



Rebalancing Britain

From HS2 towards a national
transport strategy



Department for Transport

High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited,
One Canada Square,
Canary Wharf,
London E14 5AB

Telephone: 020 7944 4908

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.hs2.org.uk

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2014, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-government-licence/version/2 **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Product code: CS194



Printed in Great Britain on paper containing at least 75% recycled fibre.

Front cover images, from top:

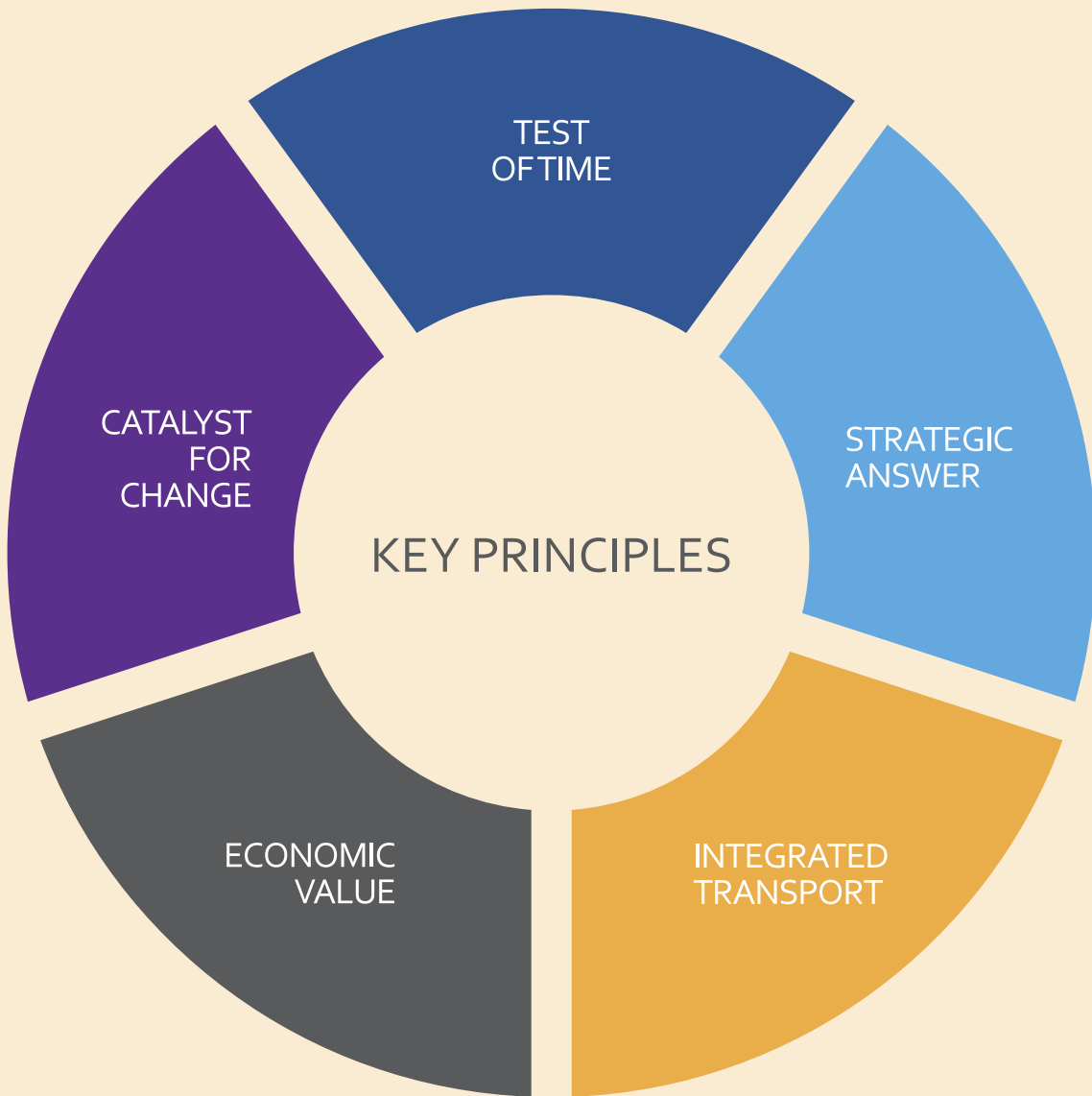
Old Market Square, Nottingham, England. © Arcaid Images/Alamy.

Newcastle upon Tyne skyline at night,
Gateshead Millennium bridge over River Tyne. © eye35.pix/Alamy.

Clarence Dock, Leeds. © iStock.

Bridge to Selfridges at the Bullring shopping centre, Birmingham. © DT Images/Alamy.

Millennium Bridge, Salford Quays, Manchester. © Robert Harding World Imagery/Alamy.



HS2 must stand the test of time



HS2 must be the right strategic answer



HS2 must be integrated with existing and future transport services



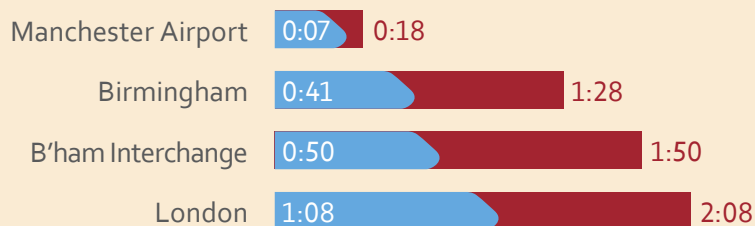
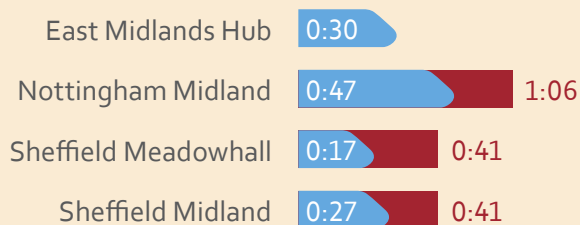
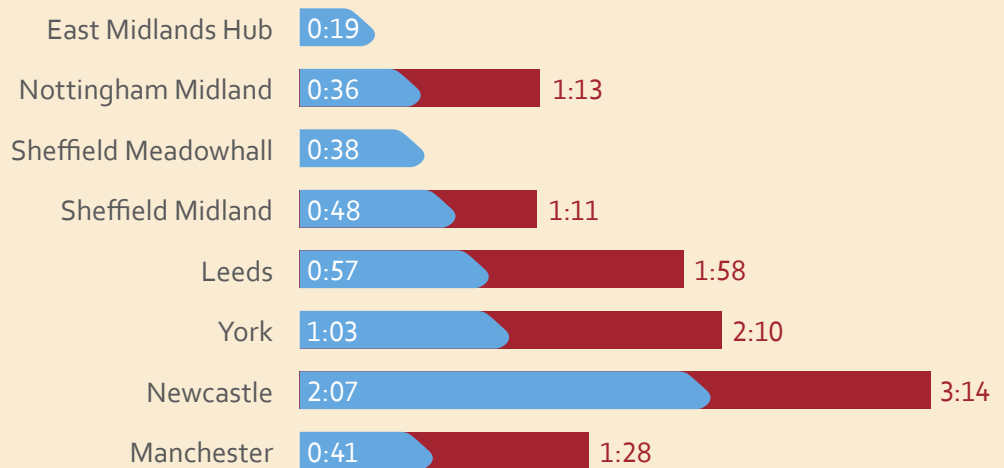
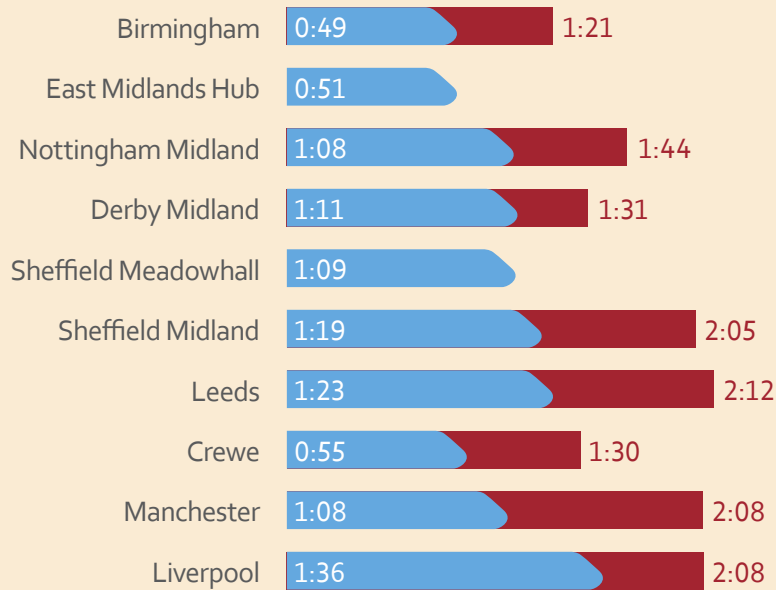
HS2 must maximise the value added to local and national economies



HS2 must be a catalyst for change, both nationally and locally

Journey times

■ Estimated journey time with HS2
■ Existing fastest journey time



Foreword



The biggest danger in any major project is losing sight of why you are doing it in the first place. Why is it worth the effort, not to mention the cost? What is the problem that it is the answer to? What is the core purpose you are trying to achieve?

Those questions, and that clarity, are particularly relevant for a project of the size, duration, complexity, impact and cost of HS2. Why is it worth the effort? What is the key problem that it is trying to address? What is its key purpose?

Whilst I believe, as I hope this report shows, that we do have answers to those questions, I also recognise we haven't always been as clear as we ought to have been in setting out that case. I hope we began to rectify that with the publication of our first report, *HS2 Plus*, in March 2014 which outlined how a combination of capacity constraints, particularly in the South, and poor connectivity, particularly in the North, were exacerbating our unbalanced national economy, which manifests itself in an overheating London and an underperforming Midlands and North.

Events since then appear to have reinforced that analysis. It was the core message of the *One North* report produced by local authority leaders across the North in August, the *Growth Taskforce Report* in March, and is integral to the plans individual cities and Local Enterprise Partnerships are producing for their areas. And in April the tone, content and result of the Second Reading vote in the House of Commons showed that MPs across all parties have grasped the huge potential of HS2. The majority of 452 votes to 41 suggests that, whilst a number of MPs have legitimate concerns both about cost and local impact issues, they also think the project is in the national interest.

But whilst there was overwhelming support for the Phase One Bill, it was also clear that, for many MPs, their support was conditional on HS2 continuing beyond Birmingham to bring its benefits to the East Midlands as well as the West Midlands – the North as well as the South. And, indeed, it was partly in recognition of that understanding that we proposed in *HS2 Plus* that we drive the line further North sooner by opening it to Crewe by 2027 instead of 2033 as originally planned.

But that report also recognised three further points. First, that if HS2 is to act as more than a capacity relief scheme, if it is to help truly rebalance and grow our national economy, then the radical reductions in journey times HS2 promises must be delivered – and delivered both in the East and the West, not to the benefit of one region at the expense of another. **Rebalancing must be done in an equitable way.**

Foreword *(continued...)*

The second point I acknowledged in *HS2 Plus* was that East-West connectivity is just as important as North-South. And that is as true in the Midlands as from Liverpool to Hull and to the North East. The Chancellor underlined the point in his Manchester speech in the early summer in which he spoke of the desire to create a “Northern Powerhouse” economy across the North to rival, and complement, London. And both he, and the Shadow Chancellor, reinforced that analysis in their support for the *One North* report which, in turn, built on the work begun by the Northern Way a decade ago. That project saw cities and regions across the North come together to address the historic underinvestment in infrastructure which had led to what they termed “market failure” in the North.

The need to recognise and respond to that wider growing consensus was the third point we made in *HS2 Plus*. Civic leaders, both in the Midlands and the North are increasingly thinking in strategic terms – not just about transport, but also their local economies and how they fit into the national picture. The same is true of civic leaders in Scotland, Wales and the North East and South West of England.

Increasingly, therefore, HS2 is no longer thought of as a standalone end in itself, but rather as a catalyst for a much bigger process of change; it is one essential element in a strategy for transforming our transport system and, therefore, our economy as a whole. And that change in mindset is what has struck me most in continuing the work of *HS2 Plus* and preparing this report.

Britain’s future is as a knowledge-based economy, whether it is in high tech manufacturing, the creative industries, finance, or law. These are the businesses in which we as a country have a competitive edge globally. But knowledge based companies need connectivity to succeed. They have to be close, or feel close, to the talent, skills base, support network, knowledge base, collaborators, clients (and competitors) necessary to create the hothouse atmosphere in which they thrive. That is why even in a high tech age, meetings matter. It is how serendipity happens. Spontaneity is easier across a table than down the line. Distance, time, overcrowding, congestion and, therefore, unreliable journeys – all are barriers to success. Perceived proximity, reliability, easy access – all help create the critical mass that leads to creativity. That is why rail passenger traffic has continued to grow above historic trend since the late 1990s. It may not be coincidental that Google has chosen to locate its new UK headquarters behind Kings Cross station.

“Britain’s future
is as a knowledge
based economy.”

That is why substantially reducing the journey times between and within our cities isn't just desirable for both passenger and freight traffic. It is a strategic necessity, just as much as creating the extra capacity that is needed to ease congestion and overcrowding. And that applies equally to East-West connectivity across the North and the Midlands, as well as the North-South links to London. Faster, more reliable, less congested services will make it easier for individual cities to pool the skills, talent and other elements they need to thrive in the knowledge economy – and to have access to their markets, whether they are local, national or international. Connectivity equals jobs. In my view, it is that simple.

One fact stands out: labour productivity in London is 50% higher than that in the North as measured by Gross Value Added per hour worked, and whilst the gap in Manchester and Leeds is much narrower, there remains a gap. Improving connectivity is one key factor essential in addressing that gap by raising our productivity, and prosperity, as a country.

That is the backdrop against which I have prepared this report. It started life as a request from the Secretary of State for an update on Phase Two of HS2. Following his speech, the Chancellor then asked me to work with Network Rail, the Highways Agency and local authorities in the North to take an initial view on how to improve East-West connectivity.

I hope I have done that, and done so applying one other principle carried over from my first report: that HS2 needs to be seen as an integral part not just of the existing rail network, but our whole transport system. I have, therefore, gone back to basics to reaffirm the rationale for what we are doing on Phase Two, and why. I did so because I think it is vital that those affected by HS2, the country at large, and indeed this and future Governments, understand not just my conclusions but the reasons why I have reached them.

While it is not discussed in this report, HS2 Ltd is preparing initial advice for the Government on the future potential to further extend high speed services to Scotland, which will be made public in due course. This report also does not prejudge the outcome of the Davies Commission into airport capacity, and hence, there is no further discussion of the previously proposed spur to Heathrow Airport.

“Faster, more reliable, less congested services will make it easier for individual cities to pool the skills, talent and other elements they need to thrive in the knowledge economy”

Summary

The rest of this report sets out in detail my thinking, but in summary my recommendations to the Government are:

- **the strategic proposal for Phase Two is right.** There should be an Eastern leg from Birmingham to Leeds via the East Midlands and South Yorkshire, and a Western leg from Birmingham to Manchester via Crewe. **Building both legs is the only way to deliver the strategic reductions in journey times and extra capacity that are needed, and to do so on an equitable basis.** In this report I propose some specific changes to the route the Government consulted on, which I believe strengthen the overall case for Phase Two.
- **the proposed hubs in the East Midlands and in South Yorkshire are, on balance, the best solutions to deliver the benefits of HS2 to their regions as a whole, and to achieve the best fit with the existing network.** There are some modifications which I describe in the body of the report.
- **the proposed North West hub should be at Crewe because that is the best way to serve not just the local region, but also provide services into the rest of the North West, North Wales and Merseyside.** I strongly recommend that its delivery should be accelerated to 2027 instead of 2033 so that the North, and Scotland, begin to feel the benefit of HS2 as early as possible. I also recommend that the possibility of running classic compatible services to Stoke-on-Trent, Macclesfield and Stockport be investigated.
- **by the time Phase Two is complete, the existing station at Leeds will need to be remodelled, so there is a clear need for a fundamental review of the best solution for the city considering growth in existing rail services, and the introduction of HS2 and potential new East-West services.** Leeds station has already seen significant growth in passenger numbers in recent years and is forecast to reach capacity in the next decade. The additional passengers that both HS2 and improved East-West services would bring into the city will only add to that capacity problem. Given the physical characteristics of the existing station achieving the best outcome will not be easy, and therefore needs to be the subject of further work by HS2 Ltd, Network Rail and, above all, Leeds City Council. We need to find not just the right transport solution, but also one that goes with the grain of the city's vision for the future of Leeds.



The strategic proposal for Phase Two is right



The East Midlands and South Yorkshire stations are best for the regions and the existing network



A Crewe hub will serve the local region and the North West



Leeds station must match the city's vision and its transport needs

- as that implies, I firmly believe that **substantially improved services East-West across the North are not only desirable, but possible.** We need to turn the aspiration into a practical plan. At present the journey from Leeds to Manchester takes anything from 48 minutes to over an hour. Initial work by Network Rail suggests that, taking into account current plans and further work, that journey times could be cut to somewhere between 26 and 34 minutes with double the number of trains per hour. That, plus further planned electrification and upgrades, would also reduce the journey time from Liverpool to Leeds from nearly two hours to one hour, and cut thirty minutes off the journeys from Manchester to both Hull and Newcastle. This initial work needs to continue, and intensify, to identify the best route, how and when it could be constructed, and its cost. This is as important to the North as Crossrail is to London.
- **that, however, should only be the first step in improving East-West connectivity across the North, not just on the railways, but the whole transport system.** Currently not only is the rail network poor, the motorway system is increasingly congested. I strongly recommend, therefore, that the Government and local authorities build on the work of the *One North* report by **agreeing a format and timetable for turning its analysis into a practical plan for the future.** I also believe that this would be helped enormously if **the major local authorities across the North formed a joint body so that they speak with one voice** on how to manage the inevitable trade-offs that will be necessary to achieve the overall goal.
- and, finally, **a challenge for HS2 itself.** Because of the legislative process, Phase Two is three years behind Phase One. We need to use that time and space to learn the lessons from elsewhere in the world where by applying new design and construction techniques, as well as private finance, high speed projects have been built quicker and for less. We need to ask how we can apply such techniques in this country.



Substantial improvements to East-West services are possible



On the roads, we have a choice: take action or face gridlock



How can we build more quickly, and for less?

Summary *(continued...)*

We should explore best practice. The current project underway in France, the Tours to Bordeaux high speed train line, which is to provide capacity relief as well as reducing journey times from Paris to Bordeaux by an hour is an example of an innovative approach to managing contractors, design and risk. This 300km project with some 400 civil engineering structures is planned to complete construction in five years, in a wider 11 year programme, and will cost around €7bn. While parts of HS2 Phase One are very different, with Old Oak Common and Euston being very complex, the sections of the route North of the Chilterns to Birmingham, and particularly on Phase Two, could benefit from delivery techniques developed on projects such as this.

The more we work on this project the more I am painfully aware of the commitment we are asking for from the country. But the more I am also convinced of the necessity of not just HS2, and improved East-West links, but, fundamentally, of the need to adopt a more strategic approach to the future of transport in this country. We need to move from addressing the issue in an ad hoc, project by project basis and be much more systematic in the way we address such issues. HS2 is a step in that direction, but it should not be the last. The discussion about how we move from a rail network designed for Victorian needs, and Victorian concepts of time, to one that matches our very different needs has only just begun. But it is a conversation that will need to continue and develop over many years, as Network Rail has recognised in its plan to launch 'Your Future Railway' – an important exercise in asking people, regular passengers or not, what they want from the railway. That wider conversation must involve the whole country, North-South, East-West, but the aim must be a much greater understanding of how the railway, transport and infrastructure can help our economy grow. It is within this context that HS2 fits. That is why I have called this report '**Rebalancing Britain: from HS2 towards a national transport strategy.**'

A handwritten signature in black ink, appearing to read 'David Higgins', followed by a long horizontal line that tapers to a point on the right.

David Higgins
Chairman

Rebalancing Britain

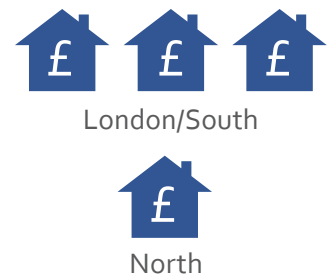
From HS2 towards a national
transport strategy

- 12 Why do we need to rebalance?
- 14 Towards a national transport strategy
- 16 Are there alternative routes?
- 22 East-West connectivity
- 28 Recommendations
- 34 Recommendations:
East-West Connectivity
- 37 A voice for the North
- 39 Conclusion

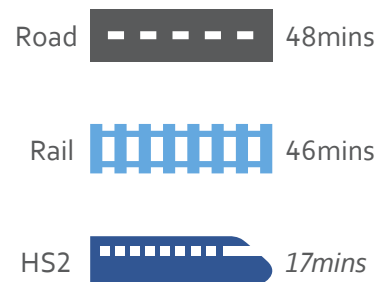
Why do we need to rebalance?

In *HS2 Plus I* highlighted the vicious circle that is threatening to make London unsustainable – both as an economy and as a place for people to live and work. The global property firm Savills said last month that London has overtaken Hong Kong as the most expensive place to live and work in the world. Londoners are faced with rising house prices that make it increasingly difficult for them to buy a home in the capital based on average wages – prices that, even for relatively modest homes, can be anything up to 10 times average salaries. The alternative is a commute on an ever more congested transport system which, despite all the money invested in recent years, is struggling to keep up with increasing demand. And, at the same time, companies are faced with probably the most expensive property prices in the world – £110 per square foot in parts of Central London. That in turn feeds through to consumers through hidden costs in the products we buy and raises medium-term questions about London’s global competitiveness. It is not coincidental that Network Rail’s headquarters is now in Milton Keynes, and the HS2 Ltd construction headquarters will soon be in Birmingham.

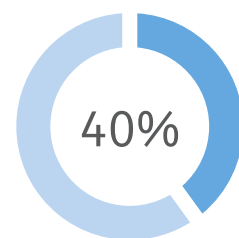
Average house prices in London and the South are three times higher than in the North and commercial property prices in the North are nearer £28 per square foot. And yet businesses are more reluctant to move there, partly because of poor connectivity both to the global market and within the region. The *One North* report showed that today’s journeys between Leeds and Sheffield require a 48 minute drive or a 46 minute train journey that could take just 17 minutes to Sheffield Meadowhall on HS2. And, without intervention, today’s poor connectivity is likely to get worse. Whilst the Government is significantly increasing spending on the roads network – and these proposed schemes will undoubtedly help at a local level – wider underlying problems will remain. The North is more dependent on roads than in the South, and yet major arteries such as the M1 and M6 for North-South traffic, and the M62 and M56 for East-West traffic are already heavily congested and forecast to become even more so. Traffic on the M6 is expected to grow by 40% by 2040 with the inevitable knock-on effects on travel times for both individuals and freight.



House price comparison between London/South and the North



Estimated journey times to Sheffield Meadowhall from Leeds



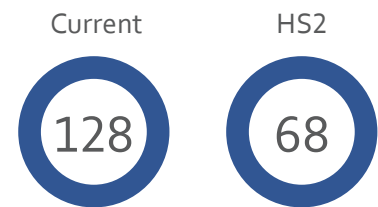
M6 expected traffic growth by 2026

So in both the North and the South the current situation is unsustainable. London is in danger of pricing itself out of the market whilst a combination of road and rail constraints is one major factor holding back the North, both through poor connectivity and increasing capacity problems on the routes into the major cities. Hence the significance of HS2 as a strategic intervention. In London it will ease the pressure on commuters by adding 18 new train paths per hour into the capital. In the Midlands and the North it will make cities more competitive by connecting them better to the global market – and to each other if HS2 is integrated properly into not just the existing rail and road network, but also improved East-West links. As the *One North* report said, that will have a multiplier effect on local economies beyond what either scheme could achieve on their own. Put simply, cutting the journey time from London to Manchester from 128 minutes to 68, or from London to Leeds from 132 minutes to 83 makes it more likely that more businesses will base themselves in the North and that existing firms will prosper. And the same is true along the route. The journey time, for instance, between Birmingham and Leeds, the centres of Britain’s largest two manufacturing regions, would shrink from 118 minutes to just 57. The effect should be transformational.

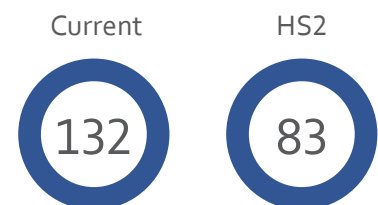
The result should be not a zero sum game in which London loses out to the Midlands and the North, but a situation in which London grows sustainably, and the Midlands and the North achieve their full potential. The country’s productivity will rise as a whole.



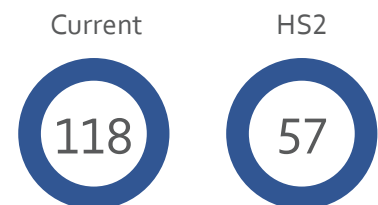
Number of proposed new train paths into London



Manchester to London journey time improvement (in minutes)



Leeds to London journey time improvement (in minutes)



Birmingham to Leeds journey time improvement (in minutes)

Towards a national transport strategy

In my first report I recognised the political vision and courage on all sides that have got us where we are today on HS2, with the clear initial backing of the House of Commons. However, I also set out why HS2 has to be seen as an integral part of not just the existing rail network, but an overall transport strategy for the whole country, something that traditionally we have been less good at. I believe transport needs to be dealt with in a less ad hoc, short term way. Only by doing that can we address the conflicting pressures and trade-offs any transport system faces.

And we have done it before at one of the most difficult times in our history. In 1938 a group of county surveyors from across the country sat down together to work out how motorways could best connect their individual areas to deal with the growing demand not just from motorists but also freight. The motoring boom meant that the A and B road system was creaking. The result was a blueprint which formed the basis of the national motorway system we use to this day. Inevitably, because of the Second World War and its economic consequences, the first 12 miles of motorway, built as a two lane bypass in Preston, wasn't opened until 1958, but the rest of the network largely followed that original blueprint over the succeeding years. That shows the value of strategic thinking.

The railway never had such a strategy and was London centric, built by competing entrepreneurs in the 19th century. While the network provided access to London, access across the country always remained extremely weak. *HS2 Plus* highlighted the poor connectivity East-West between Liverpool, Leeds and Hull and, equally, connectivity between Birmingham and Leeds, Milton Keynes and York or Nottingham to Manchester remains poor to this day which is why Phase 2 and the "Y", which cuts across the existing railway lines radiating out of London, is so essential to establishing the connectivity required.

An important element of the 1938 motorway strategy was that it was informed by the collective knowledge and understanding of the county surveyors, who understood the different needs of both motorists and freight, as well as the aspirations of each city and region of the country, and how they should fit together.

"In 1938 a group of county surveyors from across the country sat down together to work out how motorways could best connect their individual areas."

As with motorways, the critical thing today is that HS2 should fit into a wider transport strategy within which Central and Local Government can develop detailed plans in the future.

Such an approach would present Governments with a set of priorities, opportunities and constraints for transport investment. The phasing of construction will ultimately be dependent on the availability of public funding and getting strategy to suit both expenditure and the tying down of design and planning risk. Rather than having to develop a series of business cases for individual projects in contrived isolation from the bigger picture, the strategy would be informed by clear data on how transport investment between towns, regions and nations can release untapped economic potential and relieve congestion. In a world where each individual project is required to pass the highest bar of benefiting every part of the country, we risk no project getting approval, and today's imbalance persisting.

HS2, as a new spine for the national rail network, is an important catalyst for such a new strategy, supported by a wider complementary package of investment, particularly in East-West links. Others, notably the House of Commons Transport Committee, have called for such a strategy in the past, and I hope it will become an important part of the emerging positive debate on infrastructure planning.



Image © Alamy/Alamy

**“As with motorways,
the critical thing
today is that HS2
should fit into a wider
transport strategy.”**

Are there alternative routes?

Whilst there is a growing consensus about the need to rebalance the national economy, public finances remain under severe pressure and are likely to do so for quite some time. It is only right, therefore, that we should be asked to consider whether there could be cheaper, more cost effective ways to deliver the radical reductions in journey time that are necessary to rebalance the economy? Could that objective be achieved through a scaled-back version, or a combination of some new high speed rail and improvements to the existing track? Is it really necessary not just to complete the Y to both Manchester and Leeds, but also the proposed links to York and the East Coast Main Line? Which plans will stand the test of time?

Our starting point was to look at the existing market. Where is the demand coming from?

The chart for the Western leg shows the clear importance of the Manchester market, as well as the importance of linking in Liverpool. A 60 minute reduction in the journey time from London to Manchester will be transformative, and make it much easier for businesses to work in both locations. Manchester, Liverpool and Glasgow will see the benefits of HS2 directly once Phase One is completed, and that would be enhanced by a decision to accelerate the proposed route to Crewe and construction of the North West hub.

The picture for the Eastern leg is more varied, but still shows the clear demand not just from Leeds, but also from Newcastle and the North East – as well as showing the strong demand in the wider South Yorkshire and East Midlands regions. In the 100-mile corridor encompassing Birmingham, Derby, Nottingham, Sheffield and Leeds, there is a population of more than eight million people and four million jobs, and yet connectivity is poor.

That cumulative demand strongly supports the proposed route of HS2 both West and East of the Pennines, particularly given the growing importance of connected cities in our economy. Projections suggest that, on current trends, by 2050 not only will the UK population have grown from 61m to 73m, and we will be 89% urbanised, up from 82% today. That means over 14 million more people living in UK cities, more than the combined populations of Greater London and Greater Manchester today. That, plus the growing importance of the knowledge economy with its demand for shorter, more reliable journey times underlines the significance of improving the connectivity between those cities.

Current UK population

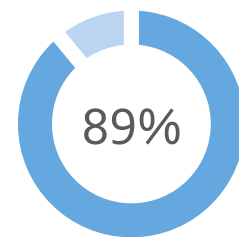


61m

UK population by 2050

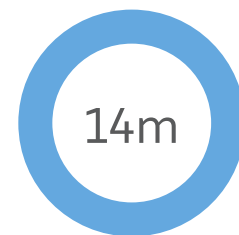


73m



89%

Percentage of UK population urbanised by 2050

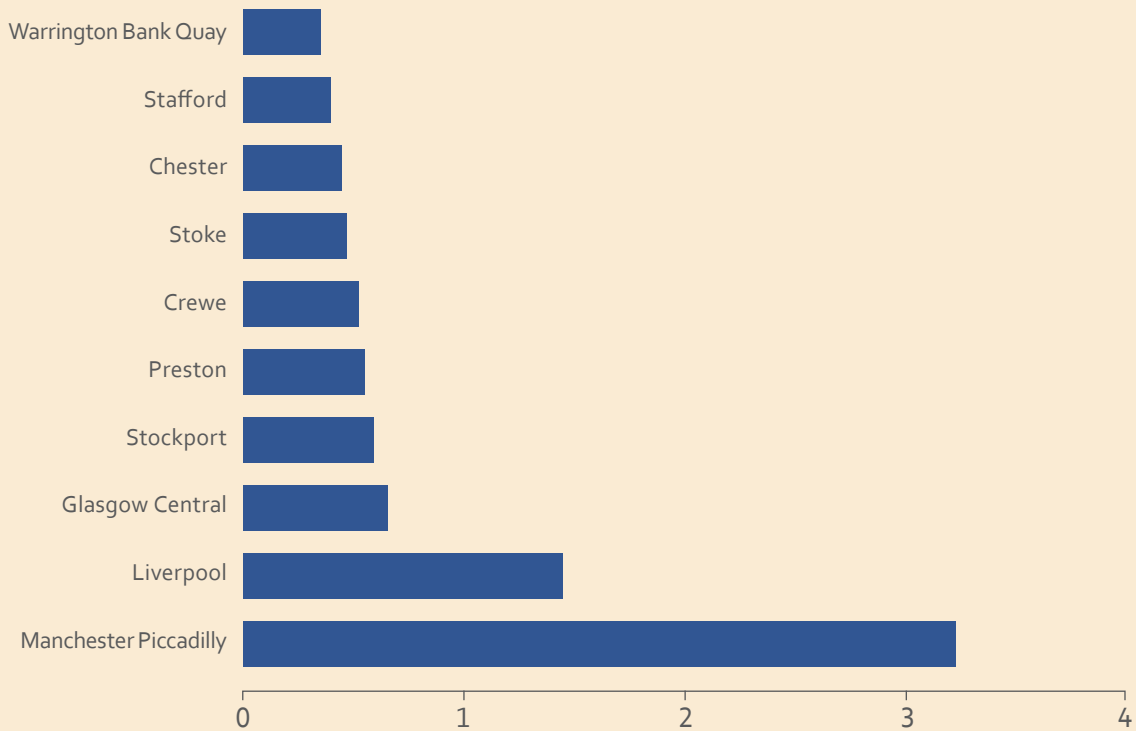


14m

Increase in UK urban population by 2050

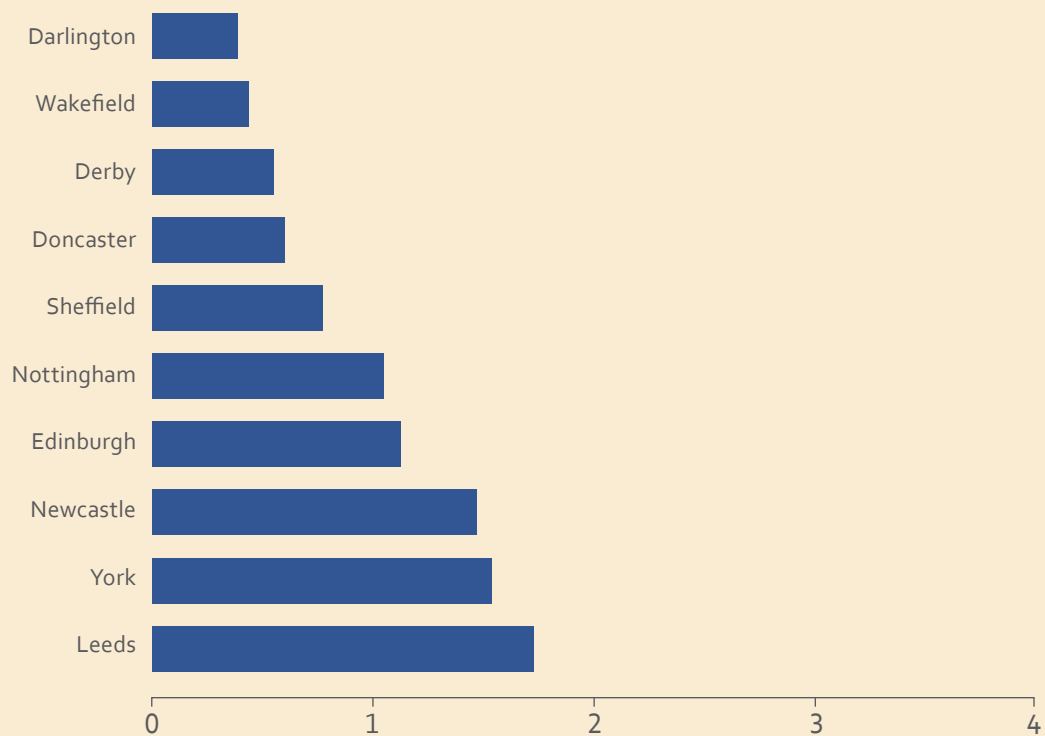
Northern markets – West

Number of rail journeys (million) to/from London in 2013/14



Northern markets – East

Number of rail journeys (million) to/from London in 2013/14



Are there alternative routes? *(continued...)*

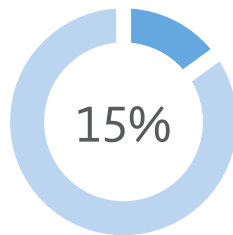
The Phase Two route, which went to consultation in 2013, suggested that the Leeds to London journey time could be reduced from the current 132 minutes to 83 minutes. The journey time to the East Midlands hub would reduce to 51 minutes from London, as opposed to 104 minutes to Nottingham at present. The time to the South Yorkshire hub would reduce to 69 minutes, compared to 125 currently to Sheffield. As the service would not be mixed use, and would be of modern construction a generation on from HS1, it will make HS2 a dependable on-time railway which is totally reliable and resilient, all day every day. So the current proposals meet the knowledge economy's requirements for better connectivity and more predictability. Travellers would be much more confident making their onward connections and, therefore, not have to build in extra time for possible delays.



Image © Network Rail



Cost of West Coast Main Line upgrade



Percentage of West Coast Main Line trains arriving 10+ minutes late

But could alternative routes, and alternative mixes of high speed and conventional track, deliver the same strategic benefit as the proposed Y?

Would it be possible, for instance, simply to upgrade the existing West Coast and East Coast Main Lines? The experience of the West Coast Main Line upgrade is not encouraging. Whilst the programme bought valuable time and increased capacity, it did not achieve the desired objective; the line remains an overstretched, mixed-use railway with all the capacity constraints that implies. The £9bn upgrade programme suffered from escalating costs to build, and maintenance costs remain high. Significant disruption was caused, particularly to weekend travel between London and Scotland, and upgrades were only completed as far North as Crewe. Reliability is, inevitably, limited. It has struggled to meet performance targets with some 15% of long distance trains regularly arriving more than ten minutes late. This lack of infrastructure resilience and uncertainty of service is both a barrier to future modal shift from road to train, as well as operating efficiencies. Given the growing pressure on the M6, and the shortage of obvious remedies, that poses a major headache without HS2. The West Coast Main Line is forecast to be full by the mid 2020s.

“The West Coast Main Line is forecast to be full by the mid 2020s”

The picture on the East Coast Main Line is not dissimilar. It too faces significant resilience and performance issues. Again, it is a mixed-use railway with all the longer-term capacity limitations that implies.

For each the main issue is not just the question of whether they are capable of meeting future passenger and freight demand, but also the disruption to existing services that would be caused in the process. That disruption would not only pose a significant barrier to local economies, and, therefore, rebalancing the national economy, but also would carry a very heavy price tag.

This does not mean that these key lines should not, and cannot, be improved. And, indeed, Network Rail is planning considerable investment in the future. But we need to be realistic. Those improvements, necessary as they are, cannot deliver the strategic transformation that HS2 can.

As well as examining broader upgrade options we looked at three particular schemes on the Eastern leg to see whether they could deliver the transformational reductions in journey times and, therefore, improved connectivity that the proposed HS2 route could.

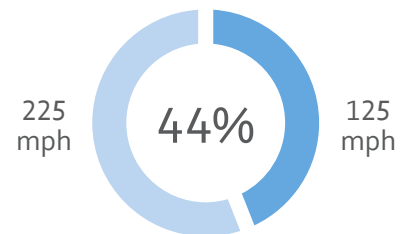
One alternative we looked at was to provide a connection from the proposed route of HS2 onto the main existing Birmingham to Derby line near Tamworth. High speed services would continue, again on existing track, through Burton on Trent to either Sheffield, via Derby, or on an upgraded line to Nottingham. North of Sheffield, HS2 services would return to a new line to the south of Wakefield before using the main East Coast Main Line route through Wakefield into Leeds. Essentially, therefore, this would be an upgrade of existing services, and whilst it would be cheaper and would realise some improvement in journey times, these would be significantly lower, particularly to Leeds, York and Newcastle, than those offered by HS2.

Are there alternative routes? *(continued...)*

The second alternative we examined would follow the proposed HS2 route south of Derby before connecting to the Midland Main Line at the existing East Midlands Parkway station which would now form the East Midlands hub. The route would then follow the Erewash Valley to Sheffield via Chesterfield. This would involve turning what is currently a two track freight line with some infrequent passenger services into a four track line. North of Sheffield, HS2 services would return to a new line as described in the previous option. Again there would be some improvement in journey times to the current services, not least because it would use more of the proposed HS2 route, but trains would still have to reduce their speed from 225 miles per hour to 125 miles per hour at best when they move onto the existing line. That in itself would require major investment, and yet would substantially reduce the impact of improved journey times, particularly the further North you go. Early estimates suggest that construction would require many years of weekend disruption on the Midland Main Line.

The third alternative we examined was a route which included a spur to Sheffield. This option considered a direct route via a spur terminating at Sheffield Midland station. While this provided limited benefits for the city centre market, it did not provide the connections and journey times necessary to serve the wider Sheffield city region effectively, particularly Rotherham and Barnsley. Furthermore, as Sheffield local leaders have also noted, introducing a terminating spur also removes the onward connections north to West Yorkshire and the North East provided by the current Y route.

I do not believe these alternatives could deliver the same improvements in journey time and capacity as Phase Two, nor would they deliver an equitable approach across the North or meet the vision of a truly high speed network for the country. Disruption on the current network during construction, with consequential impacts on demand, productivity and passenger satisfaction, must also be considered. While Network Rail will need to consider the case for incremental improvements to the current network in the next two decades until HS2 opens, I am certain that Phase Two offers the best opportunity to transform the economic geography of the country, to help create a Northern powerhouse, and I believe it remains the right strategic answer.



Percentage speed reduction required by HS2 trains to use existing Midland Main line

Alternative route options

#1 Erewash hybrid alternative



#2 Derwent hybrid alternative



#3 Sheffield spur alternative



- Proposed route
- - - Conventional upgrades
- M1 motorway

East-West connectivity

But if HS2 is to contribute fully to rebalancing Britain, improving the country's productivity as a whole and helping create a knowledge economy, then it must do more than meet existing market demand. It must also help realise potential demand, particularly by developing connectivity between East and West – a dimension which has always been poor in this country, both in the Midlands and the North where civic leaders are increasingly aware of the need to address the issue.

Average journey time 2014 (minutes)

Source: Network Rail. MOIRA data planner.

	Hull	Leeds	Liverpool	Manchester	Newcastle	Nottingham	Sheffield
Hull		62	200	126	155	159	95
Leeds	62		117	55	91	119	54
Liverpool	200	117		51	217	171	120
Manchester	126	55	51		153	122	59
Newcastle	155	91	217	153		190	121
Nottingham	159	119	171	122	190		53
Sheffield	95	54	120	59	121	53	

The Chancellor and the Secretary of State asked me to work with the DfT, Network Rail, the Highways Agency and the major local authorities in the North to look at how we start the process of improving East-West connectivity across the region from Liverpool to Hull and the North East.

As the red line in the map opposite clearly illustrates, Bradford may be the tenth largest city in the UK, but its connectivity does not match that position – and East-West connectivity in general is poorer.

East-West and North-South connectivity



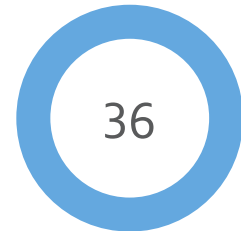
Journey time per mile (minutes)

- Less than 1 minute per mile
- 1 minute to 1 minute 29 seconds per mile
- 1 minute 30 seconds to 1 minute 59 seconds per mile
- Greater than 2 minutes per mile

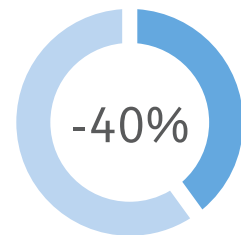
East-West connectivity *(continued...)*

Rail connections

Compared to London, existing services are slow and low in frequency, which impacts freight as well as passenger services. That is a fraction of comparable journeys from London to Reading, Oxford or Milton Keynes. The result, as described in *One North*, is a severe constraint in developing new businesses and trade across the North, particularly given the requirements of the knowledge economy. People find it more difficult than it should be to travel from one area to another to work. Companies find it more difficult to trade goods and services from other suppliers across the North. Synergies and economies of scale are difficult to achieve. One example is commuting patterns, or rather the lack of them, between Greater Manchester and the city of Leeds. The two conurbations are 36 miles apart, and yet less than one percent of the workers living in these cities commute in either direction each morning. Indeed, research has found that commuting between Manchester and Leeds city regions is 40% lower than expected given the distance between these two cities. Hence the abrupt space between the two cities in the accompanying map.



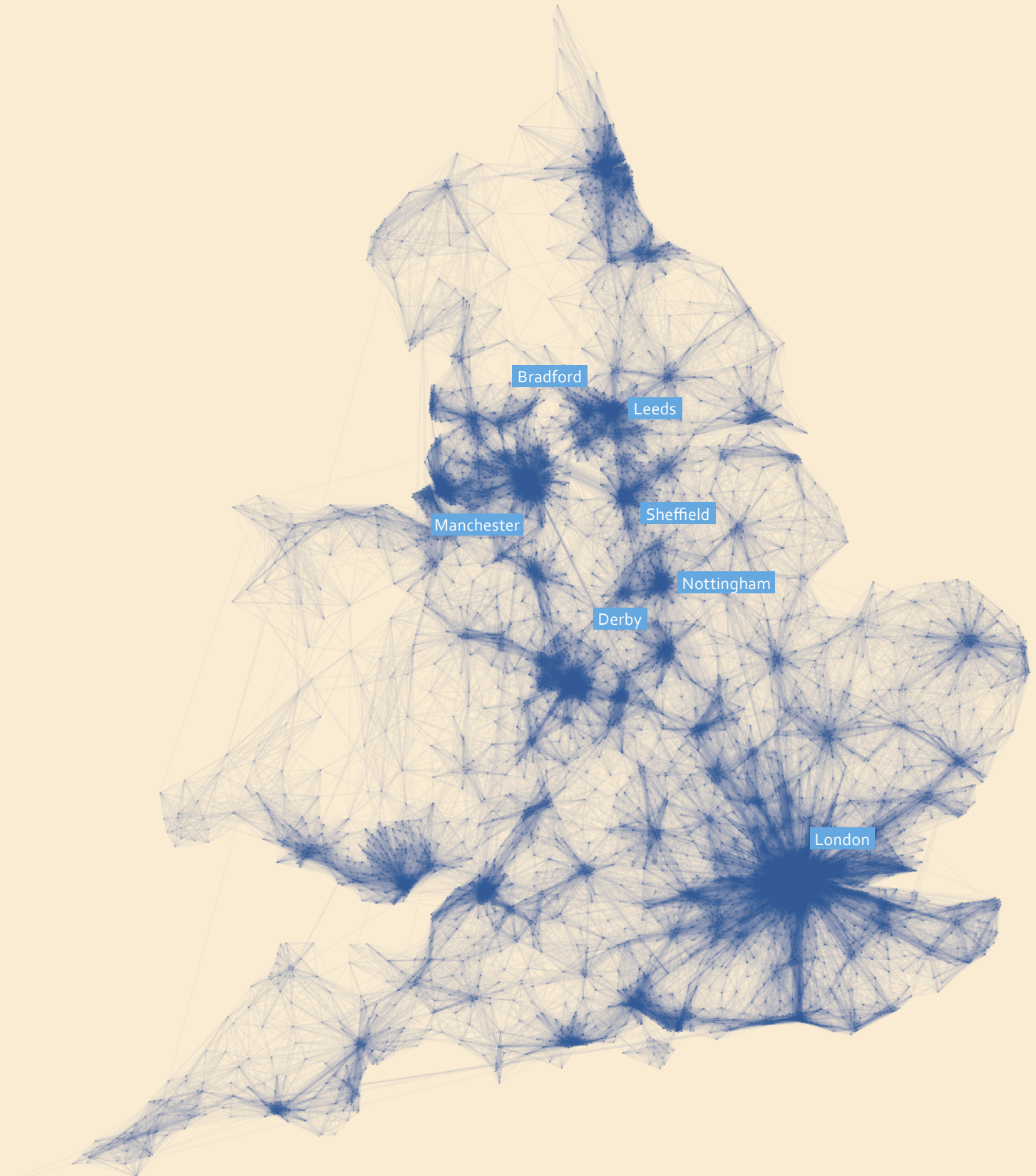
Distance between Greater Manchester and Leeds (in miles)



Difference in expectation of commuting levels between Manchester and Leeds city regions

Commuting trends

Commuter flows between the regions are limited



East-West connectivity *(continued...)*

Road connections

Congestion is regularly experienced on the key trans-Pennine road links, particularly where they pass close to the major conurbations on either side:

- In the North West, nearly all the network between and around Liverpool and Manchester experiences regular congestion, including the M6, M53, M56, M60, M61, M62 and M66.
- In Yorkshire and Humber, regular congestion is experienced on the M1, M62 and M602 in West Yorkshire, and on the M1 and A1(M) in Sheffield City Region.

And congestion is forecast to get worse. In 2013, the Department for Transport forecast that traffic vehicle miles on the Strategic Road Network, covering motorways and major A-roads, will rise by 46% by 2040. It shows that regular and severe congestion will spread across almost all of the network within and between Liverpool, Manchester, Leeds and Sheffield city regions. It is clear that, unless action is taken, conditions on the network will damage productivity and competitiveness and constrain the economy.

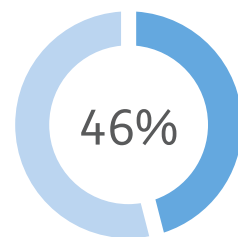
The Government is preparing longer terms plans for strategic road investment that will be published later in the year, and it is not for me to preempt them. However, I would support the Government's recognition that the longer term investment and planning which has benefited the railways over the last two decades of growth could offer a model that can be adopted and adapted for the strategic roads network.

It is clear that East-West strategic roads connections are few and widely spread, and that the M62 in particular plays a disproportionate role in the economic fortunes of the North. As with the railway, we are over reliant on a few key routes with infrastructure that was not designed for today's demands, let alone the traffic forecast for coming decades. We need to move forward from short term fixes, which too often seek to mitigate problems rather than resolve underlying issues, to a longer term vision that affords greater future capacity, connectivity and contingency.

The triangle of Manchester-Leeds-Sheffield is central to the Northern powerhouse economy, and the lack of high performance road and rail links between Manchester and Sheffield should be a matter of national concern, as identified by the *One North* report. The environmental challenge facing any proposal to enhance transport links on that corridor is daunting. But we should, as a nation, be prepared to undertake a sober, considered and ambitious conversation about how to release untapped economic prosperity in the North, to strengthen prosperity while protecting its valued environment.

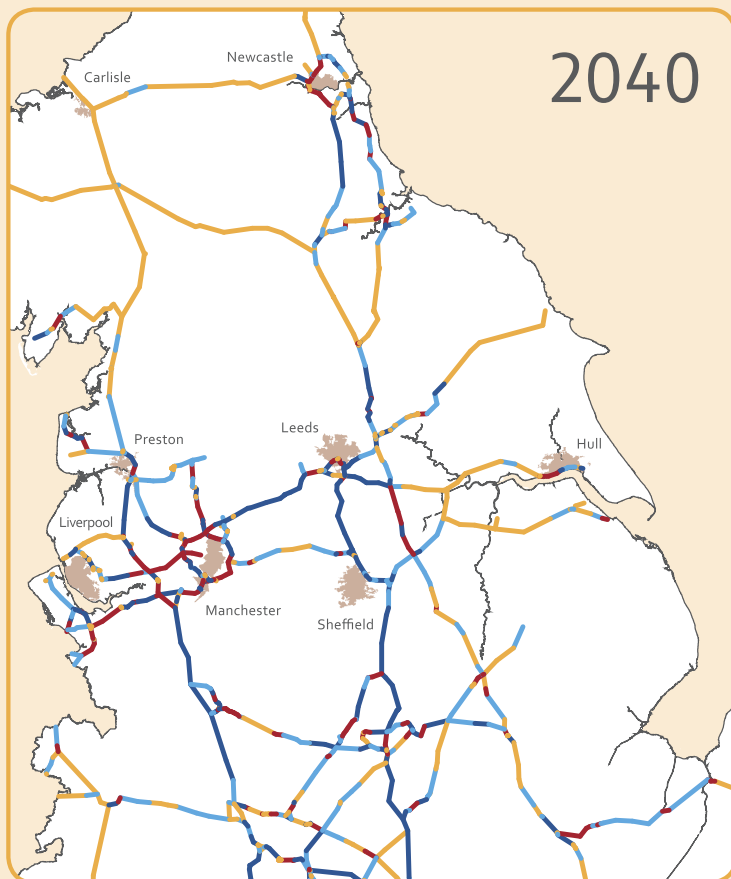
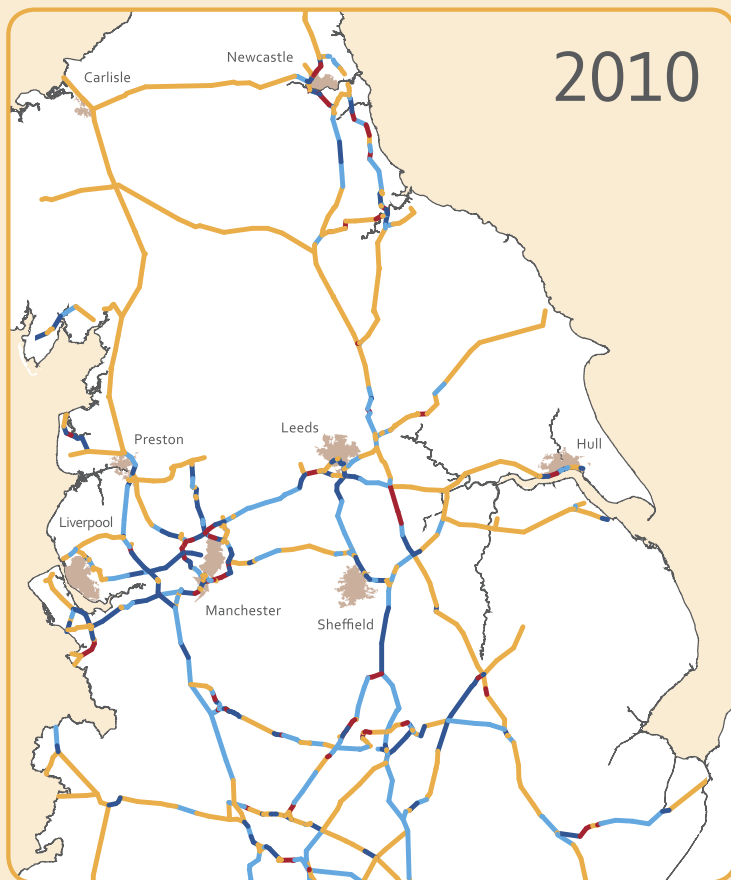


Image © iStock



Increase in vehicle traffic on the Strategic Road Network by 2040

Road congestion forecast



- Severe congestion
- Regular congestion
- Moderate congestion
- Occasional congestion

© Crown Copyright and database rights 2014. Ordnance Survey Licence Number 100039241. Adapted from Department for Transport gisu1415j045.

Recommendations

My approach and recommendations have been shaped by three considerations: specific recommendations about the HS2 route; a proposal to turn improving journey times between Leeds and Manchester from an aspiration to a practical plan; and a strong recommendation about developing a more strategic approach to improving rail and road connectivity across and within the North as a whole, and the role the local authorities in the region should play in that. The two key criteria against which we measured any alternative proposals were: would they add capacity, and, would they deliver the radical reductions in journey times across the entire route, and to Leeds and Manchester in particular? The same criteria apply when looking at how to improve East-West connectivity across the North.

WESTERN LEG

North West hub

In *HS2 Plus* I recommended that not only should there be a North West hub, but that it should be at Crewe. The choice of location for the North West hub is not just vital, it also reflects a debate about how HS2 can best serve the cities and regions outside Manchester and Leeds. The essential question is whether the decision should be based on the needs of particular locations or of the wider region. The choice between basing the North West hub in Stoke-on-Trent or Crewe reflects that tension.

Stoke-on-Trent continues to mount a strong case and clearly, it is easy to understand why it would like an HS2 station. But the decision is about more than the merits of a particular destination, however strong those are. Crewe has been a major railway intersection since Victorian times. Its *raison d'être* was to offer connectivity from the North-South artery to North Wales, Merseyside, Staffordshire and the North West in general. Stoke, in contrast, offers more limited connectivity at a higher cost and has significant geological and engineering difficulties.

Crewe, therefore, remains my strong recommendation and I remain absolutely convinced of the merits of delivering a hub by 2027, rather than 2033 as originally planned. More detailed technical work is needed to develop that recommendation, and it is for the Government to decide whether it agrees and to pronounce on the legislative consequences, and for Parliament to make the final decision.

Recognising the desire of many stakeholders in the region to capture the journey time and connectivity benefits HS2 provides, I recommend that the Government asks HS2 to look at the possibility of running classic compatible high speed services to Stoke-on-Trent, Macclesfield and Stockport to Manchester via the Handsacre link from HS2 to the West Coast Main Line.

“Crewe offers connectivity from the North-South artery to North Wales, Merseyside, Staffordshire and the North West.”

The approach to and exit from Manchester

The proposed route takes HS2 into Manchester via a new station at Manchester Airport. It is a complicated and, indeed, expensive route because it is close to the M56 and will involve a lot of tunnelling. There is a simpler alternative route into Manchester city centre via the Mersey valley. We have carried out preliminary work with Transport for Greater Manchester on both routes and concluded that whilst this route might be cheaper to build, it would not stand the test of time (one of the five principles I set out in *HS2 Plus* repeated at the beginning of this report). History might well judge that not going via the airport was a missed opportunity. Whether the airport station is built at the same time as the HS2 approach to Manchester is a matter for Ministers and Greater Manchester to agree in the future but, on balance, I believe the route via the airport is the right answer.

The other issue to be considered is the route between Warrington and Manchester to the existing West Coast Main Line via the Golborne link. Considerable concern has been expressed about this proposal, not least the construction of a depot in an environmentally sensitive part of the route. In light of that I believe further work is necessary both on the route and the location of the depot, but I believe that a link to the West Coast Main Line will be necessary sooner rather than later as part of the wider consideration of how to improve services to Scotland.

That, in turn, will need to take account of the wider study into East-West connectivity across the North that I advocate elsewhere in this report. In particular that study needs to take into account the growing congestion on the M6, M56 and M62 and the impact that has not just on individual travel, but freight as well, both North-South and East-West. This is not just a concern for Greater Manchester but also has implications for Liverpool, the wider North West and North Wales. It is my firm view that the seriousness of this issue, at a crucial pinch point for the national transport system, needs to be grasped fully. The current situation is unsustainable, and any solution must work not just in road and rail terms, but also stand the test of time.



Image © eye35. pix/Alamy

Recommendations *(continued...)*

EASTERN LEG

East Midlands hub

A combination of geography, historic land use and existing infrastructure makes it difficult to come up with the perfect solution for the East Midlands. The current proposal suggests a new station for HS2 at Toton, located between Derby and Nottingham, to maximise the benefit for the whole region and avoid a zero-sum game in which one city gains at the expense of the other. To their credit both cities recognise that and, therefore, fundamentally I believe the East Midlands hub continues to make sense. There is a question, however, as to whether the particular location at Toton is the best physical choice. It is clear from discussions with local stakeholders, and considering our broader strategic objectives, that the right location is one which delivers the best fit with existing services, especially to Derby and Nottingham.

For those reasons I am now proposing we investigate alternative station sites to the west of Toton, which can provide much better road and rail connections via the M1 and Midland Main Line respectively. Our aim should be to find a solution which provides new and better links to the centres of Derby and Nottingham and the wider region, while providing road access for Leicester. The East Midlands hub would greatly improve not just North-South connectivity, but also East-West links across the Midlands. The journey time from Nottingham to Birmingham, for instance, would be transformed.

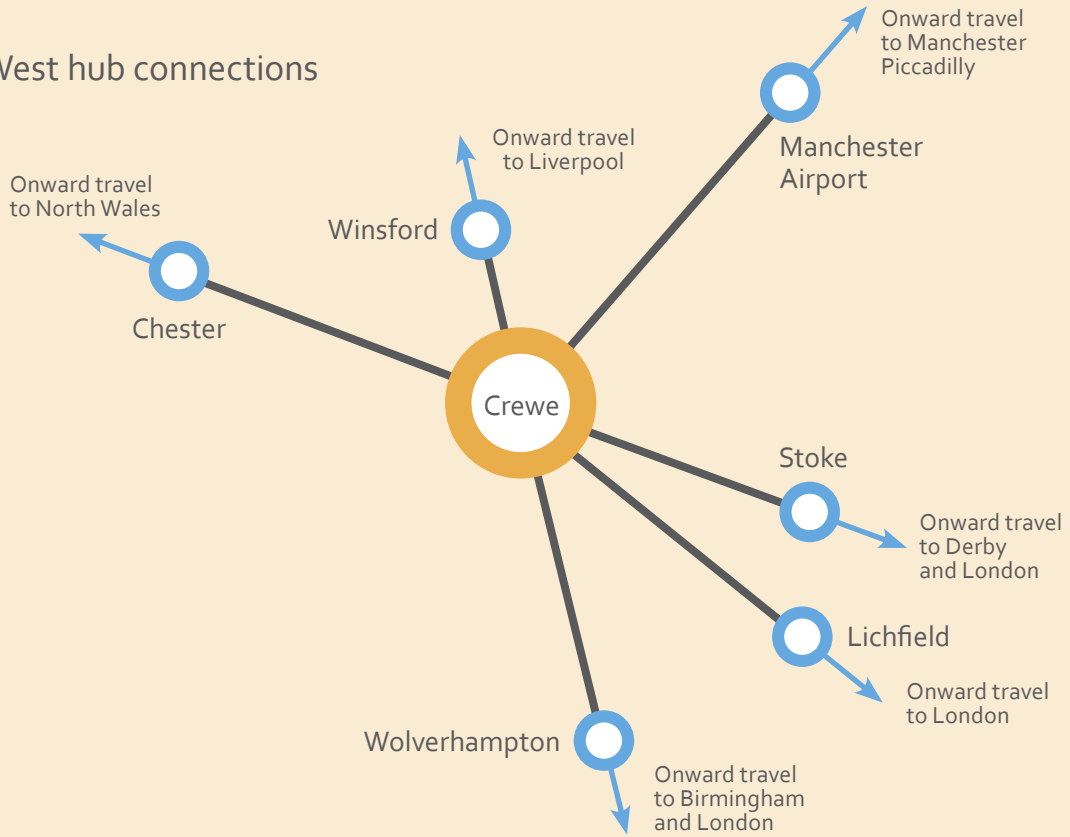
South Yorkshire hub

The debate over the final location of the HS2 station in Sheffield is essentially one between the differing economic impacts and costs of a city centre versus a hub location. There are different views across Sheffield city region about which location offers the greatest balance of cost and benefit for the city region as a whole. All sides however have been amongst the most vocal supporters of the HS2 project and in the vanguard of recognising the benefits it can deliver.

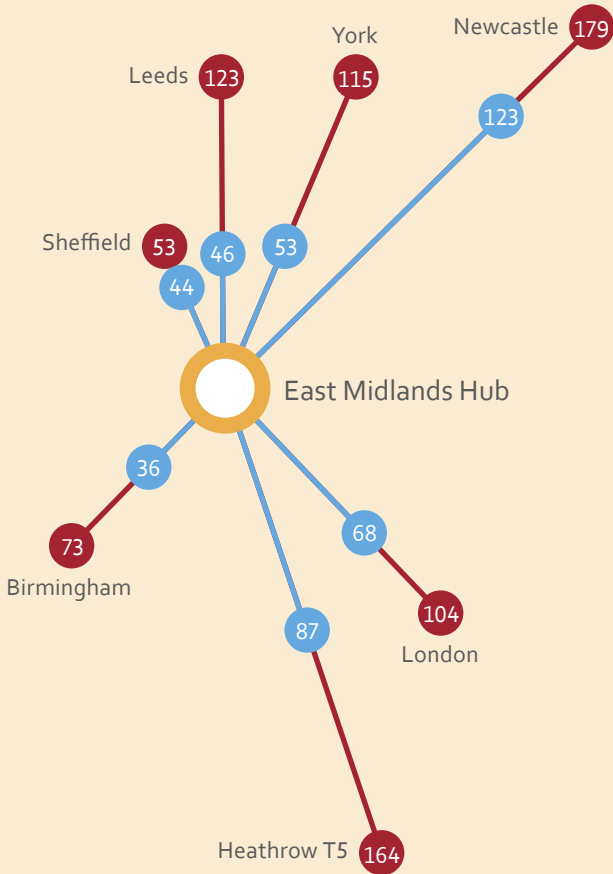
Supporters of a city centre location see the opportunity to regenerate the area North East of the city centre by locating the station at Sheffield Victoria, an old station shut since 1970. In doing so, they seek to enhance Sheffield city centre's role as a job creator for the wider city region and to enhance city to city connectivity, particularly as part of a 'Northern Powerhouse' of connected cities playing a stronger role in UK economic growth. Barnsley, Doncaster and Rotherham strongly argue for the hub to be based at the existing station, Sheffield Meadowhall, in the east of the city. Supporters of this proposal state that a Victoria station option would be more expensive because of the difficulties of building an alternative line into and out of the city; add six minutes to the

“Our aim should be to find a solution which provides new and better links to the centres of Derby and Nottingham”

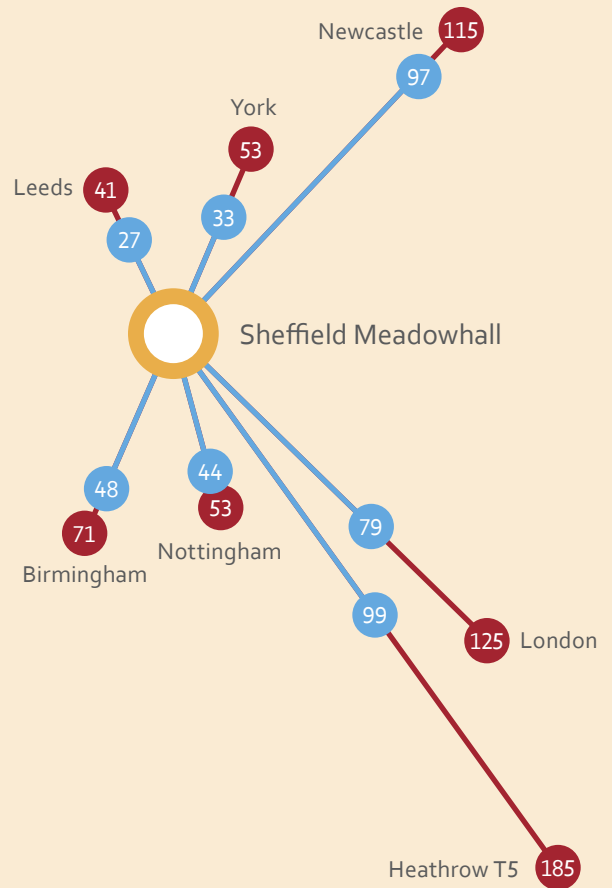
North West hub connections



HS2 journey time difference for proposed East Midlands hub



HS2 journey time difference for proposed South Yorkshire hub



Recommendations *(continued...)*

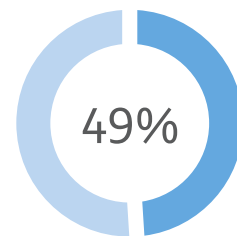
journey time to Leeds and further north so disadvantaging the North East compared to the North West; and, in particular, it would increase journey times to their towns. I am aware that Sheffield is carrying out further work aimed at addressing these points, but, until this work is complete, there is insufficient evidence to recommend altering the current proposal at this stage, so I remain of the view that Sheffield Meadowhall is the right answer for the South Yorkshire hub. My hope is that, as has happened elsewhere, a consensus is reached on the way forward to which Ministers can respond.

Indeed, the common theme I picked up in each region is a desire that decisions should be made as quickly as possible, whatever those decisions are. There is clear recognition of the value of certainty to allow local areas to start attracting the new investment that will drive their economies and shape their plans for the future.

The approach to Leeds and Leeds station

As with the East Midlands hub, a combination of geography, historic land use, and existing infrastructure makes the approach to Leeds, and the size, location and layout of Leeds station extremely difficult. The existing station is nearing capacity. Already the busiest station in the North of England, peak demand is forecast to grow by a further 49% in the next 10 years even without HS2 and additional East-West traffic. That is partly why the proposed HS2 station was located across the river at New Lane. It also had the beneficial impact of making the approach easier. The council, and others, however quite rightly pointed out that this would make the interface between HS2 and existing local services more difficult. Add to that the potential impact of increased passenger traffic resulting from the proposed improvement to services to Manchester, and it is easy to see how complicated a problem this is. On top of that, there is a direct relationship between the choices that need to be made about the station and the approaches to the city, so that they will work for HS2, local services and whatever option is decided as the best Leeds-Manchester route. In particular it will be important to ensure that the right solution and wider connectivity package provides good access to the HS2 network for Bradford, which is a major city with a population of 500,000 and growing fast.

“I remain of the view that Sheffield Meadowhall is the right answer for the South Yorkshire hub.”



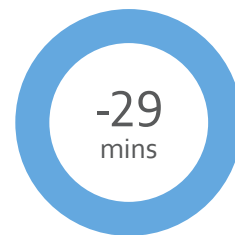
Forecast increase in demand at Leeds Station by 2024

But, as with any problem, there is also an opportunity, not just in transport terms, but for the whole city. The simple fact is that the existing station needs to be remodelled, and over a similar timescale to the completion of Phase Two. Leeds City Council, the local transport authority and Local Enterprise Partnership have been clear that that should happen as part of wider plans for the city and as an integral part of their regeneration strategy. I agree. HS2 Ltd, Network Rail and the Council now need to continue working together in detail to develop that plan, taking into account the need to ensure the best possible synergy with local services to Wakefield, Bradford and the wider city region whose representatives will be an important part of that discussion. Those discussions need to balance taking sufficient time to come up with the right solution, with the need to give as much certainty as possible, as soon as possible, to potential investors and the city as a whole.

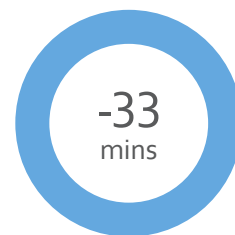
Link to East Coast Main Line and the North East

As is graphically illustrated by the passenger demand chart contained on page 17 of this report, there is a clear market for improved services to York, Newcastle, and the rest of the North East. I remain, therefore, firmly of the view that an HS2 link to the East Coast Main Line is essential and justified to allow classic compatible services to these locations. As with all parts of the route, the development of this link must be done in a way that limits the impact on the local environment and communities, while maximising benefits to the region and the country. This would reduce the journey time from York to London by 29 minutes, and Newcastle to London by 33 minutes, and journeys from both York and Newcastle to Birmingham would be cut by 67 minutes. These are substantial savings, and, just as importantly, they would also make it much easier for these cities to trade with each other and create the talent pools and economies of scale that a knowledge economy requires.

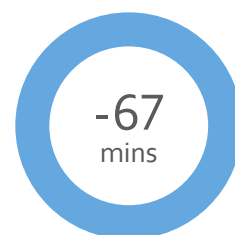
Reduction in route journey times (in minutes)



York to London



Newcastle to London



York and Newcastle to Birmingham

Recommendations: East-West connectivity

Leeds/Manchester

The average journey time between Leeds and Manchester is currently around 55 minutes to travel a distance of just 40 miles, often on crowded trains. Reliability is difficult. Nothing illustrates better the poor connectivity East-West across the North, which is why I believe it should be a priority to start improving that situation.

Network Rail has undertaken an initial study for this report to look at how this might be done. It has examined broad options of varying scales of complexity and cost ranging from a new dedicated, high speed track involving the construction of a tunnel underneath the Pennines to an upgrade of the existing line using existing but unused tunnels. They also looked at upgrading the Manchester-Sheffield service in parallel to that to Leeds.

The work demonstrates two things. Firstly, that a much improved service is possible, delivering a journey time of somewhere between 26 to 34 minutes for Leeds to Manchester. That is directly comparable with the journey times Crossrail will provide between Heathrow Airport and Canary Wharf. Clearly that is transformational and would, undoubtedly, lead to more trade and commuting between the two cities. It is also within reach of the aspiration set out in the *One North* report for a journey time of 30 minutes, an increase in capacity of up to 8 trains an hour, and a marked improvement in the performance and reliability of the line. This, plus further electrification and upgrades in the meantime, could result in the journey time from Liverpool to Leeds going from around 2 hours to an hour, and cutting half an hour off the time from Manchester to Hull and Newcastle.

The work also, however, illustrated the need for a deeper exercise to bottom out which route between Leeds and Manchester would be best and the cost and value for money of each option. That work now needs to continue in order to turn the aspiration into a practical plan.

East-West across the North

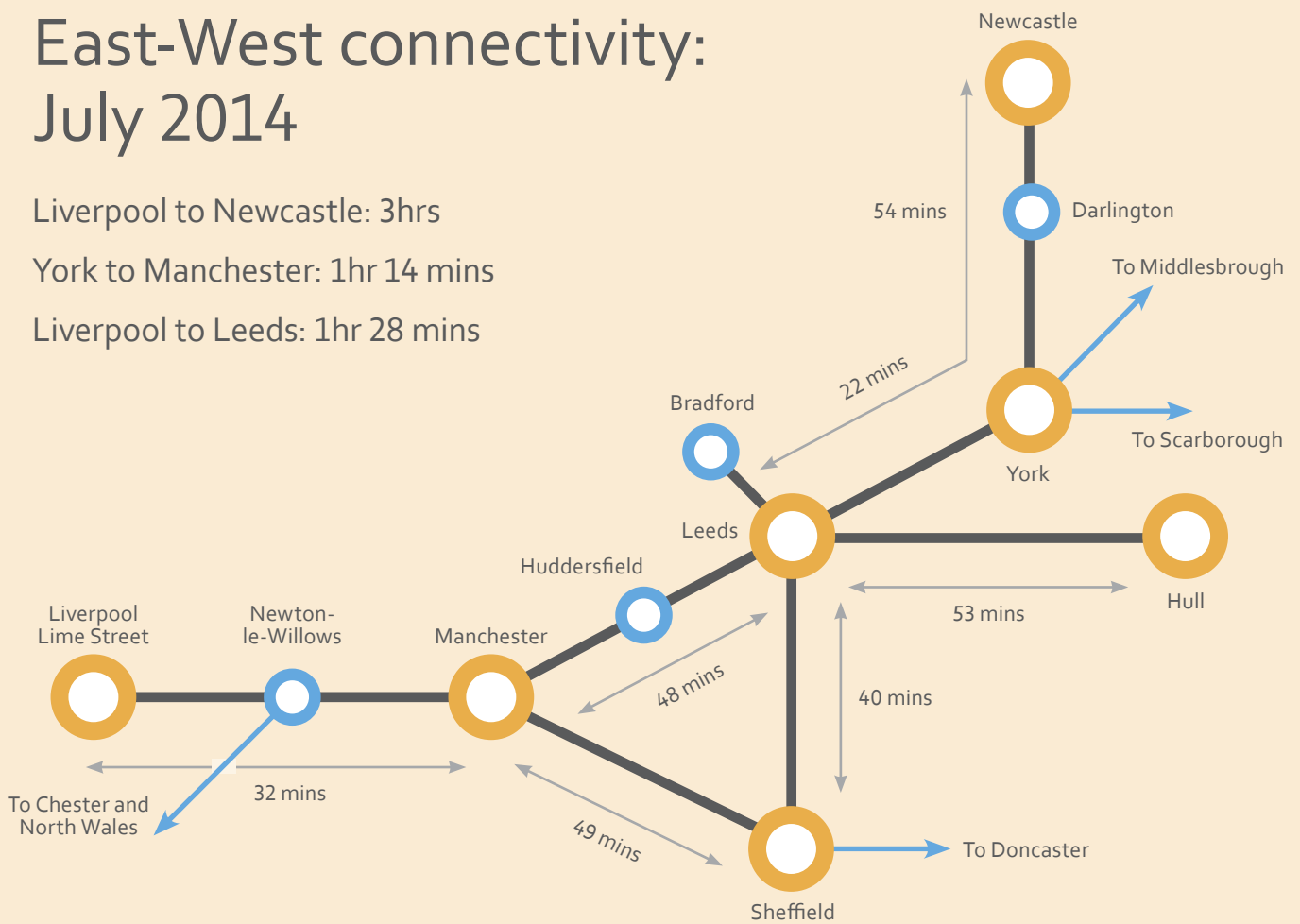
Improving the Leeds to Manchester journey time is, however, only the first step in what should be a clear strategy to address poor connectivity across the North from Liverpool to Hull, as well as to Sheffield and Newcastle. It will require significant investment over some years, but these city regions represent more than 90% of the economic activity and economic assets of the North. While many of the centres of our great cities have been transformed in recent decades, connections between them have been neglected. Network Rail's Northern Hub project, and work on pinchpoints by the Highways Agency are taking important steps to mitigate capacity and performance problems, but they won't create the kind of transformative improvements necessary to relieve the suppressed economic potential of the North.

East-West connectivity: July 2014

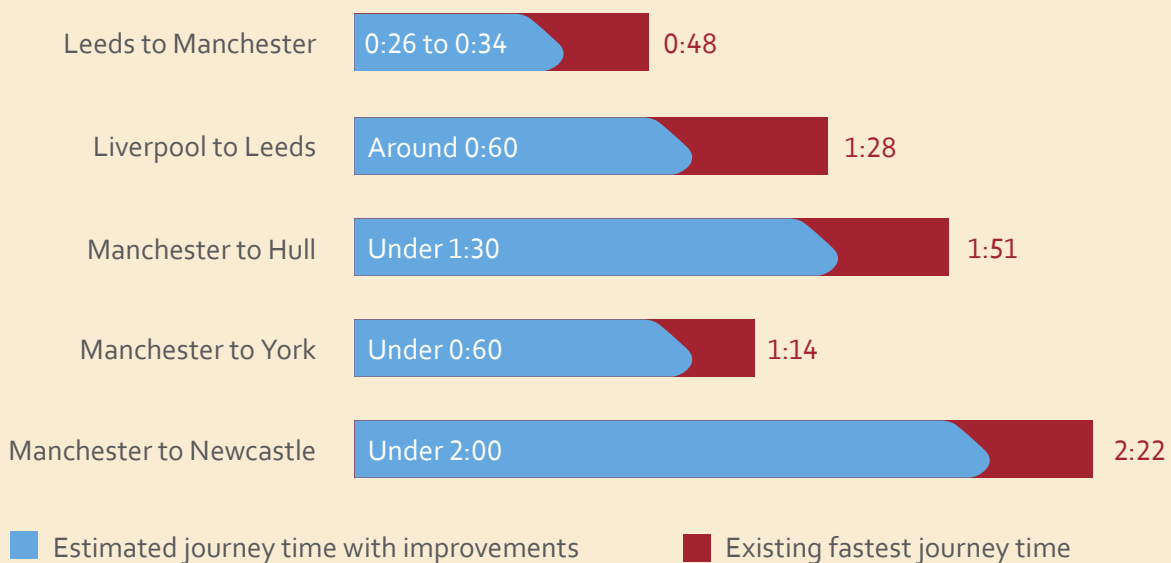
Liverpool to Newcastle: 3hrs

York to Manchester: 1hr 14 mins

Liverpool to Leeds: 1hr 28 mins



East-West estimated journey times



Recommendations: East-West connectivity *(continued...)*

Clearly that work is beyond the remit of this report, but, as I have outlined above, I am struck by the urgency of the issues facing motorway and rail networks in the North. We are approaching a crunch point in which congestion will pose not just a major inconvenience to individuals, but increasingly act as a stranglehold on freight traffic at a national level. That is no small matter.

Alongside improvements to East-West rail links between Leeds and Manchester, the Highways Agency has sizeable programmes of work underway to improve performance on the existing East-West corridor, particularly on the crucial M60-M62 corridor. I understand that one key challenge to address is the Sheffield to Manchester route, where shorter term mitigations are under consideration to improve safety and performance and yet local stakeholders are calling for more transformative road connections between the two regions. Detailed investigation of those proposals is for the Department for Transport and the Highways Agency to address with local partners. Nevertheless, it is clear that maximising the benefits of HS2 to the North relies just as much on high quality road connections within and between city regions, as it does on improved rail connections.

The *One North* report presented a compelling analysis of the issues and a strategy about what needs to be done. This now needs to be taken to the next stage and that will clearly involve discussions between Government, Network Rail, the Highways Agency, as well as the local authorities in the North. Clearly the General Election, whatever its outcome, will have an influence on those discussions, but it should not be an excuse not to make progress. I recommend, therefore, that the Government, agencies and local authorities agree a format and timetable for those discussions that should be made public as soon as possible so as the public can see and measure the progress made on turning the analysis of *One North* into reality. I recognise that there are no quick, easy, or cheap solutions to the issues I have described, but there is a clear need for strategic direction in deciding how to respond and I believe such a process could achieve that. Piecemeal solutions will only mitigate, not solve, the underlying issues. The test should be: does this stand the test of time?

A voice for the North

There is one further recommendation I would make to try to give momentum to this process. In *HS2 Plus* I noted the advantage London had gained through having, in the person of an elected Mayor, a single voice to represent the interests of the capital. The infrastructure needs of the capital have not only had a higher profile, but have also been articulated in a more cohesive way than previously, and that has undoubtedly benefitted the city in its dealings both with Government and the private sector. In contrast, our experience in the North, up to the publication of *HS2 Plus*, had been more disparate, with HS2 having separate dealings with each city across the region – a process that led to a reduction in consistency of approach.

Since then, local authorities and other key local and regional partners have engaged not only much more proactively, but also presented much more of a united front. In the Midlands, led by Birmingham and Nottingham, and on the East Coast Main Line, local authorities have come together to form groups to unify their voice on transport issues. And in the North, we have seen a similar coalescence. However that experience has only reinforced our view that there would be huge advantages if that level of cooperation were formalised particularly in the North where, as outlined above, there are real issues of priority and focus to be resolved. This would be a matter very much for regional leaders to decide, but to aid discussion we would propose the formation of a new body: 'Transport for the North', representing the five city regions across the North: Liverpool, Manchester, Leeds, Sheffield and Newcastle.



Image © nageistock.com / Alamy

“Its authority would be determined by its ability to speak with one voice.”

A voice for the North *(continued...)*

In order to maximise the representative nature of the body we would suggest that each region should nominate representatives to form a small, tightly focused group. Clearly the new body would also want to consider very carefully how it works with and represents the views of other local authorities and stakeholders in the region, such as the Association of Rail North Authorities and the Rail North Board of Directors, but its aim should be to form a united view on not just HS2, but the East-West strategy and other transport priorities, using *One North* as the platform for this work. That view would then be conveyed to the Government, HS2 Ltd, Network Rail and the Highways Agency, much as is now the case in London. Transport for the North should also be involved in thinking through options for further connections from HS2 to Scotland, to build on the journey time reduction to 3 hours 38 minutes that will be achieved to both Glasgow and Edinburgh once the second phase is completed. Its authority would be determined by its ability to speak with one voice, not just about current concerns, but about that future strategy. As such it would form a key part of the transition from treating projects such as HS2 as standalone entities and begin the process of developing a national transport strategy within which local and national plans can be developed in the future.

This builds on important work undertaken over the last decade and would mean the consensus that has emerged around the importance of a Northern powerhouse would continue to be consolidated over time, rather than being dependent on a series of individual initiatives. Such a body would require a dedicated Programme Director with the relevant support system to coordinate and articulate the views of the membership. This should be established as soon as possible.

Conclusion

HS2 will not solve all the country's transport problems. It was never going to. But by putting in place a high speed spine linking London, Birmingham, Manchester and Leeds, as well as the key interchanges at Old Oak Common, Birmingham Interchange, Crewe, Manchester Airport, East Midlands and South Yorkshire, and providing the driving force to improve East-West links, it can begin to make sense of not just our rail network, but also our transport system as a whole. As such, it would be our generation's equivalent of the motorways programme of the 1960s and '70s which did so much to transform this country. It would, therefore, not be a substitute for a national transport strategy, but could be a significant step towards one.

At a more practical, and personal, level, HS2 could also make a huge difference to people's daily lives. By bringing cities and regions closer to the global market and allowing them to develop better connections between them, HS2 will significantly boost both productivity and prosperity. It will jump-start local economies by providing much-needed impetus behind efforts to attract new investment, transform run-down areas and give businesses access to the critical mass of ideas, skills, talent and support networks they increasingly need in a knowledge economy. And the impact of that is already being seen. That means more people being able to have fulfilling careers in the communities that made them what they are, as well as less pressure on London and Londoners.

Britain needs to find a new balance and HS2 can help achieve that, so long as it is integrated fully into not just the existing transport system, but also local and national aspirations for the future. **By its very nature HS2 cannot be done piecemeal. To do so would seriously risk unbalancing, rather than rebalancing the economy and the country.** That is what makes the project so challenging, but as we work through the detail of how to make HS2 a reality what has been truly inspiring is the way in which local leaders have grasped the opportunity it represents and begun to make it their own. That is both a privilege and responsibility we intend to honour.

“Britain needs to find a new balance and HS2 can help achieve that.”

