High Speed Two is the Government’s planned new, high speed railway. HS2 Ltd is the company responsible for designing and building the railway, and for making recommendations to the Government.

The route towards Leeds and the North East
The route north east of Birmingham forms approximately 123 miles (198km) of the Leeds leg on the Phase Two network. The Phase 2b route for the Leeds leg begins at the Phase One junction to the north of Water Orton. The route runs to the East Midlands via a new station serving the region. South-east of Chesterfield, the line divides to enable services to join the existing railway network and continue to Sheffield. The mainline route continues northwards to the east of Leeds where the route divides. One line continues northeast and joins the existing East Coast Main Line to the south of York. The other line terminates at Leeds city centre.

Serving South Yorkshire
On 7 July 2016 Sir David Higgins published the “Sheffield and South Yorkshire Report 2016”, with two key recommendations for a different approach to serve South Yorkshire.

• That HS2 services would run high speed ‘classic compatible’ trains into Sheffield via a dedicated link that runs off the main HS2 line, providing up to two trains per hour into Sheffield city centre with the option of an additional stop at Chesterfield.

• That the main HS2 line be moved further east, initially running parallel to the M18. This alignment not only avoids the complexities and risks associated with the Meadowhall route but also provides journey time savings to services heading to Leeds, York and Newcastle.

The report also recommends that HS2 Ltd should undertake a study for a potential parkway station along the M18/eastern route which could serve the South Yorkshire area as a whole, and examine whether trains terminating at Sheffield Midland could be extended to destinations such as Meadowhall, Rotherham, or Barnsley.

Between July 2013 and January 2014
HS2 Ltd consulted the public on the proposed route and stations for Phase Two of HS2, from the West Midlands to Manchester, Leeds and beyond.

In November 2015
The Government announced its intention to bring forward the delivery of the Phase Two route between the West Midlands and Crewe, known as Phase 2a.

In November 2016
The Government announced proposals for the remainder of the Phase Two route, known as Phase 2b.
Connecting city centres

Using the existing Sheffield Midland station for HS2 services opens up the possibility of running high speed trains from Sheffield to Leeds by building a link back onto the main HS2 line north of Sheffield. This link could deliver Transport for the North’s (TfN’s) ambition for a frequent 30-minute journey time between Leeds and Sheffield, and might also be used by Birmingham–Leeds HS2 services, allowing them to route through Sheffield.

TfN is considering the Sheffield–Leeds corridor alongside other Northern Powerhouse Rail schemes and we look forward to their advice on how the HS2 mainline can be utilised to help deliver their aspirations for fast and frequent city centre services across the North.

Reasons for change

The “Sheffield and South Yorkshire Report 2016” highlighted five main factors for consideration in making a recommendation:

1. Demand – Any decision in South Yorkshire must be set in the context of the rest of the rail network, recognising that four times more passengers are travelling to Leeds, York and Newcastle than South Yorkshire.

2. The needs of South Yorkshire – No one option fits all, and any proposal needs to achieve the best balance between the demands of the Sheffield City Centre area and those of the rest of the region, including Barnsley, Rotherham and Doncaster.

3. Connectivity – The HS2 solution needs to fit with the ambitions of TfN to create a Northern Powerhouse through better connectivity across northern cities.

4. Local constraints – Topography, urban density and environment need to be considered along the length of the proposal.

5. Cost – The solution has to be affordable. Solutions that cost more in South Yorkshire mean that we have to find savings elsewhere on Phase Two.

Benefits

- Direct city centre to city centre services without necessitating the cost and environmental impacts associated with building a dedicated high speed station in a dense, urban environment.

- Better reflects the demand picture in South Yorkshire, where Sheffield city centre – and the area from it to Chesterfield – predominate, without impacting on the services to the areas of greater demand to the North: Leeds, York and Newcastle.

- Creates the possibility of HS2 services running through Sheffield Midland to other destinations, including Barnsley, Meadowhall and Rotherham.

<table>
<thead>
<tr>
<th>Journey times*</th>
<th>London to Sheffield</th>
<th>87 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>to Sheffield Midland including stopping at Chesterfield</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Journey times*</th>
<th>London to Leeds (non-stop)</th>
<th>81 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>no intermediate stop in South Yorkshire for through services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Estimated cost impact £1bn

* best possible times
Using the existing railway

As part of the HS2 proposals, the top of the Erewash Valley line would be electrified to allow HS2 services to run to Sheffield.

These works will complement other enhancements by Network Rail such as electrification and re-signalling works on the Midland Main Line plus remodelling within Sheffield station.

Who are HS2 Ltd?

We are the company set up by the Government to deal with the design, engineering and technical requirements of building the railway.

We also have an important role in making sure that if you’re affected by the Government’s plans, you understand what to expect (and when), and how we can help.

Sheffield Midland journey times (Fastest journey times based on assumptions and analysis as at Summer 2016); Source: HS2 Ltd.
Next steps
This graphic shows what would happen between now and when trains start running on Phase Two.

2016
Announce Phase 2b route and launch consultations

2017-2019
Carry out Environmental Impact Assessment (EIA) and produce EIA Report

2019
Deposit hybrid Bill for the Phase 2b route

2022
Royal Assent for the Phase 2b route hybrid Bill

2023
Commence construction

2033
Commence train services on the Phase 2b route

Presenting a hybrid Bill to Parliament is how the Government gets permission to build the railway, and provides the opportunity for everyone’s comments to be heard. Construction can only begin with Parliament’s approval.

We will also carry out an Environmental Impact Assessment (EIA) to understand how the project would affect the environment and local communities, and what we can do about it. Further work will be done to mitigate the impact of the railway as the design develops.

To find out more about the documents mentioned in this factsheet, visit www.gov.uk/hs2
The Residents’ Charter is our promise to communicate as clearly as we possibly can with people who live along or near the HS2 route. You can read it by visiting:
www.gov.uk/government/publications/hs2-residents-charter
We also have an independent Residents’ Commissioner whose job is to make sure we keep to the promises we make in the Charter and to keep it under constant review. The first of the Residents’ Commissioner’s reports is published at:
You can contact the Commissioner at:
residentscommissioner@hs2.org.uk

You can find out all about HS2 and properties along the line of route by visiting:
www.gov.uk/government/collections/hs2-property
You can also find out if you’re eligible for compensation at:
www.gov.uk/claim-compensation-if-affected-by-hs2

To see what jobs are available on HS2 at the moment, check our careers page:
http://careers.hs2.org.uk
If you’re a student wondering what careers in STEM subjects are like, check out articles and have a look around our Plotr World:
www.plotr.co.uk/careers/worlds.hs2
And if you’re a business wondering how to get involved with HS2, have a look at our guides and updates on:
www.gov.uk/hs2 – search for HS2 business

This document 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 HS2 Ltd.