

# Transport Strategy Refresh

Challenges, opportunities and a call for input



**Midlands Connect**  
Transport | Investment | Growth

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# In brief

**Our transport networks join us together. We all use them – to get to work, school, go shopping, see the doctor or visit family. We all need them - to move the goods and materials that we need. Businesses need them - to access labour, suppliers and markets.**

Now is an important time for infrastructure investment. The UK is facing a complex set of challenges. It is essential we secure our status as a global trading hub post-Brexit. We must also tackle the growing and deep-rooted scale of inequalities in the UK and address the threat of climate change. At the same time, the country is now in the midst of an unparalleled economic crisis caused by the COVID-19 pandemic.

The Government recognises the role that infrastructure can play in meeting these challenges. In its recently published National Infrastructure Strategy<sup>1</sup>, it has committed to building the infrastructure this country needs, both to reduce the long-standing inequalities between different parts of the UK and to meet net zero and climate change commitments.

Now is therefore an opportune moment for Midlands Connect to refresh our regional transport Strategy. We want to ensure our Strategy is part of the solution. We want it to help the Midlands meet these challenges and become a better connected, more prosperous, fairer and greener region.

This document provides the context for the refresh of our Strategy. It summarises the three key challenges we believe our region faces: economic recovery and growth; levelling-up; and climate change. We also set out the projects and programmes Midlands Connect is currently working on. These are the opportunities we believe we need to pursue in order to address these challenges.

As we refresh our Strategy we want to use our role as a Sub-National Transport Body to inform Government what the priorities for national and

regional infrastructure in the Midlands should be; and crucially what local policies and programmes will support those priorities.



## We want your views

**Tell us how you think transport funding should be spent in the region and what your priorities would be.**

Please take the time to read this document and get involved by visiting our online engagement tool at [www.midlandsconnect.uk](http://www.midlandsconnect.uk) to give us your views. You can also answer the questions on page 35 of this document. Your views are vital as we seek to develop a new and updated Strategy that enhances lives across the region through smart, timely and responsible transport interventions.



# Introduction

## The purpose of this document

We are in the process of updating the Midlands Connect [Strategy](#), published in March 2017. The refreshed Strategy will be published in late 2021. This document provides the context for our refreshed Strategy, **outlining some of the key challenges that face the region** and summarising our emerging ideas **on the projects and programmes we believe are needed to tackle these challenges and achieve our objectives.**

As we update our Strategy, we have an opportunity in the medium and longer-term to shape how transport investment is spent in the region in order to tackle the key challenges that we face.

Having read this document we want residents, businesses, partners and transport users to give us your views on how you think transport funding should be spent in the region. Please get involved by visiting our [online engagement tool](#).

### Refresh feedback so far:

This document has been informed by engagement within our Partnership and with targeted stakeholders. Some of the comments we've had from stakeholders are included in the document (in boxes like this).

<sup>1</sup>National Infrastructure Strategy - GOV.UK ([www.gov.uk](http://www.gov.uk))

# Background

The Midlands is home to almost 11 million people and over 840,000 businesses<sup>2</sup> and 5.3m jobs (2017)<sup>3</sup>. We are responsible for 22% of England's exports (the greatest share of any region in the country) and generate £239 billion annually for the UK economy<sup>4</sup>. Ours is an economy the size of Denmark's and a geography serving a population that is greater than the devolved nations (Scotland, Wales and Northern Ireland) combined.

Midlands Connect identify, develop and recommend the strategic transport projects required for our region, our businesses and our people. Our first Midlands Connect Strategy set out an ambition to turn 'untapped economic potential in the Midlands into real growth'. The Strategy provided a longer-term approach to improving transport connectivity between towns and cities within the Midlands, and with key centres elsewhere, which would boost economic growth to the benefit of the region and UK plc. In recommending a series of strategic transport corridors for future Government investment, the Strategy identified early priorities for development and the delivery of strategic road and rail enhancements phased over a 20-30-year period, providing a 'conveyor belt' of projects at different stages of development.



Figure 1: Midlands Connect geographical area

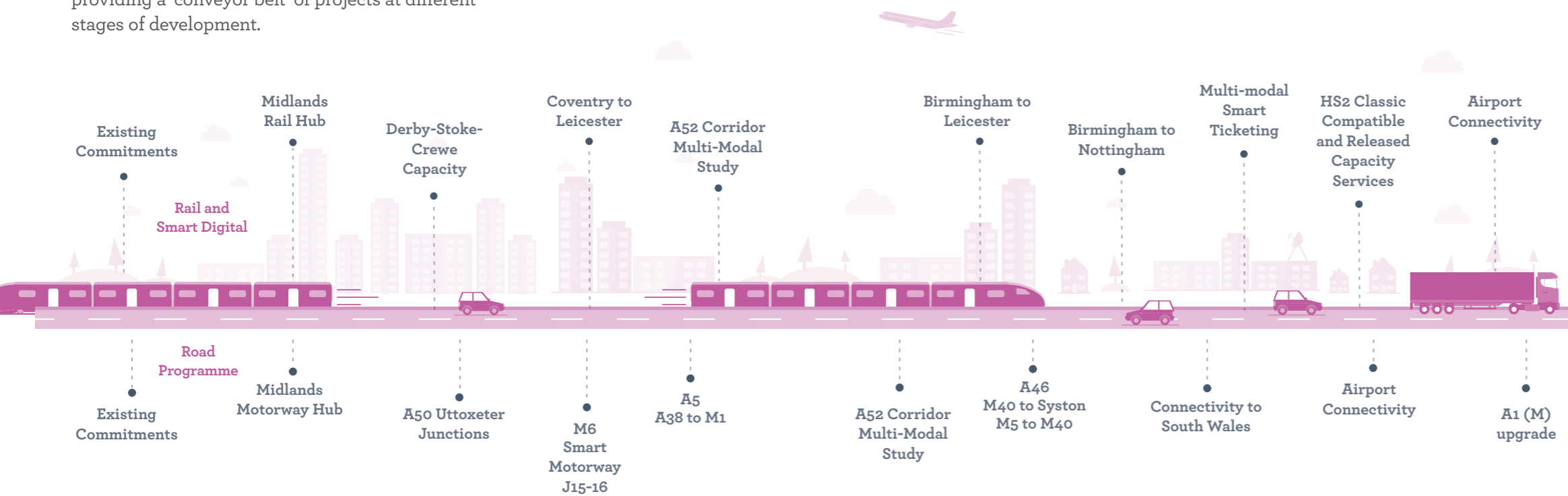


Figure 2: Early priorities from our first strategy

<sup>2</sup><https://researchbriefings.files.parliament.uk/documents/SNO6924/SNO6924.pdf>

<sup>3</sup>Midlands Engine Independent Economic Review, 2020

<sup>4</sup>Midlands Engine State of the Region Report, October 2020

## Several changes in external factors mean the region and the country is now in a different place to where we were in 2017:

- The large and growing scale of inequality in the UK and the role of improved connectivity in the Government's plans to 'level-up' the UK.
- The harmful effect climate change, mainly caused by CO2 emissions, is having on our planet, and the contribution that transport is making to this.
- Embracing a new economic world as we move outside of the European Union.
- The economic impact of COVID-19.
- Increasing recognition of the role that digital technology can play in changing our economy and opening new and cleaner connectivity opportunities.

## The aim and objectives of our refreshed Strategy

Taking these changes into account, our refreshed Strategy will aim to set out an investment programme that improves strategic connectivity between the east and west Midlands, better connects us with our neighbouring regions of the north of England and Wales and strengthens existing connectivity to the south of England, our ports and airports. This strategic investment will be complemented by improvements to local connectivity made by our local authority partners and regional economic growth plans from the Midlands Engine that will drive

levelling-up both across our region and the country. Combined with the commitment to net-zero, this will make significant contributions to UK-wide prosperity and a carbon-neutral future.

We have revised the objectives for the new Midlands Connect Strategy. This has helped us ensure the changes and challenges that have occurred since 2017 are at the forefront of our minds as we update our Strategy. Our objectives are now that the regional transport networks:

**Are ready for HS2, to fully exploit its economic and regeneration potential**

**Provide reliable, fast connections that enable Midlands businesses to grow**

**Enable the population and employment growth planned by Midlands authorities**

**Integrate national, regional and local journeys for ease of travel**

**Enhance the quality of life of Midlands residents**

**Positively contribute to the 'Net Zero' carbon target by 2050**

**Minimise other impacts on the environment from delivering new infrastructure**

### Making the region ready for HS2

The Midlands exploits the economic and regeneration potential of the new railway, providing people with fast, frequent, reliable and sustainable travel that rebalances the country's economy and improves connectivity between the Midlands and the North.

### Providing reliable and fast connections

Our strategic road and rail networks provide the journey time and reliability that enables businesses in the Midlands to access skilled workers and reduce their costs from accessing supply chains and national and international markets.

### Enabling population and employment growth

Strategic transport investment supports and advances the sustainable delivery of planned housing and employment growth and unlocks new sites in line with local and regional needs.

### Integrating with local networks to allow end-to-end journeys

Working with local partners enables us to identify the investment needed to improve integration between strategic and local transport infrastructure, providing for seamless, end-to-end journeys.

### Enhancing the quality of life for residents of the Midlands

A smart, low carbon and low emission strategic transport network supports sustainable and inclusive economic growth and improves quality of life through cleaner air, active and healthy travel choices and improving accessibility to jobs, opportunities, services and leisure activities for all in society.

### Contributing to the achievement of net zero carbon by 2050

A fully integrated, high quality public transport system for regional and national journeys. More freight is being carried by rail and existing road vehicles and freight are moving to low-carbon fuel sources.

### Minimising impacts on the environment from delivering new infrastructure

We've set standards and expectations for how delivery bodies build and operate infrastructure in the region. This is ensuring development leaves the natural environment and biodiversity in a better state than before.

## Contents of this document

In the remaining sections of this document we provide background and evidence on some of the key challenges facing our region which our Strategy will need to address.

We then set out some of the projects and programmes that Midlands Connect has been working on since our last Strategy. We hope, and believe, that these will be part of the overall solutions to the challenges we face; recognising that planning in local areas will also play a major role.

Finally, we set out how we would like you to tell us what your transport priorities are and how we'll use this information as part of the production of our refreshed Strategy.

### Refresh feedback so far:

"Unless strategic infrastructure providers talk to the local authorities, customers and even manufacturers, we won't see progress. It's about not working in silos.... There are solutions, but it's about knowledge (sharing) at the decision-making level."

**Business**



Figure 3: Our refreshed strategic transport objectives

# Context - key challenges

The medium and long-term future currently feels very uncertain; perhaps more so than it has for many decades. Disruptors such as Brexit, economic recovery, post-pandemic ways of working and travelling, the need for urgent action on climate change and the potential for new technologies to fundamentally change how our society operates, all contribute to this uncertainty.

Midlands Connect is principally here to identify the major transport infrastructure requirements needed to support a more prosperous, fairer and greener Midlands. The existence of such major uncertainties means our emerging Strategy needs to be focused on the short-term priorities; but with an eye on the kind of future we want for the region.

To that end, there are three clear challenges that our emerging Strategy must address:



## Economic recovery and growth:

How can transport help the region's economy recover from COVID-19 and, beyond this, support the creation and protection of highly skilled jobs and the housing development and regeneration essential to our regional prosperity?



## Levelling-up:

How can we use transport infrastructure investment as a tool to spread social mobility, productivity and prosperity, levelling-up the regional and UK economies and ensuring integration with the global economy?



## Climate change and carbon:

How can we decarbonise transport by encouraging public transport use, reducing congestion, greening transport and providing cleaner connectivity opportunities?



These challenges all impact on the decisions we take about what our Strategy should contain.

# Economic recovery and growth

COVID-19 has caused hardship for individuals, business and communities. Its impact will harm our economy and social inequalities may well widen as a result. There could be a fall in UK GDP in 2020 of over 10% as a result of COVID-19. Higher reductions are predicted in the economies of the West Midlands (-12.3%) and the East Midlands (-10.9%)<sup>5</sup>.

It's early days in the emerging economic downturn but the biggest impacts in the Midlands appear to be on some of our largest cities: Birmingham, Leicester, Coventry and Wolverhampton, in addition to the Lincolnshire coast. These economies are most dependent on the industries hit the hardest, including retail, hospitality, tourism, transportation and automotive.

In recessions people tend to travel less: there are fewer trips for work, and we have less money to spend on other activities we may have travelled for. The general trend after each recession is a dip in car-based road travel, followed by longer-term sustained growth (see Figure 4).

Building and investing in infrastructure has historically helped pull countries out of a recession faster. Connectivity is key to a successful economy

and supporting a strong and successful recovery for our region.

Longer-term, our transport infrastructure will need to accommodate future growth. By 2050, the population of the Midlands is forecast to grow by over 1.25 million<sup>6</sup>. The Midlands Engine has an ambitious Strategy for growth. Its transformational scenario is aimed at delivering an additional 330,000 jobs in the region by 2030<sup>7</sup>. It is also estimated that based on current rates of delivery, the overall housing need in the Midlands in the next 30 years could be in excess of **1m new homes**.

These issues ensure that the core purpose of Midlands Connect remains: To identify, develop and promote key infrastructure projects, including HS2, Midlands Engine Rail and some important road upgrades to increase connectivity, choice and capacity on our strategic transport network.

At the same time, and as we review longer-term transport infrastructure needs, it is important we look for opportunities to lock in more sustainable travel as part of a green economic recovery from COVID-19. This needs to happen if we are to get to net-zero carbon emissions by 2050 or earlier.

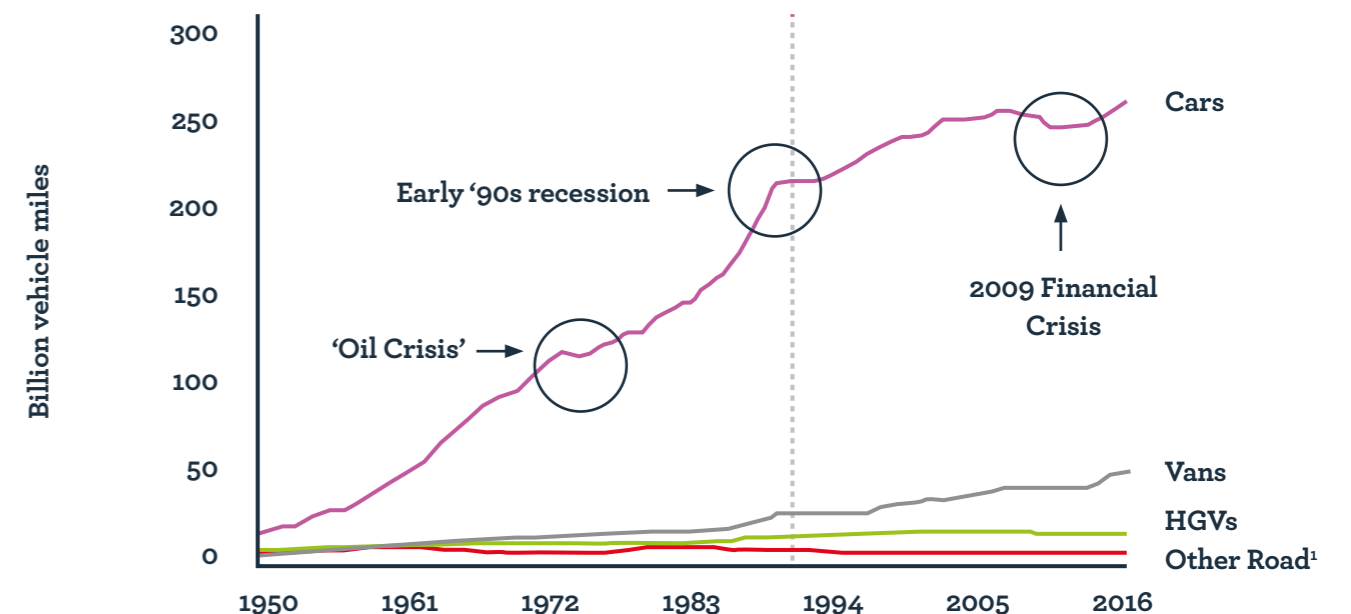


Figure 4: In recessions, people travel less by car but growth in car miles soon returns

Source: DfT Road Traffic Statistics 2016 - Traffic volumes (miles)

<sup>1</sup> Includes Motorcycles, Buses & Coaches

<sup>5</sup><https://researchbriefings.files.parliament.uk/documents/SNO6924/SNO6924.pdf>

<sup>6</sup>Department for Transport TEMPRO forecasts, based on 2010 ONS population projections

<sup>7</sup>Midlands Engine Economic Observatory: Independent Economic Review (2020). These do not take into account the impact of COVID-19.



### Considering the impacts of COVID-19

COVID-19 has seen an acceleration of people working from home and remote working from hubs (shared office spaces nearer to where people live). Embedding these habits beyond COVID-19 could result in permanent reductions in car travel. This could mean need less new road infrastructure to keep up with population growth and help achieve lower levels of CO2 emissions and improved air quality. There is a clear need to invest in digital infrastructure and policy changes aimed at locking in some of the changes accelerated by COVID-19.

The pandemic has also had a broadly positive impact on walking, cycling and ‘new mobility’ (such as the powered e-scooter hire schemes currently on trial). We need to take these positives from the pandemic and embed these low-carbon transport choices into the economic recovery, particularly in cities. A combination of the right investment and policies for shorter journeys, as well as first / last mile connections to our rail and bus hubs presents an opportunity to

make sustainable and active transport the most convenient choice of transport.

However, the current crisis has also impacted the commercial viability of public transport, with significantly reduced patronage and capacity. Car use has started to climb back towards pre-COVID-19 levels. This presents a, hopefully, short-term challenge, but a longer-term threat also exists: the downturn in patronage could reduce the commercial viability for many bus routes, particularly in rural areas.

Our new strategy will put forward what we believe to be the ‘no regrets’ infrastructure investment needs for the Midlands in the next 5 to 10-year period. In other words, those schemes we feel will be needed regardless of uncertainty of future traffic levels and economic growth, including as a result of COVID-19. To identify these schemes and present them to politicians, we will ‘stress test’ all potential options. This will include examining scenarios with lower levels of car and rail use, be that as a result of the COVID-19 impacts of working from home and related travel behaviour and / or climate change strategy measures.

## Levelling-up

The UK Government has set itself the ambition of ‘levelling-up’ economic outcomes between regions, emphasising the role of infrastructure in regional rebalancing. The UK is one of the most spatially unequal economies in the developed world and the gap is growing. Between 1998 and 2016, London’s economy grew by 71% compared with the economies of the West Midlands and East Midlands which grew about 30%<sup>8</sup>.

**There have been decades of underinvestment in our transport infrastructure.** In 2018/19 the East Midlands was the lowest region in the UK for spend per head on transport at £268. The West Midlands was the eighth lowest at £467. Both regions were below the UK average of £481.

Midlands Engine has identified transport infrastructure as one of the four main barriers to achieving the levels of productivity required to close the gap between the region and the rest of

the country. The connectivity, journey time and reliability improvements enabled by transport investment can drive productivity improvements by good access to supply chains and expanding customer and labour markets.

### Refresh feedback so far:

“Having continuous employment and work opportunities makes the region more attractive for people to live in and brings other people into the region as well... You start to create that cyclical flow of opportunity.”

**Membership Body**

### Transport Spend Per Head by Region and Country (2014 - 2019)

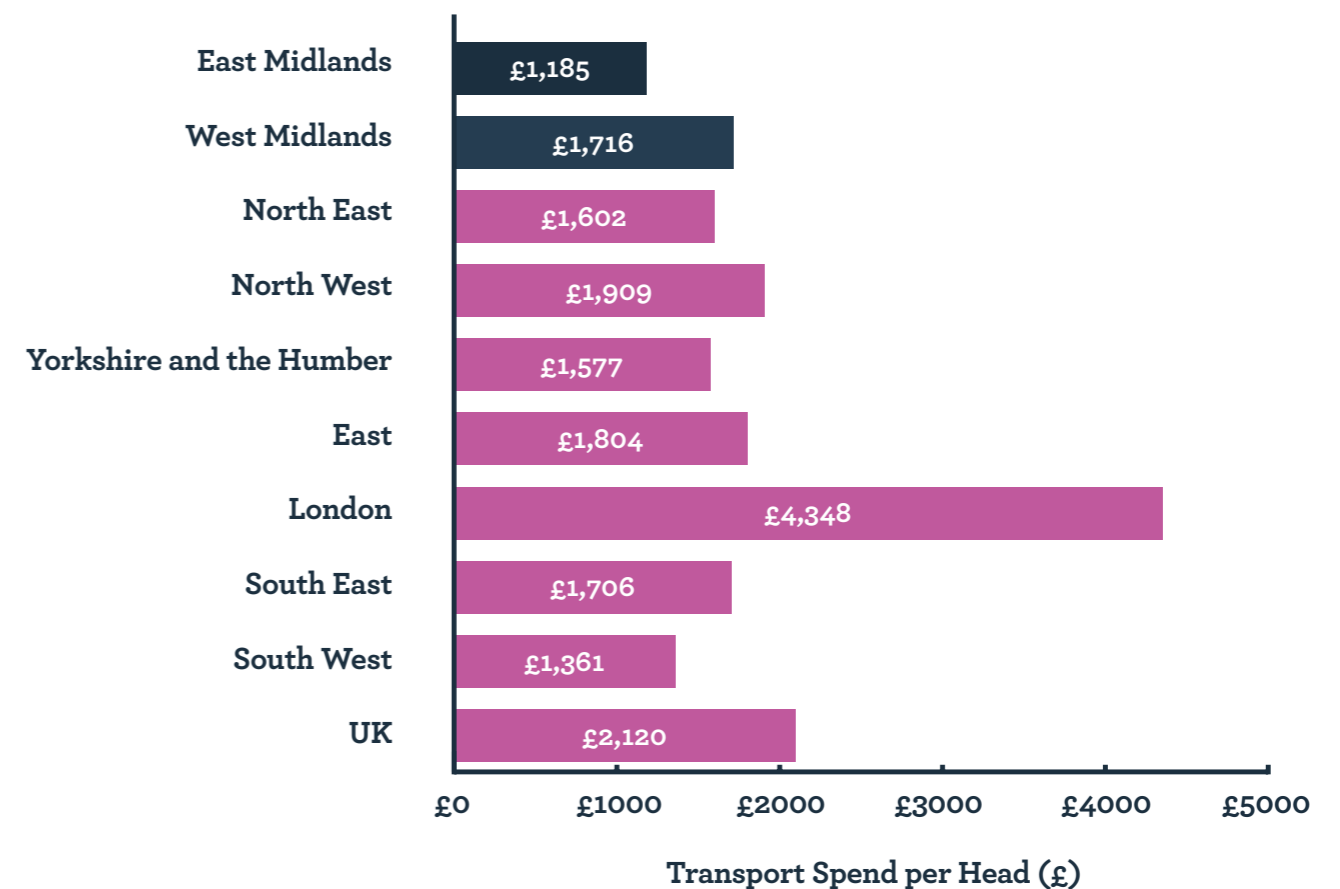


Figure 5: Transport spend per head by region and country (2014-2019)

<sup>8</sup>UK 2070 Commission: Make no Little Plans (2020)

## What levelling-up means for the Midlands

We believe that levelling-up occurs on three levels: **national, regional and local.**

**Levelling-up nationally involves** addressing the imbalance between London and the South-East and the rest of the country. In transport terms, the contribution is made by improving strategic connectivity, journey times and reliability to enable increased opportunity, productivity improvements and economic linkages through supply chains. This will stimulate private investment, taking advantage of the opportunities provided by the enhanced infrastructure, enabling the integration of the Midlands' economic sectors into the national and global economy.

“Addressing regional disparities is part of our objective to support sustainable economic growth across all regions of the UK. This means supporting faster growth in low productivity regions and balancing this with maintaining the economic performance of high productivity regions.”

**National Infrastructure Commission, 2020**

### Poor east-west connectivity in the Midlands

There are no direct trains between Coventry and Leicester, so it takes around an hour to travel just 26 miles. It's no surprise that just 1% of people travel from Coventry to Leicester by train; whereas 59% use the train to travel to London. On the roads, the A42/M42/M1 corridor is the only east-west dual carriageway. This is compared to the M5, M6, M1, A1(M) and M42/M40 which all run north-south from one end of the region to the other.

**At a regional level,** levelling-up involves improved internal connectivity and links out to national networks; spreading the tentacles of growth to all

corners of our region. East-west connectivity in the Midlands and the lack of connectivity on the eastern side of England, especially in coastal areas (and including the East Midlands) is a strategic problem.

Digital connectivity is also very variable across the Midlands, in both rural and urban areas, and impacts upon home-working and business activities (e.g. communications with overseas clients and productivity). By investing in improved connectivity, both physical and digital, over time we can create a region which is more attractive, more productive and more prosperous.

**Locally,** our local authority partners are working to ensure improved accessibility to and from areas of economic isolation and deprivation.

**The Midlands has many of the lowest areas for social mobility in the country<sup>9</sup>** (see Figure 6). The social mobility index compares the chances that a child from a disadvantaged background will do well at school and get a good job. Of the bottom performing local authority districts nationally, a third of these are in the Midlands. The majority of these are in urban areas with poor social mobility.

Transport's role in reducing social inequalities is about supporting the creation of more jobs and improving access to jobs and key services for those most in need. By working with our local authority partners, Midlands Connect can ensure we support people's connectivity needs from their front door to wherever they need to access in the Midlands. Preferably these journeys will be by public or active transport wherever possible; but journeys by an efficient road network will continue to be vitally important.



## Legend

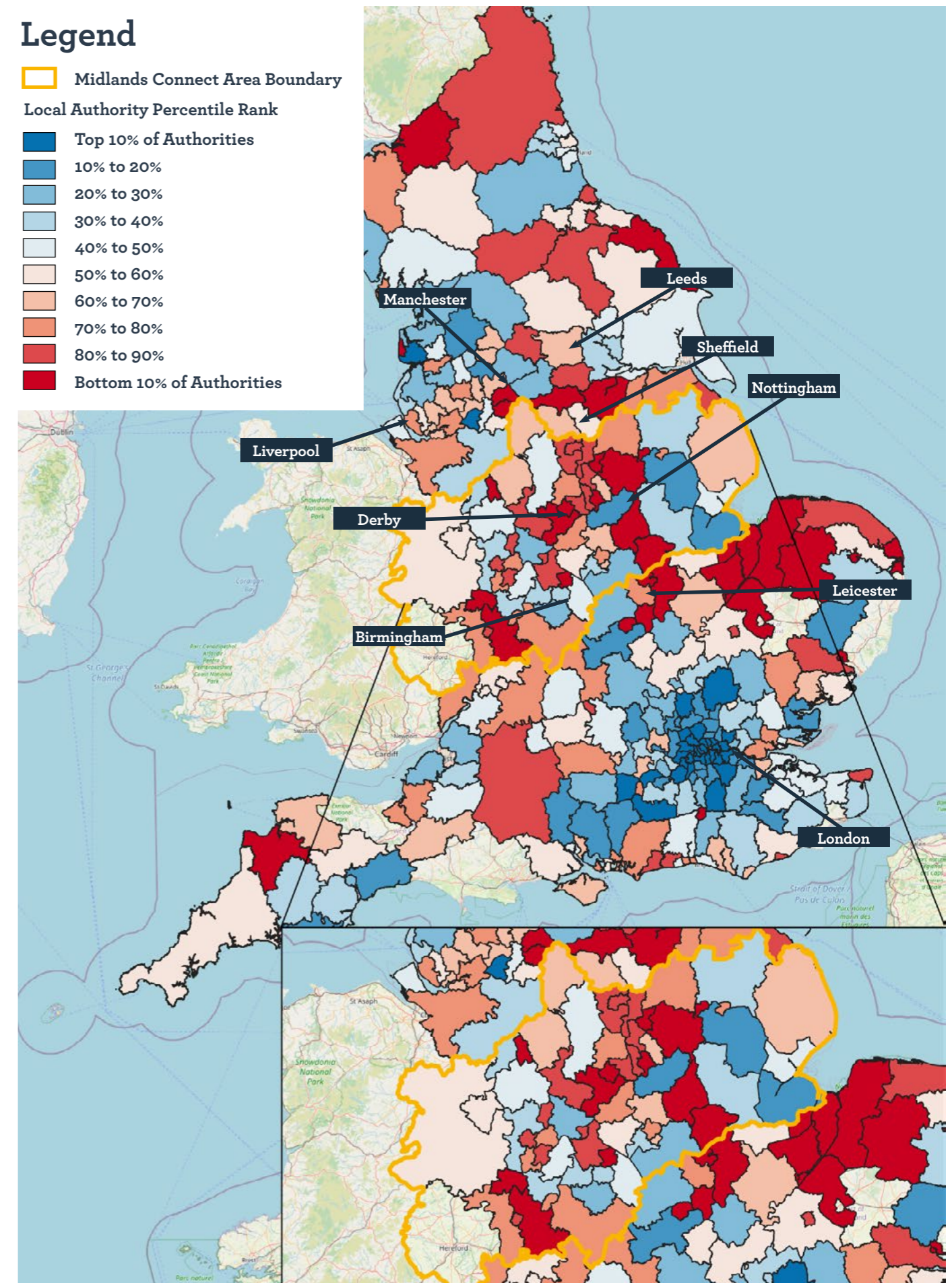
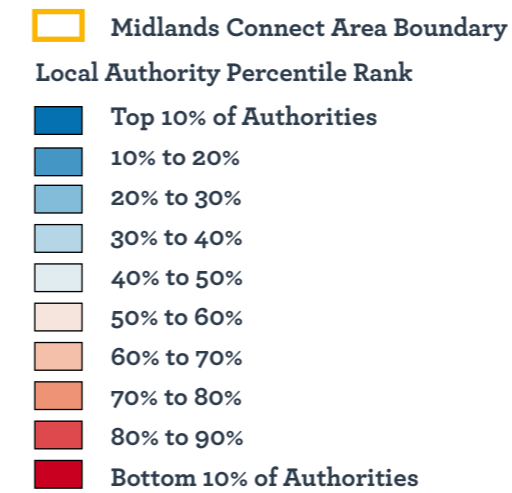


Figure 6: Social Mobility Index Local Authority District Ranks

<sup>9</sup>Data from the Social Mobility Commission



## Climate change and carbon

The international scientific consensus is that we could have just 10 years left to make significant reductions in carbon emissions to limit higher rates of climate change.

Midlands Connect must play a strong role in planning for a decarbonised society. The UK has made great strides in reducing its carbon emissions overall, but there is still a long way to go to achieve 'net zero' by 2050. **The challenge is stark for the transport sector, which accounts for 27% of all UK CO<sub>2</sub> emissions.**

### Baseline estimates for carbon emissions in the Midlands

Midlands Connect has undertaken some work to understand what the 'baseline' of carbon emissions from transport is in the Midlands - both currently and into the future (assuming no change from current trends and policies). We are using this work as a basis for developing a pathway for how emissions could be reduced over time by targeting policies and interventions at specific 'parts' of the overall problem. Some of our emerging findings are discussed below.

**We're going the wrong way:** Pre-COVID-19, some of the most important trends were moving in the wrong direction. Transport emissions in the Midlands had actually increased by 5% between 2014 and 2019<sup>10</sup>.

**We need to do more than is currently being planned for:** Total transport emissions from the region in 2019 were estimated to be just over 16 billion tonnes of CO<sub>2</sub>e. We also estimate that if current trends and forecasts are followed then this figure will only fall by 7% between 2019 and 2050, highlighting the scale of the challenge faced. This is because in our baseline analysis the benefits gained from a gradual shift to electric cars (using existing DfT forecasts that show that by 2050 46%<sup>11</sup> of cars will be electric<sup>12</sup>) are eroded away by current forecasts of population and economic growth generating more trips, longer distance travel and many more HGV trips on our roads. Our baseline also assumes that HGVs will still all be diesel in 2050 because this is currently also what DfT forecasts include. Our baseline can be considered a worst-case. We are not suggesting it represents a picture of what will happen because we know that things will change; the plans and commitments for that change are just not yet in place.



**Where and how emissions are being produced is key:** Figure 7 provides a breakdown of the main contributors of carbon emissions from transport in the Midlands. There are many ways of looking at this. We feel that by identifying where emissions are being produced and from what types of journeys, we are better able to make plans for how it might be reduced over time.

**Roads has to be a focus:** Of the total transport carbon emissions in the Midlands in 2019, 96% is from roads-based transport, i.e. cars, vans and HGVs.

**As does emissions from HGVs:** Our early work on our carbon baseline estimates suggest that emissions from HGVs are proportionately much higher in the Midlands than the UK or England average. This is partly because HGVs are mostly prevalent on the Strategic Road Network (SRN) and we have a fifth of the English SRN in our region. Added to this, the Midlands, through its locational advantage, has a very high number of freight and logistics firms located here. Emissions from HGVs is a national problem, but the Midlands is where a big part of that problem is being generated.

**Collaboration is key:** Our data also suggests that only one third of roads-based emissions in the Midlands are generated from trips wholly within a single authority area (i.e. from self-contained trips). This means that two-thirds come from trips which cross local authority boundaries. This one statistic alone demonstrates that individual organisations or authorities acting on their own cannot solve even their own part of the transport emissions problem. There will need to be a huge degree of collaboration and co-ordination across the region to achieve net-zero from transport.

## Cumulative CO<sub>2</sub> Emissions from Transport in the Midlands - Baseline

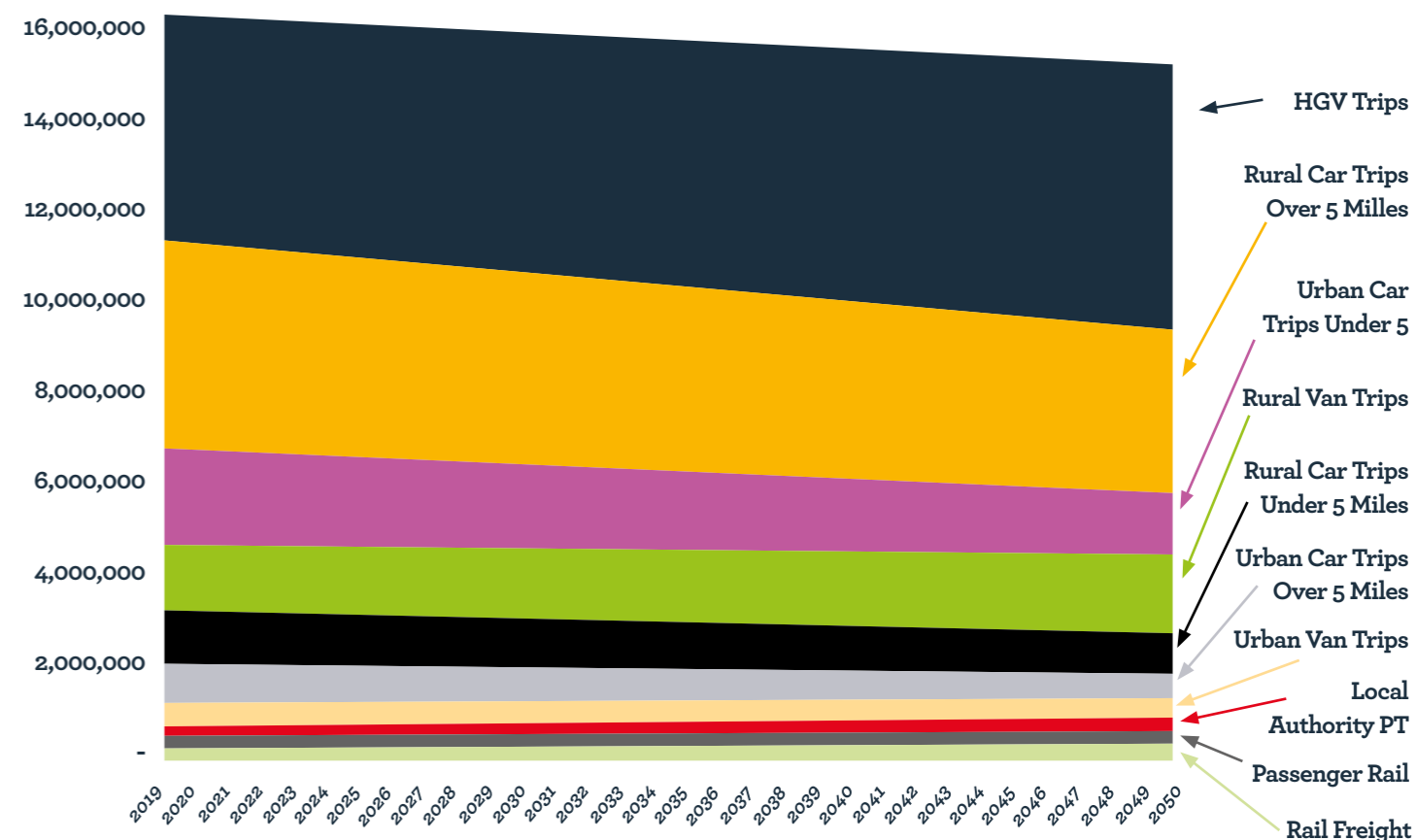


Figure 7: Total CO<sub>2</sub> by mode (bn) in the Midlands (Source: Midlands Connect Carbon Baseline)

### Routes to Net Zero

Over the coming months Midlands Connect will be developing a 'decarbonisation pathway' for the Midlands. To do so, we will work with local authorities to review their local plans and policies and track what part they will play in reducing carbon, as well as feeding in the national policy coming from the DfT's 'Transport Decarbonisation Plan' that is due in Spring 2021. This pathway will demonstrate how far the known policies and interventions will take decarbonisation from transport in the Midlands.

Decarbonising transport is a complex issue. Its complexity comes because you cannot simply look at how and where the emissions are felt, we must also understand why. How and why people travel is wrapped up in a wide range of issues, including:

- Land use patterns (e.g. where housing is built and where employment is situated);
- Personal choice (do I drive or ride my bike when it's raining?);
- Business working practices (are employees expected in the office 5 days a week?);
- Economic choices (is it cheaper to drive than catch the train?);
- Available technology (can I live with an electric car next time around?).

To develop a true pathway to net zero from transport we cannot simply say "build more railway and don't build any more roads". We must understand the influencers of choice at a much more granular level. This is something Midlands Connect will be working on with our partners over the coming months.

<sup>10</sup>BEIS (2019) UK Local Authority and Regional CO<sub>2</sub> emissions 2005 to 2017

<sup>11</sup>DfT Databook, November 2020

<sup>12</sup>These forecasts were made before the recent Government announcement regarding the ban on the sale of new petrol and diesel cars by 2030.

# Funding the delivery of our Strategy

It is important to recognise that funding is a major constraint to whether our objectives can be achieved. This constraint is not just concerned with how much money might be available to the Midlands, but also on how that money is distributed. Currently, transport infrastructure is funded through various siloed funding streams. Certain types of project can only be funded via specific pots of money. For example, the funding given to Highways England to improve motorways and A-roads cannot be re-purposed to deliver public transport in cities.

Based on the current approach to funding infrastructure, our Strategy will not be able to start from a blank sheet of paper. Instead, we will need to put across what investments our region wants to prioritise from the next iterations of specific funding streams.

By doing so we will provide some surety on what's needed in the next 10 years or so, as many funding pots operate on a 5-year cycle. Beyond that, we would like to put across a broader vision for how transport funding should be spent to achieve the region's objectives.

## Is there a different way of funding transport infrastructure?

Funding transport in silos doesn't reflect how we

use transport. For example: we use local roads to access national roads; we walk, ride or drive to use the train; we walk to bus stops. But funding for the infrastructure required to support each of part of a journey is separated and very difficult to bring together.

As an example, Figure 8 shows how the aspiration to bring forward a sustainable housing development by delivering a new rail station nearby will require funding from central government, it's delivery agencies, local government and the private sector to make this happen. The fragmented approach means that bringing these funding streams together in the right place and at the right time is extremely difficult and often means that the ultimate vision for a project is not delivered.

As we update our Strategy, we will look beyond the short-term funding cycles already in place. We want to use our role as a Sub-National Transport Body to ensure we are making the case for the transport investment our region needs and wants. We have an opportunity to shape and influence how transport investment is spent in the medium and long-term, particularly in the context of the Government's commitment to 'level-up' areas of the Midlands and the North that have seen decades of underinvestment in transport infrastructure.

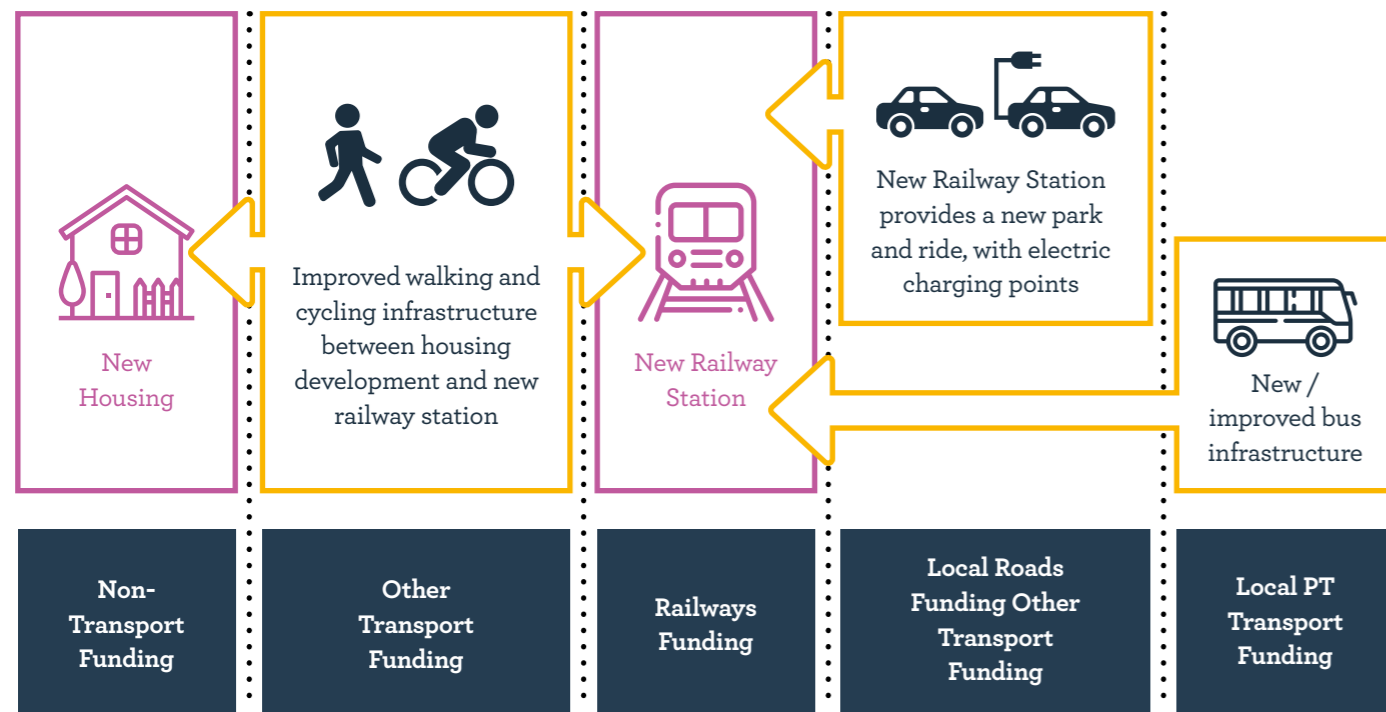


Figure 8: Using transport investment to facilitate housing development involves a number of different funding streams



## Meeting these challenges

The challenges laid out above set the context in which our new Strategy must sit. Our Strategy needs to find the right balance between having the maximum short-term impact in order to help the region recover from the current economic crisis, but also having a strong eye on the longer-term opportunities to decarbonise transport and level-up nationally, regionally and locally.

Finally, we will need to recognise that there is no bottomless pit of funding and that the current way funding is allocated may constrain the choices we can make.

The following section lays out some of the areas which Midlands Connect has been working on since our last Strategy was published. Our refreshed Strategy will need to make recommendations for immediate priorities for road and rail infrastructure based on the evidence from our technical investigations. We will also need to demonstrate how the region can collaborate on important areas of policy; and what the role of Midlands Connect can be in facilitating this.

# Our emerging Strategy refresh ideas

Our 2017 Strategy set out a range of short and longer-term strategic transport interventions for the region. Since its publication we have continued to develop our understanding of these interventions and we've been making the case to Government to kick-start the development of our priorities.

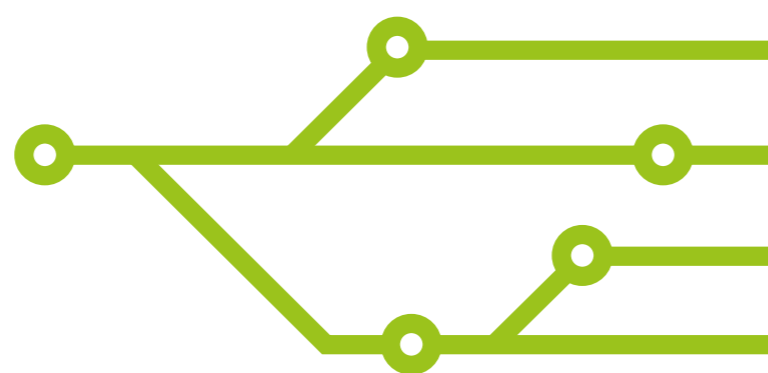
In the period since our previous Strategy we have secured funding support from Government for a range of projects that are now being taken to the next stages of development and delivery. These include: our priorities for improvements to the Strategic Road Network (SRN) which were identified in the Department for Transport's Road Investment Strategy Period 2 (published in 2020); continued significant financial support for the development of our Midlands Rail Hub project; and funding support to local authorities to develop and deliver projects from our Major Road Network and Large Local Major Scheme programme.

In addition to securing commitments from Government, Midlands Connect has continued to develop the ideas and concepts in our 2017 Strategy. As well as these, we have identified some new niche areas where we feel we can be of benefit to the region. Some of the highlights of our work since our last Strategy include:

- We have been developing new schemes to feed the pipeline for investment in various road and rail corridors to help deliver growth, drive productivity and improve access to jobs and housing.
- We have developed a new 'tap and cap' smart ticketing proposal which would enable users to hop from train to bus to tram on any operator, using their bank card and just pay a single daily fare.
- We have been developing proposals for how new forms of transport technology could be applied in rural areas.
- We have been working with the freight and logistics industry to understand the trajectory for shifting HGVs and vans to alternative fuels and understanding what that means for the new

infrastructure that would be required in the region to support that.

- We have been working with local authorities to identify ways in which they can accelerate delivery of electric vehicle charging infrastructure.



## Supporting end-to-end journeys

One of the biggest areas of change from our previous Strategy is that Midlands Connect is now taking a much broader view of what our new Strategy should contain. In 2017, we were primarily focused on strategic road and rail infrastructure needs. We now recognise that we also need to consider how people arrive at or depart from that regional infrastructure to make their full pan-regional journey.

**We are not replicating or replacing what our local authority partners do best, which is plan for journeys in their areas. We are working more closely with them to understand how local and regional planning can complement each other.**

Our next Strategy will not go into detail on schemes and plans for localised transport needs in cities or other areas; but we will identify broad opportunities for places to work together to deliver improved outcomes.

We also want to work with partners to identify a package of local complementary projects which will work with the schemes and programmes we have identified. In this way we can begin to tie together the full end-to-end journeys for people travelling across the region. See Figure 9 for how we see this working.

## How our strategy measures support a transition to low carbon movement of people and goods

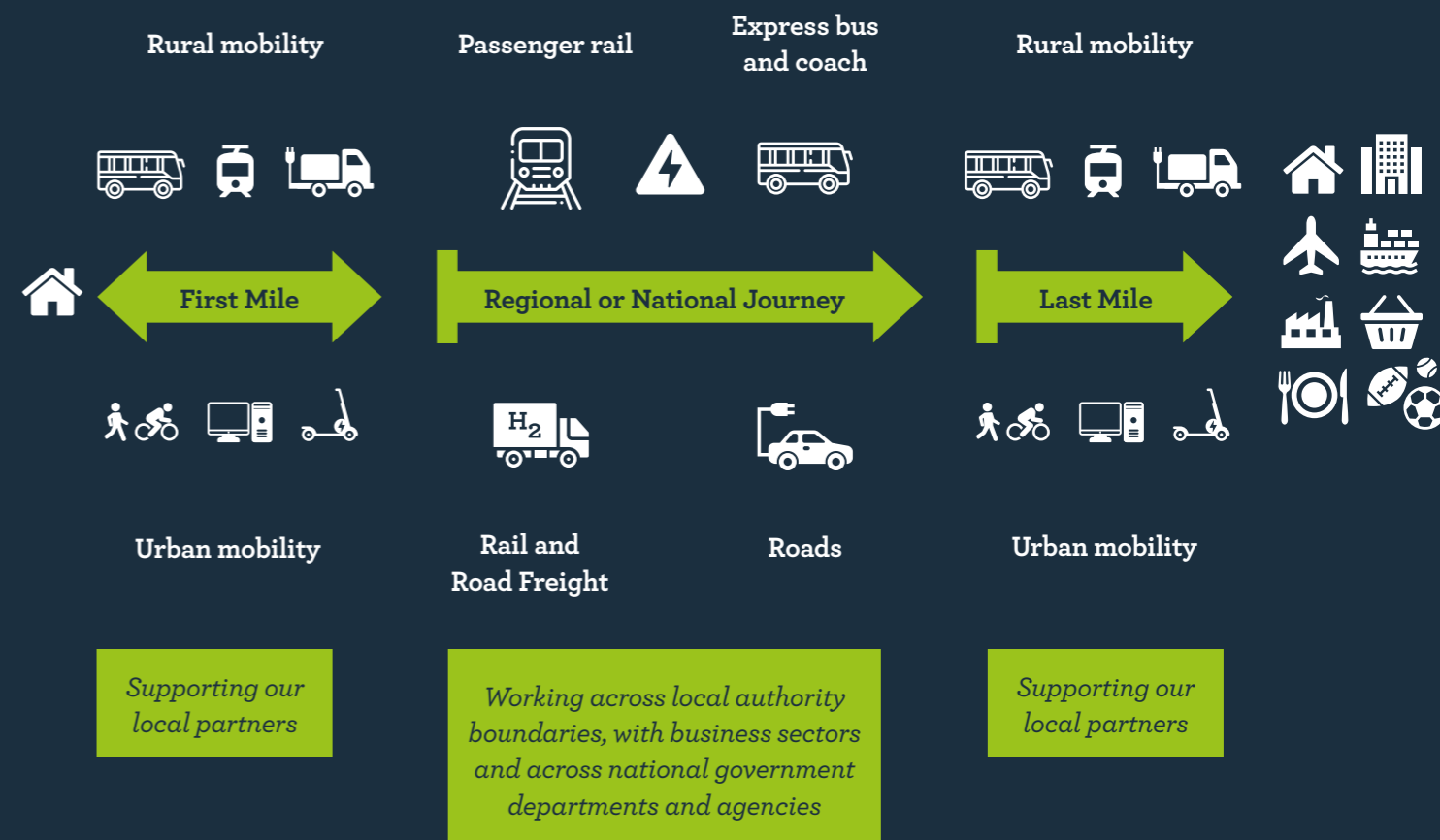


Figure 9: Supporting end-to-end journeys

### Future Transport Zones in the Midlands

In Transport for the West Midlands and Derby-Nottingham we have two of the Government funded Future Transport Zones in our area. These are seeking to develop and deploy new mobility services that work seamlessly for travellers, creating better connections in each area. We will tap into the expertise and learning from these projects, along with our work on rural mobility, to ensure we share the outcomes, knowledge and best practice from this work across our wider region.

### Prioritising our investment proposals

Developing our programme over these past few years has been an exciting period. We have built up a portfolio of projects and opportunities which will support the Midlands to grow, provide for better life chances for our citizens and accelerate the decarbonisation of our transport system.

We recognise that not all of our proposals can be delivered at once; we must prioritise and sequence what we want Government and others to invest in first. Our refreshed Strategy will present our short, medium and long-term proposals. We are seeking input during this period of engagement as to what the people and businesses of the region feel the priorities should be. We will take what we hear to our local politicians, who will make the final decisions as to what the Strategy will contain and inform them of what the region would like to see. In order to inform your input, we've described the key parts of our work in the sections below.

## Supporting regional and local public transport

Over the past few years we have been working on several projects which aim to provide improved public transport for customers in the Midlands. Our work has included: strategic planning for improved regional rail connectivity; local area multi-modal studies to support growth stimulated by the arrival of HS2; and new forms of payment mechanisms to make local public transport use much easier. Key elements of our work are described below.

### Bringing people back to public transport

#### Smart Ticketing

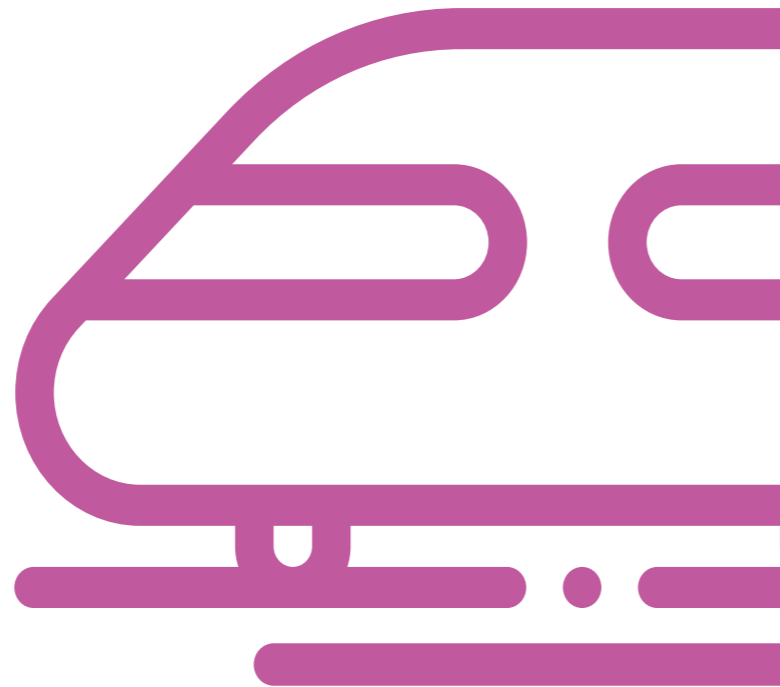
Public transport has been hard hit during the pandemic. People have been discouraged from using buses and trains and have been very slow to come back when restrictions have eased. There is a very real concern that it could take a long time for patronage levels to recover and in the meantime habits of increased car usage will begin to become entrenched. We have developed a solution which will make it much easier for people to pay for and use local public transport.

Working closely with Transport for the West Midlands and Nottingham City Council we have developed a technical solution for a region-wide 'tap and cap' smart payment system for public transport, similar to that used by Transport for London. This system will allow all public transport, including buses, trams and rail journeys to be paid for by a single smart card, bank card, or electronic device, across the whole of the Midlands.



We hope to see this idea funded by Government in the near future.

Our longer-term ambition is to see this idea integrated into local multi-modal 'Mobility as a Service' offers that could include things like parking, e-scooters and car clubs. Making travel easy to plan for and pay for is essential in ensuring sustainable transport is the go-to-choice for as many journeys as possible. This is particularly important given the potential change in commuting and business travel as a result of COVID-19 and the need to encourage people back on to public transport.



#### Midlands Engine Rail

Given the complexity, time and cost of rail improvements, securing commitment to a long-term rail investment programme is critical to our plans for a greener, fairer and more prosperous economy.

We have now developed our proposals for improved regional rail connectivity to a degree of detail where we are confident of the infrastructure requirements, their costs, when they're needed and what their benefits will be. This is a major step forward from our previous Strategy and allows us to target specific funding asks to Government.



# Midlands Engine Rail



Figure 10: Our MER programme will deliver a step change in connectivity in the Midlands

**Midlands Engine Rail (MER)** is a £3.5 billion programme of improvements that will deliver a step-change in rail connectivity in the Midlands and across the UK, increasing public transport use, supporting sustainable job growth and housing development across the region and accelerating the move towards a carbon-neutral economy.

The MER programme consists of seven key projects. Jointly these will create a regional rail network which will transform the functional economic geography of the Midlands. They combine to enable the main cities of the region to improve business to business connectivity, widen access to jobs and skilled labour and support sustainable housing growth in inner-city areas.

Midlands Connect is supporting the full delivery of HS2 and MER is fully integrated with the currently planned HS2 network. HS2 will place the region at

the heart of a new national rail network, bringing benefits whether you set foot on a high-speed train or not. HS2 creates space on the existing rail network to improve services from dozens of stations, with faster, more frequent commuter trains for millions of rail users. It also creates more freight paths on the existing rail network, an opportunity we are seeking to maximise by incorporating rail freight improvements into our passenger rail projects to support the transportation of more goods by rail. The forthcoming Integrated Rail Plan (IRP) from Government may result in some changes to the current plans for HS2 but it should also acknowledge the role of MER to create an integrated regional and national rail network. If the IRP does recommend some change to HS2 then we will have to update MER to ensure that the gaps are filled and our overall objectives are still met.

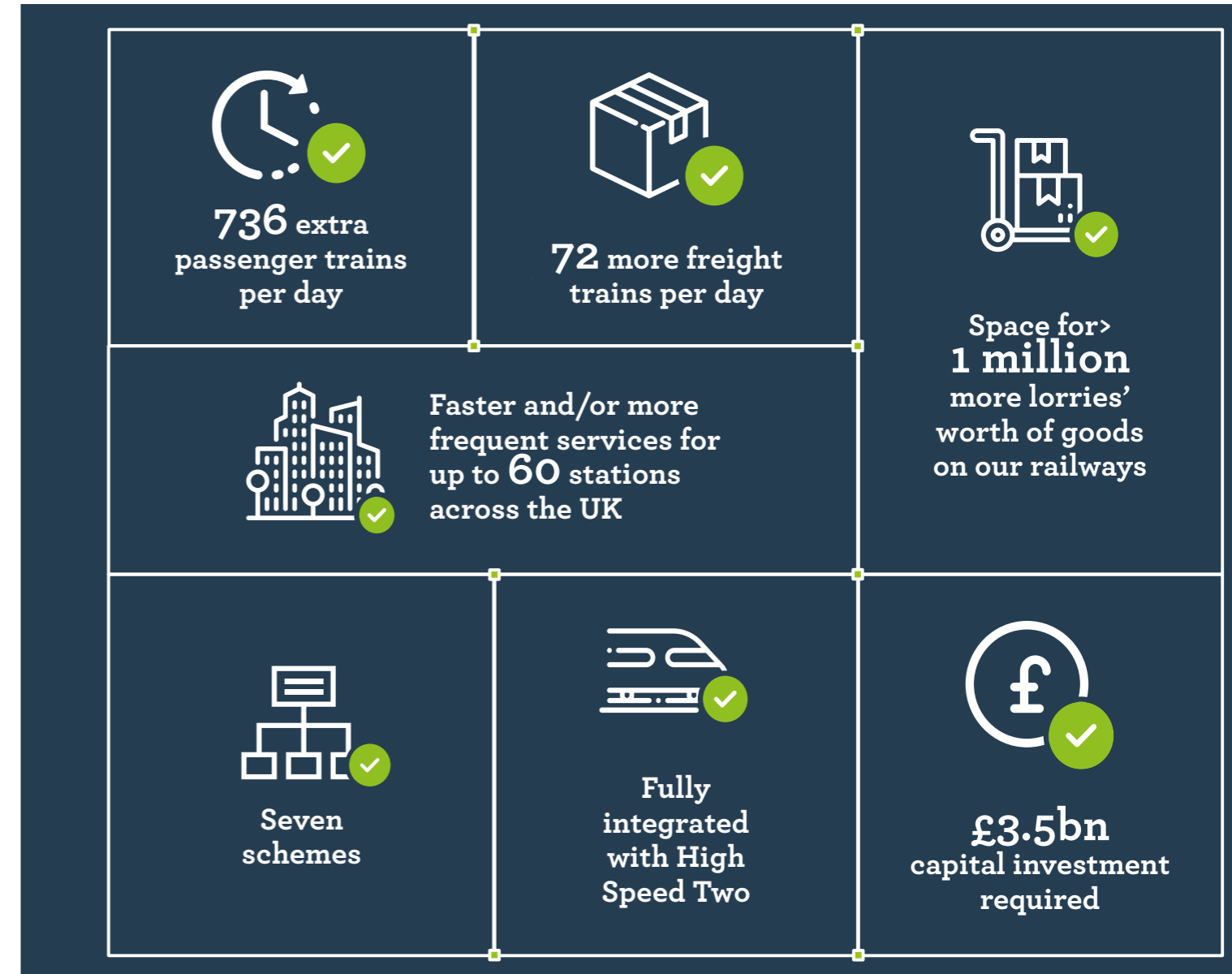


Figure 11: The components and benefits of MER

## Midlands Rail Hub

Midlands Rail Hub (MRH) is the flagship key project within MER. It will create space for more trains into and out of Birmingham Moor Street station to support new and faster connections to the South West, Wales, Hereford and Worcester and the East Midlands.

As Birmingham Moor Street will be adjacent to the new high-speed station at Curzon Street, MRH will allow communities in Cardiff, Bristol, Hereford and Worcester easy access to HS2, vastly enhancing its geographical reach. The Midlands Rail Hub will also reduce crowding and encourage sustainable travel

on a network that has seen demand double in the decade before COVID-19.

We have successfully worked with Network Rail and the Department for Transport to develop and submit a first-stage business case for MRH. On the back of our submission the project has been awarded a further £20million from Government to continue development. MRH will consist of several specific improvements to the existing rail network and will be delivered in stages; possibly starting as early as 2022. This next phase of work is to focus in on the exact interventions and their best possible sequencing.



Planned Toton innovation campus at East Midlands Hub



Figure 12: The benefits of MRH

### Access to Toton

We have worked closely with East Midlands Councils to develop a detailed plan to integrate the proposed HS2 East Midlands Hub station at Toton into the wider East Midlands through rail, tram, bus and active mode connections.

The plan also facilitates the emerging Development Corporation plans for jobs and new homes in the surrounding area.

The plan has a focus on connecting deprived communities to new opportunities, helping to level-up parts of our region that have seen decades of underinvestment in capital infrastructure.

### Regional express bus and coach opportunities

We are aware of the limited geographical coverage of the current rail network and the sometimes-prohibitive cost of new railway lines. We are therefore identifying where new express bus or coach services could provide new public transport connections at a regional level to complement our rail programme. These will widen travel choices for a bigger

proportion of the population and open up low-carbon access to jobs, services and leisure.

We have analysed a huge dataset of journeys happening across the Midlands, captured from logging the movements of mobile phones. This has helped us to identify hotspots of journeys starting and ending in similar places. Knowing where the demand for movement is helps us to target where new services might be most successful. We will use this evidence to bring together authorities and operators to understand how new services might be trialled.

#### Refresh feedback so far:

“Unless the local integration is there, the high-level stuff doesn't really work as efficiently as it should, or certainly people don't have the opportunity to take advantage of the bigger projects that are available.”

**Transport Operator**

## Supporting planning for rural mobility and connectivity

In rural areas, average weekly transport costs are higher when compared to urban areas and rural populations are nearly twice as far from their nearest services than urban populations. This reinforces the use of cars to access town centres, hospitals and education and overall trip distances being much further. In addition to poor transport connectivity, rural areas are also less connected through digital services (e.g. broadband).

Much has been made of how technology will transform how we will live and travel in our cities; but very little has been done to understand how rural areas can take advantage of the technological revolution. Our recent work has looked at the user cases for future transport innovations in a rural context.

Midlands Connect has developed a 'Rural Mobility Toolkit' which aims to help rural authorities and community groups identify how to take advantage of new transport technologies.

We are currently exploring in detail the concept of rural 'hubs' and their potential to improve rural connectivity. Our concept for a hub is a location which can firstly reduce the need to travel by bringing services to people, rather than people to services. Secondly, a hub may also help public transport be more viable in rural areas by concentrating demand for journeys to places such as town centres, hospitals or business parks. We are supporting the development of some prototypes for these hubs during 2021; and if successful we'll look to support more in the future.

Working with local partners, we also now wish to explore how rural public transport could be rethought, in an era of greater digital connectivity and the different needs of rural communities. We are aiming to generate new ideas in 2021 and develop them to the point where they could be trialled in specific locations.



Figure 13: Midlands Connect Rural Mobility Toolkit

## An efficient and greener road network that supports our economy

We recognise that in the light of the climate crisis any strategy which might appear to encourage more use of cars, vans and lorries could be difficult to support. We also accept the fact that investing in new road infrastructure typically increases road use. There is also evidence, however, which demonstrates that easing congestion reduces emissions through more efficient engine use.

Midlands Connect are advocates of shifting as many people as possible away from cars and on to alternate modes of transport and we have plans to do so. Our Midlands Engine Rail plan (described above) will provide a hugely improved service to millions of people looking to travel across the region.

However, even in a scenario where other modes are used much more than they are today, roads will remain a key element of our transport network and be vitally important to our economy, our communities and how we accommodate population growth in the coming years and decades. We must therefore continue to responsibly plan for our road networks to be more efficient and facilitate opportunities for growth and prosperity.

At the same time as identifying options for upgraded roads, Midlands Connect is progressing opportunities to help accelerate the take-up of electric cars, vans and alternatively fuelled lorries. We are also considering how we can place digital technology at the heart of our road investment work in order to manage demand for travel and enable more efficient use of our road corridors.

### Accelerating the take-up of electric vehicles

We are currently working with our local authority partners to understand how the region can collectively accelerate the provision of electric vehicle charging infrastructure. By looking at aspects such as collective procurement, standardising hardware and payment mechanisms, electricity supply constraints and locating chargers where they are most needed, we hope that the region-wide network is such that people are attracted to taking up electric vehicles at an accelerated rate.

We are also building an evidence base which will help to target locations for charging points where they are

most needed and where they will have the greatest impact on encouraging the public to purchase an electric car as their next vehicle.

#### Refresh feedback so far:

"If we want to get to net-zero, we've got to get low emissions cars into use... It's about myth-busting... Once range anxiety is overcome, people do not go back [to petrol/diesel]."

Business



Figure 14: Accelerating EV charging provision.

### Supporting the freight and logistics industry to decarbonise

We want to support decarbonisation of both rail and road freight, alongside maximising the use of rail freight where practicable.

As a starting point we have undertaken research into the challenges associated with moving towards low or zero emission freight vehicles. We have found that the top three barriers to the freight and logistics industry switching to alternative fuels were:

- The upfront costs of new vehicles which use alternative fuels;
- Uncertainty from operators over the residual values of these vehicles; and
- A lack of refuelling infrastructure out in the road network.

We have also sought to understand where future refuelling infrastructure might be needed most in the region to help facilitate the freight and logistics sector to decarbonise. We have mapped data across a number of different criteria which has helped us to identify where future ‘energy hubs’ might best be located in the Midlands in order to encourage an accelerated shift to greener fleets.

We will bring our work under this heading together and engage with industry to develop an action plan to accelerate the decarbonisation of road freight in the Midlands.

**Refresh feedback so far:**

“Electrification of our HGV fleet is probably about 10 years away. We can offset, but in terms of direct emissions that’s a pressing one.”

**Stakeholder**

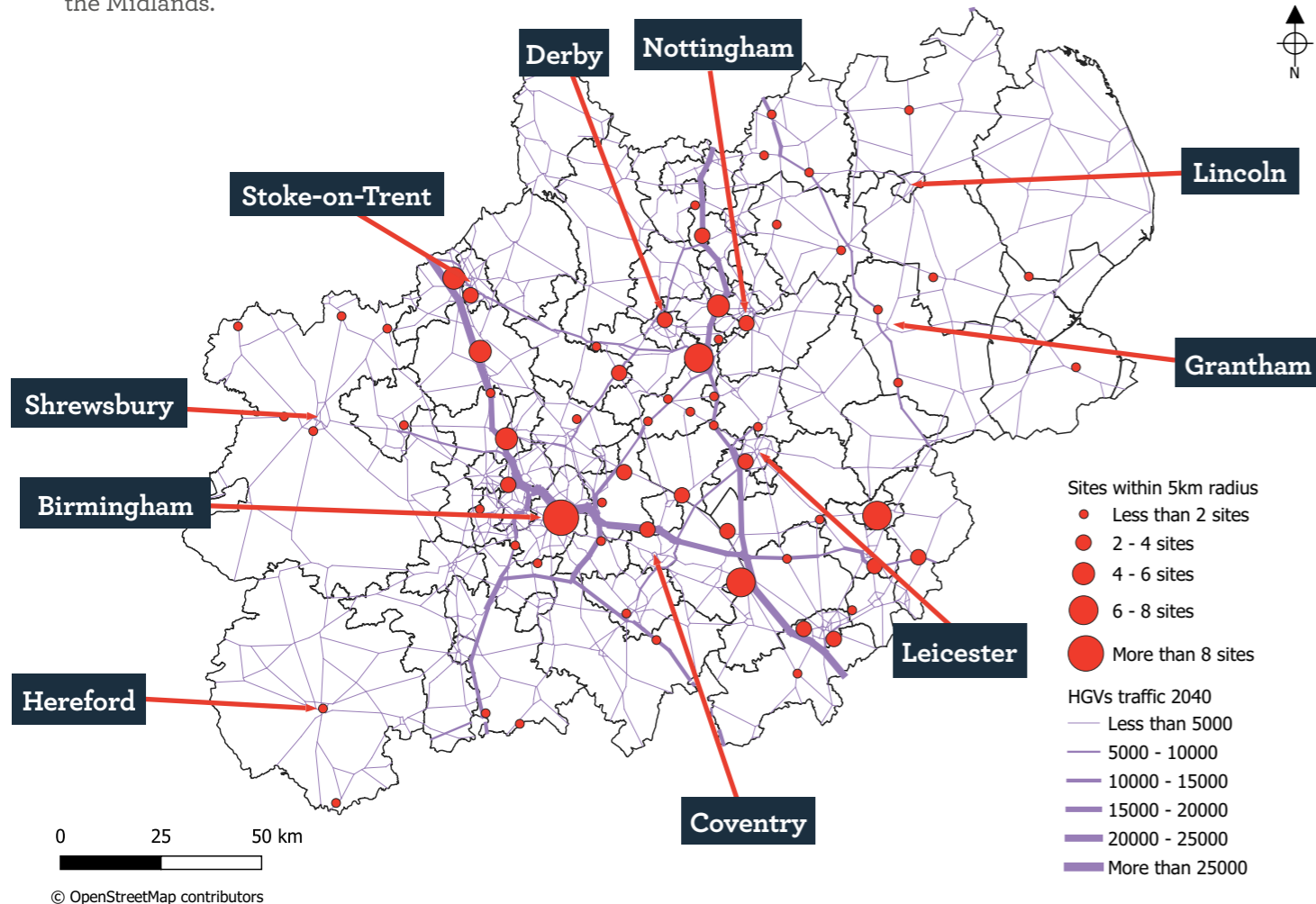


Figure 15: Proposed potential locations for future alternative fuel infrastructure sites to support the freight industry in the Midlands

**Identifying options for new and upgraded road infrastructure (if needed)**

Our first Strategy identified a number of important road corridors which linked the east and west of the Midlands. Primarily our focus has been on the role of key A-roads rather than the existing motorways. Over the past few years we have examined the following corridors in detail:

- The A46 between Tewksbury and Humberside (including the M69 and A15);

- The A5 between the M6 in Staffordshire and the M6 in Warwickshire;
- The A1 from Doncaster to Peterborough;
- The A50/A500 between the M6 at Stoke and the M1;
- The A38/M42 and A42 linking the West Midlands to Derby and Nottingham;
- The ‘Midlands Motorway Hub’, which is the network surrounding the West Midlands metropolitan area (M5, M6, M42 etc).

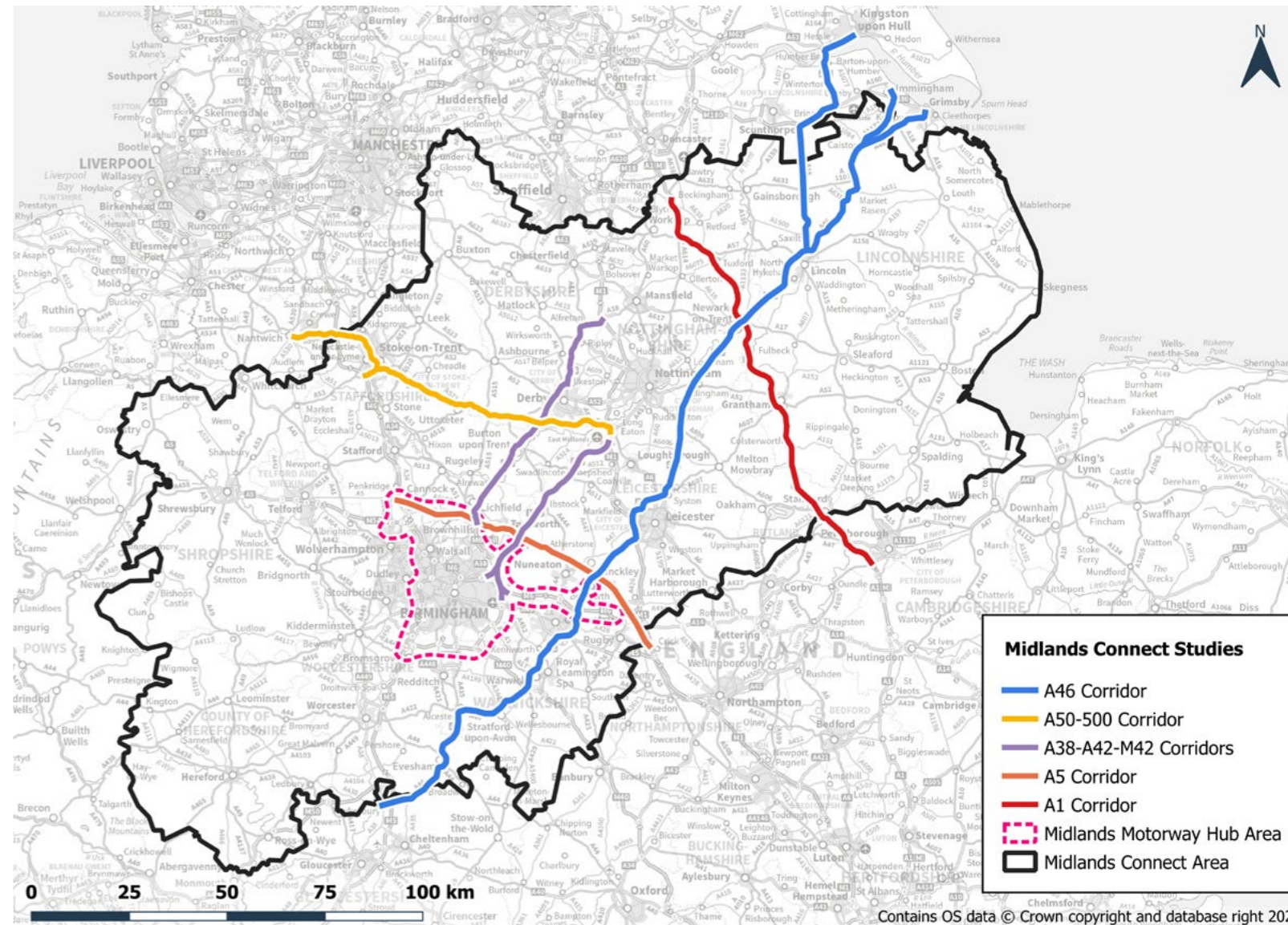


Figure 16: Key Midlands Connect corridor studies

For each of these corridors we have gathered intelligence on traffic levels, travel patterns, freight needs, housing and jobs growth (both planned and possible), and developed concepts for infrastructure which may be required to better support existing needs and future growth. Our work has formed a database of potential options which could be put forward for central government funding if and when they may become needed.

As described previously, our new Strategy will put forward what we believe to be the ‘no regrets’ road infrastructure investment needs for the next 5 to 10 years. These will be the schemes we feel will be needed regardless of uncertainty of future traffic levels and economic growth. We will ‘stress test’ all potential road investment options against a range of scenarios, including those with lower levels of car use, be that as a result of the COVID-19 impacts of

working from home and related travel behaviour, climate change policy measures or other wider policies of our partners; including potential new road pricing options which may come from central government.

For the period beyond 10 years from now, we know that we cannot be as certain. There are major potential disruptors on the horizon which may mean that the scale of any new road infrastructure investment cannot be known. This includes the long-term effects of Brexit, new post-pandemic working practices and how new technologies might change how we travel or whether we need to travel at all. We know we have options for new infrastructure if it’s really needed, but we will need to continually challenge that need.



## Seeking opportunities for economic recovery

Midlands Connect is working with the Midlands Engine to understand how certain investments in infrastructure could act as a stimulus or catalyst for wider economic growth. We have focused on three 'economic corridors', all of which are important in supporting business, trade and housing growth. We see investment in these corridors playing a crucial role in ensuring a renewed focus on the integrated and holistic placemaking that is essential to levelling up the UK economy. Our focus will be on:

- **The Midlands Logistics Corridor (A5):** Links Staffordshire eastwards to Leicestershire and Warwickshire via the A5.
- **The Trans Midlands Trade Corridor (A46):** Follows the A46/M69 and A15 from Tewksbury to Humberside, encompassing Worcestershire, Warwickshire, Coventry, Leicestershire, Nottinghamshire, Lincolnshire and North East Lincolnshire.
- **The North Midlands Manufacturing Corridor (A50/A500):** Links Staffordshire to Derbyshire/Nottinghamshire via the A50/A500.

Collaboration with the Midlands Engine is important for these corridors because we want to see how holistic planning across disciplines such as housing, skills and productivity can be brought together with transport infrastructure investment acting as an enabler and catalyst to achieve wider goals.

### Trans Midlands Trade Corridor in RIS2

After compiling a robust evidence base for improvements to the A46 corridor, a wider strategic narrative emerged for looking at improving productivity through enhancements beyond transport. The Trans Midlands Trade Corridor is the first time Midlands Connect worked with partners inside and outside the region to develop a Productivity Growth Plan. Highways England recognised the TMTC in its Roads Investment Strategy 2 in March 2020.

## The Major Road Network

Since our first Strategy we have worked with Government to designate the Major Road Network (MRN) in the region. The MRN represents the most important local authority managed roads and sits

alongside the Strategic Road Network (SRN) that is managed by Highways England. Together, the SRN and MRN form the key road network that connects our area together and provides the end-to-end links for people and business.

New funding has been made available by the Department for Transport to invest in the MRN so improvements can support local growth, housing and improve the travel experience for all users. There is a particular emphasis on ensuring that the funding provides improvements for pedestrians and cyclists as well as cars and lorries.

In 2019, we worked with partners to put forward an initial programme of schemes for this Government funding. We are continuing to work with local authorities to develop a robust pipeline of schemes for the MRN to support all road users. This will include identifying opportunities for developing technology-led interventions on the MRN and integrating these with some of the technology solutions being developed for the Strategic Road Network (SRN), to ensure that users have a more seamless experience.

## It's not all about moving people

There is a danger when thinking about connectivity that we assume the solutions are always transport-led. If the pandemic has taught us one thing it's that digital connectivity is a vitally important component in reducing our need to travel. The impact of how we plan for new housing and employment developments is also vitally important. Where and how that comes about has a big impact on how many trips people need to make, by what mode and how far they need to travel.

Just because Midlands Connect is focused on regional-scale transport needs does not mean that we ignore these other issues. We are working with other bodies, such as the Midlands Engine and West Midlands 5G, who are looking at digital connectivity to understand how their plans may impact on the demand for travel in the future.

Whilst we do not seek to influence local planning activities, we are huge advocates of sustainable development occurring alongside transport interventions. To this end, we will work with planning authorities to understand how they can utilise our ideas for improved public transport to plan for more sustainable developments.

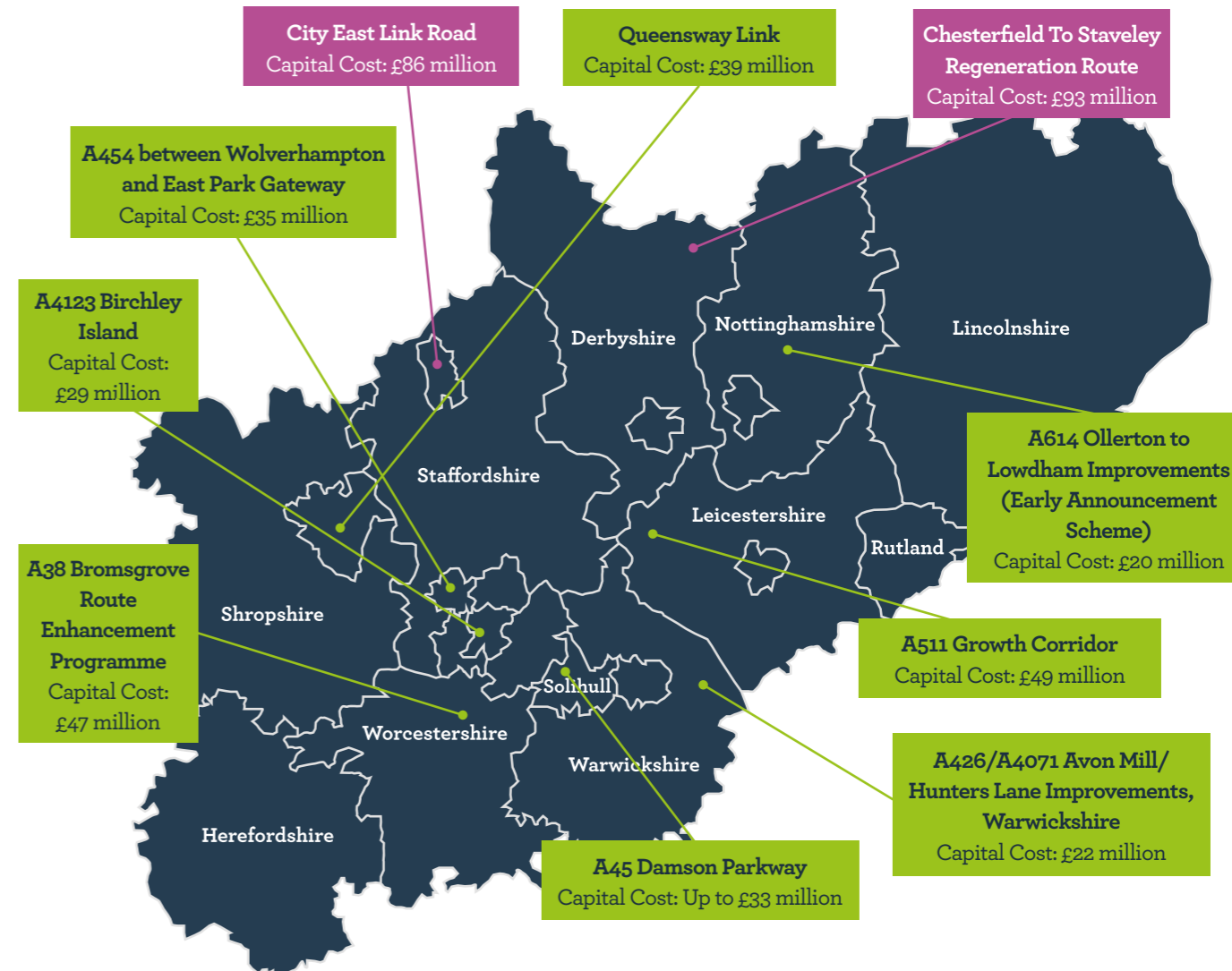


Figure 17: Our Major Road Network (MRN1) priority schemes

## Tying it all together

We hope this section has provided a good overview of the work of Midlands Connect. Over the course of the next few months we need to bring all of these strands together, and tie-in the complementary plans of our local authority partners, to form a coherent Strategy. As we have already outlined, our focus for infrastructure proposals will be on those we believe are necessary and the right priorities to come forward in the next 10 years. Beyond that, we know that uncertainties in a number of areas mean that we need flexibility in our planning to take account of what may change. We may not be able to be certain about the timeline and need for individual pieces of infrastructure beyond the next 10 years; but we can be certain about the long-term aim and vision for connectivity in the region and this is what we will need to convey.



# Strategic transport choices: your views

This document sets out the key challenges we believe our region faces. It also describes the projects and programmes that, we believe, will help the region tackle these challenges. Our plans will be complemented by local strategies developed by individual local authorities.

As we refine Strategy, we need to make decisions on what we prioritise when seeking investment from Government. During this engagement period we want to hear your views on what our big-picture strategic transport choices should be in the medium to longer-term (noting there is a limited amount of funding available and the country cannot afford to deliver everything).

**So, if you had the choice, what areas of transport investment would you focus on?** Based on the projects, programmes and policies we have outlined,

we want to know the choices you would make if there were no constraints on how funding for transport infrastructure is spent in the region.

We have created an online tool that will allow you to give your insight into which improvements and outcomes you see as most important. This [tool](#) puts you in charge of how transport funding is spent in a region, asks you to make choices and allows you to see the impact of these choices on outcomes such as jobs, housing and carbon emissions.

The tool includes some constraints around how funding can be spent but not to the same extent as currently exist. Your choices will be submitted to us. We will use this information to shape our long-term vision but also to convey to politicians what the unconstrained views of the region are.



In addition to using our online tool on our [website](#), you can also submit your views on the questions below.

1.

To support the economic recovery post-Covid-19, which transport projects and programmes would you prioritise for delivery within the next 5 years?

2.

In response to the Government's levelling-up agenda, Midlands Connect is identifying major transport projects which will improve the lives of people in the region and across the UK. Which specific transport projects and programmes would you prioritise for delivery by 2030?

3.

As a region, we need to respond to the climate change emergency. What are your top three priorities for a greener, more sustainable transport network?

4.

What technology solutions do you think the Government should invest in to help the Midlands' greener and low-carbon economy?

To submit your responses to these questions (and any relevant evidence), please email [mcstrategy@midlandsconnect.uk](mailto:mcstrategy@midlandsconnect.uk) by Friday 19<sup>th</sup> March 2021 (maximum of four A4 pages).

## How we will use your feedback

All responses from this engagement exercise will be fed back to our Strategic Board to enable them to understand the views of residents, businesses and stakeholders. These views will be used to inform and shape our updated Strategy. This will include a section in our updated Strategy that sets out what our priorities would be and what we could achieve if the current constraints around how funding is allocated by Government were not in place.

We thank you for taking the time to read this document and for getting involved. Please visit our website to access our online engagement tool to tell us your views and help shape our updated Midlands Connect Strategy.

[www.midlandsconnect.uk](http://www.midlandsconnect.uk)



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