

# TECHNICAL NOTE

**Job Name:** Sharpness Vale  
**Job No:** 332241745  
**Note No:** TN001  
**Date:** 18 May 2023  
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**Subject:** **Stroud District Local Plan 2023 – PS36 Sharpness Vale**  
**Response to Gloucestershire County Council & SLC Rail – Review of ‘Transport**  
**Report in Response to Questions Raised by Gloucestershire County Council’**

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## 1. Note Summary

- 1.1. This Technical Note has been prepared in response to the latest Gloucestershire County Council (GCC) document submitted to the Inspector in May 2023 (REP-904-001d Gloucestershire County Council, Sharpness Review of Transport Report) which highlights GCC’s concerns with regard to the passenger rail proposals for the Sharpness Vale development site as articulated in the report by SLC Rail on behalf of GCC.
- 1.2. Whilst this Technical Note responds directly to the key concerns raised in the SLC Rail report there is a much wider context to this through which it should be viewed. In line with recent shifts in National, Regional and Local policy and strategic objectives all new developments must follow a vision and validate approach to defining and shaping an optimal future travel demand profile which enables and promotes a transport demand management response that moves away from private car dominance.
- 1.3. There are a multitude of examples of rail lines where passenger services have been successfully reintroduced. A list containing some 32 of examples is provided in **Appendix A** of this report. This is not an exhaustive list but provides a useful reference to examples that have successfully navigated the complexities of re-introducing rail services to existing lines.
- 1.4. In terms of its role in the public transport system modal hierarchy and its capacity, segregated right of way, ability to sweat existing infrastructure assets, serve the wider population of the Berkeley Cluster and reduce overall transport carbon the re-introduction of passenger rail services on the Sharpness branch line as the backbone of the public transport strategy for the Sharpness Vale site remains the best solution.

## DOCUMENT ISSUE RECORD

Technical Note No	Rev	Date	Prepared	Checked	Reviewed (Discipline Lead)	Approved (Project Director)
332241745/200/TN01	-	May 2023	LS	LS	LS	DG

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- 1.5. It is however not the only solution or option. As shown in other transport evidence documents for the promotion of the Sharpness Vale site an express coach service is planned to operate from the site towards Gloucester until such time as there is sufficient passenger demand to enable the introduction of a viable passenger rail service. Further to this the assessment of the “Fallback” transport scenario, which assumes there is no future rail service and with a scaled back and more traditionally car centric approach to mode share, identifies deliverable highway improvement schemes to accommodate the additional traffic generated by the development in the event that the rail service is not implemented.
- 1.6. The Sharpness Vale site is a viable land development site regardless of whether or not the rail service is implemented and is not dependant on it.
- 1.7. It is understood and acknowledged that the reintroduction of passenger rail services on the Sharpness branch line is a complex undertaking with potentially protracted timeframes, multiple role players, processes and agreements to be reached before it can be implemented. The site promoter is committed to navigating these processes and engaging with the relevant stakeholders at the right time in the process to reach the right milestone agreements towards implementation because passenger rail remains the best option even though it may not be the easiest. Express coach services will continue to operate to Gloucester whilst the due processes are being followed to implement the rail service.

## 2. Introduction

- 2.1. In a letter dated the 21st of July 2021 Gloucestershire County Council (GCC) provided a formal response to the Draft Stroud District Local Plan Review. This letter set out specific transport comments and concerns related to Draft Local Plan policy PS36 related to the proposed Sharpness Vale site. The GCC comments regarding the Sharpness Vale site allocation were based primarily on an assessment of the Sharpness Restoring Your Railway bid documents and did not refer substantively to other transport evidence documents submitted as part of the proposed site allocation.
- 2.2. After the GCC letter mentioned above was issued in 2021 the site promoter, Sharpness LLP, undertook supplementary work in order to address the comments and concerns of GCC relating to some of the transport aspects of the proposed site development. Stantec UK, on behalf of the promoters of the Sharpness Vale Site (Sharpness Development LLP) prepared a report on this supplementary work highlighting pertinent elements as response to the questions raised by GCC. This report forms part of the evidence documentation as SG23 for the promotion of the Sharpness Vale Site under PS36 of the Stroud District Council (SDC) draft Local Plan.
- 2.3. The examination in public for the Draft SDC Local Pan commenced in May 2023. Matter 5(b) relating to Sharpness Vale commenced on 3 May 2023. On 2 May 2023 a new report from GCC (prepared by SLC Rail and dated March 2023) was received in relation to the proposals for the reintroduction of passenger rail services on the Sharpness Branch line as part of the transport strategy for Sharpness Vale. For ease of reference this report is included here as **Appendix B**. As there was insufficient time to provide a considered response to the new report from GCC before the matter 5(b) hearing the next day, the Inspector granted the Sharpness Development LLP additional time to provide a considered response.

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### 3. Purpose of this report

- 3.1. After due consideration by the Sharpness Development LLP, this Technical Note provides a formal response to the key issues raised in the latest SLC Rail report issued by GCC.
- 3.2. This Technical Note is structured in line with the key issues raised in the SLC Rail report and provides supplementary information and responses to the issues raised in sections as follows:
  - The importance of alignment with DfT's transport business case process
  - Overview of the Arcadis report on infrastructure options on the branch line
  - Analysis of the economic assumptions associated with the promoter's proposals

### 4. Alignment with DfT Transport Business Case Processes

#### Strategic Case

- 4.1. The comments regarding the need for a Strategic Business Case and Full Business Case appear to pre-suppose that the means of procurement of the Sharpness service is already defined, and that it will follow that there will be a need for public funds to initiate the service. It is undoubtedly the case that there would be a requirement for these to be completed and for the processes to be rigorously followed if the proposed introduction of passenger services was reliant on public funds to deliver it, but this is not the only way that the service could be procured. The Sharpness scheme is fully funded by the Developer and so it is entirely possible that no formal DfT Business Case submission will be required.
- 4.2. At present, the promoter has not pre-supposed the way that the service could or would be procured, as other mechanisms exist to do so. For example, the Sharpness service could be procured under an Open Access arrangement, whereby a third party (which could be, for example, the developer or promoter or the local Council, or a stewardship or management company) would contract with a suitable open access operator to provide the service. They would then apply to the Office of Rail and Road (ORR) for the right to run the service. The principle of open access is set out by ORR, very succinctly, on their website here: <https://www.orr.gov.uk/search-news/right-track-open-access-explained>. The process followed by ORR in making decisions regarding the granting of track access agreements is included in **Appendix C**.
- 4.3. Consequently, there may be no requirement for a business case to be prepared, or, if ORR required a business case at the time of granting a licence this may have a different level of scrutiny than might apply should the use of public funds be required.
- 4.4. The procurement of the relevant infrastructure works could be achieved through a separate agreement with Network Rail. This would entail a third party undertaking a suitable contractual agreement with Network Rail regarding either them or a suitable contractor being approved to deliver the relevant infrastructure works necessary to upgrade the branch line to the standards required for the service. This would be procured under Network Rails Asset Protection processes and protocols.
- 4.5. Hence, the promoters of Sharpness have undertaken sufficient work to prove that there are different options that could be deployed to deliver the rail service at Sharpness, and it is not dependent on public funding to initiate the service. This means that, whilst the points raised by SLC Rail do apply if this was the procurement route that was followed, and so this work would need to be completed to the satisfaction of DfT, it may not be relevant if a different procurement path was to be followed.

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- 4.6. It would appear that SLC Rail have incorrectly assumed that public funds were being utilised as a result of Stroud DC's "Restoring your Railway" (RyR) submission material – which was included in the Sharpness evidence base, as it set out the narrative of how the scheme had been progressed. However, it should be noted that this was an opportunistic application at the time that the RyR initiatives were announced. The development of the scheme as a developer funded proposal was already underway at that time, and therefore both the promoter and Stroud DC seized the opportunity to explore possible sources of public funding.
- 4.7. However, when this submission was unsuccessful, the scheme reverted to its original genesis, as a developer promoted project. Although the supporting technical evidence is relevant, the actuality of the RyR application should be ignored, as it relates to an early attempt to secure some public funding, which has now been utterly superseded.

### Strategic Fit

- 4.8. Although there is not necessarily a requirement for the Business Case process to be followed in respect of the Sharpness proposals, it is noted that the overarching "Strategic Fit" principles do need to be reflected in the evidence, as it is important to be able to demonstrate, in the case of a regular timetabled service, that it can be accommodated on the network. The Ed Jeffery Timetable Study that was undertaken and submitted alongside the Restoring your Railway funding bid addressed much of this issue, demonstrating that the service could be accommodated on the main line to Gloucester.
- 4.9. However, SLC Rail raise a point in respect of the fact that there may be other, more strategic proposals, that come forward over time that should have greater priority than the Sharpness scheme, and hence, which would jeopardise its delivery. This is relevant to the extent that it can be allowed for, and, at the time of the timetable study, the best available information was utilised. A subsequent update to the Sharpness Rail Timetable Study was undertaken to take into account planned changes to the mainline services such as the potential introduction of a new station at Stonehouse Bristol Road as a result of the Strategic Business Case being prepared for this. The updated Timetable Study also takes into account additional trains between Birmingham and Bristol as part of the MetroWest improvements. This aligns with the proposed increase of 1 train per hour for this service as part of the Midlands Rail Hub Outline Business Case. The Midlands Connect summary document of the West Midlands Rail Hub Outline Business Case is included as **Appendix D**.
- 4.10. There is another important consideration that relates to the Sharpness service, and which suggests that it could be accommodated alongside other proposals on the main line. This is, in simple terms, that the Sharpness services only needs to utilise a relatively short section of the mainline. They effectively "hop on" to the mainline, and then "hop off" again – either joining from the branch line, to leave as they turn off to Gloucester, or vice versa. This means that they are able to be slotted into gaps on the timetable that through services on the main line are not able to utilise.
- 4.11. This approach was first suggested to the promoter by Network Rail, as they could see that the mainline services are mostly dictated by the long-distance Express Services that are connecting between Birmingham and Bristol on this section of the main line. Operating roughly half hourly, the clearances required to stopping services on the main line mean that there are timetabling gaps around these Expresses that the Sharpness service, needing only to use a section of the main line, could occupy in a way that no stopping service on the main line could do.
- 4.12. This principle has informed the development of the Sharpness services, and provides an additional layer of confidence to the deliverability of the service in the longer term.
- 4.13. SLC Rail make reference to the recent Network Rail Corridor Study and the fact that the Sharpness Branch Line is not considered in the Corridor Study as a basis implying that it is therefore not a priority for Network Rail. This is misleading as the scope of the Corridor Study as clearly defined in the study itself only covers mainline services and hub stations and does not consider branch lines. This is the reason that the Sharpness Branch Line services are not included in the Corridor Study as is the case with any other branch line because branch lines were simply not part of the scope of the study.

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- 4.14. SLC Rail quote elements of the letter received by the site promoter from Network Rail dated 21 July 2021 in relation to Network Rail's assessment of the initial Timetable Study. This letter can be found in the Site Promoters' evidence document SG23 Appendix F. One quoted extract from the SLC report reads as follows:

*'timetable analysis is only one aspect of the feasibility of the scheme .. of **greater** importance at this stage are ... the strategic and economic case for the scheme...'*

This is a misquote of the Network Rail letter which actually states:

*'Of **equal** importance are the strategic and economic cases; and developing a view of how it could be operated.'*

The SLC Rail report further fails to acknowledge that the same letter from Network Rail also states the following:

*'We recognise, however, that schemes such as this have the potential to be transformational by supporting local and regional growth in a sustainable way.'*

### **Second Sharpness Train and Gloucester Station**

- 4.15. It appears that SLC Rail have misunderstood the requirement for upgrades at Gloucester Station, as they reframe the proposals incorrectly. The promoters technical evidence base sets out clearly that one train per hour can be accommodated at Gloucester in its current configuration, with no engineering works required. This level of service relates to the Local Plan proposals for up to 2,400 homes at Sharpness, and so the train service needed to meet the demands of the draft Local Plan proposals requires no works at Gloucester to operate.
- 4.16. The evidence also makes clear that there will be a need to ensure some signalling changes to accommodate the second train, and hence the further phase of development at Sharpness, to achieve the 5,000 homes potentially identified for the next Plan period, will need to consider how this might be provided. The technical evidence suggests that, as there are other changes proposed in and around Gloucester Station, and the delivery of the Phase 2 housing at Sharpness is most likely 15 years or more into the future, then by the time this is demanded by Sharpness it may already have been done by others. This may or may not come to pass, but either way, this is a concern for the next Plan and not the current one.
- 4.17. Hence, with regard to the certainty of delivery in terms of the current draft Plan, the Sharpness proposals in respect of train operation for up to 2,400 homes at Sharpness are for one train per hour, and that it can expand to three cars if required to add capacity.

## **5. Review of Arcadis Report on Infrastructure Options on the Branch Line Surveys**

- 5.1. The purpose of the Arcadis Report was to test previous proposals for rail operations on the branch line and provide robust cost estimates for the infrastructure interventions required to enable a minimum viable service. The options presented in the report represent a range of feasible options with the potential to satisfy the rail transport aspirations.
- 5.2. The scope for the options presented was developed through workshops facilitated by Arcadis, drawing from a combined experience and expertise within the business. The workshop team drew from expertise in design and construction of Track (Pway), Signalling, Telecommunication, Civil Engineering, Station Development, Maintenance and Operations, with a combined experience in excess of 150 years.

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- 5.3. The SLC Rail report indicates that Network Rail have not agreed the scope and neither have they verified the costs. The costs are indicative at this stage (as they would be for any project developing feasibility proposals); but that is not to say that they are not robust and represent a basis around which a business case can be developed. The costings follow industry best practice, including DfT / ORR guidance for application of a generous percentage of “optimism bias” appropriate to the level of intervention. Cost estimates draw from Arcadis’ own databases as a trusted cost consultant to the rail industry in the UK and internationally.
- 5.4. As a trusted design and engineering consultant in the UK rail industry Arcadis have access to a range of asset records which informed their desk studies. These studies confirm assumptions around asset condition and the necessary interventions to bring the branch into passenger service. The Arcadis desk studies have confirmed that the track condition on the spur is indeed good, as would be expected for a branch line carrying such sensitive freight as is carried today. The track quality exceeds that required for passenger services on similar branch lines.
- 5.5. It is unlikely that Network Rail would specify significantly more works than is required to enable a passenger service to be introduced. It is our view that a complete re-build is unnecessary, and NR would not be able to disagree with this position at the levels of detail so far developed and for the service levels proposed. Exclusions described in the report are appropriate: there is currently no formal (piped) drainage along the branch; culverts are maintained appropriately; level crossings exist only as farm crossings and are subject to change through the wider development. Signalling exclusions should however be clarified in that they are excluded in relation to the suggested enhancements at Gloucester station. Each option considered includes necessary signalling works to facilitate a passenger service.
- 5.6. NR have entered into contract for development of enhanced signalling at Gloucester; normal practice for scoping such a project would be to remove /improve upon operational constraints – our understanding of the constraints described by the “Ed Jefferey Report” suggests that such improvements would be straightforward and likely cost neutral in the context of that project. The site promoter and professional team are not privy to the scope for the signalling enhancements, and this remains a risk. As mentioned in section 4 above however upgrades to Gloucester station are not required to accommodate the Sharpness Service until the frequency is increased after the current Local Plan period. Should the Sharpness proposals be given the go-ahead, engagement with NR via the ASPRO process would facilitate the necessary conversations and the opportunity to inform / influence scope.
- 5.7. The SLC Rail Report states that the existing permanent-way is configured for a line-speed of 15 MPH – regardless of train frequency. Our desk studies confirmed that the track ride quality exceeds that required for passenger services on similar branch line track. Horizontal Track geometry on the spur could accommodate speeds up to 75mph, although the existing Berkeley Road Junction has a speed potential of 30mph only – this does not need to be replaced. Track geometry would need to be modified to enable an increase in line-speed up to 50mph on the branch – this would be achieved through track tamping to increase superelevation on curves to an appropriate level and this would not require track replacement. Comparisons to the East-West Rail project between Bicester and Bletchley are entirely inappropriate as this corridor currently exists as a bridleway/footpath right of way without any existing rail infrastructure.
- 5.8. As a matter of due diligence the site promoter has assessed alternative rail technologies. Whilst the Arcadis report makes an initial recommendation towards Option 2 employing the VLR concept train, it has since been concluded that this rail technology is not yet mature enough. The wider development viability costings therefore consider infrastructure costings for Option 1. It was not considered necessary to for Arcadis to update the report as the costing information for Option 1 is available in the same report.



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- 5.9. Arcadis have since identified that there is an error in the Option 3 costings in that the costs for the Berkeley Road station are far less than they should be due to a simple error in transcription that eluded the checking process. The impact of this is however immaterial given that the preference of the developer is towards Option 1. Comparisons to Stroudwater and other such stations are inappropriate given the location and the nature of the constraints at that site – the Berkeley Road option was ‘modelled’ upon the configuration of Cam & Dursley station in its service provision.

## 6. Analysis of Economic Assumptions Associated with the Promoter’s Proposal

### Demand for Rail

- 6.1. SLC Rail make a series of references to the way that passenger demands have been made, and especially comparisons to other places like Cam and Dursley. However, it is not clear that they have taken account of the context of the population that will be within the Sharpness and Berkeley functional transport area in the future. Taking account of the development, and both the other Local Plan allocations in the Berkeley Cluster, and the existing community suggests that Sharpness will be very different from how it is today.
- 6.2. In addition, the Berkeley cluster area will have significant employment and educational campuses that will generate patronage, in addition to the residential activity, and well in excess of what exists at Cam & Dursley today.
- 6.3. Hence, Sharpness at the end of the Plan Period will be very different in character and nature to how Cam and Dursley is today, and so it is not clear that this is in any way a relevant comparator.
- 6.4. Other comparisons suggested in evidence – by SLC Rail and by ourselves, must be viewed through a lens of a degree of caution, as there are, in reality, myriad different factors that may dictate patronage. The evidence submitted by the Sharpness promoters has identified some branch lines with similar characteristics and populations that suggest that viability ultimately at Sharpness is not an unrealistic proposition, and this seems to present a case that is as far as these comparisons are useful.
- 6.5. It should also be remembered that the forecasts used in the Sharpness evidence are based on proportions of mode share that might be considered realistic today, using census statistics and recorded mode shares and propensities towards public transport, for example. But, by 2040, at the end of the Plan period, there will have been substantial policy changes and routine travel behaviour is likely to look very different to what we see today.
- 6.6. It can, therefore, be considered that the forecasts utilised in the Sharpness evidence base are likely to prove conservative once account is taken of the incentivisation and “nudges” that will exist both locally and (by then) regionally and nationally for people to change travel behaviour. In this context, a proposal for c.480,000 passenger trips per year from a mixed community of land uses spread across the Berkeley cluster area doesn’t seem unrealistic.
- 6.7. It should also be noted that there seem to be places where the SLC Rail report appears to conflate, or at least is ambiguous, about the forecasts that relate to the Local Plan scheme for 2,400 homes and the ultimate proposal for Sharpness to extent to up to 5,000 homes in a later plan. This is an easy mistake to make, as the earlier technical evidence, prepared mostly at the time of the RyR submission, was in respect of the 5,000 home end-state, and a forecast year of 2050.
- 6.8. By this time considerable travel behaviour changes related to decarbonisation and climate change would be expected to have taken effect. It is clear that caution is needed in assuming that travel behaviour and policy towards it as it existed in 2020 (when the work was done) will be ostensibly the same by 2050 - this seems highly unlikely. Therefore, although this doesn’t justify rash or cavalier assumptions about travel behaviour change and mode shares, projecting current behaviour patterns, trends and mode shares forwards actually feels highly unrealistic, as that would suggest that nothing will be achieved in respect of travel responses to climate change.

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- 6.9. The SLC Rail report quotes the figure of 716 peak hour bus passengers stating that this is 2.5 times higher than the rail passenger numbers making the point that it would be feasible to increase the bus services and avoid the risks associated with the passenger rail option. SLC Rail failed to realise that the figures they quote for bus passengers from the promoter's evidence report relates to passenger demand to the south towards Bristol which is not served by the proposed rail service to Gloucester. It can be seen in the same table (table 5.2 of evidence document SG23) that there are zero passengers assigned to a bus service towards Gloucester as this demand is assigned to the train service.

### Capital and Operating Costs

- 6.10. The SLC Report states that the capital and operating costs appear to be hypothetical, unverified and the methodology not yet agreed with the railway industry. As covered in section 4 above the capital costs required to upgrade the rail infrastructure and facilities in order to introduce passenger rail services on the Sharpness Branch line have been developed based on an assessment of the existing condition of the branch line as well as realistic costs of infrastructure improvements. The operational costs used in the assessment proposed passenger rail service as part of the site promoter's evidence have been used from the published train operations cost from the Office of Road and Rail (ORR). This is real cost data associated with currently functioning rail services in the UK and is therefore not hypothetical or unverified.

## 7. Conclusions

- 7.1. This Technical Note has been prepared in response to the latest Gloucestershire County Council (GCC) document which highlights GCC's concerns with regard to the passenger rail proposals for the Sharpness Vale development site as articulated in the report by SLC Rail on behalf of GCC.
- 7.2. Whilst this Technical Note responds directly to the key concerns raised in the SLC Rail report there is a much wider context to this through which it should be viewed. In line with recent shifts in National, Regional and Local policy and strategic objectives all new developments must follow a vision and validate approach to defining and shaping an optimal future travel demand profile which enables and promotes a transport demand management response that moves away from private car dominance.
- 7.3. There are a multitude of examples of rail lines where passenger services have been successfully reintroduced. A list containing some 32 of examples is provided in **Appendix A** of this report. This is not an exhaustive list but provides a useful reference to examples that have successfully navigated the complexities of re-introducing rail services to existing lines.
- 7.4. In terms of its role in the public transport system modal hierarchy and its capacity, segregated right of way, ability to sweat existing infrastructure assets, serve the wider population of the Berkeley Cluster and reduce overall transport carbon the re-introduction of passenger rail services on the Sharpness branch line as the backbone of the public transport strategy for the Sharpness Vale site remains the best solution.
- 7.5. It is however not the only solution or option. As shown in other transport evidence documents for the promotion of the Sharpness Vale site an express coach service is planned to operate from the site towards Gloucester until such time as there is sufficient passenger demand to enable the introduction of a viable passenger rail service. Further to this the assessment of the "Fallback" transport scenario, which assumes there is no future rail service and with a scaled back and more traditionally car centric approach to mode share, identifies deliverable highway improvement schemes to accommodate the additional traffic generated by the development in the event that the rail service is not implemented.
- 7.6. The Sharpness Vale site is a viable land development site regardless of whether or not the rail service is implemented and is not dependant on it.



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- 7.7. It is understood and acknowledged that the reintroduction of passenger rail services on the Sharpness branch line is a complex undertaking with potentially protracted timeframes, multiple role players, processes and agreements to be reached before it can be implemented. The site promoter is committed to navigating these processes and engaging with the relevant stakeholders at the right time in the process to reach the right milestone agreements towards implementation because passenger rail remains the best option even though it may not be the easiest. Express coach services will continue to operate to Gloucester whilst the necessary due processes are being followed to implement the rail service.

## **Appendix A Examples of operational passenger rail services that have been successfully re-introduced**

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<b>Year</b>	<b>Line/route</b>	<b>Details</b>
2019	Halton Curve	Brought back into use for passenger services in May 2019 after being closed for over 40 years. The reopening improved connectivity between North Wales, Chester, and Liverpool
2015	Yeovil Junction to Yeovil Pen Mill	Regular passenger services between Yeovil Junction and Yeovil Pen Mill were withdrawn in 1968; a limited service was reinstated in 2015 and has since slowly increased
2013	Manchester South District Line	Line reopened as part of Manchester Metrolink between 2011 and 2013 as far as East Didsbury.
2009	Oakham–Kettering line	Hourly services reinstated between Kettering and Corby, line re-doubled and electrified in 2021 with half-hourly services to London.
2009	Kettering to Oakham	Closed to passengers on 18 April 1966. The line was then reopened on 23 February 2009 with Corby served by direct trains to London and a limited number of trains continuing on towards Oakham and Melton Mowbray.
2008	Ebbw Valley Railway	Services reinstated in 2008, with new stations being added later that year and in 2014 and 2015.
2008	Croy line	Passenger services reinstated between Stirling and Alloa via Dunblane. Electrified in 2018.
2008	London to Aylesbury line	Services extended along freight-only line to new Aylesbury Vale Parkway station.
2008	London to Aylesbury	Services on the London to Aylesbury Line were extended north along the former Great Central Main Line (closed in 1966) to a new station called Aylesbury Vale Parkway, which opened in December 2008
2008	Stirling to Alloa	Reopened on 19 May 2008, providing a passenger service to Alloa on the route of the former Stirling–Dunfermline main line after a 40-year gap. The restored line also provides for freight onwards to Kincardine, and ultimately to Dunfermline by the slower, single track coastal route
2007	Coleshill	Coleshill closed in 1968 was rebuilt and reopened in 2007
2005	Vale of Glamorgan line	Services reinstated and stations opened/reopened in 2005, including branches to Penarth and Barry.
2005	Larkhall line	Passenger services reinstated on the Coalburn Branch, including 3 rebuilt/new stations.
2005	Maryhill line	Passenger services extended to Anniesland via a new station at Kelvindale.

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<b>Year</b>	<b>Line/route</b>	<b>Details</b>
2005	The Argyle Line	extended in December 2005 when a four-mile (6.4 km) section of the Mid Lanark Lines of the Caledonian Railway reopened, serving Chatelherault, Merryton and Larkhall
2003	The Romsey to Eastleigh link	Closed to regular passenger services in 1969, reopened in 2003 along with the intermediate station at Chandler's Ford in Hampshire.
2002	Sunderland to South Hylton	Reopened as part of Tyne & Wear Metro.
2002	The Chiltern Main Line	The Chiltern Main Line was redoubled in two stages between 1998 and 2002, between Princes Risborough and Aynho Junction
2002	Sunderland to South Hylton	Closed in 1964 was rebuilt and reopened in 2002 as part of the Tyne and Wear Metro
1998	Robin Hood line	Through passenger route from Nottingham to Worksop opened in 1998, after a staged reopening from 1993 onwards.
1993	Rutherglen and Coatbridge	Passenger services reinstated on freight line, including 6 new/reopened stations. Services were doubled in 2009 and electrified in 2014.
1993	Rutherglen and Coatbridge Railway	closed to passengers in 1964. The majority of the route was reopened (with a revised terminus station at Whifflet) in 1993
1992	Pontefract line	Services reinstated between Wakefield Kirkgate and Pontefract Monkhill, including new station at Pontefract Tanshelf.
1992	Maesteg line	Services reinstated and six stations opened in 1992.
1992	Wakefield Kirkgate to Pontefract Monkhill	Closed in 1967 was reopened in 1992 with Pontefract Tanshelf and two new stations.
1990	Robin Hood Line	The Robin Hood Line in Nottinghamshire, between Nottingham and Worksop via Mansfield, reopened in the early 1990s. Since closure in 1964 Mansfield had been the largest town in Britain without a rail link
1990	Paisley Canal line	The Glasgow and South Western Railway's Paisley Canal line was closed to passengers in 1983. The majority of the route reopened in 1990
1984	Sugar Loaf	closed in 1965 and reopened in 1984
1978	Liverpool Central to Hunts Cross	The Merseyrail line from Liverpool Central to Hunts Cross was closed in 1972 and mainly reopened in 1978
1972	Penally	closed in 1964 and reopened in 1972

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<i>Year</i>	<i>Line/route</i>	<i>Details</i>
	Abercynon–Aberdare, Barry–Bridgend via Llantwit Major, Bridgend–Maesteg and the Ebbw Valley Railway via Newbridge	32 new stations and four lines reopened within 20 miles (32 km) of each other
<b>Schemes similar to Sharpness that have been awarded business case funding as a result of the first round of the Restoring your Railway bid process</b>		
	Leicester – Coalville – Burton upon Trent ‘Ivanhoe’ line	Reintroducing passenger services. Like Sharpness, this line currently exists as an operational line, but is only used by slow-speed freight services
	Bury – Heywood – Rochdale line	Introducing passenger services on the Bury – Heywood – Rochdale line, most of which is operated as the heritage East Lancashire Railway. This route had also been identified by Transport for Greater Manchester in 2019 for a possible tram-train trial (like Sharpness, this line is currently operated partially as a heritage railway – East Lancashire Railway)
	Totton – Fawley branch	Reinstating passenger services on the Totton – Fawley branch in Hampshire, branded the Waterside Line (like Sharpness, this would see the reinstatement of passenger services on an existing freight only branch line)



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# Appendix B SLC Rail Report – Sharpness Vale: Rail Connectivity



# Sharpness Vale: Railway Connectivity

## Review of ‘Transport Report in Response to “Questions Raised by Gloucestershire County Council’, Stantec, February 2023”

Jeremy Higgins, SLC Rail,

March  
2023

### 1. Introduction

On 9 March 2023, Gloucestershire County Council asked SLC Rail to review the additional evidence on transport submitted by the promoters of Sharpness Vale to the Stroud Local Plan examination.

The four railway enhancement options promoted by Stantec/Arcadis are:

- (1) A new station at Sharpness and branch line infrastructure enhancements for a new ‘heavy rail’ train service to/from Gloucester (£7-21m, ‘most likely’, 10-30m ‘worst case’)
- (2) As (1) but with shortened platforms designed purely for a Very Light Rail (VLR) vehicle, see Section 4, (£5-8m). This is the Arcadis preferred option.
- (3) A new station at Sharpness and branch line infrastructure enhancements with an additional new 3-platform station at Berkeley Road. VLR services will then shuttle along the branch line from Sharpness and terminate at Berkeley Road station where passengers would connect with mainline services (£8m)
- (4) New southern cord which allows the diversion of services off the existing mainline to Sharpness before re-joining the mainline along the same direction of travel (£56m).

This document forms our considered response in relation to the aspiration for a railway station at Sharpness with a train service (initially 1 train per hour (TPH), but with a view to increasing to 2TPH) to Gloucester.

This report is split into:

- The importance of the DfT’s 5 transport business cases and ‘strategic fit’
- Overview of the Arcadis report of infrastructure options on the branch line
- Analysis of the economic assumptions associated with the promoter’s proposal
- Overall assessment

## **2. Alignment with the DfT's 5 transport business: the strategic case**

There are many pressures on the railway as an integrated national transport system. To ensure that the scarce resources of the industry are maximised, the Department for Transport (DfT) requires promoters of schemes to prove to the satisfaction of the Secretary of State that the scheme being proposed is appropriate for railway industry involvement and has a clear 'strategic fit' with wider industry objectives. The first step is in making a strategic case for an intervention.

Railway enhancement projects are governed through a multi-staged business case procedure designed to ensure that only the most promising investment opportunities incur the full cost of undertaking the most detailed requirements of the government. The first stage of this process is the Strategic Outline Business Case (SOBC). If the project gains support from the DfT, Network Rail and other stakeholders at this stage, it can then progress to the Outline Business Case (OBC). Only if it gains approval at that stage can it progress to Full Business Case (FBC). This can be a long, expensive and time-consuming process before approval to implement is given.

The DfT's guidance on transport business cases specifies that, from the SOBC submission, the 'business need' for the enhancement must be clear along with how the need would be met.<sup>1</sup> Furthermore, even at this early stage, the government expect clarity on:

- (1) the 'problems' identified (i.e. what is the proposed railway intervention designed to fix?)
- (2) the aims of the proposed scheme

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<sup>1</sup> DfT, The Transport Business Cases, January 2013.



- (3) how the aims address all of the problems identified
- (4) timescales and key drivers
- (5) why the scheme is needed now
- (6) what would happen if the scheme did not go ahead

What the proposer must do, then, is

- (1) clearly explain the underlying 'problem'
- (2) identify what improvements would be required to solve the problem(s).
- (3) examine the range of possible options that deliver the improvements and so solve those problems.
- (4) justify why a rail intervention is the most appropriate of the range of options.

The January 2021 letter from Network Rail to Sharpness Developments LLP points out to them that 'The strategic case for the proposal is of critical importance'.<sup>2</sup> In essence, the strategic case explains why rail is the answer to the 'problem'. However the strategic case for enhancement to railway infrastructure is not made within the developer's submission.

Railway industry stakeholders expect not only clarity on the problem and objectives, but also evidence of wider support for the proposed scheme. Network Rail explained that 'in addition to fully understanding the transport problem that the proposal is trying to solve, [we] would expect to see alignment with and consensus between relevant transport and planning authorities and clear links to the policy and investment goals [of Local and Central Government]'.<sup>3</sup> The transport business case documentation also makes this point.

**The Sharpness Vale documentation does not explain the logic as to what problems the railway intervention solves, nor why other options could**

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<sup>2</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).

<sup>3</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).



**not solve the problem (possibly in a more cost effective way). In short, it does not make the strategic case for a railway enhancement.**

**The Sharpness Vale documentation does not demonstrate full alignment with transport and planning authorities.**

### **3.The strategic fit with the existing railway network.**

The next step is to demonstrate that the railway solution from the strategic case can be introduced into the operational railway network without detriment to the system-wide efficiency. This is called the 'strategic fit'.

Network Rail states that 'Strategic fit is an assessment of whether a proposal for a change to the railway system aligns with the overall strategy for the railway system'. There are a number of important aspects to strategic fit including:

'Capability: will the proposal impact known constraints, or align with known strategies for the capability of the railway?'

'Resilience: will the proposal have an impact on the resilience of the railway' (How the railway copes with risks to loss of service, and recovery from loss of service).

'Safety and standards', which in this case largely relates to enhancements to the branch line infrastructure, in particular the risk associated with level crossings (see below).

**The scheme promoter does not consider the wider strategic fit of introducing additional services onto the operational railway.** But, using evidence of work undertaken by Ed Jeffrey Ltd, the promoter stresses that it is possible to introduce the proposed services into the existing railway timetable schedules.

The Network Rail letter points out the important omission of not considering strategic fit, explaining that 'timetable analysis is only one aspect of the feasibility of the scheme .. of greater importance at this stage are ... the strategic and economic case for the scheme ...[and] the fit with the strategic plans for the railways and wider rail system



implications'.<sup>4</sup> The deficiencies in the submission in respect to making a strategic case for rail investment have been made above and in Section 2. But in addition, the promoter appears to have given no consideration to the wider plans for the railway.

The wider plans for the railway are important for two main reasons:

- the strategic nature of the Birmingham to Bristol mainline railway, which is outlined in Network Rail's recent 'Corridor Study' and highlights the strain on the current system, identifies key priorities for service enhancements (which does not include Sharpness) and recommends future infrastructure enhancements necessary to unlock increased rail capacity.<sup>5</sup>
- any spare capacity on the existing system may have been utilised by higher priority passenger or freight services before the Sharpness Vale scheme could justify the proposed railway enhancement.

Network Rail makes the point that 'inevitably this aspiration [for the Sharpness scheme] would compete for capacity on the network' ... other projects such as the more advanced 'Midlands Rail Hub ... have not been taken into account in the timetable development work'.<sup>6</sup>

**The key points are:**

**just because it might currently be possible to introduce another service into the existing railway timetable, doesn't mean that it will always be possible to do so.**

**In any case it might not be preferable to do so. There may be other higher priority schemes for the railway industry.**

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<sup>4</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).

<sup>5</sup> Network Rail Bristol to Birmingham Corridor Strategic Study, June 2021.

<sup>6</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).



#### **4. Review of Arcadis report: Estimating the cost of reinstating passenger rail services on the Sharpness Branch, 1 February 2023.**

Because of time constraints, the review of the Arcadis report does not attempt to challenge any of the costings (other than in relation to the Berkeley Road station assumption), but instead focuses upon potential limitations of the current scope which may undermine the viability of the strategic and economic cases for the reinstatement of passenger railway services. This section examines Arcadis's infrastructure and rolling stock assumptions.

##### **4.1 Infrastructure**

The Arcadis report considers the four railway infrastructure enhancement options with cost estimates for each. Network Rail is the infrastructure owner, with long term safety and maintenance obligations. Any infrastructure enhancement scheme will only progress if Network Rail is satisfied as to the detailed specification of the works required. There is no evidence that Network Rail has agreed the scope of work, nor verified the costs submitted by the promoter. It is possible that Network Rail would consider that both costs and scope of works are understated. It cannot be inferred, then, that these preliminary costs are anything more than indicative. A considerable amount of negotiation between the promoter and Network Rail is required before firm costings, which will be required to derive the strength of any business case, can be agreed.

Network Rail may specify significantly more works to enable the service to be introduced. Although there is no requirement on the Sharpness branch line to build brand new railway infrastructure the transformation required in terms of infrastructure capability could signal a complete rebuild. Arcadis has specifically excluded drainage, culvert, level crossing and



signalling work from their cost estimates, which may not be acceptable to Network Rail as the infrastructure owner.<sup>7</sup>

The existing permanent-way is configured for one freight train per day at a linespeed of 15 MPH. The proposal is for circa 50 trains per day (2 trains per hour in either direction) at linespeeds of 60-75 MPH. This rebuild might be on a scale similar to the East West Rail project between Bicester and Bletchley which might be useful as a cost benchmark.

Arcadis justifies limited upgrade to infrastructure, and therefore reduced cost estimates, by stating that the impact of Very Light Rail (VLR) operations on the permanent-way is because of the lower weight of the vehicles which then equates to a lower specification of track than for heavy railway users.<sup>8</sup> If it is accepted that the branch line is only configured for VLR services it limits the flexibility of the train operator (see below) and potentially increases risk in terms of project viability if, for whatever reason, VLR services cannot be introduced.

The costs estimated by Arcadis for the four options are:

- (1) A new station at Sharpness and branch line infrastructure enhancements for a new train service to/from Gloucester (£7-21m, 'most likely', 10-30m 'worst case')
- (2) As (1) but with shortened platforms designed purely for a Very Light Rail (VLR) vehicle, see Section 4, (£5-8m). This is the Arcadis preferred option.
- (3) A new station at Sharpness and branch line infrastructure enhancements with an additional new 3-platform station at Berkeley Road. VLR services will shuttle along the branch line and terminate at Berkeley Road where passengers would connect with mainline services (£8m)

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<sup>7</sup> Arcadis, Sharpness Rail Study, November 2022, Revision P02, 3 February 2023, 26, 27.

<sup>8</sup> Arcadis, Sharpness Rail Study, November 2022, Revision P02, 3 February 2023, 13.

- (4) New southern cord which allows the diversion of services off the existing mainline to Sharpness before re-joining the mainline along the same direction of travel (£56m).

Irrespective of requirements on the branch line, both the Arcadis report and the Network Rail capacity analysis paper make reference to Ed Jeffrey Ltd's suggestion that signalling work will be required at Gloucester to facilitate the 2 TPH service provision.<sup>9</sup>

It is implied within the Stantec and Arcadis documents that any works required around Gloucester are not included within the cost estimates because there is a hope that the work will be undertaken as part of other projects (these projects may not have their own funding and may not be foreseeable in the short of medium term).<sup>10</sup> If so, these projects then dictate the timescale with which the Sharpness service could be enhanced, or possibly introduced, which may well be beyond the timescale of the current Local Plan proposals. This uncertainty questions the overall viability of the rail project since it is dependent upon an improvement which, at this stage at least, is still far from certain.

Given this uncertainty, it would be risky to assume that at this stage the enhancements can be delivered for the estimated costs

Network Rail makes the following key points that 'there are important omissions...' referring to freight line operations on the branch line' and that the infrastructure 'interventions cannot be assumed to be feasible ...'<sup>11</sup> It also points out that 'the "do something" option includes the replacement of a mainline crossover [for which a] cost of tens of millions of pounds must be expected'.<sup>12</sup>

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<sup>9</sup> Arcadis, Sharpness Rail Study, November 2022, Revision P02, 3 February 2023, 26; Network Rail Sharpness Quality Assurance Capacity Analysis: Analytic Assurance Statement 20 November 2020.

<sup>10</sup> Stantec, Sharpness Vale: Transport report in response to questions raised by Gloucestershire County Council, 19; Arcadis, Sharpness Rail Study, November 2022, Revision P02, 3 February 2023, 26.

<sup>11</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).

<sup>12</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).



There appears to be some inconsistency in the costings of the four options. The base cost for Option 2 is estimated by Arcadis to be £4.9m, which specifically excludes station passing loops and signalling upgrades. The cost for Option 3, which includes a new 3-platform mainline station is estimated at £7.9m. It seems that the cost estimate for a new Berkeley Road station is £3m (i.e. the difference between the two costs). By way of comparison, the estimate for a new Stroudwater station (Stonehouse Road) some six miles away is £18m.<sup>13</sup> Current SLC Rail cost estimates for similar sized new stations typically exceed £20,

Furthermore, the Arcadis costs do not appear to include Optimism Bias (of 60%) which is a requirement for transport business cases at this early stage of maturity.

#### **4.2. Train operation**

Arcadis's preferred approach, Option 2, is configured specifically for the use of VLR. Under this option, the station cannot operate longer (or indeed almost any other) trains. Such an approach limits flexibility for Train Operating Companies (TOC) which may drive significant additional operating cost.

It is understood that because of the crashworthiness of VLR these trains are not cleared for mainline railway operations. It is possible that rules may change, but as things stand, the infrastructure solution is designed for rolling stock which cannot be used for the intended service.

In any case, the advertised top speed is 65 mph may cause congestion/performance issues on mainline (strategic fit issues as mentioned in Section 3, which may prove to be a reason for NR concern). It is not clear from the timetabling report by Ed Jeffrey Ltd whether the

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<sup>13</sup> Stantec Allen Rail, Strategic Outline Business Case: Restoring Your Railways – Stroudwater station, 25 March 2022, 47.

timetabling assessment is based upon a 65 MPH maximum speed or a train service that can operate at linespeed.

Network Rail recommended 'discussions with Great Western Railway (GWR) on operational and financial viability'.<sup>14</sup> There is no mention within the documentation of any discussions with any TOC in relation to costs associated with the VLR train. Operating a bespoke fleet will come with significant additional costs in terms of: maintenance, spare capacity, stabling, driver training. It is not clear how many trains would be required to maintain the service, where they would be based, nor how many traincrew would be required.

The choice of VLR has a direct impact on the infrastructure costs and the viability and deliverability of the project. If there has been no agreement with the TOC that VLR is acceptable and workable, then there is a considerable risk to this project that costs are sunk on a venture that cannot then be delivered.

The limitation of short platforms for VLR services means that the TOC could not substitute other rolling stock, for example during times of perturbation. It is not clear which organisation would bear the risk/costs of e.g. unit failure on the delivery of services.

It is likely to prove unacceptable to the railway industry that a station is built that can only accommodate a specific rail vehicle.

## **5. Demand for rail**

Network Rail has stated that 'the potential demand and revenue generated is of critical importance'. It also points out that 'a large volume of regular users would be required, [which is] likely to constitute an

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<sup>14</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).

exceptionally high modal share of the catchment population ...'<sup>15</sup> Its suggestion appears to be that the Sharpness Vale development may not generate such a level of footfall.

Demand is not solely about the number of residents, but a complicated combination of the propensity of residents to use rail and other services, the destination, frequency, journey time and reliability of services. It is not solely a case taking a pro-rata of the number of residents and assuming that they will wish to travel by train.

Section 8.1.1 suggests that the promoter believes that 1 million passenger journeys p.a. (2018-2019) is achievable when the development is fully built out. This would equate to the 574<sup>th</sup> largest station of 2,462 in the UK network. Akin to Kettering, Redditch, Caterham, Stratford-on-Avon and Biggleswade in passenger throughput.

If the 1 million passenger numbers are deliverable, then the VLR option is almost certainly insufficient.<sup>16</sup> At that point 77% of the seated capacity of the service would be taken. If the same growth rate occurs as at Ashchurch in the period between 2012 and 2018 then within 6 years of full operation every seat on every train will be taken and at least 2 people will be standing.<sup>17</sup> This failure to accommodate growth would be unattractive to customers and the railway industry. It is likely to result in the industry not accepting the shorter platform model as it does not allow for any capacity improvements.

Since it is predicted that 2,400 new dwellings are built by 2040, a pro-rata of the 1 million passenger estimate equates to 480,000 journeys p.a. A number similar in scale to Wrexham, Sandy, Torquay and Tiverton Parkway,

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<sup>15</sup> Matt Haywood, Network Rail, 21 January 2021 (Appendix F).

<sup>16</sup> 1 million passenger numbers equates to 2,755 per day, 1,377 in each direction. If the seating capacity of the VLR train is 56 and there are two trains per hour for 16 hours per day (32) then on average every train will have 43/56 seats taken (77%).

<sup>17</sup> Growth at Ashchurch between 2012/2013 and 2018/2019 equals 34%. 43 seated passengers plus 34% equals 58 passengers on average to each train.

and slightly below that of Stroud (561k). At this level of demand, it seems unlikely that the minimalist specification of station facilities would be acceptable to the railway industry.

Passenger numbers for similar local stations amount to less than 200,000 journeys p.a. Cam and Dursley (191k) and Ashchurch (102k) - which has direct connectivity to Birmingham, Cardiff, Worcester, Cheltenham, Gloucester and Bristol compared to Gloucester only for Sharpness Vale.

On the generous assumption that Sharpness Vale could generate 500k passenger journeys p.a. this number would equate to 1,377 journeys per day (including Saturdays and Sundays) of which 688 (50%) would be outward journeys. This would compare to 526 per day for Cam and Dursley, 263 out/return. So, by 2040 Sharpness Vale station will be 2.6 times busier than Cam and Dursley.

Section 5.3.2 shows that Stantec estimate that between 0800-0900 on a weekday with 1 TPH the loadings are 279 passengers (40% of the total daily outward services). The VLR vehicle has seats for 56, so the projected loadings for the peak train are 2.5 times the capacity of that train. Throughout the remainder of the day (on outward services) there would be 409 passengers. If there are 16 services per day (1 TPH) then there will be an average of 27 customers on each outward train other than the 0800-0900 morning peak.

The proposition does not consider an alternative to rail by increasing the provision of bus capacity (n.b. DfT seeks all business cases to consider key such alternatives). Stantec's estimates show that 1,757 residents, around 30%, are predicted to leave the settlement between 0800-0900 (Table 3.1).<sup>18</sup> During this peak hour bus loadings are projected at 716 passengers (2.5 times greater than rail). It is not clear why it would not be feasible to further increase bus provision to cater for the remaining 279 passengers. Such an approach could

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<sup>18</sup> If there are 2,400 dwellings with 2.4 residents per dwelling, then this number amounts to over 30% of the residents leaving during this single hour.





completely avoid the long-term risks associated with railway infrastructure and operations by providing a more cost effective alternative to rail.

Consideration should be given as to how Stantec justifies its estimate of rail passenger numbers. Its logic appears to be based upon 'comparable' stations to Sharpness Vale. The passenger numbers for six of the stations are not readily comparable because these locations are also significant tourist destinations.<sup>19</sup> The remaining stations are very different in comparison to Sharpness Vale because these are served by a high frequency of services (up to 5 TPH pre COVID, compared to 1 TPH for Sharpness potentially building up to 2 TPH) and are close to significant urban and economic centres (between 3 - 18 times larger than Gloucester in GVA terms).

In addition, for these 'comparable' stations, there tend to be numerous stations along the line of route, meaning that each station has to contribute less in revenue to justify the service provision. There are, for example, 8 station calls between Glossop and Manchester and 12 between Aberdare and Cardiff. Yet there is only Cam and Dursley between Sharpness and Gloucester (which is a smaller economic centre in comparison to Cardiff, Bristol, Leeds and Manchester which the 'comparable' stations serve).

Comparable stations used in Stantec analysis (from Table 8.1)

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<sup>19</sup> Seaford, Exmouth, Malvern, Dawlish, Teignmouth, Totnes.



Other stations	TPH	Key destination	GVA	Miles	Journey Time
<b>Garforth</b>	4	Leeds	21 bn	8	11
<b>Glossop</b>	2	Manchester	56 bn	13	33
<b>Aberdare</b>	2	Cardiff	9 bn	22	64
<b>Ilkley</b>	4 (3)	Leeds	21 bn	16	28
<b>Bradford-on-Avon</b>	5 (3)	Bath		10	17
			4 bn	21	36
<b>Trowbridge</b>	5 (3)	Bristol	14bn	14	23
				25	43
<b>New Milton</b>					
<b>Ashchurch</b>	1	Gloucester	3 bn	14	19
<b>Cam and Dursley</b>	1	Gloucester	3 bn	13	15
<b>Sharpness</b>	1	Gloucester	3 bn	18	Not known

The closest comparative stations are Cam and Dursley and Ashchurch. These stations appear to have been ignored by Stantec for comparative purposes.

The logic behind the argument of potential journey numbers for Sharpness Vale is flawed and therefore unconvincing.

It is possible that railway connectivity is seen as an essential prerequisite to making the overall development sustainable. The DfT and the railway industry would not, however, expect to pick up the obligations for an unviable service. They are likely to insist that passenger numbers reflect a realistic level based upon the factors described earlier in this section.

**6. Summary**

<b>Strategic Case</b>	There is no strategic line-of-sight making the case for rail intervention, explaining the underlying problem,
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	<p>the options that could resolve the problem and the justification of a rail intervention.</p> <p>No consensus between transport and planning authorities on the investment goals</p>
<b>Strategic Fit</b>	<p>Takes no account of the wider strategic fit of the intervention on the railway system. Competition for railway capacity means that just because it is possible to implement a timetable enhancement it may not be the right thing to do for the wider system.</p> <p>No consideration of the potential performance impact on the wider system of a train running at a speed considerably slower than the line speed</p>
<b>Cost</b>	<p>Scope of works and cost assumptions not agreed with NR.</p> <p>Not all costs included (e.g. Gloucester work and level crossing improvements).</p> <p>Preferred option only works for VLR solution (increases deliverability risks).</p> <p>Costs do not include Optimism Bias required for transport business cases</p>
<b>Rail operation</b>	<p>Infrastructure assumptions based on VLR - limits flexibility because not sufficient for other trains.</p> <p>VLR not cleared for mainline operation.</p> <p>Linespeed of VLR may be an issue with timetabling/performance.</p> <p>Unclear whether GWR underwrites the introduction of VLR (trains, maintenance, stabling, train-crew etc).</p>
<b>Demand</b>	<p>Demand drives the business case. Evidence to support assumption of 1 million passenger journeys p.a. is weak. Best comparable evidence (100k -200k) is not considered.</p>



	<p>At 1m passengers p.a. little capacity for increased demand with VLR.</p> <p>Projection indicates that 40% of demand is between 0800-0900. Indicates that off-peak services will be heavily under-utilised.</p> <p>Not clear why increased bus capacity cannot substitute for railway services (much cheaper).</p>
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**7. Conclusion**

How might the railway industry view the current proposal for an upgrade of the branch line at Sharpness and a reinstatement of passenger services and an increase in traffic on the Bristol to Birmingham main line?

There is limited evidence that a strategic case has been made that explains the problems and why a railway intervention is the best solution compared to other options.

The proposition does not address strategic fit with the wider railway system.

Levels of anticipated demand, which drives income for the railway industry, appear optimistic with limited evidence to support the promoter's case.

Capital and operational costs appear to be hypothetical, unverified and the methodology not yet agreed with the railway industry.

The logic for VLR remains far from certain and may create incremental costs for a TOC in operating a bespoke fleet whilst also limiting flexibility in how the branch line can be used.

Some or all of these concerns may be allayed at a later stage of maturity. But until clear evidence-based answers are provided and the project progressed through the transport business case process, there can be no certainty that the rail industry would support the introduction of railway services from Sharpness.

Therefore, if planning consent for the wider Sharpness Vale scheme is granted on the basis of the current state of the railway infrastructure enhancement project, it is done so with a very high degree of risk that the anticipated railway enhancements may never be delivered.





## TECHNICAL NOTE

### Appendix C ORR Track Access Decision Process

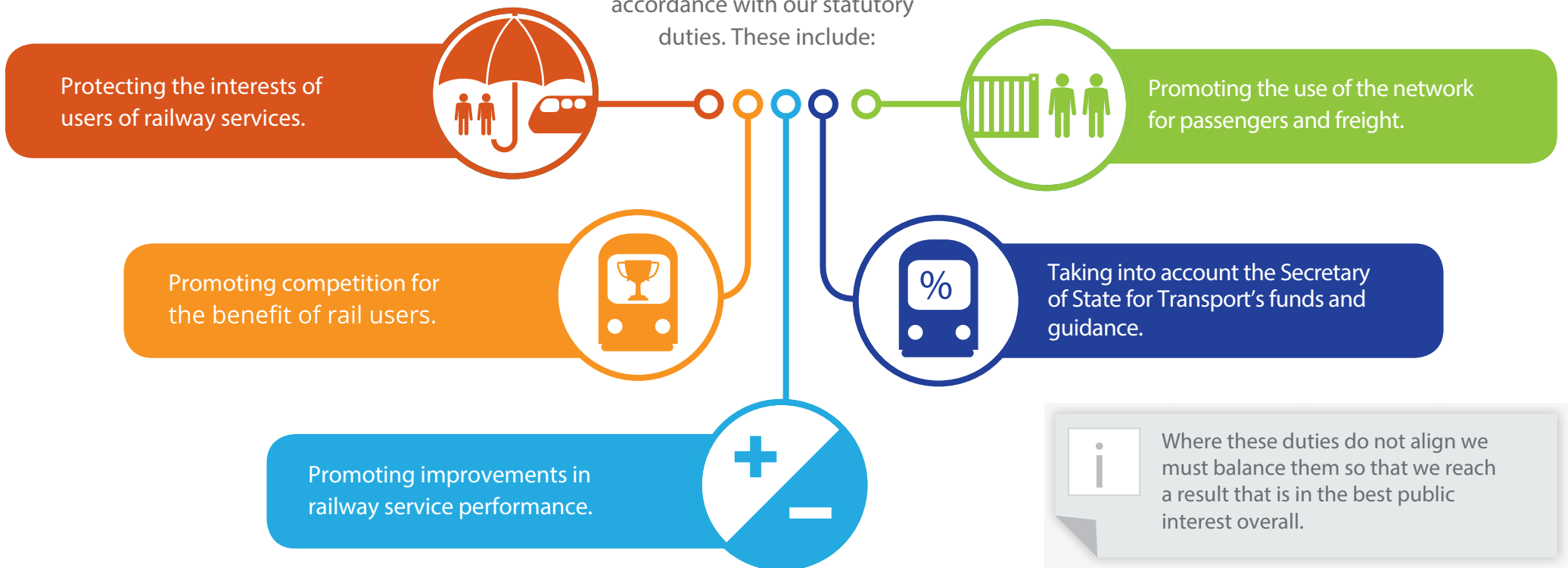


# How We Make Decisions On Track Access

If a railway operator wants to run trains on the rail network, it must seek the Office of Rail and Road's approval for a track access agreement with Network Rail.

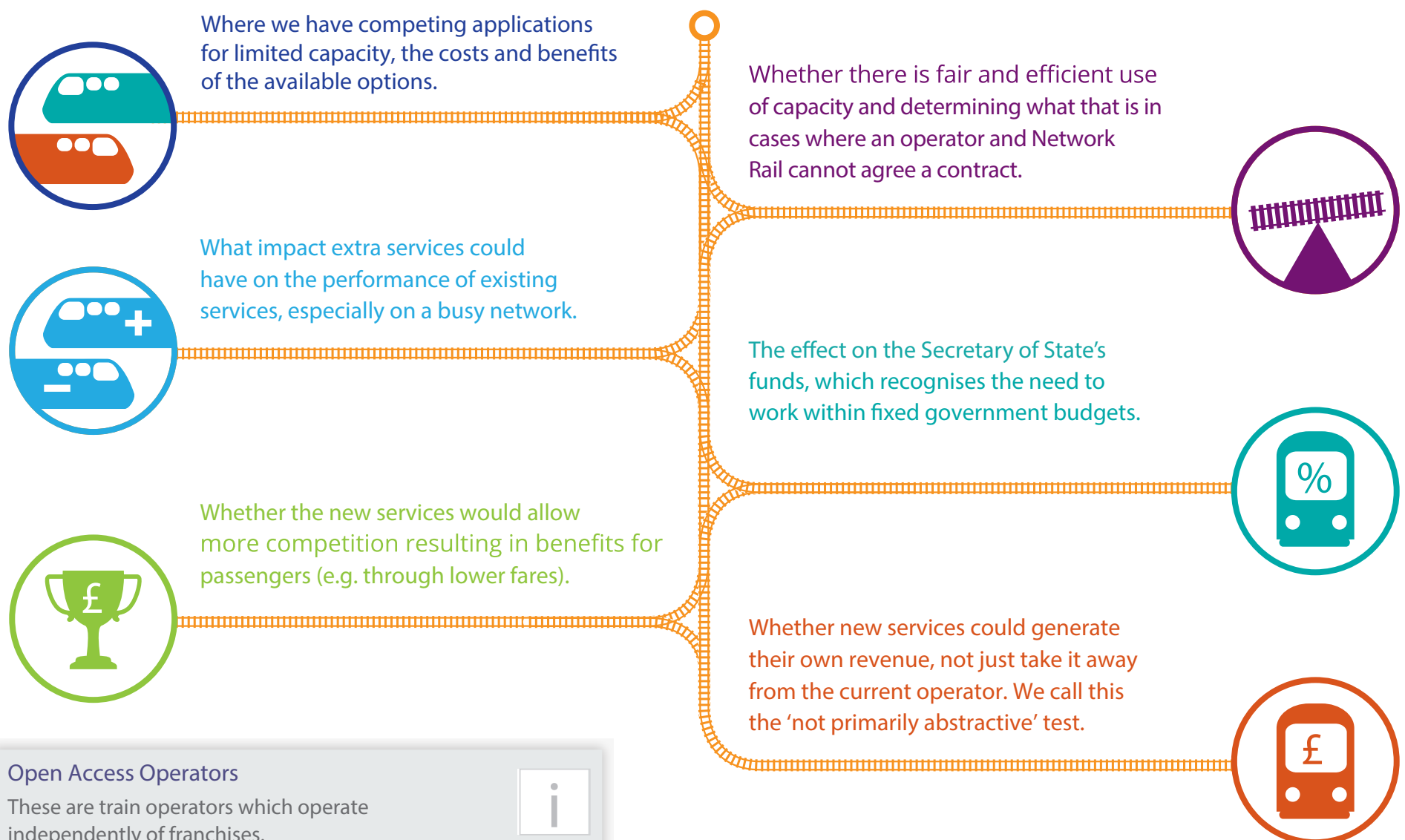
## How do we make our decisions on track access?

When we consider track access applications, we must do so in accordance with our statutory duties. These include:



## What factors do we consider when making track access decisions?

We look at the following things before we grant approval:



### Open Access Operators

These are train operators which operate independently of franchises.

The Office of Rail and Road (ORR) values the benefits of competition and supports the introduction of new 'open access' services, or the continuation of existing services, where they meet our published criteria and bring real benefits to passengers.

### Economic Equilibrium Test

We will also undertake the Economic Equilibrium Test on new open access services where the test is requested by a relevant party. This test looks at the overall impact of proposals on existing franchises.



## TECHNICAL NOTE

# Appendix D Midlands Connect - Summary of the West Midlands Rail Hub Outline Business Case

# Midlands Rail Hub

Going for Growth

A summary of our Outline Business Case



**Midlands Connect**  
Transport | Investment | Growth

December 2022





**Sir John Peace,**  
chairman, Midlands Connect



In the last five years we've have seen some of the most radical changes to our political, societal and environmental landscape in living memory. Yet, with support from Government, the Midlands Connect Partnership has worked tirelessly to advance the Midlands Rail Hub from an ambition, set out in the 2019 Conservative election manifesto, to a credible and investable proposal which, when delivered, will truly level up the Midlands.

This is a truly momentous occasion for us at Midlands Connect, we are proud to unveil this detailed plan for infrastructure changes which will transform our region. This work, delivered in partnership is a testament of collaboration and shows what happens when you set strong priorities and work together to try and deliver them.

We know the project has the backing of the businesses, communities and political leaders in the Midlands, and we stand ready to kickstart its delivery and get spades in the ground. That is unique for schemes of this magnitude and shows the willingness and determination of colleagues to work, in concert, to go for growth and level up the Midlands.

The Midlands Rail Hub will significantly impact the future of travel for generations to come. I hope the government will now look on this report and its recommendations favourably.



Midlands Rail Hub would be a game changing scheme for our region. The benefits it can bring to local people and businesses are many – whether it's connecting millions more people to the HS2 network, creating space for millions more rail journeys or opening up faster and more frequent rail links for commuters as well as business and leisure travellers.

As we bounce back from Covid, Midlands Rail Hub will support our recovery by better connecting the East and West Midlands, opening up access to opportunities right across the region and supporting thousands of jobs. Beyond the economic imperative, getting more people and businesses using the rail network is a vital tool in our armoury when it comes to tackling the climate emergency. Midlands Rail Hub helps to put us on a pathway to sustainable growth and the changes we set in motion now will not be a mere 'flash in the pan'. Our new, faster, vaster rail network will be used by Midlanders for many years to come - even a century from now.

So given how high the stakes are here, I urge the Government to help maintain our momentum and give Midlands Rail Hub their full backing in the weeks, months and years ahead. When our region succeeds, the country succeeds and the sooner Government enables us to start delivering this project, the sooner our local residents will experience the plethora of benefits to come.



**Andy Street,**  
Mayor of the West Midlands

## Executive summary

This document outlines our plans for the future of the Midlands Rail Hub, following the publication of Government's Integrated Rail Plan. Important highlights include:

1

**Midlands Connect is committed to the delivery of the Midlands Rail Hub in full, including two new chords.** Midlands Connect has collected evidence, contained within this document and our Outline Business Case, which, we believe, represents the best possible way to enhance capacity on the region's railways and boost east-west connectivity between its major towns and cities including Leicester, Birmingham, Worcester and Hereford.

2

**New opportunities exist to create enhanced connections to towns and cities across the Midlands.** While the Integrated Rail Plan delivers services to Nottingham and Derby via HS2, this doesn't provide any benefit between Birmingham and Leicester (and communities in between) and for this reason, better Birmingham to Leicester connections through Midlands Rail Hub remain as important now as they always did.

3

**We're gearing up to deliver, as soon as possible.** We've identified some parts of the scheme that could be delivered very quickly, including the reinstatement of platform 4 at Birmingham Snow Hill station, subject to Government support. This would deliver immediate benefits, including extra trains to London from Snow Hill, and reliability benefits for all services.





# What is the Midlands Rail Hub?



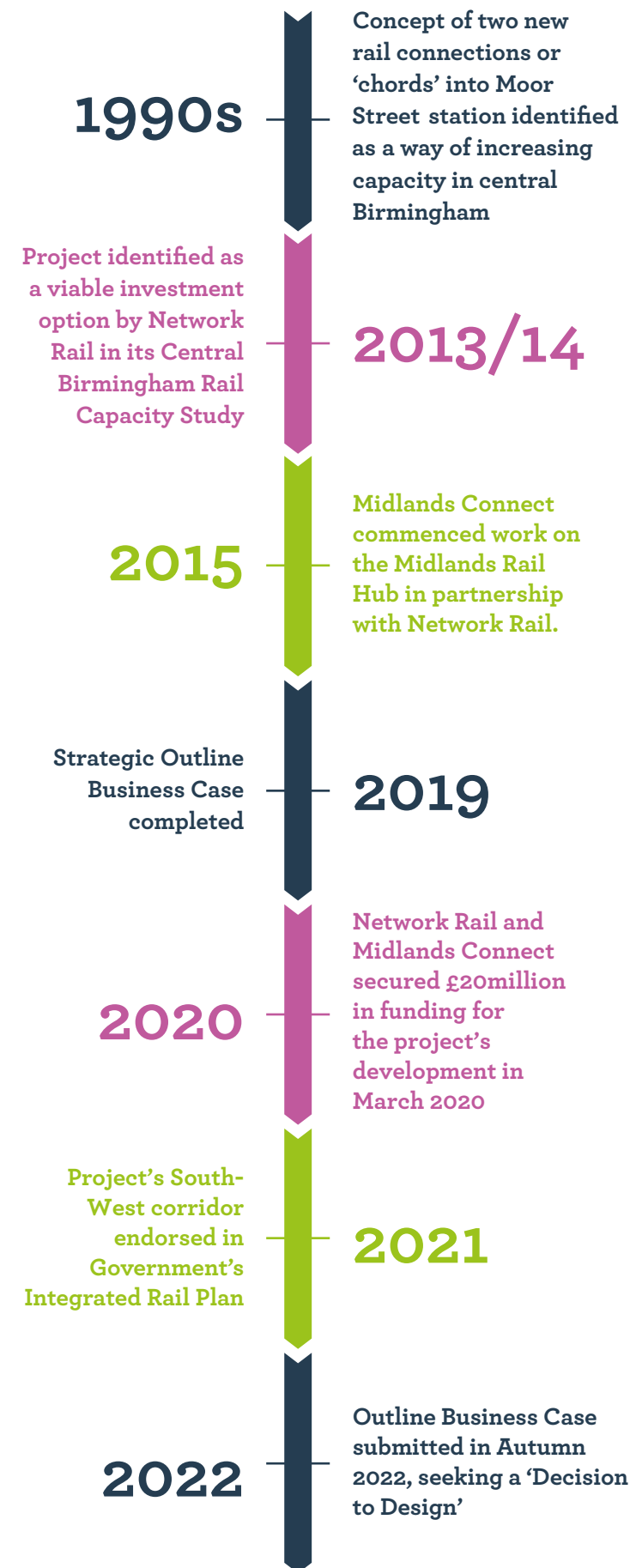
Part of the Midlands Engine Rail programme, Midlands Rail Hub is the region's biggest and most ambitious rail improvement scheme - a £900m - £1.5bn blueprint for faster, better and more frequent connections across the Midlands.

The concept of constructing two new links (or chords) into Birmingham Moor Street station was born in the 1990s, driven by a desire to create space for more trains to move into and out of central Birmingham.

Since its inception as the region's Sub-national Transport Body in 2015, Midlands Connect has worked with local leaders, authorities and Network Rail, alongside the Department for Transport to develop and progress the Midlands Rail Hub, focusing on the benefits it can bring in enhancing east-west connectivity across the Midlands and linking seamlessly with HS2 at Curzon Street. As well as gaining political consensus for the scheme, Midlands Connect and Network Rail managed to secure £20million in funding for the project's development in March 2020. The project was also listed as a transport priority in the 2019 Conservative Party Manifesto and in Government's Integrated Rail Plan, published in November 2021. The importance of Midlands Rail Hub was also reinforced by the Transport Select Committee's review in July 2022, emphasising the need for the scheme to be delivered in full.

Historically, turning rail projects from concept to reality has been a long and frustrating process. Midlands Connect is keen to break this cycle by securing the future of this project now and planning for its delivery, allowing Government to apply the principles of 'Project Speed' to its construction, as soon as possible. Given this aim, this document outlines what Midlands Connect, Network Rail and the Department for Transport are doing to progress the Midlands Rail Hub, with the aim of benefitting local people, our environment and our economy sooner.

# The project so far...





# The Midlands Rail Hub in numbers

## Travel



Faster, more frequent or new rail links for over **30 locations** including: **Birmingham, Bromsgrove, Nuneaton, Worcester, Hereford, Cardiff, Bristol, Cheltenham and Leicester**

← Better →  
**East – West connections**  
across the Midlands

Enhances access to HS2 for over  
**1.6 million people**



**>14 million more seats**  
on the rail network  
each year



## Environment



Each parcel or person moved by rail instead of by diesel/petrol vehicle creates **76% less CO2**

## Delivery



Works could  
**begin in 2025**

Full scheme  
**completed by 2030**



Estimated  
**£900m to £1.5bn**





# Key facts and figures

## Shorter journey times:

Improved rail journey times between Birmingham and Worcester by up to five minutes, Cardiff by six minutes and up to 13 minutes to Hereford.



## Support increased demand:

Housing and jobs growth is forecasted across the region in the coming years, resulting in additional demand for travel. For example, 30,000 new homes and 23,000 new jobs are expected in Herefordshire and Worcestershire by 2045. Similarly, between 2020 and 2045, an additional 144,000 new jobs are expected in the West Midlands, of which 96,000 will be in Birmingham; the highest growth rates are expected between 2030 and 2035, the period in which HS2 is due to be delivered.



## Boost economic growth:

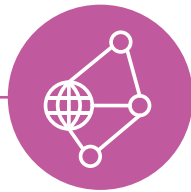
For every pound we invest, we generate over £1.50 in benefits, inclusive of those to the wider economy. This demonstrates clear value for money.



**Safeguard jobs:** Maximise the benefits of HS2 and safeguard 1,600 jobs in the engineering and construction sector.



**Better connectivity:** Improved local connectivity by creating capacity for new services to/from New Street, including reintroducing six trains per hour on the Cross City line. All of this will add to greater regional connectivity delivered by the Midlands Rail Hub to create a strong package of improvements for the Midlands.



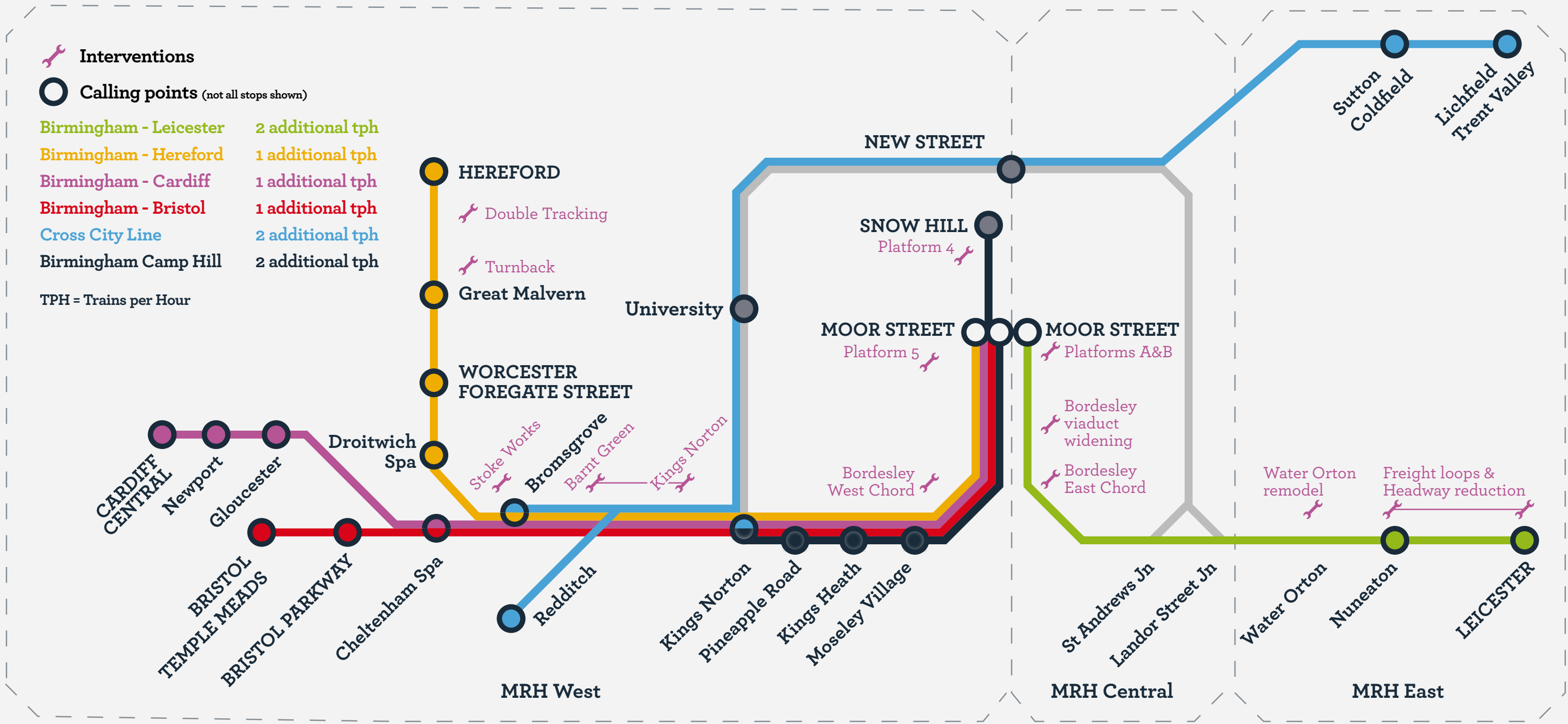
## Create higher wages:

Contribute towards improved wage levels in areas with improved rail connectivity to and between key economic centres. Areas with 10% higher rail connectivity have been shown to have wage levels 1.3% higher than comparable locations with lesser rail connectivity.





# Midlands Rail Hub map





# Options for delivery

## Option A: MRH West

In this scenario, a new West Chord is provided between Bordesley and Moor Street, allowing access to Birmingham Moor Street from the South-West and Wales, which allows us to operate extra hourly trains from Birmingham Moor Street to Hereford, Bristol and Cardiff. This option provides a great interchange between future HS2 services at nearby Curzon Street and non- high speed services at Moor Street itself. In addition, our new infrastructure means that the busy Birmingham Cross City Line enables an additional two train per hour, linking the towns of Bromsgrove and Redditch with the city of Lichfield, via Birmingham New Street. As well as serving these towns and cities, it gives us much improved access to important intermediate locations including the University of Birmingham and the Queen Elizabeth Hospital. Before Covid, this service used to operate every 10 minutes, and with our extra two Midlands Rail Hub trains, the 10-minute interval service will be fully restored, offering a ‘turn up and go’ service. Last but not least, we can run local trains from Kings Norton into Birmingham Moor Street, again providing a great interchange with future HS2 services.

While this option gives us some great new services, it doesn’t address our poor connections between the West and East Midlands, and it doesn’t provide any future capacity for extra services towards East Birmingham.

## Option B: MRH West, Central and East

This is a more comprehensive option which requires two new chords at Bordesley. First, the West Chord, which means we get all the services described above in Option A, so extra trains to Hereford, Bristol and Cardiff, plus the restoration of a turn up and go service on the Cross City Line. Second, we introduce a new East Chord, which means we can run an extra two services every hour between Birmingham and Leicester, giving these two important cities a four trains per hour service – with two faster services calling at Nuneaton only, and two slower services calling at Nuneaton and the other stations on the route. In addition to these services to Leicester, the new East

Chord we’ll have built at Bordesley gives us the space needed to run more trains in the future – be it those within the West Midlands, or those running further afield. We don’t know the specifics of these yet (that will involve more work in the future), but we do know that providing vital extra space in Birmingham is key to unlocking these.

The new capacity may also allow us to serve new stations in the future, providing access to the railway network for more people.



## Our Preferred Option

It may come as no surprise that of these options, our preference is for Option B. As well as providing a great interchange between ‘conventional’ train services at Birmingham Moor Street and HS2 services at nearby Birmingham Curzon Street, Option B gives us much improved links from the West Midlands to the East Midlands, and crucially, space to provide further (as yet unspecified) trains beyond that. While both options are demonstrably robust, Option B offers the most societal, environmental and economic benefits, and aligns best with our original objectives for the scheme.

Option B will cost us between £1.48bn and £1.54bn, compared to £925m to £969m for Option A. While Option B costs more, it gives us much more in benefits, offering over £1 billion in benefits over the life of the scheme, of which over £200m are wider benefits to the economy. When compared against the costs, our work shows that for every pound we invest in this scheme, we get over £1.50 in benefits, demonstrating value for money for the Government. In addition, our research

shows that we can safeguard 1,600 construction jobs<sup>1</sup>. We also believe the Midlands Rail Hub can contribute to improved wage levels by providing improved rail connectivity to and between key economic centres. Areas with 10% higher rail connectivity have been shown to have wage levels 1.3% higher than comparable locations with lesser rail connectivity.

Whilst long term changes in commuting patterns have occurred following the COVID-19 pandemic, rail patronage is growing and is already back to 93% of pre-Covid levels. In the medium term, passenger crowding will return on services into Birmingham impacting journey quality and constraining economic growth. Since the pandemic we have witnessed that patterns of travel are now changing, and we are seeing strong demand for leisure trips that includes people going shopping and seeing cultural attractions. The Midlands Rail Hub will create extra capacity in the network to allow us to deal with this changing demand for work and leisure, while at the same time, offering the Government (and ultimately the taxpayer) a good return on all the investment made.

## The proposed interventions

The Rail Hub will require the following infrastructure requirements for each ‘package’:

Midlands Rail Hub West	Midlands Rail Hub Central (assuming West infrastructure)	Midlands Rail Hub East (assuming West/Central infrastructure)
Snow Hill platform 4	Moor Street platforms A & B (east side)	Water Orton remodelling
Moor Street platform 5	Bordesley viaduct widening	Nuneaton to Wigston signalling headways
Bordesley West Chord	Bordesley East Chord	Freight loops between Nuneaton and Leicester
Kings Norton-Barnt Green		
Stoke Works junction		
Malvern Wells turnback facility		
Ledbury – Shelwick partial double-tracking		



<sup>1</sup> Source: National Skills Academy for Rail

# Benefits

## Option A

These tables set out the benefits of the proposals and how they meet Midlands Connect's role in researching, developing & recommending transport projects which will provide the biggest possible economic and social benefits for the Midlands.

Route	Calls at	MRH Frequency Increase	Frequency with MRH in Place	Extra Seats Per Year	Journey Time Improvements	Access to HS2
Birmingham to Hereford	Birmingham Moor Street Bromsgrove Droitwich Spa Worcester Foregate Street Great Malvern Hereford	+1TPH	2TPH	2 million	✓	✓
Birmingham to Cardiff	Birmingham Moor Street Worcestershire Parkway Cheltenham Spa Gloucester Newport Cardiff Central	+1TPH	2TPH	2 million	✓	✓
Birmingham to Bristol	Birmingham Moor Street Cheltenham Spa Bristol Parkway Bristol Temple Meads	+1TPH	2-3TPH	2 million		
Cross City Line (Lichfield Trent Valley to Bromsgrove/Redditch) - MRH provides capacity for the reinstatement of 6TPH	Four Oaks Sutton Coldfield Wylde Green Chester Road Erdington Gravelly Hill Aston Duddeston Birmingham New Street Five Ways University Selly Oak Bournville Kings Norton Northfield Longbridge Barnt Green* Alvechurch Redditch* Bromsgrove	+2TPH	6TPH	Over 5 million	✗	✗
Birmingham to Kings Norton	Birmingham Moor Street Moseley Village Kings Heath Pineapple Road Kings Norton	Re-routes from New Street to Moor Street	2TPH	N/A	✗	✓

\*Rail route splits at Barnt Green, with the line continuing to either Redditch or Bromsgrove

## Option B

Route	MRH Frequency Increase	Frequency with MRH in Place	Extra Seats Per Year	Journey Time Improvements	Access to HS2
Birmingham to Leicester Calls at: Birmingham Moor Street Nuneaton Leicester (Coleshill Parkway, Hinckley, Naborough and South Wigston expected to benefit too)	+2TPH	4TPH	3 million	✓	✓

As outlined throughout this report the Midlands Rail Hub will bring significant benefits for the economy and for passengers and it will help the government deliver on its missions to deliver economic growth, rebalance

the economy and level up the country. The full delivery of the project will deliver significant benefits for the region, including:

Option	+1tph Hereford	+1tph Bristol	+1tph Cardiff	+2tph Cross City	Re-route 2tph Camp Hill	+2tph Leicester	Space for extra trains in the future?
A (West)	✓	✓	✓	✓	✓	✗	✗
B (West, Central and East)	✓	✓	✓	✓	✓	✓	✓

Option	Better Links to HS2 for the Midlands and South West?	A more reliable railway that has flexibility for the future?	Improved connections between the West and East Midlands?
A (West)	✓✓	✓	
B (West, Central and East)	✓✓✓	✓✓✓	✓✓✓

Key ✓ = Some benefit ✓✓✓ = Big benefit



# Phases of Delivery

Midlands Connect recognises and emphasises the importance of taking a programme approach to the delivery of Midlands Rail Hub. This means that although it could be delivered all together, there may be good reasons for phasing delivery.

The benefits of building both chords in central Birmingham are apparent: you can deliver savings for the taxpayer as well as making sure the vital land needed for the project is protected, disruption to the public is minimised and the infrastructure is delivered with the lowest cost possible. Our preferred option is centred around this need to build these chords together as a foundation for the rest of Midlands Rail Hub.

Other parts of the project are at slightly different stages in the development process, and have different interdependencies that might influence when they can be delivered. For example, designs for Midlands Rail Hub East (Leicester corridor) are less advanced and will be subject to a separate Decision to Design funding request, with a supporting Outline Business Case (OBC) planned for submission during 2023. This part of the programme requires Bordesley East Chord to be built to enable it to go ahead, so that the 2 trains-per-hour from Birmingham to Leicester via Nuneaton can operate once other infrastructure upgrades between Water Orton and Leicester are also delivered.

Another example is the section of Midlands Rail Hub between Worcester and Hereford. In that area, the existing signalling is very old and needs to be brought up to modern standards before Midlands Rail Hub can upgrade the route. We are working with Network Rail at the moment to understand the timescales for this signalling renewal so that we can better plan when that part of Midlands Rail Hub may be deliverable. This section of work will enable the second train per hour between Birmingham and Hereford, assuming the rest of Midlands Rail Hub West is already complete.



# The Integrated Rail Plan

In November 2021, Government published its Integrated Rail Plan, a document outlining the major upgrades, interventions and improvements it intends to carry out across the across the Midlands and the North. The priorities listed in the Integrated Rail Plan have significant implications for the future of the Midlands Rail Hub project, as listed below.

## 1. Changes to HS2

Government announced changes to the route of the planned HS2 network, with a new stretch of high speed line now due to run from Birmingham to East Midlands Parkway station. Crucially, this new route will also bring HS2 services directly into the city centres of Nottingham and Derby, allowing fast services from Birmingham to call at Nottingham station, slashing journey times from 75 minutes to just 26 minutes, albeit not until the 2040s. This journey time is much faster than what could have been delivered by the Midlands Rail Hub. Given this step-change in connectivity, created by the HS2 line, we believe there is a future opportunity to use the additional capacity the Midlands Rail Hub creates on the region's conventional rail network to improve links to additional towns and cities in the Midlands.

### What now?

As a result of the Integrated Rail Plan, Midlands Connect have worked alongside Network Rail and other partners to work through and define a set of options for the Outline Business Case. This work is now completed and the Business Case has been submitted to government for their consideration.

## 2. Commitment to delivering the Midlands Rail Hub

As part of the Integrated Rail Plan (IRP) published last year, Government endorsed the continued development of the Midlands Rail Hub with a focus on south-western corridor services, and, explicitly, the Bordesley West Chord, whilst instructing Network Rail and Midlands Connect to work together to review the proposals for the services between the West and East Midlands, including the East Chord.

Since then and following the clear mandate from Government, Midlands Connect is actively collaborating with DfT and Network Rail - allowing us to explore together, how best to take forward the IRP and in particular the future position with regards to Midlands Rail Hub. In doing so, the Midlands Connect Partnership has reiterated its commitment to seeing all the strategic outcomes of Midlands Rail Hub, as stated in our Strategic Transport Plan (STP) launched in April 2022.

Midlands Connect has welcomed Government's ongoing commitment to support the region in kickstarting the delivery of the Midlands Rail Hub. In December 2021, the Government confirmed its commitment to working with Midlands Connect on the region's priorities by signing a collaboration agreement. The agreement acknowledged Midlands Connect's efforts in bringing the region closer together and prioritising strategic rail investments such as Midlands Rail Hub that have the ability to enhance the lives of Midlands residents.

Network Rail and Midlands Connect have now completed the Midlands Rail Hub Outline Business Case comprising a robust and complete evidence-based programme of interventions which will allow government to make an informed decision about which elements of MRH to fund beyond OBC. On behalf of the Midlands Connect partnership our Chairman Sir John Peace is calling the newly formed Government to continue its commitment to the "acceleration of this nationally-critical project, to deliver economic benefits and enhanced connectivity sooner."



# Improving capacity at Kings Norton

Kings Norton, in south west Birmingham is the junction for the routes to Birmingham New Street (via University) and Birmingham Moor Street / New Street (via Camp Hill).

To the south, the route heads towards Bromsgrove, Worcester and Bristol. It is already an important junction location and is due to see an additional two trains per hour in December 2023 when the Camp Hill local services will be introduced and will run from New Street to Kings Norton via Camp Hill.

This intervention is common for all MRH options and sees significant works to the existing layout. The currently derelict island platform will be re-instated as platforms 2 and 3, with platform 2 primarily for southbound cross city services and platform 3 for terminating Camp Hill services. It is anticipated that platform 4, the current cross-city south platform will see much reduced usage. A new through line will be provided between the current platform 3 and 4 tracks so terminating Camp Hill services do not reduce through capacity.

The improvements at Kings Norton are expected be delivered as part of a wider package of improvements between Kings Norton and Barnt Green that includes the extension and upgrade of the current freight loop lines, infill electrification and an improved junction at Barnt Green.

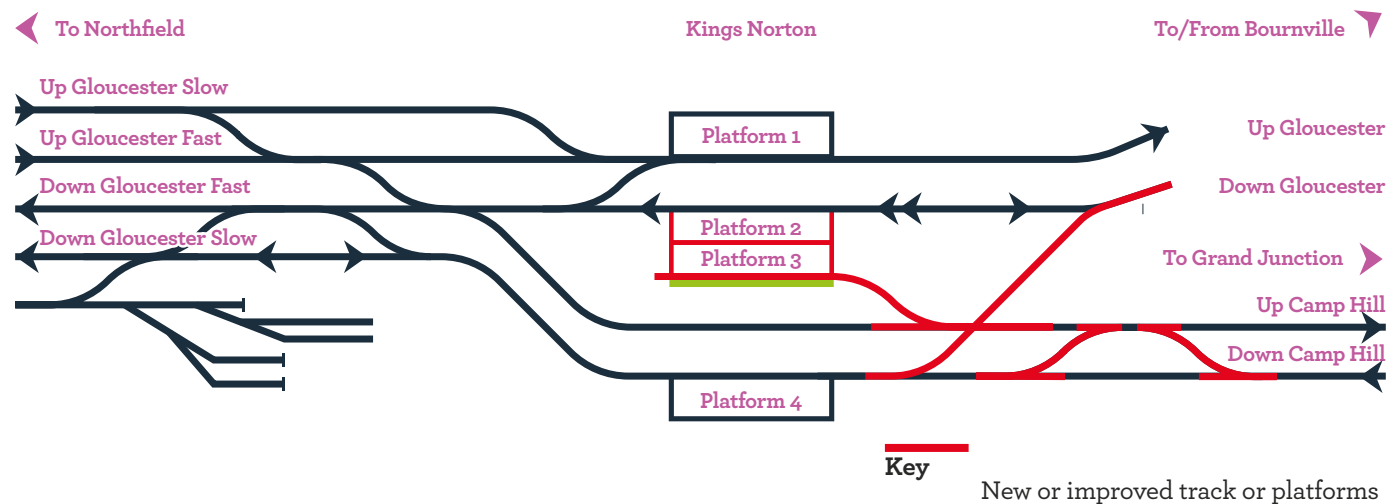
Midlands Connect are keen to see this scheme delivered as soon as possible.



“

**Gary Sambrook**  
MP, Birmingham Northfield

“Improving connections for residents in and around Kings Norton will help residents, businesses and commuters and will help further unlock the economic growth and regeneration we have been able to secure for Northfield in the last few years.”



# Reinstating platform 4 at Birmingham Snow Hill station

Improvements at Birmingham Snow Hill station will allow more passengers to alight or disembark in the centre of the city’s business district. After being repurposed as a temporary terminus for the tram (which no longer calls there), its fourth platform now lies unused. Repurposing the platform for heavy rail will bring numerous benefits, improving connectivity to Birmingham city centre and increasing the resilience of the rail network, especially when there are hold ups or blockages elsewhere on the line.

Our analysis suggests that reinstating this platform will bring 350,000 more passengers into Birmingham Snow Hill station every year, to the benefit of local businesses and employers.



“

“There is a huge amount of development going on around Birmingham Snow Hill station, and the area is already home to thousands of highly-skilled jobs. Reinstating platform 4 will create space for more leisure travellers, and commuters to get to the heart of the city by rail. It’s vital we secure this investment and deliver improvements as soon as possible.”

**Shabana Mahmood,**  
MP for Birmingham Ladywood

# Serving the East Midlands

Midlands Rail Hub East will address poor rail connectivity between Leicester and Birmingham, which currently suffers from slow and infrequent services (currently it is two trains per hour). It will also provide improved connectivity, frequency and journey opportunity to Leicester, the fastest growing city in the East Midlands, where the population rose by 11.8% between 2011 and 2021.

Enhancing connectivity to Leicester, will open up opportunities to one of the youngest and most

diverse communities in the UK - offering a wealth of opportunities for business to expand and grow in Leicester as well as to the towns and communities along this crucial corridor. This extra Moor Street connectivity for Leicester is in addition to that currently delivered at New Street in our preferred option.

Midlands Rail Hub East is dependent on delivery of the central Birmingham infrastructure in the 'Central' options.



## Working with Transport for the East Midlands

Midlands Connect and Transport for the East Midlands (TfEM) have collaboratively agreed a joint statement of six investment priorities for the East Midlands, two of which are relevant to Midlands Rail Hub:

- Making the most of HS2
- Transforming East - West connectivity

The delivery of Midlands Rail Hub East will support the above statements by providing greater connectivity and faster journey times between Leicester to Birmingham, as well as direct connectivity to the HS2 network at the Birmingham Moor Street/Curzon Street interchange.

Only the East Chord enables the provision of improved services to Leicester and destinations to the East Midlands – a key strategic outcome of Midlands Rail Hub.



“  
Sir Peter Soulsby,  
Chair of TfEM  
& City Mayor of  
Leicester

“Leicester is a thriving and rapidly growing city, but we need better connectivity by rail to realise the city’s economic potential.

The Midlands Rail Hub will double the rail service between Leicester and Birmingham and ensure the city is connected to both New Street and Moor Street stations. This will provide onward connectivity to Wales and the South West, as well as easy access to HS2 Services at Curzon Street.

We expect that HS2 East will transform connectivity between Birmingham, Derby and Nottingham by the 2040s. In the meantime, the Midlands Rail Hub will preserve onward connectivity for existing services from Birmingham New Street to the West Midlands, Wales and the West Country.”





# What's this got to do with HS2?

The Midlands Rail Hub will allow us to get the most out of our new high speed network, HS2, by improving connectivity to the new railway for over 1.6 million people in the West Midlands, South West England and Wales.

By bringing passengers more frequently and quickly to Birmingham Moor Street Station, the Midlands Rail Hub will bring them to HS2's doorstep allowing for fast and easy interchange. Birmingham Moor Street station is right next to the planned Birmingham Curzon Street HS2 station, and the two destinations will share a landscaped pedestrian link.

## Electrification

In its Transport Decarbonisation Plan, released in July 2021, Government committed to "creating a net-zero rail network by 2050", as well as pledging to remove all diesel-only passenger and freight trains by 2040. Midlands Connect are advocating for the routes enhanced by Midlands Rail Hub to be electrified as soon as reasonably practical to drive the biggest environmental benefits, sooner. Even if diesel trains run for a period before routes are electrified, Midlands Rail Hub will support the Transport Decarbonisation Plan commitments by making rail travel more attractive and more accessible, taking cars off the roads.

Birmingham Curzon station



Birmingham Moor Street Station

# What now?

With the submission of the Outline Business Case we are now seeking a 'Decision to Design' for MRH West and Central. Furthermore, we want to continue progressing Snow Hill as a quick win project.

When considering the economic and strategic cases alongside the objectives and outcomes that are sought in the delivery of Midlands Rail Hub as part of a holistic investment in the rail network in the Midlands, we strongly endorse Network Rail's recommendation that the Full Business Case development should include both Bordesley Chords and associated additional platforms at Birmingham Moor Street.

As set out in the recently launched Midlands Connect Strategic Transport Plan, the Midlands Connect Partnership remains committed to seeing

all the strategic outcomes of Midlands Rail Hub delivered. Our proposals and recommendations being submitted to Government, represent a robust and complete evidence-based programme of interventions - allowing Government to make an informed decision with the knowledge that leaders across the Midlands stand ready to kick start the delivery of this transformational programme.



## Midlands Rail Hub project development

Eligible schemes shortlisted for inclusion in MRH (Summer 2016)

Enhanced Strategic Case produced (Spring 2017)

Strategic Outline Business Case produced (Summer 2019)

Full Business Case to be produced (2023-2027)

Separate Outline Business Case for Leicester corridor (2023)

Outline Business Case submitted (October 2022)

Delivery of Snow Hill Platform 4 2025-2027

Delivery of full scheme 2025-2030



# MC | Midlands Connect

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