



Transport for the East Midlands

Spending Review 2021

Submission by TfEM

September 2021

Core Messages

- **Level up Growth:** The East Midlands has a diverse and resilient economy with huge potential for sustained growth in a post-Brexit economy. Whilst productivity and GVA growth has been better than many other parts of the UK over the last 20 years, levels have remained generally below the UK average.
- **Level up Investment:** Transport spending per head in the East Midlands has declined significantly over the last 20 years relative to the UK. In 2019/20 investment in the East Midlands stood at just 58% of the UK average - the lowest level of any UK region or nation.
- **Close the Gap:** Increasing transport investment in the East Midlands towards the UK average will increase productivity and deliver higher levels of growth. Working with Midlands Connect, TfEM has identified a program of strategic investment priorities that will support recovery from Covid, start to close the regional funding gap, contribute to 'levelling up' the UK economy - and to the Government's decarbonisation agenda

Our SR 2021 Priorities

1. This TfEM submission is consistent with that made by Midlands Connect but highlights East Midlands priorities that will **support recovery from Covid, help to close the regional funding gap and contribute to 'levelling up' the UK economy** and the **decarbonisation** agenda.
2. Our immediate concern is **accelerating delivery** of schemes that have already been prioritised locally, but which have yet to be given the 'green light' by the Department for Transport. Rapid delivery of these schemes will help our local economies bounce-back from Covid-19 and support business growth.
 - **Chesterfield-Staveley Regeneration Route** in Derbyshire (Large Local Major): DfT contribution of £79m, total scheme cost £93m.
 - **Nottingham - Lincoln Line Speed Improvements (RNEP)** – additional £10m from DfT to raise lines speeds to 75mph across the route.
 - **A46 Newark Northern Bypass** – expedite delivery of the Government's flagship RIS2 committed scheme.
 - **Levelling Up Fund** - Support delivery of key transport focussed LUF bids from LTAs
3. However, breaking the long-term cycle of underinvestment requires a long-term commitment to transforming regional connectivity and a more collaborative relationship between central and local government. Key to this will be the Government's forthcoming **Integrated Rail Plan** which must set out a clear plan for the delivery of **Eastern Leg of HS2 in full**, including the **East Midlands Hub Station at Toton, HS2 connectivity for Chesterfield** and the **Infrastructure Maintenance Depot at Staveley**.
4. In addition to HS2, TfEM is seeking early investment in the following:
 - **Completing Midland Main Line Electrification:** Under current plans the line as far as Market Harborough will be electrified (53% of the MML) and then between Clay Cross and Sheffield (62% of the MML). There is a golden opportunity to complete electrification of the MML over the next decade to improve services, reduce running costs and carbon and prepare the way for HS2.
 - **Nottingham - Leicester – Coventry Rail Enhancement:** Development of an Outline Business Case (OBC) by 2022 for the re-instatement of direct rail services between Nottingham-Leicester-Coventry and provision for early delivery from 2025.
 - **Leicester Area Rail Capacity:** Development of a Strategic Outline Business Case (SOBC) for capacity and performance improvements in the Leicester area (CP6)
 - **'Access to Toton' Phase 1:** A package of measures that could be delivered over the next 10 years in advance of HS2 with a very strong business case that will benefit up to half a million local people across the East Midlands, many of whom live in areas of multiple deprivation.
 - **M1 Junction 25/A52:** Funding to develop an integrated scheme with Highways England that will reduce congestion, facilitate access to of HS2 Hub Station at Toton, and unlock early local growth linked to the proposed Development Corporation.
 - **A1 (Peterborough to Blyth):** Establishment of a modernisation strategy with Highways England to bring the 72 mile stretch of the A1 in the East Midlands up to three lane motorway standard, with an immediate focus on improving safety.

1. Introduction

1.1 Transport for the East Midlands (TfEM) brings together the ten Local Transport Authorities in the East Midlands under the auspices of East Midlands Councils. The purpose of TfEM is to:

- provide collective leadership on strategic transport issues for the East Midlands develop and agree strategic transport investment priorities;
- provide collective East Midlands input into Midlands Connect (and other relevant sub-national bodies), the Department for Transport and its delivery bodies, and the work of the National Infrastructure Commission;
- monitor the delivery of strategic transport investment within the East Midlands, and to highlight any concerns to the relevant delivery bodies, the Department for Transport and where necessary the EMC Executive Board.
- provide regular activity updates to Leaders through the EMC Executive Board.

1.2 The TfEM Board is chaired by Sir Peter Soulsby, City Mayor of Leicester. Cllr Richard Davis, Transport lead for Lincolnshire County Council is Vice Chair.

1.3 This submission was discussed and agreed at a meeting of the TfEM Board on the 14th September 2021. It is consistent with that made by Midlands Connect but highlights East Midlands priorities that will **support recovery from Covid, help to close the regional funding gap, contribute to 'levelling up' the UK economy and the Government's decarbonisation agenda.**

2. Growth, Productivity & Investment in the East Midlands

2.1 The East Midlands is a region of 4.8 million people and 397,000 businesses. Total regional output in 2018 was £125 billion, equivalent to 5.8% of the UK economy. The East Midlands employment rate (2021) remains just above the UK average at 75.3% (UK= 75.2%) but median weekly earnings (2020) are below: £561 pw compared to £586 pw. 11.1% of the workforce work in manufacturing, compared with 7.4% for the UK¹.

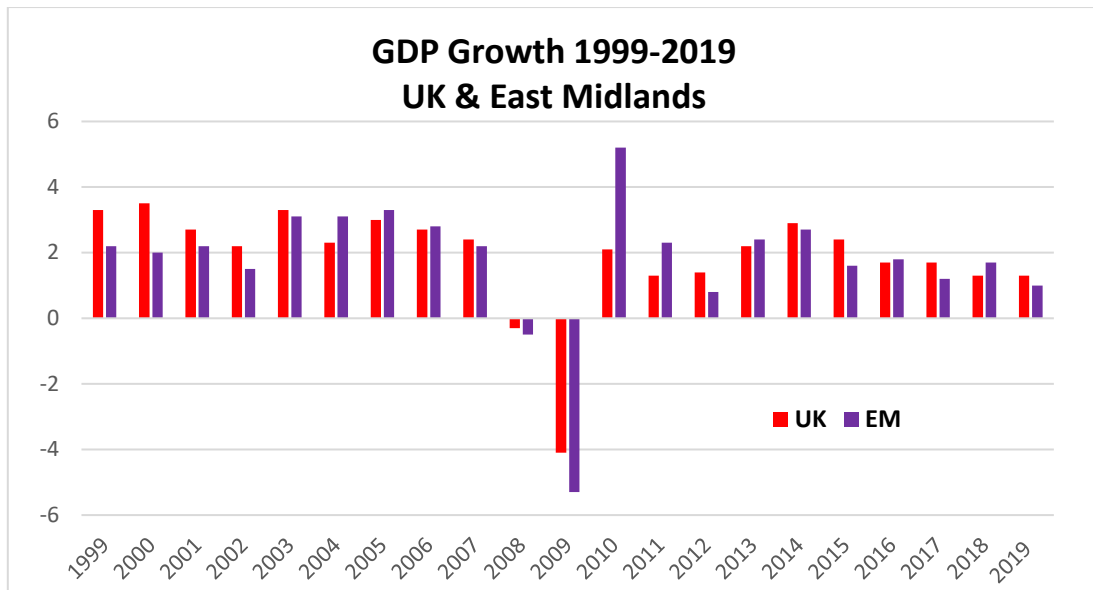
2.2 GDP growth in the East Midlands over the last 20 years has been better than most other regions/nations, but generally just below the UK average - 1.8% p.a. between 1999 and 2019 compared to 1.9% p.a. for the UK².

2.3 Similarly, productivity has remained below the UK average over the last 20 years and has been declining relative to the UK to 85.6% in 2019³.

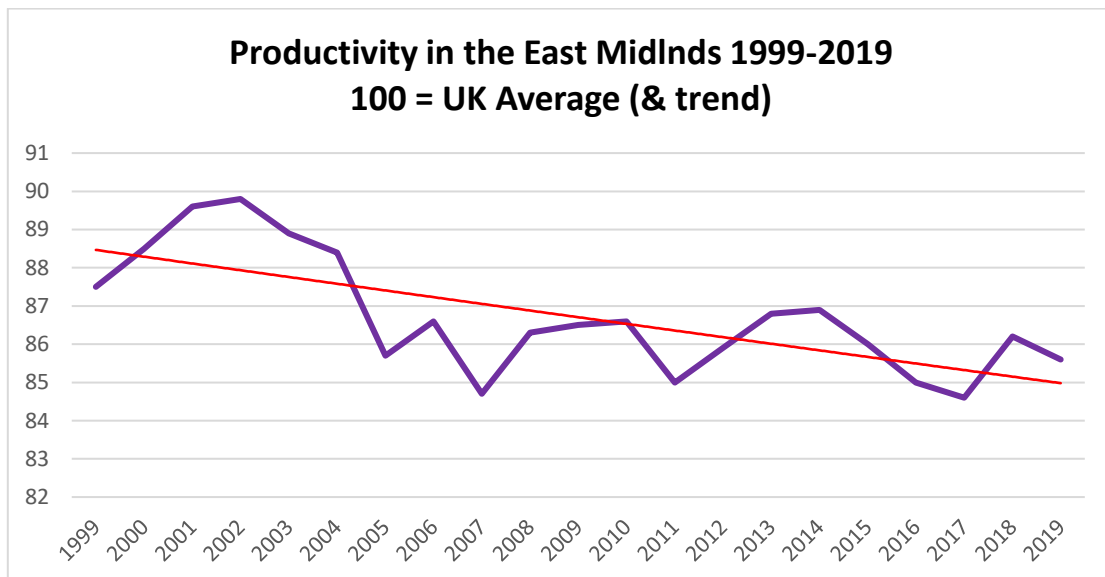
¹ <https://researchbriefings.files.parliament.uk/documents/SN06924/SN06924.pdf>

² [Regional gross domestic product: all ITL regions - Office for National Statistics](#)

³ [Annual regional labour productivity - Office for National Statistics \(ons.gov.uk\)](#)



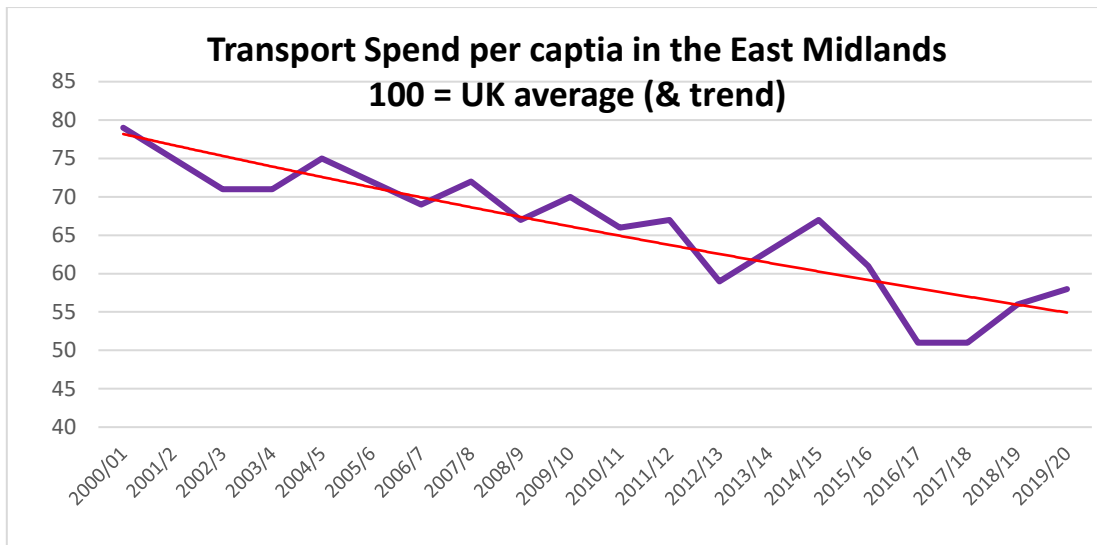
Source: [Regional gross domestic product: all ITL regions - Office for National Statistics](#)



Source: [Annual regional labour productivity - Office for National Statistics \(ons.gov.uk\)](#)

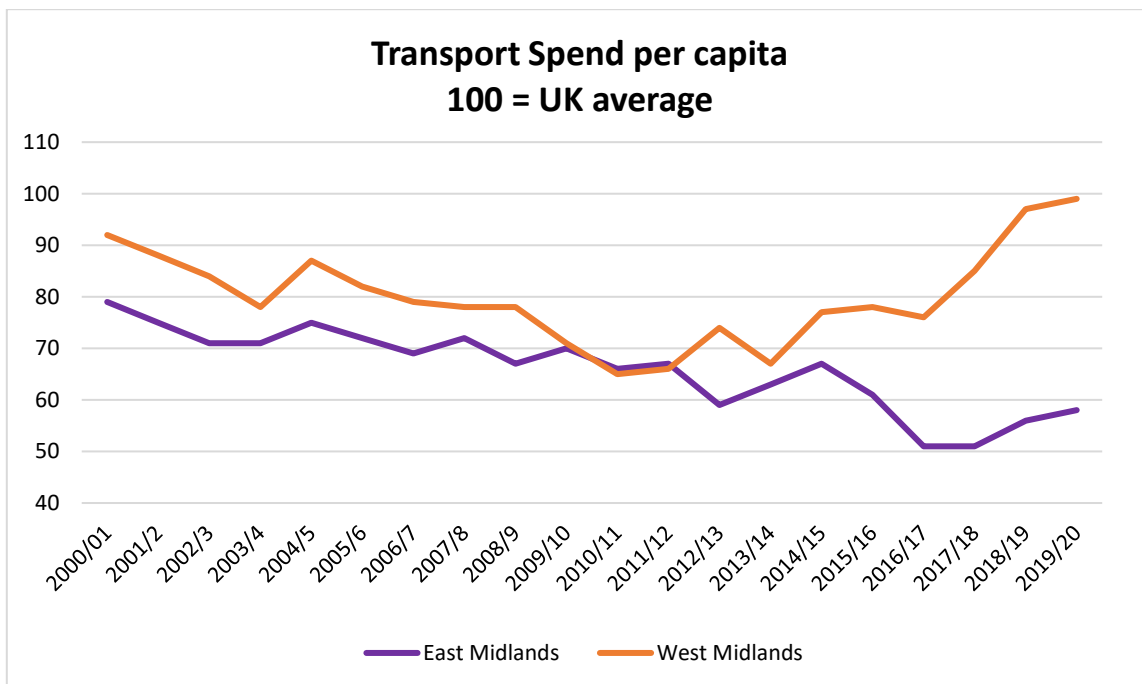
2.4 However transport spend per head has been very significantly below the UK average level for all of the last 20 years, declining to just 58% of the UK average in 2019/20, the lowest level of any UK region or nation⁴.

⁴ <https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2021>



Source: <https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2021>

- 2.5 If the region was funded at a level equivalent to the UK average, the East Midlands would have an **extra £1billion a year** to spend on transport.
- 2.6 In addition, there is a growing gap between the East and West Midlands which is likely to widen further over the next decade as a result of the delivery HS2 Phase 1 and associated investments, and initiatives like the ‘City Region Sustainable Transport Settlements’.



Source: <https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2021>

- 2.7 Transport investment is a key driver of productivity and economic growth. The fact that the East Midlands has consistently delivered GDP growth close to the UK average from very low levels of transport investment is testament to commitment and ingenuity of the thousands of SMEs that are the backbone of the region’s economy. But declining relative productivity means even this level of performance cannot be sustained.

- 2.8 In order to level up the economy the Government must first level up investment. Boosting transport spending in the East Midlands towards the UK average will improve productivity and GDP growth in the East Midlands, which will not just benefit the region's people and businesses but the whole UK economy.

3. Accelerating Delivery of Existing Schemes

- 3.1 Our immediate concern is accelerating delivery of schemes that have already been prioritised locally but which have yet to be given the green light to start construction by the Department for Transport. Rapid delivery of these schemes will help our local economies bounce-back from Covid-19 and support business growth. Recent confirmation of Government support for the delivery of the A614 (Nottinghamshire) and A511 (Leicestershire) is very welcome, but there is potential for further delivery.

3.2 Chesterfield-Staveley Regeneration Route in Derbyshire (Large Local Major)

- 3.2.1 The regeneration of the Staveley Works Area following the decline of the mining, iron and steel industries is already a top priority for Derbyshire County Council. The area has already been invested in and it is part of a regeneration corridor in the Chesterfield local plan.

- 3.2.2 The new route is critical to the North Derbyshire Growth Zone with 5,700 new jobs and 1,800 new homes earmarked in the Staveley and Rother Valley Corridor Area Action Plan. The route also provides access to the proposed HS2 Infrastructure Maintenance Depot at Staveley, integral to maximising the opportunities presented by HS2. Within the East Midlands the route will be an important connection to Derby and Nottingham to the south and the Peak District to the north.

- 3.2.3 An Air Quality Management Area was designated in Brimington due to congestion on the A619 during rush hour. Removing traffic from the A619 will improve air quality. The new route includes new crossing facilities and bridleway improvements for cyclists and pedestrians, and real time passenger information for public transport. Moving traffic from the A619 to the new route will make the five regular bus services that use the A619 more reliable, encouraging more people to use public transport

- 3.2.4 The existing A619 forms a corridor between the A61 and M1 Junction 30 is a designated diversion route during incidents on the M1 Junction 29 to 30. The new, higher standard route would be another, more reliable alternative during disruption on the M1.

3.3 Nottingham - Lincoln Line Speed Improvement (RNEP)

- 3.3.1 The rail corridor between Nottingham and Lincoln is underused and is not a competitive alternative to the car. Increasing the frequency of services from 1 to 2 trains per hour first depends on increasing line speeds to at least 75 mph.

- 3.3.2 Newark Rail is already committed to renewing the signalling at Swinderby on the rail line between Lincoln and Newark. However, this would do nothing to alter the current 50mph speed limit which impacts both local trains and LNER Azuma services between Lincoln and London King Cross.

3.3.3 Working with Midlands Connect and Network Rail local partners have developed a strong business case to increase the speed limit to 75 mph for a cost of £5 million, which will make better use of the new rolling stock and help to make rail travel along the route a more attractive option when compared with the private car.

3.3.4 There is also the opportunity to invest similar amount on the section of the line between Nottingham and Newark to bring the whole corridor up to a 75 mph standard, working closely with Midlands Connect.

3.4 **A46 Newark Northern Bypass**

3.4.1 The A46 Newark Northern Bypass remains TfEM's top SRN priority for the East Midlands. The A46 around Newark from Farndon to the interchange with the A1 and A17 has been a 'bottleneck' for many years which has caused congestion, pollution and safety issues, and which as a result has undermined trade, economic growth and development.

3.4.2 Enhancing the route would enable ambitious plans for growth and development in an around Newark to be fully realised, including the Government funded 'Town Deal'. At a more strategic level, the A46 forms a nationally significant 250 km trade route linking the Port of Bristol with the Humber Ports, identified by Midlands Connect as the 'Trans-Midland Trade Corridor', and which also supports Birmingham and East Midlands Airports.

3.4.3 TfEM welcomed the inclusion of the scheme in the Government second Roads Investment Strategy (RIS2) for construction start. Following the recent non-statutory consultation held by Highways England (HE), it is important that HE moves quickly to finalise the scheme and secure the necessary Development Consent Order to allow construction to start as soon as possible.

3.5 **Levelling Up Fund**

3.5.1 Local Transport Authorities in the East Midlands have made a number of transport focussed bids to the Levelling Up Fund (LUF) which can deliver local improvements that will unlock growth and can be delivered quickly. In particular:

- £23m to transform Leicester Rail Station responding to current pressures and planned services, and linked to a wider station area regeneration scheme (Leicester City Council)
- £49.5m bid to create a new junction, slip road and roundabout onto the A50 to support the South Derby Growth Zone including a new link road to bring forward the Infinity Garden Village development (Derbyshire County Council/Derby City Council)
- £20m package of improvements to the A16 between Boston and Spalding to support the agri-food sector (Lincolnshire County Council)
- £30m scheme to extend the Robin Hood Rail Line to Ollerton and Shirebrook (Nottinghamshire County Council)

4. Breaking the Cycle of Underinvestment

- 4.1 Accelerating the delivery of existing schemes is a vital first step. However, breaking the long-term cycle of underinvestment requires a long-term commitment to transforming regional connectivity and a more collaborative relationship between central and local government (and its delivery bodies). Key to this will be the Government's forthcoming **Integrated Rail Plan** which must set out a clear plan for the delivery of **Eastern Leg of HS2 in full**, including the **East Midlands Hub Station at Toton, HS2 connectivity for Chesterfield** and the **Infrastructure Maintenance Depot at Staveley**.

The Integrated Rail Plan and the Eastern Leg of HS2

It is now 12 years since the HS2 'Y' network was first proposed by Government, during which time there have been numerous public consultations, Ministerial Statements and independent reviews.

Yet whilst work is now starting on Phase 1 of HS2 to Birmingham and the line to Manchester is all but committed, there is still no certainty about the Eastern leg to Leeds via the East Midlands.

In the East Midlands local leaders have worked tirelessly over the last five years on a cross party basis developing detailed plans which use HS2's arrival at Toton in Nottinghamshire and in Chesterfield as the centrepiece for joined-up economic strategies. These plans will create thousands of jobs and transform connectivity between the towns and cities of the East Midlands, Birmingham, Leeds, and the North East – a combined area of over 13 million people.

At their heart, our proposals are driven by two fundamental principles: to deliver the maximum public value from investments that have the capacity to transform our economy, and to ensure that these benefits will be felt by local people in 'left-behind' communities across the East Midlands.

Importantly, our plans also safeguard and enhance our precious natural resources, reversing over 100 years of pollution and environmental degradation caused by industry and creating a new low carbon future for our region, restoring our natural capital for generations to come.

The Hub Station at Toton and associated development is a fundamental part of the wider East Midlands Development Corporation proposition developed with support from MHCLG, launched by Midlands Engine Chairman Sir John Peace and which will deliver up to 84,000 new jobs and additional £4.8b of GVA. The Chancellor's recent announcement of a 'Freeport' around East Midlands Airport will complement these proposals.

In Chesterfield and Staveley local leaders have been working with the private sector on proposals for 4,740 new homes and 10,220 new jobs which will deliver £270m net additional GVA and bring 176 ha of brownfield land brought back into use and establish a new international gateway into the Peak District National Park.

As previous assessments have all confirmed, only by completing the whole HS2 network can the transport and economic benefits of the Government's investment be realised.

That is why TfEM is urging the Government to confirm a legislative timetable for the full delivery of the Eastern Leg of HS2 in the Government's forthcoming Integrated Rail Plan, including the Hub Station at Toton, HS2 connectivity for Chesterfield and the Staveley Infrastructure Maintenance Depot.

4.2 In addition to HS2, TfEM is seeking early investment in the following strategic interventions.

4.3 **Completing Midland Main Line Electrification**

4.3.1 Complete electrification of the Midland Main Line (MML) remains a shared priority for the East Midlands. The MML is only currently electrified between London and Bedford – just under 30% of the route to Sheffield.

4.3.2 The Government is committed to electrification from Bedford to Kettering (Key Output 1) and to ensuring that the whole route between London and Kettering can run at 125 mph (Key Output 1a). This will mean that 47% of the MML will be electrified by 2023.

4.3.3 The Government cancelled Key Output 2: the electrification of the Midland Main Line between Kettering and Sheffield in 2017 and decided to procure a fleet of diesel/electric bi-mode trains instead. However, in order to electrify as far Corby/Kettering, it will be necessary to connect a power supply located at Market Harborough. There is therefore an opportunity to electrify the section between Market Harborough and Kettering (8.4 miles) rather than running an underground cable. Network Rail is currently developing the full business case to do this – which would increase electrification to 53% of the MML by 2023.

4.3.4 The Government has already committed to electrifying the MML between Clay Cross in Derbyshire and Sheffield (15.5 miles) to enable HS2 Classic Compatible trains to serve Sheffield by 2033. This will increase electrification to 62% of the MML.

4.3.5 The power supply at Market Harborough will be sufficient to electrify at least to Leicester (a further 16.2 miles). This would increase electrification to 71% of the MML. If at least one platform could be electrified. This would enable re-instatement of the direct Leicester to Bedford peak services lost from the recent revision of the Thameslink timetable.

4.3.6 Electrifying from Leicester to Nottingham via Toton (24.4 miles) would require an additional power supply but would increase the electrification to over 85% of the MML - and also enable the HS2 Classic Compatible services proposed as part of Midlands Engine Rail to operate. Electrifying the remaining 15% between Leicester, Clay Cross and Derby would enable the full network benefits to be realised.

4.3.7 Analysis of information publicly available in the House of Commons Library suggests that the cost of operating bi-mode trains is around 50% less per mile in electric mode than in diesel mode, due to lower fuel costs and reduced engine/track maintenance costs. As a result, the available evidence suggests that if the capital costs can be kept below £3 million per mile (2010 prices), the BCR for incremental electrification of the MML with bi-mode trains would be at least 2 to 1.

- 4.3.8 Electrifying just the 'easy' sections of the MML on this basis would significantly reduce the running costs of the line and may ultimately enable the diesel units to be replaced by battery technology for difficult to electrify sections (such as through stations and tunnels) - eliminating diesel emissions in the Air Quality Management Areas (AQMAs) in Derby, Leicester and Nottingham.
- 4.3.9 Fully electrifying the MML would enable bi-mode trains to be converted to all-electric, or to be re-deployed elsewhere on the network and replaced by purpose built electric trains. All electric traction would release a further dividend in running/maintenance costs and based on experience on the southern section of the MML, make possible additional line speed improvements not viable with the heavier bi-mode trains. The electrification benefits for conventional rail services would be in addition to those which would be realised through the ability to run conventional compatible HS2 services.
- 4.3.10 Electrification of the Great Western Line was poorly conceived and subject to substantial cost over-runs due to a combination of poor project management, the scale of the scheme and unfamiliarity with the new technology procured to deliver the works. However the Rail Industry Association (RIA) has set out a series of proposals learning from this experience that should in future enable electrification to be delivered for between 33%-50% of the costs of some recent projects using examples from around the UK and internationally⁵.
- 4.3.11 In particular, RIA recommends the establishment of a permanent, dedicated electrification team (similar to that which exists in Germany), which could deliver a program of incremental electrification works as opportunities and funding became available. Those currently working on the electrification to Corby, Kettering and Market Harborough could form the basis of this permanent team.
- 4.4 **Nottingham-Leicester-Coventry Rail Enhancement**
- 4.4.1 The scheme would reinstate direct rail services between Coventry, Leicester and Nottingham for the first time in two decades, creating over 2million extra seats on the region's rail network every year.
- 4.4.2 The improvements would introduce two new trains each hour, also calling at Loughborough made possible by a new 'dive under' at Nuneaton, creating space for these services to pass through the area, alongside plans to improve line speed along the route, making journeys faster.
- 4.4.3 Currently, passengers travelling along the corridor must leave one train at Nuneaton station, change platforms and board another, culminating in a slow, inconvenient service. Because of this, just 3% of trips between Coventry and Leicester are made by rail, compared to 30% of trips between Coventry and Birmingham, which enjoys a regular, fast and direct rail connection.
- 4.4.4 Journey times along the route will be cut significantly, with trips from Coventry to Leicester falling from 54 to 38 minutes, with trips from Coventry to Nottingham down to 70 minutes from 108 minutes. Loughborough would also have new, direct and more frequent links to Coventry

⁵ Electrification Cost Challenge, RIA, 2019 <https://www.nsar.co.uk/wp-content/uploads/2019/03/RIAECC.pdf>

4.4.5 A Strategic Outline Business Case (SOBC) for the scheme was published by Midlands Connect in May 2021⁶. The capital cost is estimated to be at £115m- £130m with a Benefit Cost Ratio (BCR) of between 1.6 and 2.6. There is widespread support for the idea in the community. Of over 3,000 people in and around Coventry, Leicester and Nottingham questioned by Midlands Connect, 87% were keen for it to go ahead.

4.4.6 The immediate requirement is to secure funding for an Outline Business Case (OBC), to be completed by the end of 2022 using project SPEED principles. There is an opportunity for early delivery of the scheme from 2025 onwards subject to completion of a Full Business Case.

4.5 **Leicester Area Capacity**

4.5.1 Network Rail (NR) is seeking authorisation for £200k of RNEP funding for a Strategic Outline Business Case (SOBC) for capacity and performance improvements in the Leicester area ("Leicester Area Capacity") consistent with NR's Control Period 6 (CP6) Plan.

4.5.2 The SOBC will review the assumptions and outputs from the Network Rail produced Leicester Area Continuous Modular Strategic Planning (CMSP) process outputs (June 2020) and NR's Leicester Strategic Advice (July 2020).

4.5.3 Leicester was declared as congested infrastructure in 2015. Along with existing constraints there are a number of key projects that drive demand for growth in the Leicester area that are all at differing stages of development. These include:

- Felixstowe to Midlands and the North (aims to increase to 48-60 trains per day in each direction, a proportion of which will route through Leicester)
- Midlands Connect promoted schemes: Midlands Rail Hub (MRH) up to 2 additional trains per hour, Midlands Engine Rail (MER) up to 2 additional trains per hour
- Ivanhoe Line – Restoring Your Railway up to 2 additional trains per hour
- Strategic Freight Growth
- Northampton to Leicester (England's Economic Heartland STB) proposal up to 2 additional trains per hour

4.6 **'Access to Toton' Phase 1**

4.6.1 The 'Access to Toton' Study⁷ was established to determine the most effective package of interventions to widen access to the Hub Station at Toton in order to boost the regional economic impact of HS2. The study has been jointly funded by the four local transport authorities in the D2N2 area (Derby, Derbyshire, Nottingham, Nottinghamshire), DfT (HS2 Growth Strategy funding), Highways England and Midlands Connect, with in-kind contributions from HS2 Ltd, East Midlands Airport and Leicestershire County Council.

4.6.2 The package of recommended interventions is based around three phases: a package of well-defined measures that are operational for when the Hub Station opens ('day 1'), and a

⁶ Building Back Greener, Midlands Connect, May 2021: [Building Back Greener \(midlandsconnect.uk\)](https://www.midlandsconnect.uk)

⁷ East Midlands Gateways Connectivity Study Strategic Case & Economic Case, Systra for local partners, 2020, (Submitted to DfT). Summary document available at: [https://www.emcouncils.gov.uk/write/Access to Toton, the HS2 East Midlands Hub.pdf](https://www.emcouncils.gov.uk/write/Access%20to%20Toton,%20the%20HS2%20East%20Midlands%20Hub.pdf)

package of longer term measures (split into 2 phases), to be deliverable after HS2 opens, which can respond to changing patterns of travel demand and which as a result are generally less well defined at present.

4.6.3 The Phase 1 package of 'day 1' measures comprise the following interventions, which are in addition to the Government's HS2 Reference Case, Midlands Connect Conventional Compatible services and the proposed Strategic Housing Infrastructure Fund (SHIF) funded access road into Toton site:

- Local NET (tram) extensions to Long Eaton (Asda)
- Enhanced local and sub-regional bus strategy
- Local Road Access from Long Eaton via A6005
- Part segregated Bus Rapid Transit (BRT) from Derby to the Hub Station
- Minimum of four conventional trains per hour from the Hub Station to Derby, Leicester & Nottingham via the Hub Station (requiring the proposed Trowell Curve); and
- New rail services between Mansfield and Derby/Leicester via the Hub Station, Ilkeston and Langley Mill (the Maid Marian Line), with enhanced local bus services to both these stations.

4.6.4 Taken together, the **Phase 1** package of interventions has an estimated capital cost of 454m (2018 costs plus a 66% allowance for 'optimism bias') and an estimated Benefit to Cost Ratio (BCR) of **4.2** – which represents 'very high value for money'. The BCR assessment has been undertaken using appraisal methodology consistent with the Treasury's Green Book, and therefore only considers 'transport user benefits', with no allowance made at this stage for wider economic benefits such as land value uplift.

4.6.5 In order to progress our Phase 1 proposals from SOBC to Outline Business Case standard, local partners require an additional £4.5 million through Budget 2021.

4.6.6 The package of longer-term measures to be delivered after HS2 is operational is split into two phases:

Phase 2 - which would build on the growth in public transport patronage delivered through Phase 1:

- Conventional rail connectivity to East Midlands Airport/Freight Interchange from the Midland Main Line and East Midlands Parkway Station enabling services linking to Derby and Nottingham.
- Conventional rail connectivity to East Midlands Airport/Freight Interchange from Leicester; and
- Fully segregated mass transit (assumed to be a NET extension for modelling purposes) from Derby to the Hub Station.

Phase 3 - which would also be dependent on significant levels of new development around East Midlands Airport and at Ratcliffe Power Station:

- Conventional rail connectivity to East Midlands Airport/Freight Interchange from Derby via Rolls Royce/Sinfin; and

- Tram-Train connectivity to the East Midlands Airport/Freight interchange from the Hub Station.

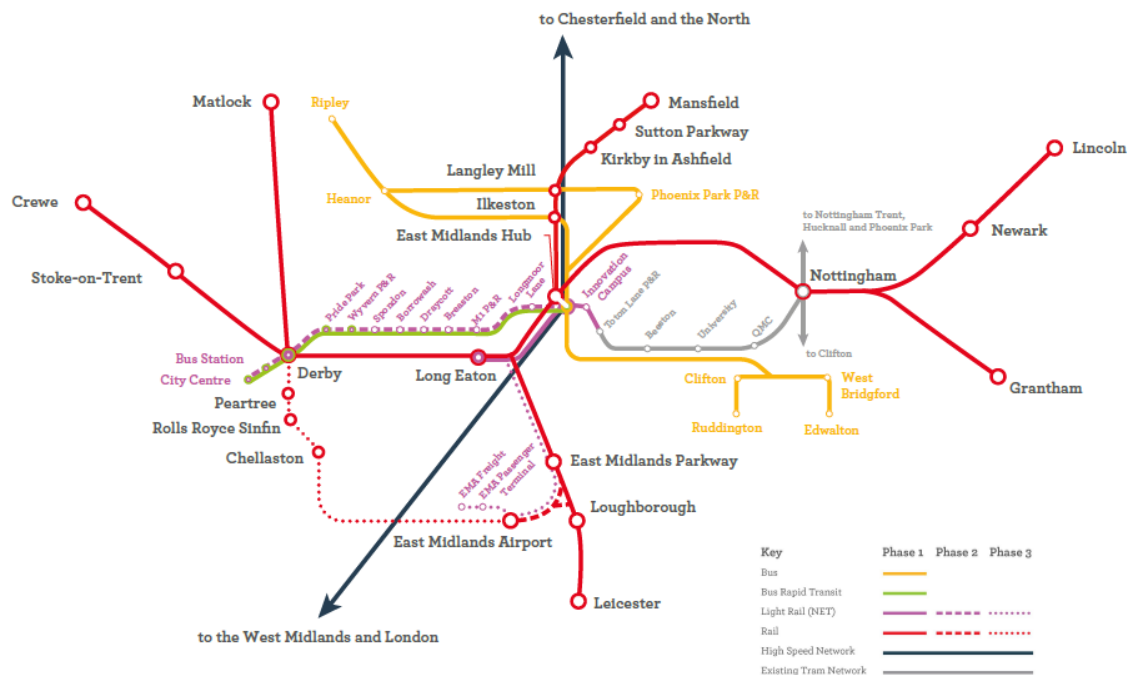


Diagram 1: Access to Toton package

- 4.6.7 The estimated capital cost of Phase 2a is £822m and for Phase 2b £1,052m (2018 costs plus a 66% allowance for ‘optimism bias’). Further work will be required to develop and understand the full benefits of both these packages. At present, the available evidence suggests a combined BCR for the Phase 1, Phase 2a and Phase 2b packages of **1.76** - which still represents ‘medium value for money’, but which is a significant reduction on the Phase 1 Package alone.
- 4.6.8 The impact of the three packages will be to progressively extend the economic impact of HS2 to key centres of population across the East Midlands, in particular in areas of multiple deprivation - as illustrated below.

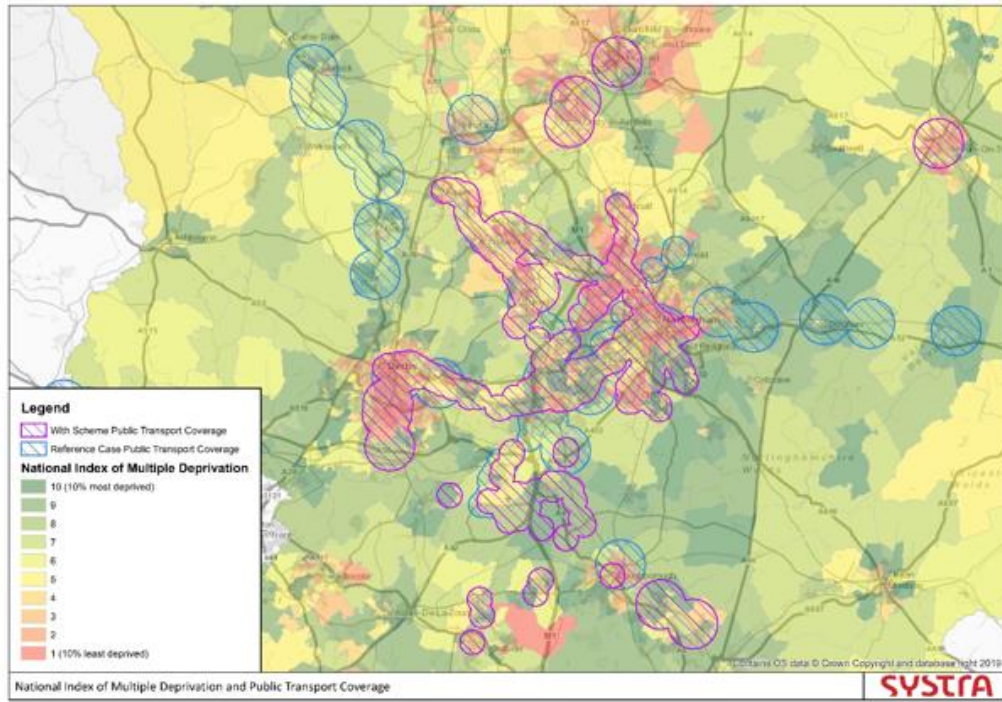


Diagram 2: Impact of package interventions on Areas of Multiple Deprivation

4.7 **M1 Junction 25/A52**

4.7.1 M1 J25 experiences congestion at peak times, particularly on the slip roads leading to the A52. This congestion is expected to worsen significantly following the arrival of HS2 as highway demand for the station is concentrated at this junction.

4.7.2 High levels of congestion in the area surrounding the planned HS2 Hub Station is likely to restrict growth within Derby and Nottingham and to impact on proposals for the establishment of a locally led Development Corporation, which has the potential to create 84,000 net additional jobs and 4,500 new homes by 2045. Key opportunities include:

- Toton and Chetwynd: development of land adjacent to the Hub Station and transforming a former military site to deliver 4,500 new homes, up to 10,000 new jobs and new community facilities.
- East Midlands Airport Area: supporting the airport’s plans to triple freight volumes, offer additional passenger routes and create 7,000 new jobs, the development of SEGRO’s purpose built 700-acre logistics park at East Midlands Gateway which is set to create over 8,000 jobs in the next six years and the establishment of an ‘Inland Freeport’; and
- Ratcliffe-on-Soar Power Station: plans to repurpose the power station site which is due to close by October 2025 into a zero-carbon technology and energy hub.

4.7.3 Without investment in M1 J25 in advance of the arrival of HS2 in the East Midlands, the region will not be able to reap the transformational benefits that HS2 and the proposed locally led Development Corporation will bring.

4.7.4 This is an issue of immediate concern. Proposals for a new ‘Toton Link Road’ to part of the site adjacent to the Hub Station are well advanced and will facilitate new development within the next five years. Local partners are working closely with HS2 Ltd on the design of

the junction from the A52 into the Hub Station with of the objective of limiting the impact on developable land in the forthcoming hybrid bill.

- 4.7.5 To maximise local benefits, reduce costs and minimise environmental impacts, it is vital this work is taken forward in parallel with the development of an enhancement to M1 Junction 25. However, Highways England do not have the resources to take forward the necessary development work within the current RIS2 period.
- 4.7.6 CSR 2020 is an opportunity to make additional funding available to Highways England to expedite development work on M1 J25 as part of an integrated area wide solution, including the Toton Link Road and the proposed access from the A52 into the Hub Station. It will also be important to consider the pressures on other key junctions along the M1 corridor, including J21/21a and J24.

4.8 A1 Peterborough to Blyth

- 4.8.1 The A1 corridor is a nationally significant freight artery, linking the North and Scotland with London and the South East. This route is particularly vital for connections to major ports on the East Coast, including Felixstowe, Grimsby, Immingham and then Dover (via the M25). Industries identified along the corridor generally all have a requirement for freight and therefore rely on the A1 for connectivity, a pattern which is subsequently reflected in origin destination data for HGVs.
- 4.8.2 The A1 between Peterborough and Blyth through the East Midlands is 72 miles long and carries between 20,000 and 25,000 vehicles per day on average (single direction). The percentage of Heavy Goods Vehicles (HGVs) along the corridor is very high (average of 22%) compared to 12.1% of an average trunk road and 19% observed on the M1 in the Midlands.
- 4.8.3 Around 50% of trips travel the full length of the corridor. The A1 carries a greater proportion of longer distance strategic trips for cars and light goods vehicles than the M1, which plays a more of a regional role connecting key economic hubs. HGVs on the A1 make longer and more strategic trips including between ports and agricultural areas than on the M1, which is dominated by short HGV movements.
- 4.8.4 The A1 corridor within the East Midlands has an important economic role, particularly for sectors such as agri-food, logistics, manufacturing and tourism. There are very significant levels of housing (up to 100,000 units) and employment growth proposed along the corridor, although this may not be fully reflected in current adopted local plans.
- 4.8.5 In sharp contrast to the motorway standard sections immediately to the north and south, the A1 between Peterborough and Blyth a dual carriageway 'A' road. The condition of the route is characterised by:
- Sub-standard junctions and right turn movements across the carriageway;
 - Safety issues and accident blackspots at numerous points along the corridor, lack of resilience and alternative routes during closures;
 - Severe congestion hotspots (e.g. Newark), often leading to queuing on the carriageway;
 - High HGV numbers and incidences of delay due to HGVs overtaking;
 - Large number of junctions and small service areas with substandard merging;
 - Lack of technology, including SOS telephones, variable messaging signs and CCTV.

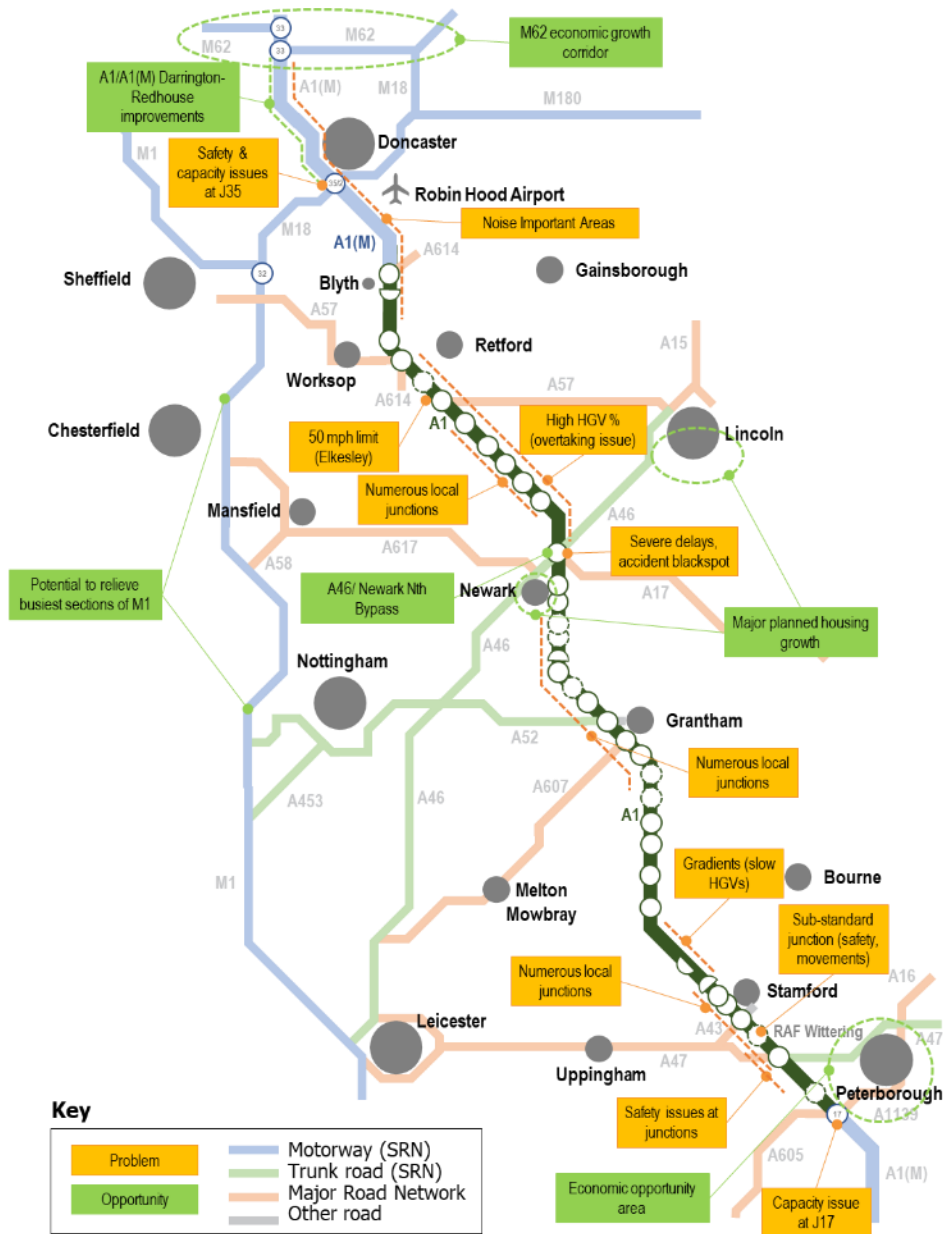


Diagram 3: A1 Constraints & Opportunities

- 4.8.6 Consequently the rate of fatal collisions (per hundred million vehicle km) is higher than the SRN average for an 'A' road dual carriageway. There have been 201 closures of the A1 (in at least one direction) in the past 5 years – over one every two weeks. Incidents resulting in at least one lane closure occur over once a week. Clear up times for any incident on the A1 are around 5 hours on average, which can result in knock-on disruption on the surrounding local road network, particularly within Newark and Grantham. Recent accidents have closed the road for up to ten hours.
- 4.8.7 Given the scale of these challenges, the TfEM Board has concluded that the only long-term solution is to upgrade the whole of the A1 within the East Midlands to three lane

motorway standard. Budget 2021 provides an opportunity for the Government to publicly support this objective and make available the necessary preparatory funding available to Highway England to commence scheme development.

4.8.8 There is also an immediate requirement to address the worst of the existing safety issues. If additional resources can be secured, there is an opportunity for Highways England to deliver a programme of safety 'quick wins' within the current RIS2 period comprising:

- closure of side roads and sub-standard junctions;
- provision of a concrete central barrier and removal of the existing right turn gaps;
- better, active, traffic management introduction of technology e.g. CCTV monitoring and variable messaging; and
- closure or upgrade of road-side service accesses.

4.8.9 These measures will not address the longer term challenges of managing growth and development along the corridor or strategic connectivity to Scotland, but they will make the road safer and more resilient in the short term prior to an upgrade to three lane motorway standard.