice.

#### The Importance of National Civic Institutions

The role of civil society and civic institutions with a long-term commitment to the success of their city has been recognised. As the process of disseminating the insights from *Ambitions and Opportunities* has been developing, relationships have been formed with the Royal Society of Arts (RSA), The Academy of Urbanism (AoU), the Urban Land Institute (ULI) and the Place Alliance (UCL). Each has a national membership representing civil society and a wide spectrum of communities of practice. In addition, the Centre for Cities has been approached to act as a central data source and an "observatory" for benchmarking performance.

The proposed goals of the Forum are to:

- Reinforce the vision of a successful and well connected network of distinct city regions.
- Support the collaboration within regions so they can compete more effectively in European and global markets.
- Raise awareness by eveluating past successes and failures and sharing experiences.

The Forum should be:

- Inclusive providing the platform to bring together the resources from the public and private sectors, providers and civil society.
- Self-organising supported by a not-forprofit service company. Future of London provides an excellent example.

**Future of London** (www.futureoflondon.org.uk) was initiated by the GLA as a not-for-profit business with the role of establishing a network, building capacity and sharing best practice within its boroughs. Future of London provides an excellent example of how a sharing network could be self-supporting with core support from public sector members and project sponsorship from private sector partners.

The issues we have identified that that could gain from cooperation between city regions are:

- Reinforcing the energy and knowledge represented by civil society, a number of which have established national networks (RSA, Universities, Chambers of Commerce, the AoU);
- Providing a long-term inter-regional perspective that explores the importance of relationships between the Northern Powerhouse, the Midlands Engine and London and its wider South East conurbation; and,
- 3) The collection and sharing of knowledge.

We recognise that as capacity in the wider rail network is released, HS2 will bring benefits to a wider range of places – all Core and many of the Key Cities will enjoy enhanced High Speed connectivity as capacity in the wider rail network is released. As such, Bristol, Cardiff, Liverpool, Newcastle, Edinburgh and Glasgow (representing Scotland) will have a direct interest and much to offer this learning network.

**Collaborating** *Working and acting together on shared projects* 

At the city region level, the ITC's dissemination programme of the insights from Ambitions and Opportunities has focused on identifying what makes each of the places served by HS2 distinctive. To support the discussion, we have explored the long-term (25 year) strategic integrated plans for transport to improve connectivity, create opportunities for development, and improve links between and within city regions.

Stakeholder involvement has focused on land-holders, business, academia and civil society.

Discussions have taken place with stakeholders in the dominant city regions (Birmingham, Sheffield, Leeds, Nottingham, and Manchester) who in turn should provide leadership in ensuring events spread to other places, with the Universities and colleges as the catalyst. The stakeholder groups we have identified have a valuable role to play in acting as a critical friend, communicating proposals that have been developed collaboratively, and building the identity and commitment to an area through small-scale pilot initiatives that can test innovative spatial forms and operational structures. Capturing the maximum returns from change is achieved by both changing the spatial configuration – in its most extreme, building anew - and taking the opportunity to review and improve ways of operating.

In all the cities we visited we found an active civil society eager to contribute to the success of their city by proactively and responsibly engaging with the public authorities and private developers in co-creation and production.

London as a global city has spawned a host of civil organisations and associated networks concerned with supporting the betterment of the city. Two examples that stand out are New London Architecture (NLA)<sup>48</sup> and Centre for London<sup>49</sup> which are both a focus for debate on issues affecting the vitality of the city.

The energy, ideas and talent already exists in the localities we visited. The problem is more often finding the funding to support continuity, as well as ensuring administrative stability and implementing the aspirations of the membership. This will require action at two levels. First, within city regions, momentum and commitment must be sustained to plan. promote and deliver strategic priorities at the city region level and across key policy areas (including, crucially, spatial planning, regeneration and transport). Second, at the national level, the Government will need to establish and sustain clear frameworks for devolution as well as the fiscal conditions that will enable city regions to plan and deliver over the longer term with certainty.

#### 4.3 Immediate Actions

#### **Changing Perceptions**

In the last 100 years Britain, apart from High Speed One (HS1), has constructed no significant new railway lines. Instead, Britain has become adept at squeezing capacity out of existing systems. We are now playing a game of "catch up" to meet the increasing demands of passengers and freight. The need for additional infrastructure is recognised, and HS2 helps to meet that demand. The question is: how we can ensure that what we are constructing today will have the resilience to meet the unpredictable demands of the future?

In this period of economic austerity the Government is committed to major rail infrastructure investment. Alongside the £42 billion investment for HS2 over the next 16 years, there is a £38 billion investment programme for Network Rail over the 5-year control period 2014-19, with additional investment to follow before HS2 is complete. This commitment will ensure that we have the capacity for future generations whilst in the short term stimulating new jobs, developing skills and fostering innovation. Integrating planning and operations between our High Speed and classic networks to provide longer-term benefit is the challenge ahead.

In the last two years we have seen a shift in the way that HS2 is perceived and discussed. There is a growing awareness of:

- The value of planning holistically for a system that integrates High Speed, classic and light rail. The long-term goal of transport infrastructure is to improve accessibility to places where people wish to live and thrive. However, the outcome of such thinking is less apparent in current design proposals;
- The opportunities afforded by considering complementary initiatives. New technologies and methods of operating can help to enhance capacity and the service offer.

<sup>48.</sup> www.newlondonarchitecture.org

<sup>49.</sup> www.centreforlondon.org

Understanding how HS2 will allow for better use of the existing infrastructure will also enhance long-term resilience of the rail network;

The returns from thinking ahead and 'future proofing' our rail network at an early stage when costs and disruption will be much lower. This requires sufficient flexibility of design to respond to future needs.

To capture the opportunities from HS2 investment will require a change in perceptions by:

- Recognising transport as a means to a better city, not an end in itself;
- Understanding a changed urban landscape resulting from a network of well-connected places and the power of agglomeration.

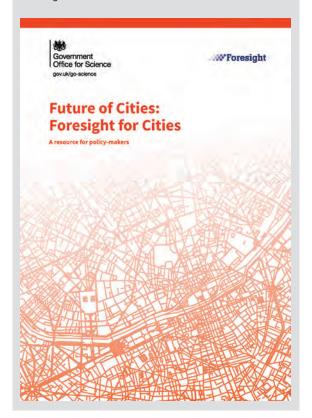
#### **Proposals for Action**

To reinforce the change in perceptions and greater public involvement the ITC proposes that:

- 1. Central Government supports the following initiatives:
- A review of the initial lessons learnt from HS2 Phase 1, which could be transferred to Phase 2 to improve understanding of how to capture the full value from the infrastructure investment. We recommend that the review is independently chaired, inclusive, intensive and involves a process of learning and developing rather than an audit.
- Learning from existing HSR led developments. Field trips, as seen with those undertaken for Ambitions and Opportunities, are valuable opportunities for collaborative learning and stimulating closer relationships between various stakeholders. We recommend additional 2-day intensive visits to those places that have experienced HSR investment.
- Evaluating the success of past initiatives through visits. We learnt from our visits in Europe that the benefits achieved were not

- always those that were initially planned. Through the process of planning and constructing HSR, perceptions change and new opportunities emerge. To understand better what benefits were achieved, in-depth visits are recommended to select cities that have already tried to capture the benefits of HSR investment (eg. Lille, Bordeaux and Rotterdam).
- 2. The City regions should focus on developing a culture of inclusive and collaborative working through:
- Supporting the creation of an HS2 Cities
  Forum. This would provide a platform for
  encouraging cooperation and the sharing
  of knowledge across the regions. It should
  be self-organising and inclusive by involving the public and private sectors as well
  as civil society.
- Understanding the UK's future connected urban economy, using the insights and tools developed by the Lead Expert Group of the GoS Foresight Future of cities project (see opposite box). We recommend a programme of workshops to develop scenarios for 2065 and explore the relationships between the Northern Powerhouse, the Midlands Engine and London, in order to understand how our future urban economies can compete and grow in a global market place.
- Nurturing Civil Society. Opportunities for drawing on the capacity, energy and expertise of civil society are clear from the UK cities visited. To capture the full potential from the capacity, energy and expertise of civil society, the potential contribution of such groups needs to be recognised by invitations by the city regions to contribute at an early stage in planning and development. This does not require formal structures but rather a culture of open engagement – "permission" to act by legitimising small-scale initiatives, as well as modest initial grants to kick start the process and encourage long-term committed leadership.

The GoS Foresight Future of Cities Lead expert Group<sup>50</sup> is a central government initiative that has developed a network of UK cities exploring their future. The outcome is an approach, alongside the necessary tools, for cities to create scenarios of shared aspirations and expectations for the future, which could become a stand alone, self-supporting service working with cities or between city regions, The insights and data collected would provide valuable feedback to central government departments as well as the cities and regions.



#### 4.4 Passing on the Baton

The workshops and discussions that the ITC has conducted over the past year have identified the great opportunities that exist to capture the wider long-term benefits from transport infrastructure investment.

It is clear that HS2 proposals have already helped to stimulate investment for better connectivity between our great city regions, recognising that the success of each place will be reflected in its separate and distinctive characteristics.

Challenges do, of course, remain. Major construction projects are concerned with fixing decisions in order to ensure certainty over delivery on time and within budget, whilst cities and the consumer often need to adapt to rapidly changing circumstances and needs. Achieving a good balance between these paradoxical demands is an important objective. Recurring themes we have identified for success include collaboration, the sharing of knowledge, recognising the range of interests in such schemes and looking outside the project for advice<sup>51</sup>.

The ITC, as a small research charity, has played a key role in capturing evidence from existing experiences of HSR investment, and helping our city regions and Government understand appropriate lessons from those experiences. The challenge now is for our great city regions to make use of these lessons in their own planning. The ITC will remain a source of advice, but will now return to focus on our core activity of exploring strategic policy issues. Through the initiatives recommended above, the ITC looks forward to passing the baton over to our great cities and regions to implement the lessons learned from the project. We would like to thank all those who have participated in this process, from Government, to city officials, to civil society, and wish all those involved with this great process every success in capturing the benefits from HS2 investment for the good of all.

<sup>50.</sup> Future of Cities: Foresight for Cities, A resource for policy-makers, Foresight, Government Office for Science (2016)

<sup>51.</sup> *Places of Connection*, Worthington and Bouwman, AoU and INTA (June 2012)

### **Appendices**

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ITC HSR Workshop in Leeds, 16 July 2015

#### **Key Documents**

#### Greater Manchester

- Greater Manchester Transport Strategy 2040: Our Vision. Transport for Greater Manchester (2016)
- A Plan for Growth and Reform in Greater Manchester. Greater Manchester Combined Authority (March 2014)
- Draft Strategic Plan for Manchester City Centre: 2015-18. Manchester City Council (July 2015)

#### Greater Birmingham

- Birmingham Big City Plan: Birmingham Curzon HS2, Masterplan for Growth. Birmingham City Council (February 2014)
- Black Country Strategic Economic Plan Made in the Black Country: Sold Around the World. Black Country LEP (31 March 2014)
- The Midlands HS2 Growth Strategy: Accelerating the UK's Engine of Growth. Greater Birmingham and Solihull LEP (April 2015)
- Greater Birmingham and Solihull Strategic Economic Plan: The SEP to Change Britain. Greater Birmingham and Solihull LEP (March 2014)
- UK Central The Interchange: Prospectus for a 'Garden City' Approach. Solihull Metropolitan Borough Council and Arup (no date)
- West Midlands Local Transport Plan: Making the Connections, 2011-2026. Centro (no date)

#### **Leeds City Region**

- The Yorkshire Hub: An Interim Report on the Redevelopment of Leeds Station. HS2 Ltd (2015)
- Strategic Economic Plan 2014. Leeds City Region LEP (March 2014)
- Leeds South Bank: A New Direction for a New Kind of City. Leeds City Council (November 2014)

#### Sheffield City Region

- Sheffield City Region High Speed 2 Connectivity: Connectivity Study Paper. South Yorkshire Passenger Transport Executive (29 January 2014)
- Strategic Economic Plan: A Focused 10 Year Plan for Private Sector Growth 2015-2025.
   Sheffield City Region LEP (31 March 2014)
- Sheffield Garden City, Options for Long-Term Urban Growth. Urbed for Sheffield City Council (November 2015)

 Delivering a Blueprint for Sheffield's Rail Infrastructure. David Hodgson (April 2016)

#### Crewe

- All Change for Crewe: High Growth City.
   Cheshire East Council (September 2013)
- All Change for Crewe: A Prospectus for Crewe. Cheshire East Council (no date)
- Cheshire East 'High Growth Region': The Evidence Base for Crewe Superhub. Cheshire East Council (28 January 2014)
- Energising The Northern Powerhouse: The Crewe HS2 Superhub. Farrells on behalf of Cheshire East Council and Cheshire and Warrington LEP (October 2014)

#### **East Midlands**

- The D2N2 Local Enterprise Partnership Strategic Economic Plan: The UK's Most Inspirational Postcode. D2N2 (31 March, no year)
- Delivering High Speed Rail to the East Midlands and Yorkshire. David J Faircloth (January 2015)
- A Flourishing Region: Regional Economic Strategy for the East Midlands, 2006-2020.
   East Midlands Development Agency (no date)
- East Midlands HS2 Hub: Maximising the Wider Regional Benefits. Farrells and Peter Brett Associates on behalf of East Midlands Councils (November 2015)

#### Old Oak Common London

- The Mayor's Economic Development Strategy for London. Mayor of London (May 2010)
- The London Plan: Spatial Development Strategy for Greater London. Mayor of London (July 2011)
- Old Oak: A Vision for the Future. London Borough's of Brent, Ealing, Hammersmith and Fulham. Mayor of London and Transport for London (June 2013)
- Old Oak and Park Royal: Opportunity Area Planning Framework. OPDC and Mayor of London (November 2015)
- High Speed 2 Growth Strategy: Connected by Ambition – Where London Welcomes HS2. OPDC (April 2015)

#### General

 Can you change government's mind on major infrastructure projects? Volterra partners (July 2015)

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#### Glossary

#### **BIS**

Department for Business, Innovation and Skills.

#### City regions

In this report, city regions refers broadly to the metropolitan areas associated with Birmingham, Sheffield, Leeds, Manchester and in the case of East Midlands, Nottingham/Derby/Leicester, rather than to defined administrative or political areas such as the Combined Authorities.

#### Classic rail

Used to refer to the existing UK rail network where the infrastructure is owned and managed by Network Rail.

#### **Combined Authority**

Under the Coalition Government (2010 to 2015) and the succeeding Conservative government, regional policy has focused on encouraging and enabling local authority areas initially in the metropolitan areas but latterly extending to more rural counties such as Devon, to combine their resources and powers in areas such as housing, skills, regeneration and transport and to work collaboratively with their Local Enterprise Partnerships (LEPs). This is supported by substantial devolution of funding. The Combined Authorities take their powers from the Local Democracy, Economic Development and Construction Act 2009

While the Greater London Authority (GLA) and the London Mayor is not a Combined Authority, its transport body Transport for London (TfL) and Transport for Greater Manchester (TfGM) have similar executive roles in their respective areas. Additionally, other Combined Authorities which were formerly Metropolitan Areas, such as West Yorkshire (Leeds), South Yorkshire (Sheffield), Merseyside, and Tyne and Wear have transport executive bodies.

#### **Core Cities Group**

A cross-party group representing the eight largest

cities in the UK outside London: Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle, Nottingham, and Sheffield.

#### DCLG

Department for Communities and Local Governments.

#### DfT

Department for Transport.

#### East Midlands HS2 Strategic Board

The Board is made up of all the East Midlands councils. Its purpose is to provide strategic political guidance for the delivery of HS2 with the aim of maximising the economic benefits for the region.

#### Europe

Used as shorthand for Continental Europe, where the ITC held a number of study visits exploring HSR systems in 2014 which were reported on in the ITC's major report Ambitions and Opportunities.

#### GoS

Government Office for Science

#### **Greater Birmingham**

The unofficial name for the anticipated Birmingham and West Midlands Combined Authority expected to cover Birmingham, Solihull, Walsall, Dudley, Sandwell, Wolverhampton and Coventry.

#### Greater Manchester

The first of the Combined Authorities that covers Manchester City, Trafford, Bury, Stockport, Rochdale, Oldham, Salford, Bolton, Tameside and Wigan.

#### High Speed 2 (HS2)

The UK Government's major infrastructure project that involves the construction and operation of a new high-speed rail line running North-South, connecting Birmingham, the East Midlands, Sheffield, Leeds, Crewe and Manchester with London.

#### High Speed One (HS1)

The first high-speed rail line (67miles/108km) to be built in the UK, linking London through to Continental Europe via the Channel Tunnel. The first section opened in 2003.

#### High Speed Rail (HSR)

Used to describe train services operating at over 125mph (200kph) that require specialised infrastructure compared with 'classic' rail in order to permit such speed.

#### High Speed Trains (HST)

Trains designed with the necessary characteristics

for operation on high-speed infrastructure (engineering and braking capability, and aerodynamic design).

#### HS2 Ltd

The UK Government-owned company, which is a subsidiary of the Department for Transport (DfT) and is charged with the development and delivery of HS2

#### High Speed 3 (HS3) also known as Trans-North

A government project taken forward by Transport for the North (qv) to improve the rail connections and journey times across the Pennines between the northern cities of Liverpool, Manchester, Leeds, Sheffield, Newcastle and Hull. The maximum line speed is expected to be 140mph, and it is expected that the route will not be physically connected to HS2.

#### Leeds South Bank

The future site of the HS2 station, it is 132 hectares of land in central Leeds with significant regeneration potential that will connect with the existing Leeds Railway Station. South Bank is expected to be an education hub and encourage clustering of creative and digital media businesses.

#### Local Enterprise Partnership (LEP)

These private sector lead bodies were set up under an initiative of the Department for Business, Innovation and Skills (BIS) in 2009 in order to encourage local business and local authorities (and now Combined Authorities) to work together to establish economic priorities and lead economic growth in their areas.

#### Local Transport Plan (LTP)

Local authorities with responsibility for transport, such as a Combined Authority, produce a long-term policy and implementation plan for transport in the relevant area which conform to statutory guidance given by the Department for Transport.

#### METRO or Midland Metro

Birmingham's tram system initially operated between Birmingham and Wolverhampton. A city centre extension is planned to open in 2016 and further extensions are contemplated as part of the Midlands Engine initiative and as a feeder to and from the planned HS2 station at Curzon Street.

#### Midlands Connect

Intended to improve transport links in the West and East Midlands areas. It is developing a long-term transport strategy and is designed to become the sub-national transport body for West and East Midlands with a similar role to that of Transport for London and Transport for the North (qv).

#### Midlands Engine

A proposal to encourage economic growth in the West and East Midlands, similar to the Northern Powerhouse concept. Midlands Connect (qv) is delivering the transport strategy.

#### National Infrastructure Commission (NIC)

Established in 2015 as a non-ministerial Government department responsible for providing expert advice to the government on the infrastructure challenges facing the UK.

#### Northern Hub

An ongoing rail project due to be completed in 2018 to improve services and reduce journey times (for example between Liverpool and Leeds) in the north of England. A number of the improvements are centred on Manchester including the construction of two through platforms at Manchester Piccadilly Station.

#### Northern Powerhouse

An initiative between central government, the Northern cities and their Local Enterprise Partnerships (LEPs) (qv) intended to stimulate the economy of the North of England and reinforce agglomeration benefits with the aim of rebalancing the country's economy.

#### Nottingham Express Transit (NET)

The Nottingham tram system, England's newest, opened in 2004 and following a substantial upgrade and extension now covers 20 miles (32km). It currently ends about 1.5 km from the expected site of the HS2 station at Toton.

#### Sheffield City Region Combined Authority

Formed in 2014, it is the Combined Authority for South Yorkshire covering Barnsley, Doncaster, Rotherham and Sheffield with representation from the non-constituent member councils in Derbyshire and Nottinghamshire which make up the rest of the Sheffield City Region.

#### TGV/LGV

Literally translated from French to 'High Speed Trains'. TGV is the name given to France's HSR system (the acronym LGV is less well recognised) and the trains that run on it.

#### Transport for the North (TfN)

The regional transport authority for the North of England whose role is to bring together the Northern transport authorities and to devise a comprehensive transport strategy for the region.

#### West Yorkshire

Formed in 2014, it is the Combined Authority for Bradford, Calderdale, Kirklees, Leeds, Wakefield, and York.





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