



## BRIEFING PAPER

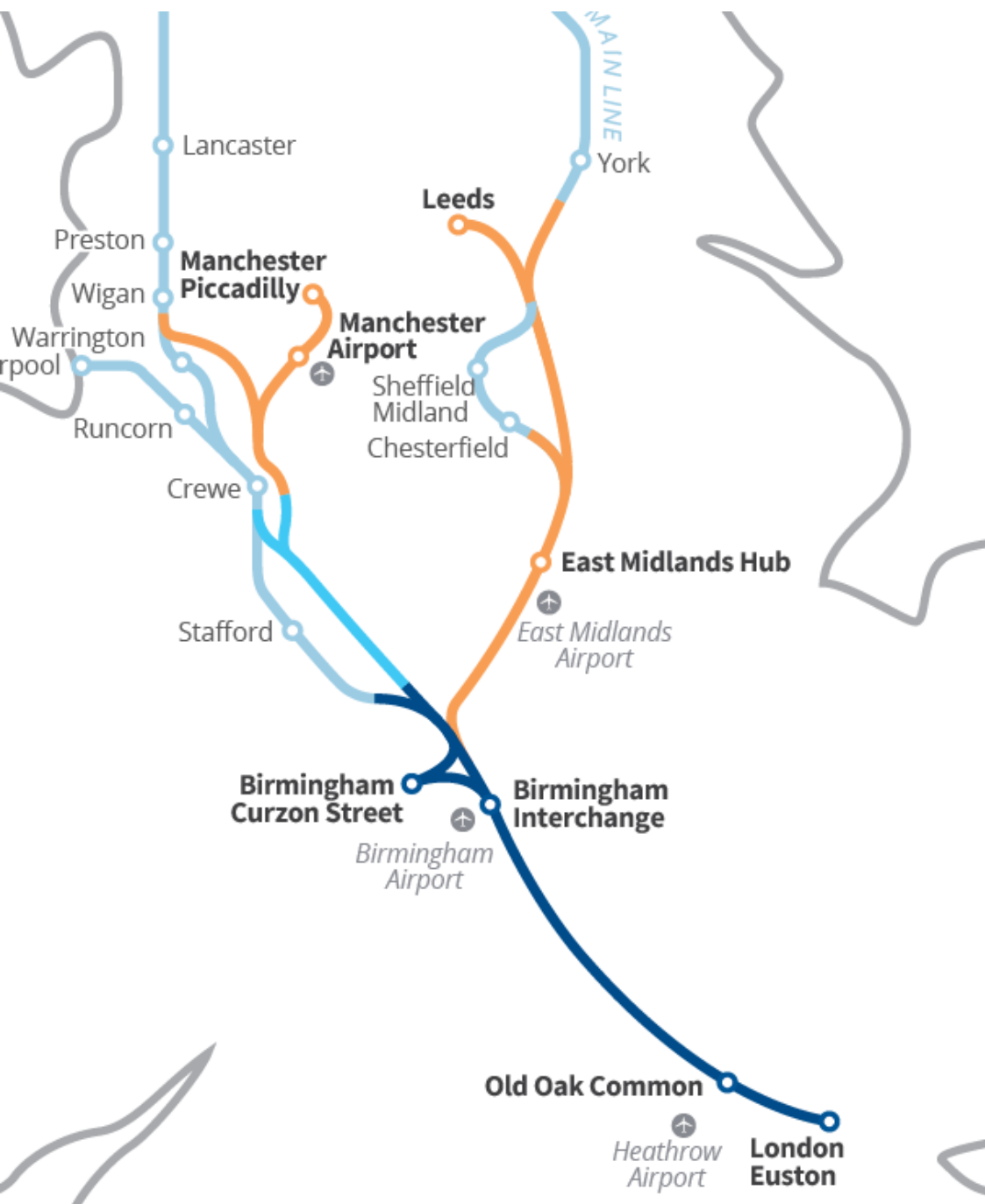
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# High Speed 2 (HS2) Phase 2b and beyond

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## Summary

This paper summarises Phase 2b of the proposed new high speed rail line between London and the North of England (HS2). It gives a brief overview of the scheme, its costs, compensation arrangements and the preferred route. It also looks at Northern Powerhouse Rail (HS3) and high speed rail to and within Scotland.

HS2 is a proposed infrastructure project to build a high speed rail line from London to Manchester and Leeds, via Birmingham, to begin operation in 2026 and be completed in 2033. It was supported by the Labour Government after 2009 and has had the support of the Conservatives in government since May 2010.

HS2 will be delivered in three phases:

- **Phase 1** from London Euston to Birmingham Curzon Street and Lichfield with intermediate stations in West London (at Old Oak Common) and at Birmingham Airport;
- **Phase 2a** from the West Midlands to Crewe; and
- **Phase 2b** comprising an eastern leg from the West Midlands to Leeds New Lane with intermediate stations in the East Midlands and South Yorkshire; and a western leg from Crewe to Manchester with an intermediate station at Manchester Airport.

In total, the scheme is estimated to cost £55.7 billion in 2015 prices (including rolling stock).

Despite enjoying widespread support across all parties in Parliament the scheme remains controversial outside, with disagreements regarding the economic and environmental cases for the scheme. Many of those who will be directly affected by the construction of the route are concerned for the future.

This paper deals with Phase 2b of the HS2 scheme from Crewe to Manchester and from the West Midlands to Leeds via Sheffield. In July 2017 the Government issued a consultation on the eastern leg rolling stock depot and announced decisions on route refinements for Phase 2b. The bill for this part of the route is expected after the Bill for Phase 2a has passed through Parliament; the Government hopes this will be in 2019.

This paper also looks briefly at Northern Powerhouse Rail (sometimes referred to as HS3, though it is not 'high speed' in the way that HS2 is) and the progress of high speed rail to and within Scotland.

Information on Phase 1 and Phase 2a of HS2 can be found in HC Library briefing papers [SN316](#) and [CBP 7082](#), respectively.

General background information on the HS2 scheme can be found in [RP11/75](#).

Maps showing the Parliamentary constituencies through which HS2 runs can be found attached to the [landing page](#) for this paper.

Further briefings are available on the [Railways Topical Page](#) of the Parliament website.

# 1. What is HS2?

## 1.1 Policy background

HS2 is the Government's flagship transport infrastructure project to build a high speed rail line from London to Manchester and Leeds, via Birmingham, the East Midlands, Sheffield and Crewe, to begin operation in 2026 and be completed by 2033.

Supporters claim that the line is urgently needed to meet projected future demand; to tackle the capacity constraints on the West Coast Main Line; and to deliver wider economic and regional benefits. Opponents maintain that these claims are overstated and that future demand and capacity requirements can be met via other, cheaper means.

The scheme that became HS2 was floated separately by the three main parties in 2008-09. In January 2009 Geoff Hoon, then Transport Secretary in the Labour Government, set up HS2 Ltd. with the principal aim of advising the Secretary of State on the development of proposals for a new railway from London to the West Midlands and potentially beyond.<sup>1</sup> The scheme taken forwards from 2010 was based on the outcome of the work conducted for the Labour Government by HS2 Ltd. It was initially proposed by Labour in its March 2010 command paper and was taken up by the Coalition Government after it assumed office in May of the same year.<sup>2</sup>

In the May 2010 Coalition Agreement the new Government confirmed its decision to build the new line in two phases, due to "financial constraints".<sup>3</sup> It was later confirmed that Phase 1 would take the line from London to the West Midlands by 2026 while Phase 2 would take the line from the West Midlands to the north of England by 2032-33.<sup>4</sup>

It was not until January 2013 that a decision was taken as to the configuration of the route from Birmingham north to Manchester (via Crewe) and Leeds (via the East Midlands and Sheffield).<sup>5</sup> The Government ran a consultation on Phase 2 between July 2013 and January 2014.<sup>6</sup> In November 2015 the Government announced its intention to bring forward the route to Crewe (now called Phase 2a) before the remainder of the route to Manchester and Leeds (now called 2b). In July 2017 it issued consultations on the Crewe hub and the eastern leg rolling stock depot; announced decisions on route refinements for Phase 2b and published the Bill for Phase 2a.<sup>7</sup>

More background information and discussion on the HS2 scheme can be found in HC Library briefing paper [RP11/75](#).

<sup>1</sup> DfT, *The role and funding of High Speed Two Ltd.*, 14 January 2009

<sup>2</sup> DfT, *High Speed Rail*, Cm 7827, March 2010; and: DfT press notice, "[Proposed high speed rail network North of Birmingham confirmed](#)", 4 October 2010

<sup>3</sup> HMG, *The Coalition: Our Programme for Government*, May 2010

<sup>4</sup> DfT, *High Speed Rail: Investing in Britain's Future – Consultation*, February 2011, p16

<sup>5</sup> DfT, *High speed rail: investing in Britain's future – Phase Two: the route to Leeds, Manchester and Beyond*, Cm 8508, January 2013; [detailed route maps](#) are available on the DfT archive website

<sup>6</sup> DfT, *High Speed Rail: investing in Britain's future - Consultation on the route from the West Midlands to Manchester, Leeds and beyond*, July 2013

<sup>7</sup> All available at: DfT, [HS2: high speed rail](#) [accessed 3 August 2017]

Arguments for and against HS2 are based on competing ideas not only about what the country needs in terms of new or improved rail infrastructure, but about how (if needed at all) it should be delivered and what the benefits and costs are of the ideas put forward. The two sides fundamentally disagree with each other's interpretation of the 'facts and figures' about the scheme. A fuller statement of these arguments can be found in HC Library briefing papers [RP11/75](#) and [RP14/24](#).

## 1.2 Party views

Since the beginning of the project there has been a general consensus that without all-party backing, the HS2 scheme would be very difficult to get through Parliament.

HS2 has been supported by the Conservatives, Labour and the Liberal Democrats since 2009, in government and opposition.<sup>8</sup> One should note, however, that the parties' proposals initially varied in terms of scope, route alignment and destinations.

In the 2010 Parliament there were MPs in the two main parties who disagreed with the scheme: 41 voted against the HS2 Phase 1 Bill in April 2014; most of these were Conservatives.<sup>9</sup> In the 2015 Parliament 42 MPs voted against the Bill at Third Reading; again these were mostly Conservatives but also included Labour MPs and representatives of smaller parties.<sup>10</sup>

- **Labour:** The then Shadow Transport Secretary, Lilian Greenwood,<sup>11</sup> said in her September 2015 speech to the Labour Conference: "let's invest in high speed rail – and let's make sure it can be run under public ownership, as a public service: an integrated national asset that the country can be proud of".<sup>12</sup> Labour has also said that HS2 should be "run in the public sector, as a public service".<sup>13</sup>
- **Scottish National Party (SNP):** Generally supports HS2, but is focused on its extension to and benefits for Scotland. The SNP manifesto for the 2015 General Election said that the party would seek support for connecting Scotland to HS2 "as a priority, with construction beginning in Scotland as well as England, and a high speed connection between Glasgow, Edinburgh and the north of England as part of any high-speed rail network [...] High Speed Rail should be constructed both from the north down and from

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<sup>8</sup> DfT, *Britain's transport infrastructure: High Speed Two*, January 2009; Conservative Party, *Conservative rail review: getting the best for passengers*, February 2009; and: Liberal Democrats, *Fast track Britain: Building a transport system for the 21<sup>st</sup> century* (policy paper 85), June 2008

<sup>9</sup> [HC Deb 28 April 2014, cc666-9](#)

<sup>10</sup> [HC Deb 23 March 2016, cc1676-9](#)

<sup>11</sup> now Chair of the Commons Transport Select Committee

<sup>12</sup> [Lilian Greenwood, speech to Labour Conference](#), 29 September 2015

<sup>13</sup> Labour press notice, "[HS2 should be run in the public sector, as a public service – McDonald](#)", 4 November 2016

the south up".<sup>14</sup> The 2015 Spending Review confirmed that Scotland would receive Barnett consequentials for HS2.<sup>15</sup>

- **Liberal Democrats:** Supported HS2 in government between 2010 and 2015 and there is no reason to believe that their view has changed. The party's manifesto for the 2015 General Election included a commitment to "proceed with HS2, as the first stage of a high-speed rail network to Scotland".<sup>16</sup>
- **Plaid Cymru:** Generally opposed to HS2 unless benefits can be secured for Wales.<sup>17</sup>
- **Green Party:** Opposes HS2 on environmental grounds and what it believes will be a further skewing of the economy to London.<sup>18</sup>
- **UKIP:** Called for HS2 to be scrapped in the party's 2015 General Election manifesto.<sup>19</sup>

### 1.3 Brexit

There is no reason why Brexit should have significant impact on HS2. However, some have suggested that, given the financial uncertainty caused by Brexit a big expensive project like HS2 may no longer be a priority and could be scaled back by, for example, using slower and cheaper trains and dropping some sections of the proposed line.<sup>20</sup> The Government has however reiterated several times its commitment to the project, including the announcement in November of the detailed route for Phase 2b.<sup>21</sup> More recently in April 2017 the Prime Minister, Theresa May, reiterated the Government's 'absolute commitment' to HS2.<sup>22</sup>

The Government had also hoped to secure some EU funding for the project. In 2015 it secured €39.2 million for ground investigation works for Phase 1, to be delivered between 2015 and 2019.<sup>23</sup> The funding comes from the Connecting Europe Facility (the funding instrument for EU transport infrastructure policy, basically supporting the [Trans-European Transport Network \(TEN-T\)](#)).

Further funding would now be unlikely. However, this would only ever have represented a small percentage of overall costs – EU contributions

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<sup>14</sup> SNP, *Stronger for Scotland: SNP Manifesto 2015*, 20 April 2015, pp10&12

<sup>15</sup> HMT, *Statement of funding policy: funding the Scottish Parliament, National Assembly for Wales and Northern Ireland Assembly*, November 2015, Table C.16, p64

<sup>16</sup> Liberal Democrats, *Manifesto 2015: Stronger Economy. Fairer Society. Opportunity for Everyone*, 15 April 2015, p30

<sup>17</sup> e.g. [NDM5505](#), 14 May 2014, Rhun ap Iorwerth AM; Plaid Cymru press notice, "[Devolved administrations should unite on HS2](#)", 11 June 2015; and "[Further push to get Wales bigger share of HS2 cash](#)", *BBC News*, 10 December 2015

<sup>18</sup> "[Voters want "big changes" - and only the Greens can deliver, says party leader Natalie Bennett](#)", *Birmingham Post*, 14 August 2014; and "[High speed rail could be so much better](#)", *Guardian blog*, 4 March 2011

<sup>19</sup> "[Nigel Farage: 'Skint' Britain cannot afford HS2](#)", *The Daily Telegraph*, 25 January 2014; and UKIP, *Believe in Britain: UKIP Manifesto 2015*, 15 April 2015, pp8&37

<sup>20</sup> "Brexit means uncertain future for infrastructure projects", *Financial Times*, 26 June 2016

<sup>21</sup> e.g. "Heathrow runway ruling may come in weeks, says Grayling", *The Times*, 18 July 2016

<sup>22</sup> "[May promises to deliver HS2 to Yorkshire](#)", *Yorkshire Post*, 29 April 2017

<sup>23</sup> [HC WPO 31957](#), 24 March 2016

to previous high speed rail projects via the TEN-T stream have equated to between four and six per cent of the overall cost.<sup>24</sup>

More generally, HS2, is included in the European Commission's TEN-T programme. To be clear this does not mean that the EU is forcing the UK to build it, rather that the UK had indicated that it should be included in TEN-T *because* it intends to build it. TEN-T is essentially a programme of major schemes aimed at improving intra-European connectivity.

## 1.4 HS2 Ltd.

As indicated above, in 2009 the Labour Government set up HS2 Ltd. to advise the Secretary of State on the development of its HS2 proposals.

HS2 Ltd. describes itself as "the company responsible for developing and promoting the UK's new high speed rail network". It is an executive non-departmental public body, sponsored by the Department for Transport and funded by grant-in-aid from the government. It has almost 800 employees who are mostly based in London.<sup>25</sup>

### **Non-departmental public bodies**

A non-departmental public body (NDPB) is a "body which has a role in the processes of national government, but is not a government department or part of one, and which accordingly operates to a greater or lesser extent at arm's length from ministers".

NDPBs have different roles, including those that advise ministers and others which carry out executive or regulatory functions, and they work within a strategic framework set by ministers.<sup>26</sup>

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HS2 Ltd.'s Chairman is Sir David Higgins, the former Chief Executive of Network Rail and the London 2012 Summer Olympics Delivery Authority. Its current chief executive is Mark Thurston, who succeeded interim Chief Executive Roy Hill in March 2017.<sup>27</sup> Both Mr Thurston and Mr Hill worked for the US engineering company CH2M, which raised questions about conflicts of interest given the company's involvement in the HS2 project.<sup>28</sup> CH2M has also received millions of pounds from the taxpayer in its capacity as development and engineering delivery partner for HS2.<sup>29</sup> When CH2M withdrew from an HS2 contract in March 2017 this provoked further concerns.<sup>30</sup> The Transport Select Committee subsequently questioned the Secretary of State, Chris Grayling, and Sir David Higgins, about the relationship between HS2 Ltd. and CH2M.<sup>31</sup>

HS2 Ltd.'s annual reports and accounts and annual expenditure reports are available on their [website](#).

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<sup>24</sup> DfT, [HS2: Outline Business Case - Section 4: Financial Case](#), March 2014, para 78

<sup>25</sup> HS2 Ltd., [About us](#) [accessed 14 February 2017]

<sup>26</sup> Cabinet Office, [Public bodies transformation programme](#), 27 April 2016

<sup>27</sup> HS2 Ltd. press notice, "[HS2 announces new CEO](#)", 26 January 2017

<sup>28</sup> [CH2M Hill: Written question – 63303](#), 9 February 2017

<sup>29</sup> *ibid.*

<sup>30</sup> "HS2 scraps contract over conflict of interest claims", *Financial Times*, 29 March 2017

<sup>31</sup> Transport Select Committee, [Oral evidence: HS2 - CH2M contract](#), HC 1140, 19 April 2017

## 2. Costs

### 2.1 Funding envelope & spend to date

The Government stated in September 2016 that **to date** it had spent a total of £1.4 billion on HS2.<sup>32</sup> The bulk of this spend is for Phase 1. Spending will begin to increase once construction begins: in June 2013 the then Chief Secretary to the Treasury, Danny Alexander, announced that the HS2 budget for 2015/16 to 2020/21 would be £16 billion.<sup>33</sup>

A great deal of HS2 spending goes on **consultancy and legal fees**. Figures published in February 2013 indicated that to date the DfT and HS2 Ltd had spent approximately £194 million on professional services contracts for HS2.<sup>34</sup> Further figures published in March 2014 showed that HS2 Ltd. had contracts with, amongst others, Atkins, totalling over £40 million; CH2M, of over £35 million; and Parsons Brinckerhoff, totalling over £13 million. Payments made to March 2014 from HS2 Ltd. to these three companies totalled more than £30 million.<sup>35</sup> CH2M has received more than £100 million since 2011.<sup>36</sup> In September 2016 the Government said that it had spent almost £12 million on legal costs; the vast majority of this was paid to Winckworth Sherwood and Eversheds LLP in their capacity as solicitors/parliamentary agents for the hybrid bill.<sup>37</sup>

On the **infrastructure**, in November 2015 the Government updated the HS2 cost figures to 2015 prices, putting the total cost of the project, including rolling stock, at £55.7 billion (£50.1 billion in 2011 prices). The Government said that this does not represent a budget increase, but an adjustment for inflation.<sup>38</sup> The funding for Phase 2a, as set out in the Explanatory Notes to the Bill is £3.48 billion.<sup>39</sup>

In June 2016 the National Audit Office (NAO) published a report on HS2's progress and preparations. It highlighted the fact that the £55.7 billion funding package does not cover funding for all the activity needed to deliver the promised growth and regeneration benefits:

The funding covers the cost of building the railway and buying new trains and maintenance depots in order to deliver the capacity and connectivity benefits assessed in the economic case for High Speed 2. Local authorities, in partnership with others such as Local Enterprise Partnerships, are responsible for driving regeneration and local growth benefits, and there is a risk that these wider benefits will not materialise if funding cannot be secured.<sup>40</sup>

Further information on costs and spending can be found in HC Library briefing paper [SN316](#) on Phase 1 of HS2.

<sup>32</sup> [High Speed 2 Railway Line: Written question – 45120](#), 12 September 2016

<sup>33</sup> HMT, *Investing in Britain's future*, Cm 8669, June 2013, p25

<sup>34</sup> [HC Deb 1 February 2013, c1007W](#); and: [HC DEP 2013-0221](#)

<sup>35</sup> [HC Deb 10 March 2014, cc61-3W](#)

<sup>36</sup> [CH2M Hill: Written question – 63303](#), 9 February 2017

<sup>37</sup> [High Speed Two: Legal Costs: Written question – 44231](#), 7 September 2016

<sup>38</sup> [High Speed 2 Railway Line: Written question – HL3816](#), 4 December 2015

<sup>39</sup> [Bill 006 EN 2017-19](#), para 482

<sup>40</sup> NAO, *Progress with preparations for High Speed 2*, HC 235, 28 June 2016, p8, see also pp39-40



The Public Accounts Committee highlighted this issue in its September 2016 follow up report and recommended that the Government “seek assurances from the relevant local authorities that they have plans in place to identify sources of funding and financing, to secure the local regeneration and growth benefits [of HS2]”.<sup>41</sup> In its response to the Committee, published in December 2016, the Government said that this work was ongoing as part of local authorities’ HS2 growth strategies and that it expected to see these in place by March 2018.<sup>42</sup>

The **rolling stock/trains** that will operate on the line will also have to be purchased. The funding envelope for the rolling stock, in 2015 prices with contingency, is £7 billion.<sup>43</sup> This reflects the ‘central estimate’ cost in 2011 prices of £6.93 billion (revised down from the previous estimate of £7.5 billion largely due to changes in risk assumptions). The lower figure was used in the October 2013 revised economic case, though the Department stated that “it is also appropriate to retain the higher figure as a long-term fiscal provision, providing a higher level of certainty”.<sup>44</sup>

There will be two types of rolling stock: captive (used on HS2 only) and classic compatible (able to run off the HSR track onto the conventional railway). The revised costs refer only to 200 metre units (trains); the 260 metre units, which were previously envisaged to run on the full Y network once Phase 2 was open, have now been discarded.<sup>45</sup>

## 2.2 Value for money

As the anticipated costs of HS2 increased, the Benefit-Cost Ratio (BCR) fell. However, recent projected cost savings and changes to appraisal methodology have increased the BCR.<sup>46</sup>

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<sup>41</sup> PAC, [Progress with preparations for High Speed 2](#) (Fourteenth Report of Session 2016–17), HC 486, 14 September 2016, p6, recc. 5

<sup>42</sup> HM Treasury, [Treasury Minutes](#), Cm 9389, 19 December 2016, pp6-7

<sup>43</sup> [High Speed 2 Railway Line: Written question - HL4189](#), 21 December 2016

<sup>44</sup> op. cit., [The Economic Case for HS2](#), pp74-5; and [HS2: Outline Business Case - Section 4: Financial Case](#), paras 19-20

<sup>45</sup> HS2 Ltd. for the DfT, [HS2 cost and risk model report](#), March 2012, pp15-17; and: *ibid.*, para 16

<sup>46</sup> BCR is essentially the net monetised benefit divided by the net cost to Government

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<b>Estimate to:</b>	<b>February 2011<sup>47</sup></b>	<b>October 2013<sup>48</sup></b>	<b>November 2016<sup>49</sup></b>	<b>July 2017<sup>50</sup></b>
<i>BCR</i>				
Phase 1 (with WEIs)	1.6 (2.0)	1.4 (1.7)	n/c	n/c
Phase 2 (with WEIs)	-	-	2.5 (3.1)	-
Phase 2a (with WEIs)	-	-	-	1.6 (1.9)
Phase 2b (with WEIs)	-	-	-	2.1 (2.6)
Full Y network (with WEIs)	2.2 (2.6)	1.8 (2.2)	2.1 (2.7)	1.9 (2.3)

According to the Government's guidance on value for money assessments, a BCR of 1.4 would represent 'low' value for money; 1.9 would represent 'medium' vfm and 2.6 would represent 'high' vfm.<sup>51</sup>

The higher BCRs (bracketed in the table above) are a result of the inclusion of wider economic impacts (WEIs). There has been a great deal of debate about how WEIs are calculated and how the Government applies them.<sup>52</sup> Much of the WEI comes from regional benefits.

In September 2013 the Government published a report by KPMG, which estimated that investment in HS2 could potentially generate £15 billion a year in productivity gains for the British economy in 2037 (2013 prices). This would represent an increase of around 0.8 per cent in the total level of GDP in 2037.<sup>53</sup> The methodology of the report was subsequently criticised and a later FOI request by the BBC resulted in the publication of the names of those areas that KPMG calculated would lose out from HS2.<sup>54</sup>

<sup>47</sup> HS2 Ltd., *Economic case for HS2: The Y network and London-West Midlands*, February 2011, p12&p43

<sup>48</sup> op. cit., *The Economic Case for HS2*, p85; and DfT, *High Speed Two: East and West: The next steps to Crewe and beyond*, Cm 9157, 30 November 2015, para 2.50, p46

<sup>49</sup> DfT, *High Speed Two Phase 2b: Strategic Outline Business Case - Economic Case*, 15 November 2016, p15

<sup>50</sup> DfT, *High Speed Two: Phase Two Economic Case*, 17 July 2017, pp13, 16 & 26

<sup>51</sup> DfT, *Value for Money Assessments* [archived 11 August 2016]

<sup>52</sup> for more information, see: op. cit., [RP11/75](#), section 5

<sup>53</sup> KPMG for HS2 Ltd., *HS2 Regional Economic Impacts*, Ref: HS2/074, September 2013, p13

<sup>54</sup> for criticism, see: Robert Peston: "[What KPMG ignored when arguing for HS2](#)", *BBC News*, 11 September 2013; and: Prof. Henry Overman: "[The Regional Economic Impacts of HS2](#)", *LSE SERC blog*, 13 September 2013; and for the FOI outcome, see: "[HS2 'losers' revealed as report shows potential impact](#)", *BBC News*, 19 October 2013

As indicated by the NAO above, there are concerns that WEIs will only be generated by extra spending, on top of the £55.7 billion for the scheme itself.

The Government's October 2013 HS2 strategy paper gave the following reasons as to why the BCR had decreased:

The changes to the benefit-cost ratio compared to August 2012 are driven by the following factors. Upward influences on the benefit-cost ratio are associated with improvements in services through use of released capacity, including to towns such as Preston, York and Milton Keynes, and better evidence on travel patterns which mean we are now forecasting more business travellers on key routes served by HS2. These are offset by downward pressures on the benefit-cost ratio from factors such as increases in costs and the reduction in the value of business travel time savings.<sup>55</sup>

In effect, the factors that buoyed up the BCR were improvements in services through use of released capacity, and more business travellers using key routes served by HS2.<sup>56</sup>

The updated November 2016 financial case for Phase 2b said that the reason the BCR had increased from previous estimates was due to a number of updates to improve the modelling and appraisal framework.<sup>57</sup> The July 2017 economic case said that changes to the BCR since the November forecast had come about due to a wide range of issues such as model updates, assumptions about conventional rail, changes to the Phase 2b route alignment and changes to appraisal.<sup>58</sup>

## 2.3 Comment

The cost of HS2 has been one of the key bones of contention between supporters and opponents of the scheme.

One of the reasons it has taken on such importance is that the cost will largely fall on the taxpayer. Governments have consistently argued that 'some' funding could come from the private sector and from the EU: "... further contributions will be sought from certain businesses and developers directly benefitting from the project".<sup>59</sup> However, the Coalition Government acknowledged that "third party contributions could only ever deliver a small percentage of the core costs for HS2".<sup>60</sup>

That said, once the line is operational it is likely that the Government of the day will seek to recoup some of the construction costs by letting out a contract to operate the line. Such a contract is currently in place on HS1.<sup>61</sup> While the Department has "not decided at this stage" whether

There have been a number of Parliamentary debates on the costs of HS2, see for example [Second Reading of Christopher Chope's HS2 Funding Referendum Bill on 23 January 2015](#).

<sup>55</sup> op. cit., [The Strategic Case for HS2](#), para 5.4.16 [page 105]; supplemental documents on the economic and financial cases were published in March 2014, see: DfT, [HS2: strategic case supporting information](#), 6 March 2014

<sup>56</sup> Mott MacDonald and MVA for HS2 Ltd, [The economic case for HS2: Summary of key changes to the Economic Case since August 2012](#), October 2013

<sup>57</sup> op cit., [High Speed Two Phase 2b: Strategic Outline Business Case - Economic Case](#), p5, for more detail see chapter 3

<sup>58</sup> op cit., [High Speed Two: Phase Two Economic Case](#), pp9-10

<sup>59</sup> [Bill 132 2013-14 - EN](#), para 505

<sup>60</sup> op. cit., [HS2: Outline Business Case - Section 4: Financial Case](#), para 62

<sup>61</sup> for details see section 3 of HC Library briefing paper [SN267](#)

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to let a similar concession for HS2,<sup>62</sup> “there is likely to be significant market capacity for an HS2 concession”. The value of such a concession:

... will be determined largely by the level and certainty of access charge revenues, but the potential scale may be such that the delivery of finance may be best sought by letting two or even three separate concessions. An operating concession would mean government would still need to meet the up front capital costs of the project, and would also bear post construction defect risk. However, risk transfer could be structured to focus on those elements where the private sector can enhance efficiency (e.g. operating costs).<sup>63</sup>

More generally, successive Governments have maintained that HS2 is a good investment for the country, that it will stimulate growth (particularly in the regions) and have an overall positive impact on jobs and business.<sup>64</sup> Those opposed to HS2 disagree. They assert that it will not deliver jobs and growth; it is not value for money; it is not needed for capacity; and it blights homes.<sup>65</sup>

There have been a number of Parliamentary reports looking at the costs and benefits of HS2 since the firm plans for Phase 1 were published in 2011.

The Commons **Treasury Select Committee**: published a report in October 2013 on the 2013 Spending Round and stated that the Treasury should not allow HS2 to proceed “until it is sure the cost-benefit analysis for HS2 has been updated to address fully the concerns raised by the National Audit Office” (see below); that the Treasury should publicly quantify the benefits for HS2 “not captured by the existing economic appraisal”; and that prior to any decision by the Treasury to proceed with HS2, it “should publish its own comprehensive economic case supporting its decision”.<sup>66</sup> The Government responded to the report in December 2013, pointing to the recently published Strategic Case and updated Economic Case for HS2 as a response to the Committee’s concerns.<sup>67</sup> The former Chairman of the Committee, Andrew Tyrie, wrote to the Transport Secretary on subsequent occasions, continuing to flag up concerns with the economic case.<sup>68</sup>

In addition to the report described above, the **Public Accounts Committee**: published two reports in May 2013 and January 2015 on the back of reports by the National Audit Office (NAO). The 2013 report on preparations for HS2 estimated that there was a £3.3 billion funding

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<sup>62</sup> op. cit., [The Strategic Case for HS2](#), para 105, p37

<sup>63</sup> op. cit., [HS2: Outline Business Case - Section 4: Financial Case](#), para 94

<sup>64</sup> e.g. op. cit., [High speed rail: investing in Britain's future – Phase Two: the route to Leeds, Manchester and Beyond](#), p5

<sup>65</sup> e.g. HS2AA press notice, [“HS2AA responds to announcement of route for phase two of HS2”](#), 28 January 2013

<sup>66</sup> Treasury Committee, [Spending Round 2013](#) (third report of session 2013-14), HC 575, September 2013, para 67

<sup>67</sup> [Spending Round 2013: Government Response to the Committee's Third Report of Session 2013-14](#) (Third Special Report of session 2013-14), HC 932, December 2013, p11

<sup>68</sup> [Letter from Committee Chair to Transport Secretary](#), 14 September 2016 and [Letter to Chris Grayling MP, Secretary of State for Transport on the economic case for HS2](#), 4 January 2017

gap over four years (2017-18 to 2020-21) which the Government had yet to decide how to fill. It criticised the Department for Transport for making decisions “based on fragile numbers, out-of-date data and assumptions which do not reflect real life” and having a large contingency that appeared “to be compensating for weak cost information”.<sup>69</sup> The 2015 report on major rail infrastructure programmes set out the Committee’s concern that ‘generous contingency funds’ could be used to hide cost overruns, and sought the Government’s assurance that this would not happen.<sup>70</sup>

The Lords **Economic Affairs Committee**: published a report in March 2015 posing a series of questions to the Government, and querying the cost-benefit analysis, particularly the values of non-work travel time savings that contribute significantly to the anticipated net benefits of the scheme.<sup>71</sup> The Government responded to the report in July 2015, generally dismissing the Committee’s concerns and asserting that “the case for HS2 is clear and robust” and “our appraisal techniques are world class”.<sup>72</sup> There followed an exchange of letters between the Committee and the Government on what the Chairman considered to be unanswered questions in the report.<sup>73</sup>

The Government’s **Infrastructure and Projects Authority (IPA)** publishes annual reports with accompanying portfolio data, detailing the rating it has given to a number of transport projects.<sup>74</sup> Since 2013 HS2 has had an ‘amber/red’ rating, denoting that “successful delivery of the project is in doubt, with major risks or issues apparent in a number of key areas” and that “urgent action is needed to ensure these are addressed, and whether resolution is feasible”.<sup>75</sup> Most recently the IPA stated that the scheme “continues to make excellent progress against a challenging schedule”.<sup>76</sup>

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<sup>69</sup> PAC, [High Speed 2: A review of early programme preparation](#) (twenty-second report of session 2013-14), HC 478, 9 September 2013, p5 (based on NAO, [High Speed 2: A review of early programme preparation](#) (session 2013-14), HC 124, 16 May 2013)

<sup>70</sup> PAC, [Lessons from major rail infrastructure programmes](#) (twenty-eighth report of session 2014–15), HC 709, 12 January 2015, p5 (based on NAO, [Lessons from major rail infrastructure programmes](#) (session 2014-15), HC 267, 29 October 2014)

<sup>71</sup> Lords EAC, [The Economics of High Speed 2](#) (first report of session 2014-15), HL Paper 134, 25 March 2015

<sup>72</sup> [House of Lords Economic Affairs Committee: The Economics of HS2 Government Response](#), July 2015, p4 & p27

<sup>73</sup> see: [Economics of HS2: correspondence with Ministers](#) [accessed 14 February 2017]

<sup>74</sup> formerly the Major Projects Authority (MPA), which was combined with Infrastructure UK on 1 January 2016 to form the IPA, see: IPA, [About us](#) [accessed 14 February 2017]

<sup>75</sup> Cabinet Office, [The Major Projects Authority Annual Report](#), 24 May 2013, chapter 2; all the data is available on the [IPA website](#) [accessed 14 February 2017]

<sup>76</sup> IPA, [DfT Government Major Projects Portfolio data, 2017](#), 18 July 2017

### 3. Compensation

Petitioners to the HS2 Phase 1 Bill Committee and Members of Parliament were concerned about the adequacy of the proposed compensation arrangements for those affected by the HS2 line since they were first announced in 2012. Those concerns continue, particularly as the compensation settlement for Phase 1 are the model for Phase 2.<sup>77</sup>

The Government has issued safeguarding directions for Phase 2b. This means that owner-occupiers in the safeguarded area (usually 60 metres either side of the line of route) can serve a blight notice, asking the Government to purchase their property. The Government also published a consultation on the property compensation and assistance schemes for people affected by the plans for the Phase 2b route. As indicated above, this is based on the schemes in operation for Phase 1.<sup>78</sup> In its July 2017 decision, DfT said that “there are no significant differences between the route's three phases to justify a new approach to property schemes for Phase 2b” and that it had decided to implement “the same package of property compensation and assistance schemes for Phase 2b as those which are in place for Phases One and 2a”. It also decided:

For all phases, to extend the Rural Support Zone (RSZ) and Homeowner Payments (HOP) schemes to rural properties adjacent to deep bored tunnels, where they are within 300m of the track as it enters and leaves the portal

On the Phase 2b route, to make amendments to four rural / urban boundaries at Crewe, Long Eaton, Trowell and Leeds (see images on pages six and seven)<sup>79</sup>

There is a guide to the available compensation schemes on the [Gov.uk website](http://Gov.uk),<sup>80</sup> with information on eligibility and how to apply. In summary they are as follows:

- In a safeguarded area: [Express Purchase Scheme](#) and [Need to Sell Scheme](#)
- In a rural support zone: [Cash Offer or Voluntary Purchase Scheme](#) and [Need to Sell Scheme](#)
- In a homeowner payment zone: [Homeowner Payment Scheme](#) (NB not available until the hybrid bill achieves Royal Assent) and [Need to Sell Scheme](#)
- Outside the zones: [Need to Sell Scheme](#)

Further information on the development of the HS2 compensation schemes can be found in HC Library briefing paper [SN316](#) on Phase 1 of HS2.

<sup>77</sup> plaintiffs were successful in a legal case challenging the first consultation on the compensation scheme; the Government decided not to appeal and reran the consultation in line with the judge's finding, see: DfT, [HS2 judicial review the challenges explained](#), 15 March 2013, and DfT press notice, “[High court rejects legal challenges to HS2 in landmark victory for the government](#)”, 15 March 2013

<sup>78</sup> DfT, [HS2 Crewe to Manchester, West Midlands to Leeds: Property Consultation 2016](#), 15 November 2016

<sup>79</sup> DfT, [High Speed Two Phase 2b: Crewe to Manchester, West Midlands to Leeds and beyond – Property Consultation Response](#), Cm 9480, p5

<sup>80</sup> DfT, [Claim compensation if your property is affected by HS2](#) [accessed 14 February 2017]

- Rent Back: It is possible to [apply to rent and continue living in the property](#) if it is sold to the government under one of these schemes.

For Phase 2b the relevant [property scheme maps](#) showing compensation zones are available on the HS2 Ltd. website.

### 3.1 HS2 Residents' Commissioner

The [HS2 Residents' Charter](#) came into being on 16 January 2015 and is available on the Gov.uk website. Mr Mould QC described it thus:

The intention is to help to ensure that residents are treated in a fair, clear, competent and reasonable manner. It embraces a number of key principles: Discretionary property packages will be communicated clearly in the plainest non-technical language possible, individuals will be offered a single, named case officer, individuals will be offered the opportunity to meet in private with a property specialist from HS2 Ltd to explain the discretionary and statutory measures, and HS2 Ltd will commit to a reasonable response time for all property related enquiries.

The Charter went live on Friday, and Deborah Fazan has been appointed as the Residents' Commissioner to oversee the Charter and to ensure that the principles that I have just referred to are adhered to.<sup>81</sup>

To date, the Residents' Commissioner has published [six reports](#). The most recent, dated 2 March 2017, reported on how HS2 Ltd. had responded to the Bynoe report into its complaint handling and community engagement.<sup>82</sup> It stated that:

- not all HS2 Ltd staff respond quickly or proactively to the helpdesk to enable them, in turn, to respond to individuals. All HS2 Ltd staff must prioritise helpdesk enquiries;
- it is still difficult to get HS2 Ltd to engage directly with a community. Where engagement is through parish or county councils, it often lacks the intensity of focus that those living in the community bring to discussions ... HS2 Ltd urgently needs to clarify how and to what timescale it will engage with local communities on construction, traffic impacts, utility works, etc.;
- HS2 Ltd needs to make sure that community engagement stays front-of-mind for everyone working on the new railway. Community engagement must be embedded in every employee's, contractor's and third party agent's role; and
- a customer satisfaction survey for the helpdesk is overdue and would help to inform thinking, to the benefit of members of the public and the helpdesk team. It would also act as a benchmark, if undertaken at least twice a year, to indicate how well HS2 Ltd is managing its enquiries process.<sup>83</sup>

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<sup>81</sup> Commons HS2 Bill Committee, "[High Speed Rail Bill Select Committee: Statement by the Promoter and by the Chair](#)", 20 January 2015

<sup>82</sup> HS2 Ltd., [Report on HS2 Ltd's complaints handling and community engagement](#), 21 April 2016

<sup>83</sup> HS2 Ltd., [HS2 Residents' Commissioner report 6 - March 2017](#), 2 March 2017, pp5-14

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In terms of the operation of the various compensation schemes the report said that as of 31 January 2017:

- 337 blight notices had been accepted and a further 69 are being assessed;
- 107 applications for the Rural Support Zone (RSZ) had been received, of which 90 have been accepted and four are being assessed; and
- 297 applications for the Need to Sell (NTS) scheme had been received. Of these, 125 have been accepted and a further 54 are waiting for a decision (outstanding applications to the Phase 2b Exceptional Hardship Scheme (EHS) were transferred to the NTS scheme in November 2016 and not all of these have yet been determined).<sup>84</sup>

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<sup>84</sup> *ibid.*, pp2-3



## 4. Route development for Phase 2b

### 4.1 Initial proposals, 2010-13

The plans for Phase 2 generally have changed since 2010: it was initially supposed in the January 2012 command paper that Phase 2 would include a direct link between HS1 and HS2, allowing direct travel between the Continent and the north of England without the need to change in London, and that 'route options' should be developed for a spur to Heathrow Airport.<sup>85</sup> In January 2013 the Government announced a 'pause' on work for a Heathrow spur, pending the outcome of the Davies Commission review of airport hub capacity.<sup>86</sup> Provision for the HS1-HS2 direct link was included in the Phase 1 Bill; in March 2014 the Government announced its intention to remove it from the Bill on the basis that it should not proceed.<sup>87</sup>

In January 2013 the Government published a command paper setting out in some detail its proposals for Phase 2 from Birmingham north to Manchester (via Crewe) and Leeds (via the East Midlands and Sheffield).<sup>88</sup> The proposed route interchanges/terminals were as follows:

- **Manchester city centre** alongside the existing Manchester Piccadilly main line station;
- **Manchester Airport**, alongside the M56, between Warburton Green and Davenport Green "subject to agreement of a suitable funding package";
- **East Midlands at Toton** (East Midlands Hub), located between Nottingham and Derby, 1.2 miles from the M1 and close to the A52;
- South Yorkshire at **Sheffield Meadowhall**, to the east of Sheffield city centre, adjacent to the M1;
- **Leeds** at New Lane, in Leeds city centre to the south of the River Aire and with close links to the existing Leeds City station; and
- **connections** to the West Coast Main Line, just to the south of the existing **Crewe** station and to the south of **Wigan**, near Golborne; and to the East Coast Main Line near **Church Fenton** approximately 9 miles to the south west of York.<sup>89</sup>

In July 2013 the Government published a consultation document on Phase 2. It explained the Government's case for Phase 2 and set out the proposed route from the West Midlands to Manchester and Leeds with stations at Manchester Airport, Manchester City Centre, in the East

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<sup>85</sup> DfT, [High Speed Rail: Investing in Britain's Future – Decisions and Next Steps](#), Cm 8347, January 2012, p37

<sup>86</sup> DfT, [High speed rail: investing in Britain's future – Phase Two: the route to Leeds, Manchester and Beyond](#), Cm 8508, January 2013, p71

<sup>87</sup> [HC Deb 17 March 2014, cc53-54WS](#)

<sup>88</sup> op. cit., [High speed rail: investing in Britain's future – Phase Two: the route to Leeds, Manchester and Beyond](#), p9

<sup>89</sup> *ibid.*, pp36-37&47

Midlands close to Derby and Nottingham, Sheffield and Leeds; the connections to the existing railway at Crewe, south of Wigan and south of York to allow the trains to serve further destinations; and the supporting infrastructure required (e.g. depots). It sought views on whether there should be any additional stations on either leg; explained the sustainability impacts of the proposed route; looked at ideas on how to use the rail capacity freed up on the conventional rail network; and looked at how to integrate HS2 with other utilities, like water or electricity, alongside the line. The consultation closed in January 2014.<sup>90</sup>

Alongside the consultation document, the Government published a sustainability statement. The non-technical summary stated that Phase 2 “would have no direct impacts on AONBs, Registered Battlefields, Grade I and Grade II structures, Registered Parks and Gardens and Natura 2000 sites”.<sup>91</sup>

## 4.2 Higgins Report and beyond, 2014-16

In October 2014 Sir David published his second report on developing Phase 2. His central proposals were as follows:

- There should be an investigation into the possibility of running classic compatible services to **Stoke-on-Trent, Macclesfield and Stockport**.<sup>92</sup>
- **Leeds Station** should be fundamentally reviewed by HS2 Ltd., Network Rail and Leeds City Council, as by the time Phase 2 is complete, the existing station will need to be remodelled.<sup>93</sup>
- The route approach to Manchester should be via **Manchester Airport**, but “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”.<sup>94</sup>
- The route between **Warrington and Manchester** to the existing West Coast Main Line (WCML) via the **Golborne link** and the construction of a depot in an environmentally sensitive part of the route require further, urgent work as “a link to the [WCML] will be necessary sooner rather than later as part of the wider consideration of how to improve services to Scotland”.<sup>95</sup>
- The proposal for a new station at **Toton**, located between Derby and Nottingham, should be reviewed with a view to investigating 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”.<sup>96</sup>

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<sup>90</sup> DfT, *High Speed Rail: investing in Britain's future - Consultation on the route from the West Midlands to Manchester, Leeds and beyond*, July 2013

<sup>91</sup> Temple-ERM for HS2 Ltd, *High Speed Rail: Consultation on the route from the West Midlands to Manchester, Leeds and beyond - Sustainability Statement, Non-technical summary*, July 2013, p28

<sup>92</sup> op. cit., *Rebalancing Britain: from HS2 towards a national transport strategy*, p8

<sup>93</sup> *ibid.*, pp8&32-33

<sup>94</sup> *ibid.*, p29

<sup>95</sup> *ibid.*, p29

<sup>96</sup> *ibid.*, p30

- On the two opposing schemes for a **Sheffield station/South Yorkshire hub** – at the old Sheffield Victoria Station to the north east of the city centre and at the existing station, Sheffield Meadowhall, in the east of the city – 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”.<sup>97</sup>

Two of the most contentious issues are the locations of the **Sheffield** and **Leeds stations** on the eastern branch of the Phase 2 route.

In February 2015 the Government asked Sir David Higgins, chair of HS2 Ltd., to look at the options for HS2 into Leeds city centre following concerns that the originally proposed new station at New Lane was a quarter of a mile from the existing Leeds station.<sup>98</sup> Sir David published his conclusions in November 2015, recommending his so-called ‘option 2’, i.e. extending the existing Leeds Station to the south, with HS2 platforms reaching directly into the existing station, creating a common concourse between services.<sup>99</sup>

Following the announcement in November 2015 of the changes to Leeds station, Sheffield City Council chiefs renewed their calls for its high speed station to be located in the city centre rather than at Meadowhall.<sup>100</sup> In its November 2015 command paper the Government said that its preference remains for Meadowhall but that it recognises “the arguments put forward for a city centre station in Sheffield and we continue to explore them. We are committed to ensuring that HS2 delivers the largest possible benefits and continue to work with local partners to ensure that Sheffield city centre will benefit from HS2”.<sup>101</sup> There were reports in March 2016 that disagreements over the location of the Sheffield station were a contributory factor to delays with Phase 2b.<sup>102</sup>

In July 2016 Sir David Higgins published a further report analysing the various options for Sheffield and South Yorkshire. He recommended that the Government proceed with his suggested plan to physically separate the service to South Yorkshire from that to the route further North. He argued that this could “be achieved by what is termed a classic compatible service – a dedicated link taking high speed trains off the main line and running up to two trains per hour into Sheffield on existing lines whilst the main HS2 line continues to carry trains serving Leeds and further North”. It would also allow a re-appraisal of the main HS2 route to the East, running it initially parallel to the M18 to avoid not only the complexities associated with the Meadowhall viaduct but

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<sup>97</sup> *ibid.*, p32

<sup>98</sup> “[Higgins to look at other sites for Leeds HS2 station](#)”, *Rail Technology Magazine*, 6 February 2015

<sup>99</sup> HS2 Ltd., *The Yorkshire Hub: An interim report on the redevelopment of Leeds station*, 30 November 2015, pp14-15

<sup>100</sup> “[Call to ‘see sense’ over Sheffield HS2 station after Leeds decision](#)”, *The Star*, 30 November 2015

<sup>101</sup> *op. cit.*, *High Speed Two: East and West: The next steps to Crewe and beyond*, para 8.18, p86

<sup>102</sup> “HS2 station row threatens Osborne’s northern powerhouse”, *Sunday Times*, 6 March 2016

the legacy of mining in the area and allowing for fewer potential watercourse diversions.<sup>103</sup>

Liverpool launched a campaign for Phase 2b to be extended '[20 Miles More](#)' to the city and has said that it would be able to repay £2 billion of the estimated £3 billion cost for the extension on the basis of increased business rates and income from devolved local employers' National Insurance Contributions.<sup>104</sup>

### 4.3 Announcement of preferred route, November 2016

An announcement on the full Phase 2 route was much delayed: it was originally expected towards the end of 2014.<sup>105</sup>

In the event the Government announced its preferred route from Crewe to Manchester and the West Midlands to Leeds on 15 November 2016:

On the western leg, HS2 will:

- continue north from Crewe to Manchester Airport
- continue from Manchester Airport on to Manchester city centre, where a new HS2 station will be built next to Manchester Piccadilly

There will also be a connection to Liverpool and to the existing West Coast main line allowing HS2 services to continue north, serving stations to Glasgow and Edinburgh.

On the eastern leg, HS2 will:

- continue from the West Midlands to Toton in the East Midlands, where a new HS2 station will be built to serve Nottingham, Derby and the wider region
- continue north from the East Midlands to South Yorkshire
- in line with Sir David Higgins' recommendation, we propose HS2 should serve Sheffield with a connection to the existing station with the main route be moved further east and we will be consulting before a final decision is made next year
- from South Yorkshire, HS2 will continue to Leeds where a new HS2 station will be built in Leeds city centre, adjacent to the existing station

HS2 will also have a connection onto the East Coast Main Line, allowing HS2 to serve York, Newcastle and other places in the north-east.<sup>106</sup>

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<sup>103</sup> HS2 Ltd., *Sheffield and South Yorkshire Report 2016*, 7 July 2016

<sup>104</sup> "[Liverpool offers £2bn to be included in HS2 network](#)", *The Guardian*, 23 February 2016

<sup>105</sup> op. cit., *High Speed Rail: investing in Britain's future - Consultation on the route from the West Midlands to Manchester, Leeds and beyond*, para 5.3.1, p42

<sup>106</sup> DfT press notice, "[HS2 route to the East Midlands, Leeds and Manchester set out by the government](#)", 15 November 2016

On the thorny question of the alignment around **Sheffield**, the command paper indicated that the Secretary of State is “minded to accept” Sir David Higgins’ July 2016 recommendations of a 9.4km southern spur at Stonebroom off the HS2 mainline, enabling HS2 trains to run into Sheffield city centre along the existing rail network; and that the main north-south alignment should follow a more easterly alignment over some 70km between Derbyshire and West Yorkshire as its preferred option.<sup>107</sup> It sought views on this option (instead of the original Meadowhall option) in a design refinement consultation (see below).

Information on how the scheme will tie up with **Northern Powerhouse Rail** and routes to **Scotland** are examined in sections 4 and 5 below.

With regards to **Liverpool**, journey times to London are expected to be cut by more than 45 minutes once Phase 2a is open. More widely, Transport for the North (TfN) has examined two options that make use of HS2 to connect Manchester and Liverpool. Both options involve construction of a new line to Liverpool, and a junction onto the HS2 route. Under these options it would be possible to deliver a 30 minute journey between Manchester and Liverpool, connecting the cities via Manchester Airport.<sup>108</sup>

Responses to the announcement were mixed, with some arguing that “the Government have finally come clean in admitting ‘freeing up capacity’ means for many cities ‘losing the trains you already have’”,<sup>109</sup> others that “the Government must set out an integration plan to show exactly how HS2 will enable extra freight and passenger trains on the existing network and how the new high speed services and stations will link with the rest of the transport network”.<sup>110</sup>

## 4.4 Design refinements, 2016-17

Alongside the announcement of the preferred route in November 2016 the Government issued a consultation on a number of design refinements, on both the western and eastern legs. These were:

On the western leg:

- to move the previously proposed rolling stock depot at Golborne to a site north of Crewe
- to move the approach to Manchester Piccadilly up to 370 metres eastwards with the northern tunnel portal in Ardwick, to avoid direct impacts on residential properties and a school at West Gorton
- to move the route in the Middlewich - Northwich area in Cheshire up to 800 metres westwards

On the eastern leg:

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<sup>107</sup> op cit., *High Speed Two: From Crewe to Manchester, the West Midlands to Leeds and beyond*, p15

<sup>108</sup> ibid., p65

<sup>109</sup> Stop HS2 press notice, “[Government announce cuts to existing services along with HS2 Phase 2b route](#)”, 15 November 2016

<sup>110</sup> Campaign for Better Transport press notice, “[Campaigners call for HS2 integration plan as preferred route for second phase is announced](#)”, 15 November 2016

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- to move the route to the east of Measham in Leicestershire, avoiding the most significant impacts on local manufacturing businesses and development sites
- to go around instead of tunnel under East Midlands Airport
- to amend the alignment of the preferred route as it passes through Long Eaton to reduce severance in the local community and reduce impacts on the highway network and existing rail infrastructure
- to move the alignment of the route from Derbyshire to West Yorkshire to reflect a change in the proposals for serving the Sheffield city region, as recommended by Sir David Higgins in his report *Sheffield and South Yorkshire* published in July 2016<sup>111</sup>

The Secretary of State for Transport, Chris Grayling, announced his decisions on 17 July 2017:

After carefully considering the responses to the consultation, I have decided to confirm the following changes to the route. The western leg rolling stock depot will move from a site near Golborne to a site north of Crewe. That site will be included in the full environmental assessment being undertaken for the whole route and I will look carefully at that assessment.

A 26 km section of the route in the Middlewich and Pickmere area of Cheshire will change and be raised as it passes through the Cheshire salt plains, to avoid brining and gas storage infrastructure. The approach to Manchester Piccadilly station will be adjusted to improve operational efficiency and reduce impacts on residential areas and a primary school. The route near East Midlands airport will now closely follow the eastern side of the A42. This avoids tunnelling under the airport and reduces the impacts on some communities. At Long Eaton, after much consultation with the local community, the route will pass through the town on a high viaduct.

The route in South Yorkshire will be the route we consulted on in 2016, which in part follows the M1 and M18, and serves Sheffield city centre via a spur from the HS2 line. I am also asking HS2 Ltd to take forward the provision of a northern junction back on to HS2, giving a city centre to city centre connection between Leeds and Sheffield in less than 30 minutes. That is very important for the development of Northern Powerhouse Rail. We will also continue to work on a possible parkway station.

Finally, I have decided not to proceed with the proposed change of route to the east of Measham. Instead, I am confirming a modified version of the 2013 preferred route to the west of Measham. In Measham itself, the route is moved approximately 80 metres and the viaduct extended to mitigate commercial property impacts. I have heard the concerns raised by local communities about the proposed eastern leg rolling stock depot at Crofton. HS2 Ltd believes it has found a better option, on which I am now consulting, which is east of Leeds in the Aire valley, adjacent to the M1 on a brownfield site.<sup>112</sup>

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<sup>111</sup> DfT, [HS2 Crewe to Manchester, West Midlands to Leeds: Route Refinement Consultation 2016](#), 15 November 2016

<sup>112</sup> [HC Deb 17 July 2017, cc662-3](#); see also: DfT, [High Speed Two Phase 2b: Crewe to Manchester & West Midlands to Leeds Route Refinement Consultation 2016, a summary of consultation responses](#), 17 July 2017

## Eastern leg rolling stock depot

As indicated by Mr Grayling above, there have been concerns raised by local communities about the proposed eastern leg rolling stock depot at Crofton. HS2 Ltd. consequently developed a different option, east of Leeds in the Aire valley, adjacent to the M1 on a brownfield site.

HS2 Ltd. issued a consultation on this new site in July 2017. It states:

The Secretary of State is minded to relocate the Eastern Leg RSD to a site east of Leeds in the Aire Valley, adjacent to the M1 and the A63 corridor ...

The site is brownfield land, previously used for industrial purposes. There are good connections to the local highway network, and the site has planning consent for a large area of commercial development.

This site provides operational benefits when compared to the previously proposed site at New Crofton, and there is potential to further improve the site's operational suitability without increasing costs or impacts. The site also has the potential to provide an operational cost saving due to its proximity to Leeds as this will reduce the distance empty trains need to run from the station to the depot.

The site would be connected to the Leeds spur corridor using a flat junction and two approach tracks.

It is possible additional maintenance sidings will be needed and work continues to assess this.<sup>113</sup>

The consultation closes on 12 October 2017.

## 4.5 Next steps

Mr Grayling stated that he intends to bring forward a third hybrid bill for Phase 2b in 2019.<sup>114</sup> In preparation, HS2 Ltd. has published a consultation on the technical scope and methodology to be used in the environmental and equality impact assessments.<sup>115</sup>

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<sup>113</sup> HS2 Ltd., [High Speed Two Phase 2b Crewe to Manchester West Midlands to Leeds: Eastern Leg Rolling Stock Depot Consultation document](#), 17 July 2017, pp8-9

<sup>114</sup> [HC Deb 17 July 2017, c663](#)

<sup>115</sup> HS2 Ltd., [HS2 Phase 2b draft Environmental Impact Assessment Scope and Methodology Report](#) and [HS2 Phase 2b draft Equality Impact Assessment Scope and Methodology Report](#), 17 July 2017; both closing on 29 September 2017

## 5. Northern Powerhouse Rail (HS3)

### 5.1 Background, 2010-14

A trans-Pennine high speed rail link has long been discussed as a desirable part of any 'high speed network' for the UK. In fact it was part of the recommended scheme, called the 'inverse A' alignment, that HS2 Ltd. put to the Labour Government before the 2010 General Election:

The Inverse A configuration is an adaptation of networks which have been examined in other past studies. It is the most comprehensive network able to be supported by the capacity of HS2, relying as it does on one route north from London. We report on the possible need for a second line from London later in this chapter.

The Inverse A aims to maximise benefits to the widest number of people by offering direct London access to each of the conurbations in our remit, as well as Merseyside (via the existing classic line), East Midlands and South Yorkshire. The transpennine link between Manchester and Leeds would carry only east-west flows, with services to and from London travelling either side of the Pennines. This configuration would also unlock potential for a network of high speed inter-regional services.<sup>116</sup>

This would have delivered journey times between Leeds and Manchester and Liverpool of approximately 25 minutes.<sup>117</sup> It put the cost of the trans-Pennine element at between £3.8 billion and £4.6 billion, depending on whether the line went to the east or west of Manchester, with a total length of between 54 and 69 km.<sup>118</sup>

In its March 2010 command paper the Labour Government rejected the trans-Pennine link as part of its broader support for a 'Y network':

... the Government believes that the link between Manchester and Leeds would be best enhanced through consideration of options for a conventional upgrade of the existing line rather than through a new high speed line, given the proposals for upgrading the line contained in Network Rail's Northern Hub plan.<sup>119</sup>

It then sat on the backburner somewhat until 2014, when the Government began talking about the concept of a 'Northern Powerhouse'. In a June 2014 speech the Chancellor of the Exchequer, George Osborne, said:

We need an ambitious plan to make the cities and towns here in this northern belt radically more connected from east to west - to create the equivalent of travelling around a single global city. As well as fixing the roads, that means considering a new high speed rail link.

More information on Northern Powerhouse Rail can be found in HC Library briefing paper [CBP 7676](#).

<sup>116</sup> HS2 Ltd. for DfT, *High Speed Rail London to the West Midlands and Beyond: A Report to Government by High Speed Two Limited*, March 2010, p220, paras 6.1.11-12; for recommendation see p9

<sup>117</sup> *ibid.*, p226

<sup>118</sup> *ibid.*, p229, figure 6.1f

<sup>119</sup> *op. cit.*, *High Speed Rail*, para 4.31, p74



Today I want us to start thinking about whether to build a new high speed rail connection east-west from Manchester to Leeds. Based on the existing rail route, but speeded up with new tunnels and infrastructure.

A third high speed railway for Britain.<sup>120</sup>

The immediate responses to this idea were mixed. Sir Richard Leese, leader of Manchester City Council and a supporter of HS2, told *The Guardian* that the north could have “both vastly improved services on what he admits are the currently “wretched” northern lines, while looking 20 years ahead to super-high-speed links”.<sup>121</sup> Dr Richard Wellings, Head of Transport at the Institute of Economic Affairs and an opponent of HS2, said that the relatively short distances between northern cities “mean that high-speed rail is an expensive and inefficient way of linking them together” and that smaller-scale schemes would deliver higher returns for the taxpayer.<sup>122</sup>

In July 2014 five big city councils in the North of England (Leeds, Liverpool, Manchester, Newcastle and Sheffield) published *One North*, a report setting out a ‘strategic proposition’ for transport in the North. This included a recommendation for:

A new 125 mph trans-Pennine route, connected to the HS2 lines and the existing rail network, tunnelled as needed, linking the five city regions together with Manchester Airport and the ports. It will be a facility that will need to be planned for intensive use as a high-reliability all-weather central component in the North’s transport system.<sup>123</sup>

### What is ‘high speed’ rail?

It is worth pausing here to reflect on what is meant by ‘high speed’. While there is no internationally agreed definition of what constitutes a high speed railway, policymakers have now generally fallen into line with the definition set out in the European Union’s 1996 Directive dealing with high-speed rail. This defined ‘high speed line’ in the following way:

High-speed lines shall comprise:

- specially built high-speed lines equipped for speeds generally equal to or greater than 250 km/h [155 mph],
- specially upgraded high-speed lines equipped for speeds of the order of 200 km/h [124 mph],
- specially upgraded high-speed lines which have special features as a result of topographical, relief or town-planning constraints, on which the speed must be adapted to each case.<sup>124</sup>

This causes confusion in the debate about ‘HS3’ as a 125 mph conventional rail line is technically a high speed line, but the prevailing debate about HS2 means that to most people ‘high speed’ means the speeds of 200 mph+ being proposed for that route.

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<sup>120</sup> HMT, *Chancellor: ‘We need a Northern powerhouse’*, 23 June 2014

<sup>121</sup> “[Forget HS3 – we need to fix the north of England’s wretched rail service now](#)”, *The Guardian*, 23 June 2014

<sup>122</sup> IEA press notice, “[HS3: A costly vanity project](#)”, 23 June 2014

<sup>123</sup> Northern Councils, *One North: A Proposition for an Interconnected North*, July 2014, p25

<sup>124</sup> [Directive 96/48/EC](#), 23 July 1996, Annex I, para 1(b)

Sir David Higgins, Chairman of HS2 Ltd., published a report in October 2014 which included consideration of what sort of east-west rail link would benefit the North of England. This put more flesh on the bones of HS3: Sir David reported that Network Rail had undertaken an initial study for his report to look at how journey times and reliability between Manchester and Leeds might be improved:

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 ... 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.<sup>125</sup>

## 5.2 Strategic Transport Plan for the North, 2014-

In his response to the Higgins report the then Secretary of State for Transport, Patrick McLoughlin, announced his intention to create a new sub-national transport body (STB) called Transport for the North (TfN), made up of the main northern city regions, to work together with other authorities and stakeholders and "allow the north to speak with one voice on the big decisions, to benefit the region as a whole":

I would like to invite these cities to come together and work with the Government on the options for HS3, alongside a wider transport strategy for the north. I intend that this Government-led strategy will be developed with input from Network Rail, the Highways Agency as well as TfN, and will stretch from Liverpool to Sheffield, Hull and Newcastle.<sup>126</sup>

This was legislated for in section 21 of the [Cities and Local Government Devolution Act 2016](#). It will come into being when the relevant secondary legislation has been passed by Parliament.

In March 2015 the Government published a transport strategy for the North, in partnership with TfN. It said that the Government would

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<sup>125</sup> op. cit., [Rebalancing Britain: from HS2 towards a national transport strategy](#), p34

<sup>126</sup> [HC Deb 27 October 2014, c8WS](#)

consider “all options for moving towards the 30 minute journey time ambition [between Manchester and Leeds], including options for tunnelling where necessary to improve speeds [... in] the next rail control period (2019-24)”.<sup>127</sup>

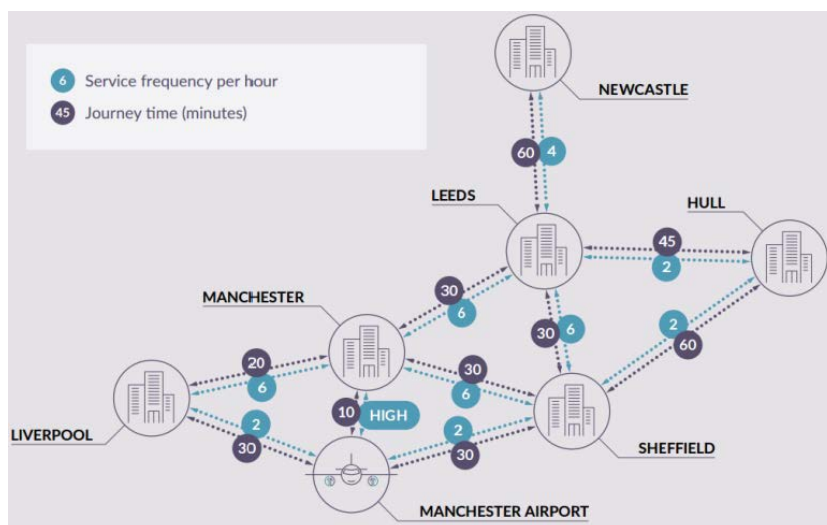
In the March 2016 update of the Northern Transport Strategy, TfN said:

... our work to date has indicated that in some cases achieving the vision in full might involve entirely new lines, or in other cases major upgrades to existing routes that are akin to a new line, such as major bypasses and cut-offs. Further work on route options and intermediate stations is being developed as outlined in our November 2015 report. On routes between Leeds and Manchester, and Manchester and Sheffield our work to date has shown that we need to go further than committed investments in the existing railway in order to achieve our vision for faster journeys and more frequent services. We are therefore developing a range of options, including new lines, that look at how we could achieve our longer term transformational vision, as well as accommodate the anticipated growth in freight.<sup>128</sup>

TfN is working towards its [Strategic Transport Plan](#) (STP) for the North. In its June 2017 report on integrated rail, it stated that:

There is a reasonable degree of certainty about the changes in supply that will occur in the short to medium term. In the longer term, HS2 Phases 2a and 2b will involve the provision of new infrastructure in the North, in 2027 and 2033 respectively under current plans. However, while work continues developing the Phase 2a and 2b propositions, only Phase 1 of the scheme (London – Birmingham) is committed at the moment. NPR [Northern Powerhouse Rail] is under development, and will be further refined by TfN over the remainder of 2017. NPR would also be a long term, transformative infrastructure project in the North.<sup>129</sup>

The current ‘vision’ for NPR is given in the graphic below:<sup>130</sup>



<sup>127</sup> DfT/TfN, [The Northern Powerhouse: One Agenda, One Economy, One North A report on the Northern Transport Strategy](#), 20 March 2015, p21

<sup>128</sup> TfN, [The Northern Transport Strategy: Spring 2016 Report](#), March 2016, p29

<sup>129</sup> TfN, [Initial Integrated Rail Report Strategic Transport Plan Evidence Base Report by Steer Davis Gleave commissioned by Transport for the North](#), 19 June 2017, executive summary

<sup>130</sup> *Ibid.*, p48

Since late 2015 the Government has referred to HS3 in PQs as Northern Powerhouse Rail (NPR); this may assist in better understanding what the scheme is and differentiate it from HS2.<sup>131</sup> In December 2015 the Transport Minister in the Lords, Lord Ahmad of Wimbledon, said: “The Northern Powerhouse Rail network develops the HS3 concept to offer a vision for radically improved journey times and service frequencies between the major cities of the North, building on the substantial rail improvements to which the government is already committed”.<sup>132</sup>

### 5.3 National Infrastructure Commission report, 2016

In March 2016 the National Infrastructure Commission (NIC), chaired by Lord Adonis, published its third report, called *High Speed North*. Its central recommendation on rail was “kick-starting HS3, integrating it with HS2 and planning for the redevelopment of the North’s gateway stations”.<sup>133</sup>

The Commission defined HS3/NPR as “a transformed east-west network from Liverpool in the west to Hull and Newcastle in the east”.<sup>134</sup> It said that HS3 should make use of key northern sections of HS2, upgraded existing lines, and sections of new track where necessary “to provide capacity, speed and congestion relief” and “enhanced connectivity and improved journey times between the major cities of the North and to Manchester Airport”.<sup>135</sup> This would be achieved by upgrading the TransPennine line between Manchester and Leeds; designing the optimal configuration for the northern phase of the HS2 network; and redeveloping Manchester Piccadilly station.<sup>136</sup>

The Commission explained that Network Rail had been commissioned and funded to develop a plan for a major upgrade of the TransPennine line from Leeds to Manchester via Huddersfield for delivery by 2022. It said that, building on this, proposals should be developed to integrate it with options for a second phase of major route enhancements, which should aim to deliver a 30-minute journey time, together with capacity and frequency improvements. Crucially, the Commission said that this second phase “may not require a completely new line but will require sections of major new infrastructure”.<sup>137</sup>

Bearing all this in mind, the Commission recommended:

The upgrade of the Leeds to Manchester link should form the first phase of HS3 to be developed in detail. It should comprise a long-term programme with the objective of reducing journey times to 30 minutes, alongside substantial capacity and frequency improvements. The first part of this should be a shorter-term plan, to be developed and implemented by TfN and Network Rail by

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<sup>131</sup> e.g. [WPO HC 31234](#), 21 March 2016

<sup>132</sup> [WPO HL4692, 21 December 2015](#)

<sup>133</sup> NIC press notice, “[Put HS3 at the heart of a High Speed North – Adonis](#)”, 15 March 2016

<sup>134</sup> NIC, [High Speed North](#), 15 March 2016, p4

<sup>135</sup> *ibid.*, p8

<sup>136</sup> *ibid.*, p8

<sup>137</sup> *ibid.*, pp8-9

2022, to cut the journey time between these cities and to onward destinations by roughly 20% from 49 to 40 minutes, enhance capacity and improve service regularity and frequency.<sup>138</sup>

In the March 2016 Budget, published the day after the NIC report, the Government accepted the NIC's recommendations and said it was "giving the green light to High Speed 3 between Leeds and Manchester to reduce journey times to around 30 minutes".<sup>139</sup> To this end, it would provide £60 million to develop plans both for the Leeds-Manchester route by 2017 and to improve transport connections between cities of the North.<sup>140</sup>

## 5.4 Command paper, November 2016

As indicated in section 4 above, on 15 November 2016 the Government announced its preferred route for Phase 2b of HS2 from Crewe to Manchester and the West Midlands to Leeds. It put a great deal of emphasis on the importance of connecting HS2 to Northern Powerhouse Rail (NPR) in order to leverage the anticipated local economic impacts of HS2 in the north.

It is important to note at this juncture that NPR now goes beyond the single trans-Pennine line originally designated HS3 and is generally used to refer to the wider programme of strategic rail projects across the North. Therefore when the Government, TfN and others talk of integration between HS2 and NPR they are not only talking about closing that trans-Pennine link between the HS2 termini in Leeds and Manchester but about other linkages across the north.

The main NPR benefits highlighted in the command paper were as follows:

- Building a connection north of **Sheffield Midland** would result in Sheffield being served by a 'loop' and create the opportunity to connect Sheffield city centre with Leeds, York and Newcastle. This connection could be the first step in delivering a 'Northern Powerhouse network', with journeys between Sheffield and Leeds of around 25 minutes;
- A new connection for services travelling north from Sheffield could serve **York, Newcastle and Hull** via Leeds station;
- The Government has begun work on a study to examine the potential for a parkway station in Yorkshire, as well as whether HS2 services between Sheffield Midland and London can also serve **Rotherham, Barnsley or Meadowhall**;
- TfN has examined two options that make use of HS2 to connect **Manchester and Liverpool**. Both options involve construction of a new line to Liverpool, and a junction onto the HS2 route. Under these options it would be possible to deliver NPR's ambitions for a 30 minute journey between Manchester and Liverpool, connecting the cities via Manchester Airport;

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<sup>138</sup> *ibid.*, p9

<sup>139</sup> HMT, [Budget 2016](#), HC 901, 16 March 2016, para 1.232, p62

<sup>140</sup> *ibid.*, para 1.291, p73

- There is strong local aspiration for NPR services into, and through, **Manchester** to serve Manchester Piccadilly so that interchange can be made easily with HS2; and
- Compared to the **Leeds** HS2 station proposed in the 2013 consultation, the current proposal better integrates HS2 into the city centre and the existing rail station, enabling easy interchanges onto current rail services across West Yorkshire and future NPR services.<sup>141</sup>

The Government has indicated willingness to include 'passive provision' for NPR services in the Phase 2b hybrid bill.<sup>142</sup>

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<sup>141</sup> op cit., [\*High Speed Two: From Crewe to Manchester, the West Midlands to Leeds and beyond\*](#), pp65-66

<sup>142</sup> *ibid.*, p66

## 6. High speed to Scotland

### 6.1 Background, 2010-15

The Scottish National Party (SNP) has called for HS2 to be extended to Scotland for a number of years and in 2012 it said it was considering building a separate high speed rail link between Edinburgh and Glasgow by 2024.<sup>143</sup> In June 2014, following the announcement of the Government's plans to look into 'HS3', Gordon MacDonald MSP, member of the Scottish Parliament's Infrastructure and Capital Investment Committee, said that "it is ridiculous that Westminster is extending the High Speed Rail network but without any consideration for Scotland ... There is an undeniable economic case to connect Scotland to the rest of the UK and the continent".<sup>144</sup>

In February 2015 the Scottish Infrastructure Secretary, Keith Brown, highlighted research by Greengauge 21 indicating that a high speed rail link between Scotland and Manchester could generate almost £25 billion for the UK economy. He said the Scottish Government was "committed to a genuinely national high-speed rail network" and expanded on this theme in a debate in the Scottish Parliament.<sup>145</sup>

Meanwhile, in November 2013 the Government and Transport Scotland instructed HS2 Ltd. to "identify ways to make further rail capacity and journey time improvements between northern England and Scotland for both passengers and freight. This will include looking to cut journeys from Glasgow and Edinburgh to London to 3 hours or less".<sup>146</sup> When questioned about it by the Transport Select Committee in November 2014 Sir David Higgins said that it would contain "a range of options, from ambitious schemes of an entirely new high-speed network or probably the more realistic ones, ones of upgrades and the staging of that".<sup>147</sup>

In September 2015 Keith Brown said that the final report would enable the Scottish Government to develop its planned high-speed line between Edinburgh and Glasgow.<sup>148</sup> There followed reports in early 2016 that the Edinburgh-Glasgow link had been 'shelved'.<sup>149</sup>

Background on debates about high speed rail in Scotland can be found in section 3.3 of HC Library briefing paper [RP 11/75](#)

<sup>143</sup> SNP press notice, "[SNP welcome commitment to high speed rail by 2024](#)", 12 November 2012

<sup>144</sup> SNP press notice, "[HS3 plans leave Scotland in the slow lane](#)", 23 June 2014

<sup>145</sup> "[Westminster challenged to commit to high-speed rail in Scotland](#)", *STV News*, 24 February 2015, and [Scottish Parliament motion S4M-12382](#), 24 February 2015

<sup>146</sup> DfT press notice, "[Next phase of work for High Speed 2 and Scotland](#)", 1 November 2013

<sup>147</sup> Transport Committee, [Oral evidence: HS2: update](#), HC 793, 17 November 2014, Q13

<sup>148</sup> "[Scots high-speed HS2 rail report suffers new delay](#)", *The Scotsman*, 3 September 2015

<sup>149</sup> see, e.g., "[High speed Glasgow-Edinburgh rail link plans 'shelved'](#)", BBC News, 15 January 2016; and "[Scottish Government has 'dropped' Glasgow to Edinburgh bullet train](#)", *The Scotsman*, 18 February 2016

## 6.2 UK and Scottish Government reports, March 2016

In March 2016 the UK and Scottish Governments published two reports on HSR to and within Scotland. The first report, produced by HS2 Ltd., considered various options including upgrades or new routes to deliver a three-hour journey time between the central belt of Scotland and London. These options fell under two headings: upgrades to existing routes and high speed options:

### Upgrades to existing routes

Upgrades to both the East and the West Coast Main Lines would be challenging and, within the footprint of the existing network, would deliver limited journey time savings, short of the three-hour journey time aspiration.

Achieving a three-hour journey time to Glasgow and Edinburgh through upgrades to existing lines would require around 137 miles of new high speed bypasses on the West Coast Main Line at a cost of between £17 billion and £19 billion and would present sustainability and engineering challenges similar to those for a new line.

On the unimproved sections of the railway, existing challenges regarding capacity, traffic mix, disruption and resilience would remain. Upgrades on the East Coast Main Line alone, with slightly fewer bypasses, could deliver a three-hour journey time to Edinburgh, but not Glasgow. This would cost between £11 billion and £13 billion without addressing the capacity issues; a solution addressing the capacity issues would cost up to £20 billion.<sup>150</sup>

### High speed options

A new high speed route from the northern end of Phase 2 to Scotland would involve more than 190 miles of new railway, and the potential to serve other city centres. It would increase capacity and reduce journey times, but it would have associated sustainability impacts.

A high speed route using the western leg of Phase 2 of HS2 could serve both Edinburgh and Glasgow by connecting to the mid-point of an Edinburgh to Glasgow high speed line. This would cost between £22 billion and £25 billion (excluding the cost of an Edinburgh to Glasgow high speed line).

A slightly different configuration to the west serving both Glasgow and Edinburgh would cost between £32 billion and £34 billion, while a route to the east would require significantly more infrastructure and cost anything between £27 billion and £43 billion.<sup>151</sup>

A separate report, published by Transport Scotland, concluded that the benefits of a high speed rail line between Glasgow and Edinburgh were “not considered to be sufficient in themselves to cover the very high cost of building a high speed link between Glasgow and Edinburgh as a free standing scheme”. A high speed line between Glasgow and

<sup>150</sup> HS2 Ltd., *Broad options for upgraded and high speed railways to the North of England and Scotland*, 21 March 2016, p3

<sup>151</sup> *ibid.*, p4



Edinburgh would be possible, “but its feasibility is dependent on a commitment to extend high speed rail to Scotland”.<sup>152</sup>

The Scottish and UK Governments said that work would be carried out in 2017 to identify options with the best business case for implementation from 2019 onwards.<sup>153</sup> This was reiterated in the Government’s November 2016 announcement of its preferred route for Phase 2b of HS2 from Crewe to Manchester and the West Midlands to Leeds.<sup>154</sup>

Information is available on the [Transport Scotland website](#).

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<sup>152</sup> Transport Scotland, *High Speed Rail Scotland: Summary Report*, 21 March 2016, p2

<sup>153</sup> DfT press notice, “[Three-hour Scotland to London rail journeys on track](#)”, 21 March 2016

<sup>154</sup> op cit., *High Speed Two: From Crewe to Manchester, the West Midlands to Leeds and beyond*, pp59-60

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