



# **Sheffield City Region: Restoring Your Railway Fund**

Sheffield to Chesterfield via Barrow Hill

16 March 2020



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# 1 Foreword

## 1.1 Lee Rowley MP – Member of Parliament for North East Derbyshire

I am writing to offer my strong support to the proposal to reopen the Barrow Hill Line to passenger services.

The re-opening of the line would be transformative to the north east part of my constituency - re-connecting, in a meaningful way, Killamarsh, Eckington, Renishaw, Staveley and the surrounding villages with both Sheffield and Chesterfield. As jobs, leisure and working patterns change, an increasing number of local residents commute to both towns on a regular basis and improvements to public transport would be warmly welcomed by those who otherwise are reliant upon the car or struggle on existing road-based public transport.

I understand that Sheffield City Region has already undertaken a high-level study regarding the re-opening of the line to passengers which demonstrates that it would be both practically feasible and would be well-used by local residents. Given the likelihood of High Speed Two also reaching Sheffield and absorbing capacity on the existing Midland Mainline, the return of the Barrow Hill line would provide much needed additional opportunity for passenger travel on the important local transport corridor of Sheffield to Chesterfield.

I would like to offer my full backing for this proposal, and I am keen for it to be progressed to the next stage of analysis and review. If there is anything I can do to assist in the development of this initiative, or to support its eventual approval, I would be happy to do so.

The re-opening of the line would be strategically important for North East Derbyshire, its future prosperity and its local success. I am pleased to be associated with a scheme that offers so much to my constituency and its residents.



## 1.2 Toby Perkins MP – Member of Parliament for Chesterfield

I understand that the County Council are planning to apply for funding from the £500m "Beeching reversal" fund announced by the Government.

I would like to express my full support for your application, and I am keen to assist in any way I can to help develop this project.

Reopening the Barrow Hill line would provide a massive economic and social boost to Staveley, which has seen significant decline for a number of years. The improved commuter links to Sheffield will increase job opportunities for residents and make the area a more attractive place to live and invest in. The line would help bring visitors into the area and help the shops and businesses in the town.

It is also a massive opportunity to link into other projects, such as HS2, Hartington Industrial Park redevelopment, the Chesterfield Waterside project and the regeneration plans for Staveley that will hopefully be funded by the money from the Towns Fund.

Hundreds of homes are being developed in the Staveley and Whittington areas and improved transport links will be vital for the new residents.

Please keep me updated on the progress of the project and let me know how I can assist.



## 2 Summary

**This scheme is simple, deliverable and scalable. The level of capital investment will be small compared to other restoration schemes and thus will be deliverable within a relatively short timescale. It will unlock several benefits upon completion that benefit all levels of society, as well as unlocking several planned growth and regeneration sites.**

This report shows how restoring the Barrow Hill line can deliver several socio-economic benefits that would translate into a compelling business case narrative if this scheme were progressed to the next stage of development.

- Rail connectivity has had a demonstrable impact on growth and development at communities currently served by the Midland Main Line, which could be replicated along the Barrow Hill line
- The scheme will provide linkages to several communities that could benefit from enhanced access to jobs and services
- It will deliver a new and reliable form of transport to communities along the route which are currently poorly served by public transport
- Restoring this route will also enable several deprived communities such as Barrow Hill and Staveley to access fast and reliable connections to nearby job opportunities and services
- There is considerable development potential along the route, including several larger sites at Staveley and Beighton that could all benefit from the enhanced connections provided by the route
- The restored route could alleviate several capacity constraints on the Midland Main Line, which will become an important consideration in ensuring HS2 can serve Chesterfield and Sheffield Midland stations
- The route could also provide linkages and wider pathing choices for services in SCR to connect to key destinations in both the East Midlands and West Yorkshire
- Partners across the affected area, including local MPs, have shown their support for the scheme as a means of enhancing connectivity and addressing capacity concerns on the Midland Main Line
- The level of capital investment required to make the route operational will be minimal, as the line is already double tracked and within Network Rail ownership, as are most of the potential station sites
- Further assessment of the viability and accessibility requirements of individual station sites will be required, however there are multiple opportunities to provide an integrated transport offer at various locations, including Nunnery Square, Beighton and Killamarsh
- The route could support broader connections from the proposed Sheffield Victoria station, which in the long-term could deliver multiple regeneration benefits and capacity enhancements to the city of Sheffield



## 3 SCR Strategic Context

Sheffield City Region (SCR) forms a core part of the Northern Powerhouse, as well as the UK's emerging infrastructure landscape, with High Speed 2 (HS2) and Northern Powerhouse Rail (NPR) both due to converge within the area. SCR is also characterised by a strong industrial heritage; giving rise to a large manufacturing presence and dense rail network. Our Strategic Economic Plan (SEP) which is currently being updated, highlights the decline in manufacturing employment<sup>1</sup> which has coincided with the closure of many rail lines.

To counter this decline in employment and connectivity, we have targeted growth in the private sector, particularly in advanced manufacturing. This growth cannot be delivered in isolation, and both we and our partners have already undertaken significant investigation into where transport connectivity can deliver growth.

- Our strategic policy, set out in our SEP and running through to our Transport Strategy has highlighted the need to bolster connectivity across all modes to ensure economic opportunities are realised and employment land is made more accessible.<sup>2</sup>
- Network Rail's Continuous Modular Strategic Planning (CMSP) report for the Sheffield area highlights that accommodating growth will prove challenging from a capacity and connectivity perspective unless infrastructure interventions are considered.<sup>3</sup>
- Previous technical studies have focussed on understanding the feasibility of rail restoration proposals in our four target areas
- These objectives are supported by Local Plans across the affected planning authorities

Devolution has helped us to focus our transport vision around accommodating a projected increase of 500,000 trips on our transport system by 2026,<sup>4</sup> thus underlining the need to invest in connectivity improvements to drive economic growth. Our recently published Integrated Rail Plan (IRP) sets out our ambitions for enhancements to the railway network<sup>5</sup>:

*"We need a clear plan of action, one that draws together planned national, pan-regional projects such as HS2 and NPR and local investment in community rail stations and transport interchanges."* Mayor Dan Jarvis, SCR Integrated Rail Plan (2019)

This report details SCR and Derbyshire County Council's proposals for the **Sheffield to Chesterfield via Barrow Hill** scheme (referred to as the Barrow Hill Line). It is one of four schemes that SCR and its partners would like to see further developed through the Restoring Your Railways Ideas Fund and has been previously identified as a scheme warranting further investigation as part of our IRP (see map overleaf).

Evidence presented in this report highlights the benefits and constraints we have already identified for this proposal, suggesting that this scheme can easily be implemented within a relatively short timeframe.

We look forward to working with you alongside our partners to progress this scheme.

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<sup>1</sup> Sheffield City Region (2020) "Strategic Economic Plan – draft for consultation"

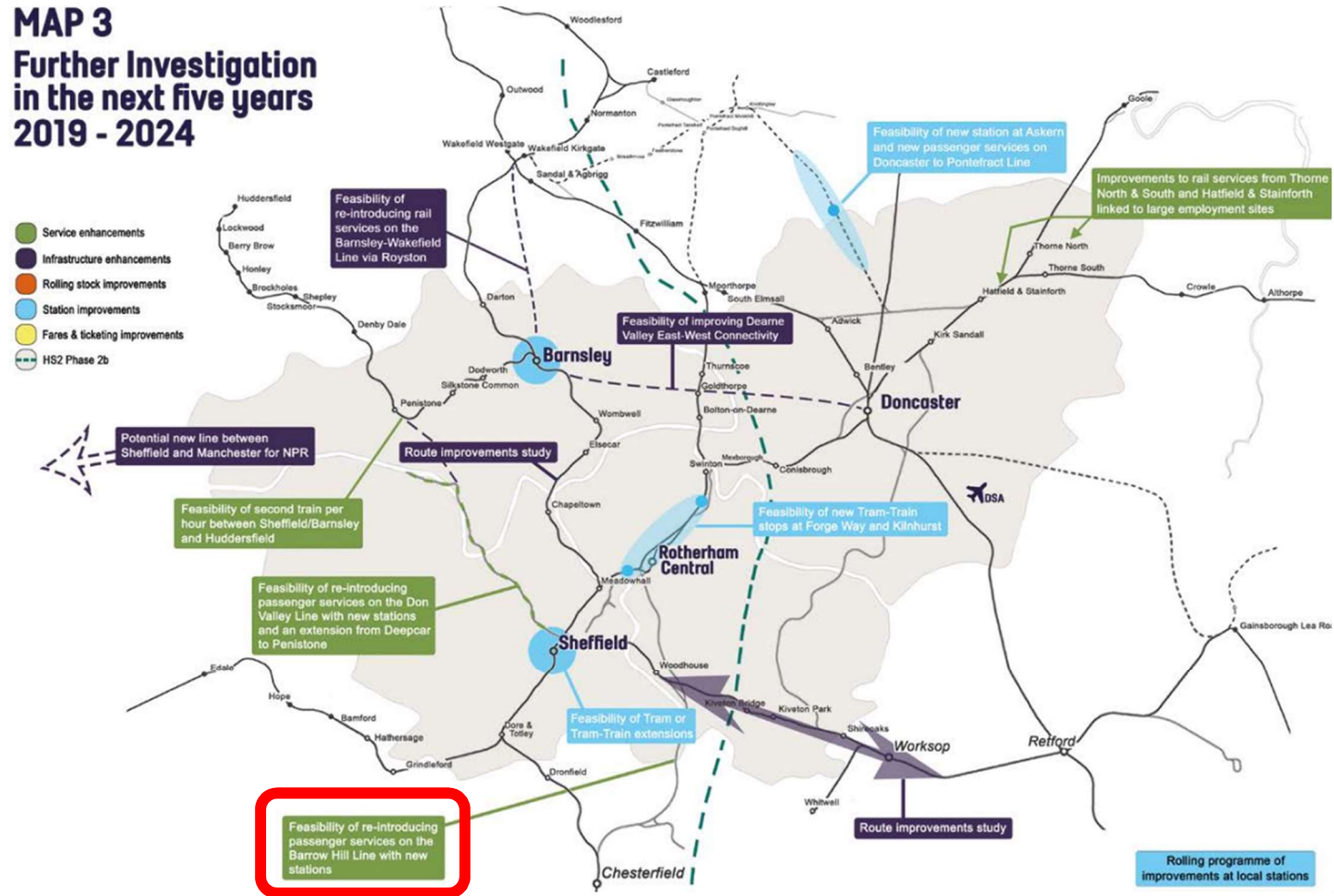
<sup>2</sup> Sheffield City Region (2016) "Integrated Infrastructure Plan"

<sup>3</sup> Network Rail (2019) "Continuous Modular Strategic Planning: Sheffield Area Strategic Question"

<sup>4</sup> Sheffield City Region (2018) "The Mayor's Vision for Transport: A Transport System Connecting People to Places"

<sup>5</sup> Sheffield City Region (2019) "Integrated Rail Plan"

Figure 3.1: SCR Integrated Rail Plan – highlighting the need for further investigation on the Barrow Hill Line



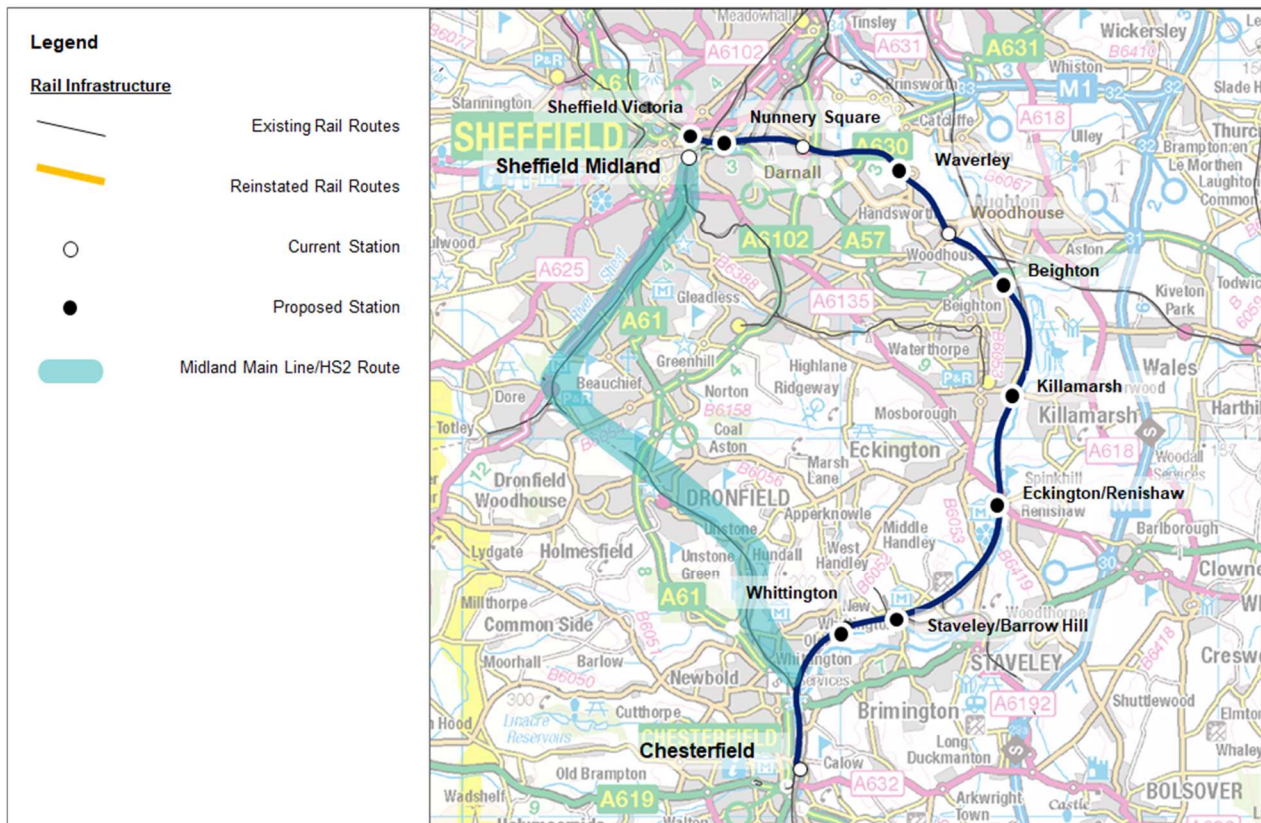
Source: Sheffield City Region

## 4 Scheme Information

### 4.1 Introduction

The Barrow Hill Line connects the Sheffield-Worksop-Lincoln Line just east of Woodhouse Station with the Midland Mainline just north of Chesterfield, serving communities in South East Sheffield, North East Derbyshire and Chesterfield.

Figure 4.1: Barrow Hill Line



Source: Mott MacDonald

Since 1963, when all the intermediate stations closed, the route has been freight-only. Occasionally, the line acts as a diversionary route between Chesterfield and Sheffield and the route is therefore used by passenger trains almost daily to retain driver route knowledge in case of diversions.

However, several communities along the length of the line remain isolated from the rail network, depriving them the opportunity to access opportunities in either Chesterfield or Sheffield or benefitting from the wider impacts of upskilling and employment in either location.

The line remains double-tracked throughout and maintained by Network Rail, so does not require significant infrastructure work.

## 4.2 Proposed Scheme

The restoration proposal for the Barrow Hill Line is to allow passenger services to use the current freight route between the Sheffield-Worksop-Lincoln Line and the Midland Main Line and as an alternative means of connecting Sheffield and Chesterfield. This will provide an opportunity to link existing communities with limited public transport to these employment hubs. The line reinstatement would also support existing strategic housing allocations at Waverley in Rotherham and a number of potential future allocations within the Sheffield Local Plan.

Services would run between Sheffield Victoria or Sheffield Midland, via the existing Nunnery Square junction, along the existing Sheffield-Worksop-Lincoln line as far as Beighton before transferring to the restored route as far as Tapton Junction where they would join the Midland Mainline for a short stretch into Chesterfield, where a fourth platform may be required to accommodate terminating services.

Restoring this route will, in isolation, provide additional rail capacity for passenger services beyond the congested Midland Main Line, which is also anticipated to service HS2 and NPR.

To enhance connectivity to communities along the length of the route, the proposed scheme also includes five new stations on the Barrow Hill Line:

- Whittington
- Barrow Hill & Staveley
- Eckington & Renishaw
- Killamarsh
- Beighton

At this stage in the study, we have assumed that the stations would be restored at their historic locations along the existing route. Most of these stations have since been abandoned or demolished, but remain within Network Rail ownership, meaning that new, modern facilities could be considered at these locations with minor enhancements to the surrounding environment to enable access and mitigate constraints. This will ensure that isolated communities can be reconnected to the rail network with relative ease.

A new station is also planned at Waverley on the Sheffield–Worksop–Lincoln line, which is being developed through a separate funding route but could be served by a new service on the Barrow Hill Line.

We also propose to develop a new interchange station at Nunnery Square on the freight line towards Sheffield Victoria, which would enable integration with the Sheffield Supertram network.

Another component of the restoration scheme will be to upgrade the existing freight link from Nunnery Square towards the Sheffield Victoria station site, thus enabling potential onward connections on the Don Valley line (see separate submission). The restoration proposal could therefore be delivered in three phases:

- **Phase 1: Restoration of Barrow Hill Line;** ensuring signalling, power, drainage, telecoms, track and fencing are compliant with requirements for passenger services then examining the potential to introduce a new service or extend an existing service between Chesterfield and Sheffield Midland.



- **Phase 2: Restoration of train stations on Barrow Hill Line at Whittington, Barrow Hill and Staveley, Eckington and Renishaw, Killamarsh and Beighton;** enabling stopping services to use the route and deliver local connectivity improvements between Sheffield Midland and Chesterfield; alongside any complementary parking and integrated transport facilities at each site
- **Phase 3: Restoration of Nunnery Square – Sheffield Victoria Link;** diversifying service patterns and opening up south and eastbound connectivity from Sheffield Victoria proposal (see separate submission)

The route will spread the benefits of HS2 and NPR through improving local connectivity to the national rail network and stations and the key economic centres. These benefits primarily arise from the existing and future workforces being more productive with faster and more frequent transport connections.



## 5 Socio-Economic Benefits

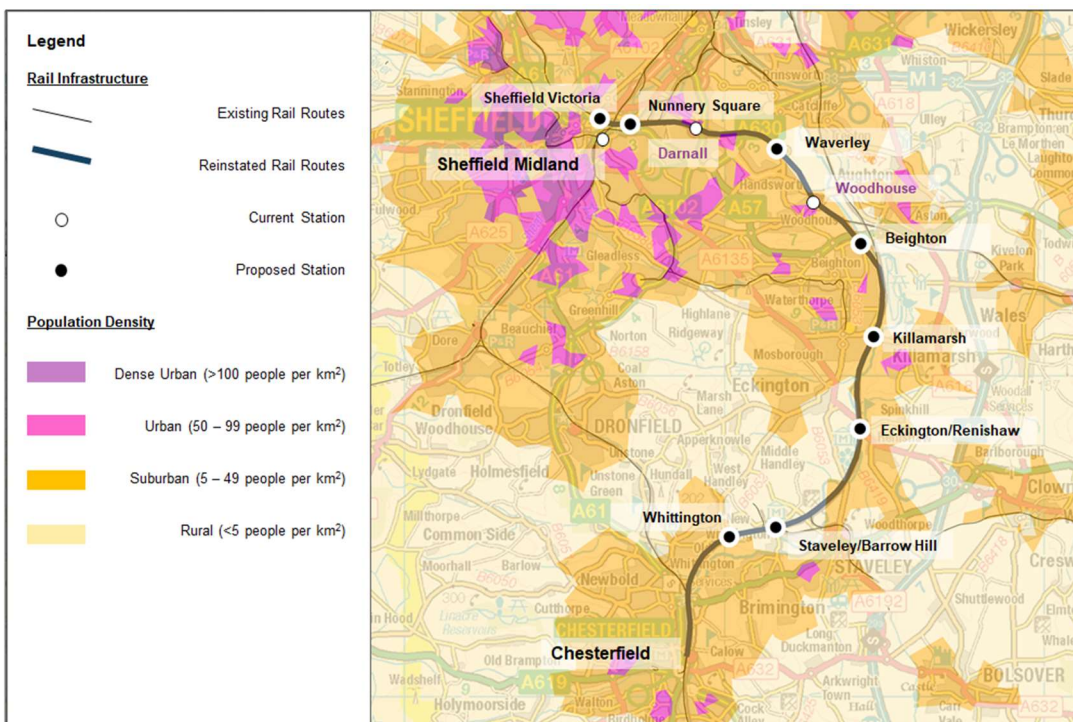
### 5.1 Current Transport Issues and Challenges

The Barrow Hill Line serves several former coal mining villages on the eastern fringes of Sheffield and in North East Derbyshire that have been cut off from the rail network for many years. A passenger rail service serving these communities would reduce car dependency and improve public transport connectivity for these areas and would be significant boost to the local economy, as well as delivering local and strategic environmental benefits. This proposal will be considered in conjunction with an SYPTE study looking into opportunities to extend the Supertram network in this part of South East Sheffield.

### 5.2 Target Population

Excluding the terminus stations in Sheffield and Chesterfield, the population within a 1km catchment of the proposed new stations totals 40,700.

**Figure 5.1: Population density along Barrow Hill Line**



Source: 2011 Census/Mott MacDonald

The route passes through predominantly suburban areas extending to the south east of Sheffield and the north east of Chesterfield, capturing a considerable commuter population for both urban centres.

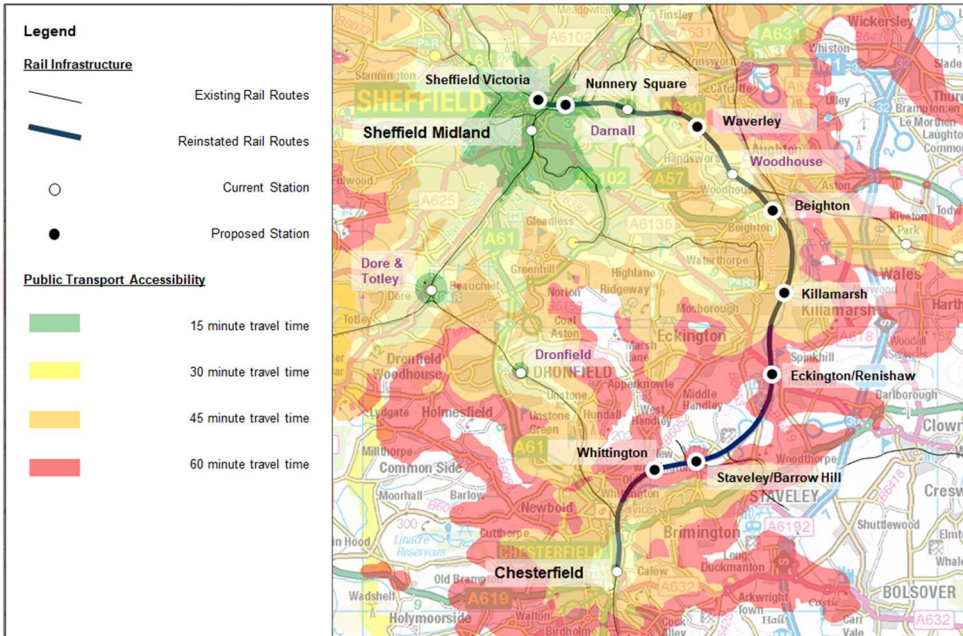
**How does this scheme provide benefit?** The route passes through several well-populated areas that currently have no rail connection, providing linkages to densely populated urban centres and associated concentrations of health and education services; such as Chesterfield Royal Hospital, Chesterfield College, Sheffield Hallam University and University of Sheffield.



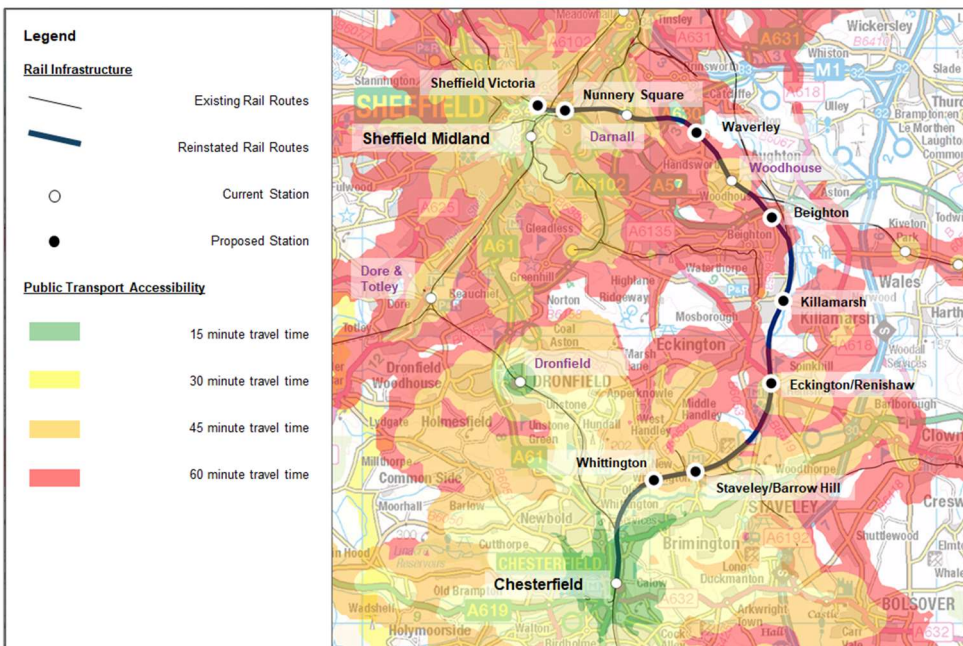
### 5.3 Public Transport Accessibility

Figure 5.2 & Figure 5.3 illustrate travel times by public transport into the local urban centres in Sheffield and Chesterfield.

**Figure 5.2: Public Transport Accessibility to Sheffield**



**Figure 5.3: Public Transport Accessibility to Chesterfield**

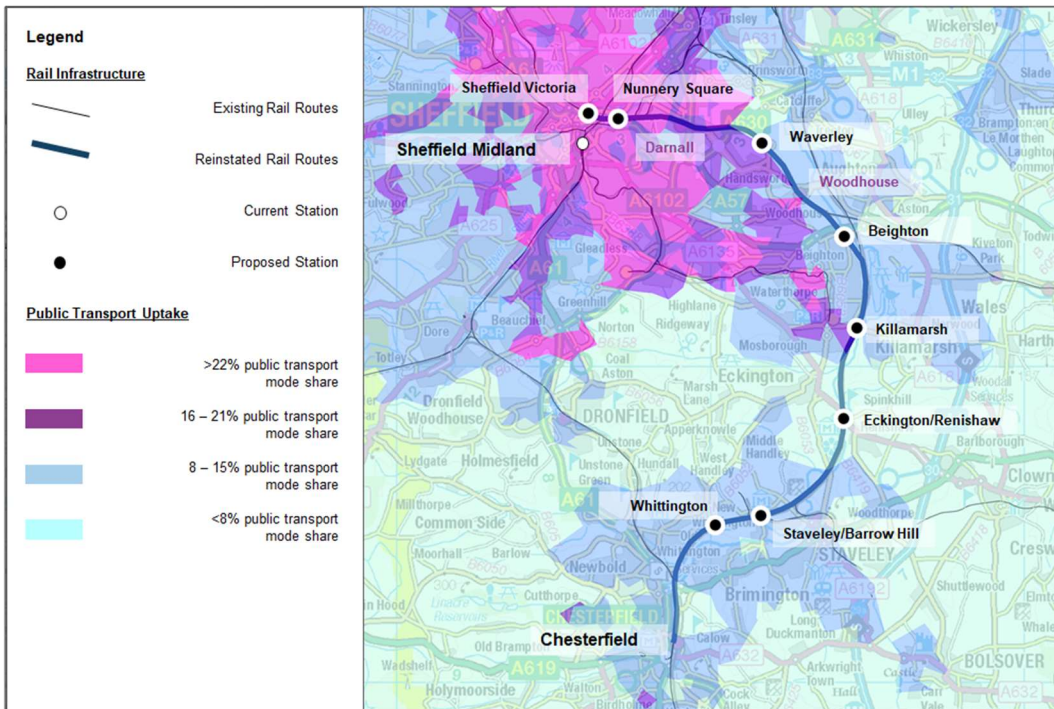


Source: TRACC/Mott MacDonald

This demonstrates that current public transport journey times into the centre of Sheffield and Chesterfield are very long and tortuous, limiting opportunities for people in these communities to access productive jobs, education and healthcare.

These limitations have a demonstrable impact on public transport uptake, which is predominantly lower than the national average of 16%<sup>6</sup> adjacent to the proposed route.

**Figure 5.4: Public transport uptake on Barrow Hill line**



Source: 2011 Census/Mott MacDonald

A comparison of public transport accessibility on the Barrow Hill Line compared to the Midland Main Line demonstrates the potential transformative impact that restoring this route could have, bringing isolated communities within a 5-10 minute travel time of either Sheffield or Chesterfield. Communities along the Barrow Hill Line lie within easy reach of Chesterfield and Sheffield via the rail network, and consequently their public transport uptake could be enhanced.

Reducing car reliance will have widespread benefits for congestion and travel times on key commuter routes, as well as contributing towards addressing the emission targets within Sheffield’s recently declared Clean Air Zone (CAZ).

**How does this scheme provide benefit?** Reconnecting these communities to the rail network will encourage more people to travel via public transport, which would have a positive impact on congestion and air pollution on key commuter routes. It would also open up access to jobs and services for isolated communities in North East Derbyshire and Chesterfield.

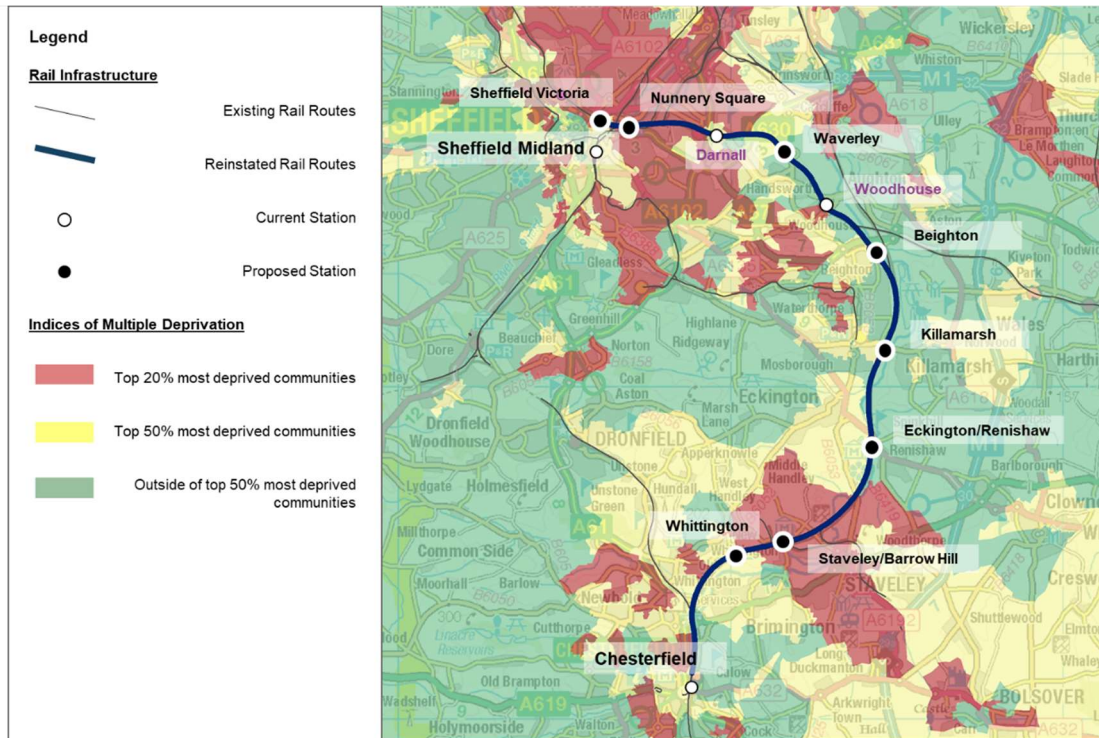
<sup>6</sup> 2011 Census – Method of travel to work



## 5.4 Inclusive Growth

The potential for inclusive growth is highlighted through the numbers of deprived communities who could benefit from the restoration of the Barrow Hill line. Former mining communities near Staveley and Barrow Hill both fall within the top 20% deprived communities within the country.

**Figure 5.5: Indices of Deprivation adjacent to Barrow Hill Line**



Source: MHCLG/Mott MacDonald

This underlines the need for providing a new viable connection to opportunities and services through restoring the rail route along the Barrow Hill line.

**How does this scheme provide benefit?** The scheme could provide quicker, more efficient and reliable connections to jobs and opportunities in both Chesterfield and Sheffield for deprived communities such as Staveley and Barrow Hill. Onward connections from the line using the existing bus network would also mean that other communities in the area benefited ensuring we delivered inclusive growth that assisted all sections of society.

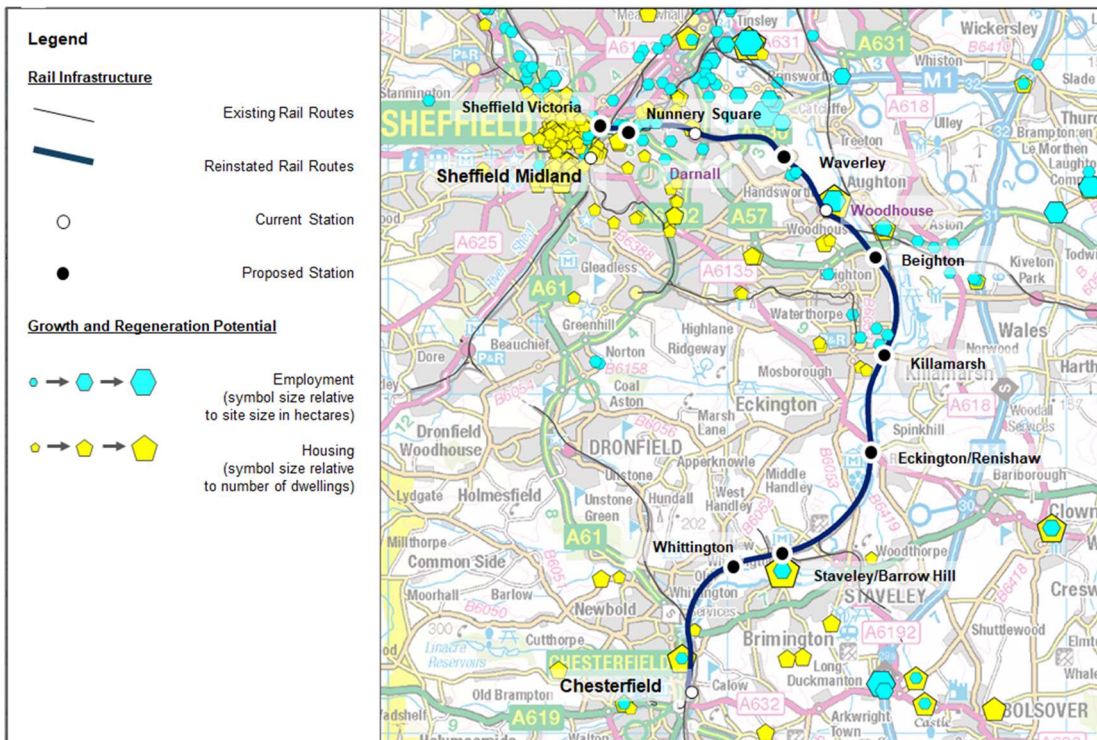
## 5.5 Growth and Regeneration Potential

Significant new employment and housing development is planned along the length of the route. This includes a large mixed-use development near Staveley consisting of housing, industrial sites and the HS2 infrastructure maintenance depot. The scheme also supports wider developments that are also taking place around the Staveley Corridor such as the Chesterfield-Staveley Relief Road and regeneration proposals put forward for Staveley's Towns Fund.

Several smaller development proposals have also been put forward near Beighton and Killamarsh and there is a large advanced manufacturing and research site near Waverley at the Advanced Manufacturing and Innovation District (AMID).

Improved transport links will be vital to prospective residents, employees and customers alike; whilst also increasing the potential for additional transit-oriented development to help our districts meet their housing requirements. There is an opportunity for a new cycling and walking link along the abandoned railway between Barrow Hill and Staveley to provide an accessible active travel route to the new station. Key site locations are illustrated in Figure 5.6.

**Figure 5.6: Development proposals along the Barrow Hill Line**



Source: Local Plan data/Mott MacDonald

The route would serve cultural and visitor attractions in both Sheffield and Chesterfield, as well as several potential attractions along the proposed route, including Rother Valley Country Park, Renishaw Hall, the Barrow Hill Roundhouse Railway Centre, Guillivers Valley theme park at Rother Valley, Chesterfield Canal and the Trans-Pennine Trail at Killamarsh.

**How does this scheme provide benefit?** The scheme has the potential to unlock access to over 4,000 new houses and 70 hectares of potential employment land within a 1km radius of the reinstated route; and could potentially encourage further development to help the affected planning authorities attain their growth targets.

### 5.6 Key Policy Messages

Reinstating passenger services between Sheffield and Chesterfield via the Barrow Hill line could present several strategic opportunities linked to sub-regional, city-regional and local policy, including:

- Safeguarding service connections between Sheffield and Chesterfield once HS2 services are operational on the Midland Mainline



- Freeing up capacity on congested parts of the Midland Mainline, such as Dore Station junction
- Enhanced frequencies on Sheffield – Worksop line into Sheffield Victoria
- Better connectivity for car-reliant communities between Sheffield and Chesterfield
- Better connectivity for areas without access to cars in the north east of Chesterfield
- Improved transport links for proposed major redevelopment sites at AMID and Staveley
- Reduced car reliance will contribute towards meeting emissions targets required for the Sheffield CAZ

A summary of the potential catchment opportunities of each proposed station within a 1km catchment is provided in Table 5.1.

**Table 5.1: Summary of socio-economic benefits**

Station	Total Population	Public Transport Uptake (% commuters)	Households without access to a car (% households)	Proposed Employment Area (Ha)	Proposed Housing (Dwellings)
Nunnery Square	10,000	29%	57%	10	1,300
Waverley	7,100	14%	19%	20	-
Beighton	11,000	13%	21%	20	560
Killamarsh	11,065	11%	13%	7	200
Eckington / Renishaw	4,500	7%	19%	-	-
Barrow Hill / Staveley	1,500	14%	38%	16	2,000
Whittington	5,600	12%	25%	-	-

Source: Mott MacDonald



## 6 Partner Support

### 6.1 Introduction

Several key partners in the city region support the scheme, including:

- Local MPs including representatives for South East Sheffield, North East Derbyshire and Chesterfield
- Local councils such as Sheffield City Council, Rotherham Metropolitan Borough Council, Derbyshire County Council, Chesterfield Borough Council and North East Derbyshire District Council
- Regional bodies such as Sheffield City Region Mayoral Combined Authority
- Private sector representative bodies such as SCR and D2N2 Local Enterprise Partnerships
- Campaign groups such as Railfuture.

The following supporting comments were provided as part of the SCR Rail Reinstatement study, conducted in 2019.<sup>7</sup>

### 6.2 Feedback Notes

Stakeholders have been supportive of the restoration proposals in order to deliver better connectivity and improved regeneration prospects in Staveley, Barrow Hill and Whittington.

Some also see the proposals as a means to maintain local connectivity following the arrival of HS2.

Our real concern is that Chesterfield could go from being a very well-connected town in terms of rail service to one where the main HS2 services travel non-stop through the station and the existing regional/local services are thinned out to accommodate it, significantly worsening the rail travel options.

Derbyshire County Council

It was widely recognised that Sheffield Midland is close to capacity and that the arrival of HS2/NPR would place additional demands at the station. Opening up both the Barrow Hill line and Don Valley line could therefore present an opportunity to create a new “Sheffield Hub” at either Nunnery Square or Sheffield Victoria where services could allow Sheffield-bound passengers to alight.

The regeneration benefits of such a hub were compared to Manchester Victoria (the “Northern Hub”) and Birmingham Snow Hill where the impact of alleviating capacity constraints at the main station and extending the city centre environment were both noted.

The proposals have also been discussed with Network Rail and Transport for the North and each have indicated levels of support in principle.

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<sup>7</sup> Sheffield City Region (2019) – SCR Rail Reinstatement Study

# 7 Services Proposed

## 7.1 Train Service

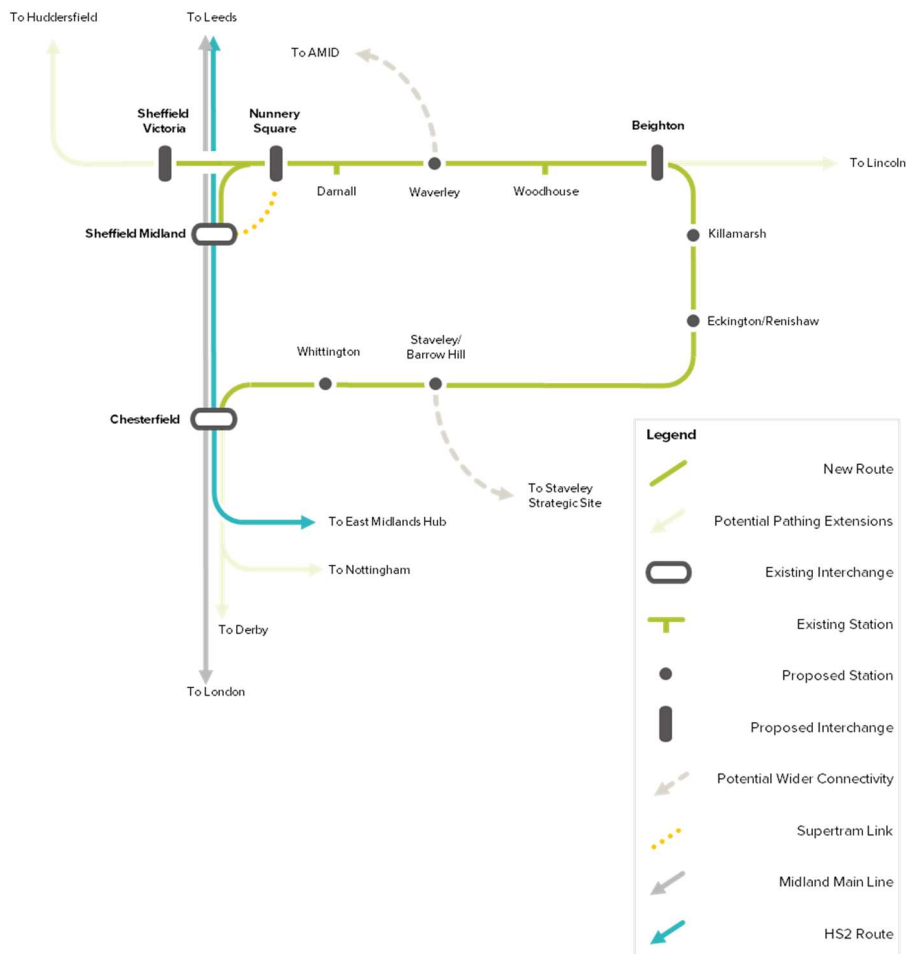
It is proposed to introduce a half-hourly (2 tph) service on this line between Sheffield and Chesterfield, stopping at a number of re-opened stations. This service could initially run to Sheffield Midland, before potentially including 1 tph to Sheffield Victoria and 1 tph to Sheffield Midland (subject to other submissions).

HS2 proposals currently plan for up to 4 trains per hour in each direction along the Midland Mainline between Sheffield and Chesterfield, which could impact on the existing 6 train per hour frequency between the two stations. The reinstatement of the Barrow Hill line will help to retain this level of service at a local and regional level, offering onward connections to Nottingham and Huddersfield (see separate bid for Don Valley Line).

Current freight services along the line could be maintained, ensuring no detriment to existing operations on the route.

A conceptual network map is provided in Figure 7.1.

**Figure 7.1: Barrow Hill Line and onward connections**



Source: Mott MacDonald

## 8 Infrastructure and Operating Costs

### 8.1 Cost Estimate Parameters

A high-level cost estimate was provided as part of our recent SCR Rail Reinstatement Study. The cost estimate parameters used to inform this estimate are provided in the table below.

**Table 8.1: Cost Estimate Parameters**

Route Segment	Current Assumed Infrastructure Standard	Length of Route (m)	Assumed level of upgrade required	Extant Structures	New Structures	New Stations
Sheffield Victoria to Nunnery Square	Single-track freight	830m	Single to Double-Track upgrade	Assumes all structures require minimal upgrade	N/A	1 interchange station at Nunnery Square 1 interchange station at Sheffield Victoria (see separate bid)
Chesterfield to Sheffield Midland	Double-track passenger/freight	19,630m	Double-Track upgrade	Assumes all structures require no upgrade	N/A	5

Source: Mott MacDonald

This assumed that the following upgrades were required:

- 1. Single-Track to Double-Track upgrade** – typically on existing freight lines; this level of upgrade assumes that existing single-track freight infrastructure will require minimum maintenance and upgrade to ensure it can be used by modern passenger services. It is assumed that a new additional track, with associated earthworks, ballast, drainage and track placement will be required alongside the existing single track to enable usage by modern passenger services. Extant structures on these routes are assumed to be wide enough to accommodate double-tracking and require minimal reinforcement.
- 2. Double-Track upgrade** – assumes that some minor signalling upgrades will be required to accommodate modern passenger services, however no further engineering works would be required. All extant structures are assumed to be sound and require no further reinforcement.

This demonstrates the relative ease in which this line could be restored for passenger services, assuming that the initial phase of work concentrated on reinforcing connections between Sheffield Midland and Chesterfield via Barrow Hill, with further upgrades as far as Sheffield Victoria to link into another one of our proposals.

### 8.2 Constraints Summary

Our assessment of engineering constraints has found few issues along the Barrow Hill line itself given its current operational status. At the proposed station locations, we examined both potential constraints and accessibility to the site. These are summarised overleaf.

**Table 8.2: Barrow Hill Line: Station Constraints**

Station	Environmental Constraints	Land Availability	Highway Access	Pedestrian/Cycling Access
<b>Nunnery Square</b>	No apparent environmental constraints	Station site can be accommodated within Network Rail land.	Easy access from road network, some bus routing modifications required to provide integrated transport connections	Some infrastructure required to reduce potential severance
<b>Beighton</b>	Flood risk considerations, as well as proximity to nearby Nature Reserve.	Large tract of Network Rail land available at station site to accommodate station and potential parking/	Highway access would require some remediation works near the A57 and adjacent routes. Bus routes along Beighton Road could be diverted to serve the site.	Similar to highway access, although additional overbridges could be considered to link with adjacent developments
<b>Killamarsh</b>	Flood risk considerations	Site lies within Network Rail land, although there are some adjacent structures and light industry. Power lines run through the site and could affect the size of the footprint/station access.	Highway access could be gained from Station Road, although some land take would be required to fully access the site and provide parking facilities.	There is an existing overbridge adjacent to the road and the site is approx. 250m from the Trans-Pennine Trail.
<b>Eckington / Renishaw</b>	Flood risk considerations. The site is also heavily forested	Site is located within Network Rail boundaries, although there are several constraints either side of the station footprint, including some light industry and a lake.	Access to be gained from Station Road, with remediation works.	A pedestrian overbridge would need to be considered, and the route lies adjacent to the Trans Pennine Trail, enabling walking and cycling access to be gained from the national network
<b>Barrow Hill / Staveley</b>	Flood risk considerations	Site narrowly lies within NR boundaries, but is closely bounded by Station Road and Cavendish Place. A branch line (Clowne branch) also bounds the site to the south. The station site lies adjacent to the proposed HS2 infrastructure development and could provide access to the site.	Access could be gained from Station Road, with some widening works and potential to develop adjacent parking/interchange facilities.	Pedestrians could use Cavendish Place as a means to cross the railway if access could also be gained from this link. The Clowne Branch could also provide a cycling and pedestrian link to Staveley and more distant communities.
<b>Whittington</b>	Much of the site lies within a flood storage area and a flood risk zone	The site lies within Network Rail boundaries but is tightly constrained by the River Rother to the northern edge of the site	Highway access via Station Lane, with some structural enhancements required to cross River Rother.	Pedestrians could similarly access from Station Lane, a footbridge could also link to pedestrian routes in the south towards the Chesterfield Canal.

Source: Mott MacDonald

At this stage, many of these constraints would require further investigation, but all stations are deemed to be feasible from an engineering perspective.

