

# Moving Forward Together

Delivering the transport infrastructure that businesses need

**Matthew Oakley - Director**  
[matthew@wpieconomics.com](mailto:matthew@wpieconomics.com)

September 2019

Supported by



NORTH WEST  
BUSINESS  
LEADERSHIP  
TEAM



# Contents

1	Foreward	02
2	Executive Summary	04
3	Chapter 1: Why Infrastructure Matters	06
4	Chapter 2: The Current Status Of Transport Infrastructure	08
5	Chapter 3: Key Areas For Action	22
6	Chapter 4: Recommendations	34
7	Conclusion	37

# About this report

This report was made possible by support from London First, the Northern Powerhouse Partnership and the North West Business Leadership Team.

It is based on extensive desk research and data analysis, as well as three roundtables in Liverpool, Leeds, and London that brought together stakeholders including local and regional authority representatives, policymakers, transport companies, infrastructure providers, and local businesses. We then supplemented these with one-to-one interviews to explore these issues further.

We are grateful to all those who took part in this research, and particularly to Addleshaw Goddard, EY, and Arcadis, for hosting the roundtables in Leeds, Liverpool, and London respectively. Thanks also go to Jamie Thunder, for his work on this project and James Edgar, new Chief Economist at WPI Economics who has provided input and comment as we have finalised the report.

I	Endnotes	38
II	Appendix	42

**Disclaimer & Legal**  
This report has been produced by WPI Economics, an independent economics and policy consultancy. The views expressed in the report are based on independent research and represent solely the views of the authors. They are provided for informative purposes only.

# About WPI Economics

WPI Economics is a specialist economics and public policy consultancy. We provide a range of public, private and charitable clients with research, modelling and advice to influence and deliver better outcomes through improved public policy design and delivery. We work with a range of organisations - from FTSE 100/250 companies to SMEs and charities and Central and Local Government.

 [wpieconomics.com](http://wpieconomics.com)    [info@wpieconomics.com](mailto:info@wpieconomics.com)    [@wpi\\_economics](https://twitter.com/wpi_economics)



## About The Author

Matthew founded WPI Economics in 2015. He is a respected economist and policy analyst, having spent well over a decade working in and around policy making in Westminster. He has previously been Chief Economist at Which?, and Head of Economics and Social Policy at Policy Exchange. He began his career as an Economic Advisor at the Treasury. He holds an MSc in Economics from UCL. He also led the Independent Review of Jobseeker's Allowance sanctions that reported to Parliament in 2014.

**Matthew Oakley**  
**Director**

# About London First

London First is a business campaigning group with a mission to make London the best city in the world to do business. We've galvanised the business community to bring pragmatic solutions to London's challenges over the years. We have been instrumental in establishing the Mayor of London, pioneered Teach First, driven the campaign for Crossrail and, most recently, lobbied for government action on airport capacity, leading to the approval of a new Heathrow runway. Now, we are working on solutions to what our business leaders see as the top priorities for our capital: talent, housing and transport. We also scan the horizon, link with other cities, and support our members on the key issues that will keep our capital globally competitive.

# Foreword

Businesses across the country know the value of good transport infrastructure. It affects where companies locate, who they employ, and what it costs to reach suppliers and customers. And those businesses are made up of people whose productivity, health, and happiness is shaped by the transport networks they use.

The UK does not have a strong track record. As this report notes, we have lagged behind our international competitors for much of the last 25 years. Despite being ranked 8th in the world for overall competitiveness, the quality of transport infrastructure is a drag on Britain's scorecard. Our port and rail infrastructure is ranked 16th and 19th respectively, with our road and air transport even further behind (27th and 28th).

The solution is clear: invest in Britain's future now.

The National Infrastructure Commission has set the national priorities through to 2050, including delivering major transport schemes like Crossrail 2, HS2, and Northern Powerhouse Rail. Whilst the costs and details of these schemes should remain under scrutiny, these are all important national projects. Along with critical local transport links, they can be delivered within a public funding remit of 1.2% of GDP, and with additional funds coming from the private sector.

**At a time of national uncertainty, government can at least remove the question mark hanging over the pipeline of major transport projects by committing to this funding remit. This commitment to invest 1.2% of GDP in infrastructure must then be the floor – not the ceiling – of our ambition.**

Had the UK government spent 1.2% of GDP on infrastructure between 1995 and 2016, we would have seen nearly £80bn of additional investment. That's enough to pay for Northern Powerhouse Rail, Crossrail 2, and have change left over. If, over the next decade, we fall short and only invest 1% of GDP, that will mean £50bn of lost investment. Every additional year of underinvestment holds back businesses and communities that would benefit from greater connectivity.

Infrastructure delivery should not be a zero-sum between different projects and places. All major projects have real impacts well beyond their immediate geography, not least through the jobs and opportunities provided by connecting people with suppliers, employers and customers. That is why all our organisations support the delivery of HS2, Northern Powerhouse Rail, and Crossrail 2. We know that if we want to grow, we must grow together, uniting the UK as one.

To support this, the Government must also deliver on devolution. Meaningful budgetary and decision-making responsibilities allow regions and cities to take real control. We would welcome further work from the National Infrastructure Commission to lay out appropriate structures that would support better long-term outcomes. This should build on the successful model provided by Transport for London. In addition, stable five-year funding packages for city regions would give certainty of investment in local priorities.

If we are serious about confronting the challenges of productivity, the environment, and reuniting the country, then we must address the systemic underinvestment in the UK's transport infrastructure. It is the foundation of our businesses, and our country, moving forward together.



Jasmine Whitbread,  
Chief Executive  
London First



Henri Murison,  
Director  
Northern Powerhouse  
Partnership



Emma Degg, Chief  
Executive North West  
Business Leadership  
Team





# Executive Summary

## Businesses need more from the UK's transport infrastructure

This report is about transport infrastructure and the critical role it plays across the UK. Our ambition for the UK's transport infrastructure should be nothing less than a world-class system that connects and unlocks the full potential of every part of the country, from London to the Northern Powerhouse to the Midlands Engine, the South West and each of the UK's four nations.

But based on analysis and detailed discussions with businesses leaders and roundtable events in three major UK cities, this report shows that this is not the system we have at present and that businesses need more from the UK's transport infrastructure.

In particular, they require more certainty that the investment needed for local, regional and national schemes right across the UK will be delivered. For example, participants were concerned and frustrated about the uncertainty over whether schemes that have already been approved, such as HS2 and the third runway at Heathrow, would materialise. This uncertainty affects business decisions to invest, and at the very least risks delaying the benefits of projects.

Participants were also clear about the benefits of investing right across the country. For example, at our London roundtable, participants were strongly in favour of investment in programmes like Northern Powerhouse Rail. Similarly, participants at our Liverpool and Leeds roundtables were highly supportive of initiatives like Crossrail 2. Participants at each of the roundtables expressed frustration with decision-making processes and a lack of local and regional control.

This shows that investment alone is not enough: businesses also need certainty of action, long-promised schemes to be delivered and more trust to be placed in the hands of decision makers across the country to make choices based on their understanding of what is needed.

## The Government has an opportunity to drive growth and improve living standards

This provides a major opportunity for the Government to drive confidence, productivity and, ultimately, growth and living standards across the UK. Taking advantage of this opportunity will require action from Government, and this report outlines a set of recommendations for urgent action and future work.



**Spending 1% of GDP on infrastructure rather than 1.2% between 2020 and 2030 would mean close to £50bn less investment.**

Source: WPI Economics, NIC

Perhaps most importantly, it argues that the Government must provide a long-term plan for infrastructure investment and certainty that it will stick to it. The importance of that is clear: whilst the Government has set a fiscal remit for infrastructure investment of between 1% and 1.2% of GDP, the difference between these two figures is significant. In fact, if investment of only 1% of GDP is achieved, this would mean investing £50 billion less between now and 2030 than if 1.2% of GDP were achieved. That is an underspend that our businesses, neighbourhoods, towns and cities cannot afford.

To tackle this, we argue that the Government must change its current fiscal remit into an investment floor of 1.2%, meaning that at least this amount should be invested each year. To ensure that this is delivered, it should also put in place a mechanism so that any underspend in one year is carried forward to the future. Doing so would go some way to delivering the confidence that businesses need to invest and grow and would be a major step towards ensuring that the UK's transport infrastructure is a driver of, not hindrance to, growth and living standards right across the UK.

**...the Government should create an investment floor of 1.2% of GDP for transport infrastructure and put in place a mechanism to ensure that any underspend in one year is carried forward to the future.**

## Delivering the transport infrastructure that businesses need to succeed

However, as already highlighted, investment on its own is not enough. This report explores key themes taken from semi-structured interviews and roundtables with business leaders to show that, across the country, there is broad agreement on what needs to happen. Based on these themes and our own analysis, our key recommendations are:

### 1. Delivering certainty on infrastructure investment:

- The Government should commit to a spending floor of 1.2% of GDP on infrastructure, rather than a target of between 1% and 1.2%.
- Should spending fall below 1.2%, a mechanism should be developed to ringfence the underspend and devolve the budget to regional authorities for meeting local priorities.

### 2. Delivering certainty on major projects: The Government should confirm its commitment to taking forward HS2, Northern Powerhouse Rail and the third runway at Heathrow.

### 3. Delivering on devolution:

- Government should devolve significant budgetary control, decision-making and implementation responsibilities to pan-regional and regional bodies and local authorities. Given the complexity of delivering this, the National Infrastructure Commission (NIC) should be tasked with consulting with a wide range of stakeholders to deliver a clear plan for responsibilities at each level of Government.
- The Government should also set out a strategy for how it will extend fiscal freedoms to new and existing regional and local bodies, including details of how it will approach co-funding of investment in future.
- The Government should test devolving primary responsibility for regional train services to regional bodies such as Transport for the North and Transport for London.

More detail on each of these is provided in this report. It is also clear that they are all significant policy changes that would require a bold Government, determined to drive a step change in the quality of transport infrastructure in the UK. But the need to take these steps, and the potential economic and social benefits of doing so, are clear. If taken forward, these recommendations could be the first steps towards transport infrastructure that works better for business and better for Britain.

# Why infrastructure matters

Any time people or goods travel, they rely on transport infrastructure. While it's often easy to blame a train company, other road users, or a freight company for delays, the underlying infrastructure is equally important. Around 60% of delays on our rail network are attributed to Network Rail<sup>i</sup> (with two-thirds of these due to infrastructure faults such as points failures), but it's the train operating company that bears the brunt of passenger dissatisfaction. In short, while it may be less visible, infrastructure matters; it is a necessary, if not sufficient, condition for better transport services. When this is achieved, it helps to drive economic growth, living standards and wellbeing right across the country.

## The benefits infrastructure can bring

The potential economic benefits that improved transport infrastructure can bring are well-rehearsed.<sup>ii</sup> There are four main drivers of these benefits:



**New journeys being made possible:** By connecting places that were previously not connected, transport infrastructure enables new journeys, nationally and internationally.



**Reduced journey times:** Even where links already exist, improved infrastructure can reduce the time a given journey takes. This can benefit those who currently use a particular route, but can also increase the number of people willing to make the journey.



**More reliable journeys:** Fast journeys between places are of little use if there is a significant risk that they may not happen at all. Better infrastructure means increased confidence, which is likely to increase willingness to rely on them for important journeys (for example, for commuting or freight).



**More comfortable journeys:** A journey standing on a train, or sitting in slow-moving traffic, is very different to one in which you have a seat or can drive freely. Infrastructure can improve the capacity of a transport network, and make journeys both more pleasant and more productive.

These benefits then translate into tangible outcomes for growth, living standards and wellbeing:



**More efficient labour markets:** Transport links employers and employees - and crucially make more 'matches' possible without employees needing to move house. This helps place the right people in the right jobs, increase labour mobility and allows employers and employees to utilise their skills in full.



**Reduced congestion and air pollution:** Better infrastructure improves public transport options, and means vehicles spend less time idling or travelling at low, inefficient speeds. The equivalent of 40,000 premature deaths are attributable to outdoor air pollution annually, and an estimated £2.7bn was lost in productivity due to air pollution in 2012.<sup>iii iv</sup>



**Better commutes:** By reducing both commuting time and crowding, improved transport infrastructure makes commuting more pleasant. Longer or more crowded commutes are negatively correlated with wellbeing.<sup>v vi</sup> Faster and 'business-conducive' travel (with, for example, reliable phone or wifi signal, and seats to work from) both free up time for other leisure or work activity.



**Urban and regional agglomeration:** By connecting places within regions, better infrastructure allows places to benefit from 'agglomeration' or cluster effects – helping industries to learn from each other and making areas more attractive to potential employees. Research suggests that doubling the number of workers in a city or travel to work area increases productivity by 4%-8%.<sup>vii</sup>



**More competitive markets:** By opening up new international or regional markets for businesses who could not previously reach those potential customers, transport can encourage competition, and therefore lower prices and higher quality products and services. This is true of regional 'exporters' as well as companies that export internationally.<sup>viii ix</sup>



**Unlocked investment:** Better transport links can encourage companies to invest in new or expanded facilities, in the knowledge that their workforce and / or product can easily get to and from the facilities (see Box 1).

## Box 1: Transport investment needed to unlock investment

Leeds Bradford Airport had over 4m passengers in 2018 and is Yorkshire's largest airport. If its growth targets are met, numbers will increase to over 7m passengers by 2030 and its contribution to the local economy will rise from £336m GVA to £724m, with the number of jobs it supports almost doubling, to over 10,000.

However, achieving this in the timeframe is contingent on new and improved transport links enabling better surface access to the airport. A parkway rail station is due to be opened by 2023, with a new link road to follow, but the lack of shorter-term or interim access solutions means the airport's expansion is constrained until this happens. Surface access connectivity is particularly important for airports, as airlines only make decisions on where to open up new routes, particularly long-haul routes, after careful consideration of both onsite and offsite infrastructure. These decisions are taken infrequently, so if the offsite infrastructure is not adequate the route might be opened up elsewhere, and the opportunity will have been lost for the airport.

Source: WPI Economics analysis of ONS / 2011 census<sup>x xi</sup>

Investing in transport infrastructure can also play a role in tackling other pressing issues. In particular, it can unlock land for development, which is an important part of resolving the widely-recognised 'housing crisis' affecting many parts of the country.<sup>xii</sup> This can be because infrastructure projects make new journeys possible, which increases desire to live there (and therefore land values and development viability), or that it means new housing won't overload existing transport systems, which can make development more likely to be approved. Two proposed schemes in London and the South East alone (Crossrail 2 and the Bakerloo Line extension) are expected to enable 225,000 new homes to be built.<sup>xiii xiv</sup>

## Crossrail 2 and the Bakerloo Line extension will unlock 225,000 new homes

Overall, it is clear that England's transport infrastructure is vital for enabling millions of people to travel for work or leisure, and moving goods of all kinds from factories, ports, and airports to other businesses or consumers. This does not mean, however, that there is not room for significant improvement, and in Chapter 2 we will set out what we know about the performance of transport infrastructure in England.

# The current state of transport infrastructure

There are several ways to assess the current state of England's transport infrastructure. No single fact or figure captures the whole picture across different transport modes, across different parts of the country, or for different types of user.

The importance of looking across regions, in particular, is shown by the very different mode use of commuters. For example, London has 20 percentage points fewer commuters who drive to work than any other city.<sup>xv</sup> This shows that increases in road infrastructure delays will affect proportionally fewer Londoners, while they will benefit proportionally more from investment in rail or underground / light rail infrastructure.

Below we show the evidence for transport infrastructure quality when looking at a range of impacts, and how this varies by region and by city.

## Journey delays and crowding

### Delays

The clearest impact of inadequate infrastructure is on journey delays. A survey of North West Business Leadership Team members highlighted this: across a range of measures to improve transport (including reducing congestion, improving inter-urban transport, and integrating transport types) businesses said that the main benefit would be reducing the time taken to transport people and goods, and the consequential productivity benefits.<sup>xvi</sup>

The impact of road delays is felt across the country, with Manchester, London, Reading, and Bristol all seeing average delays per vehicle per mile on locally-managed A roads of over 100 seconds. Using a wider measure of congestion, the National Infrastructure Commission (NIC) has also found that the top 25 congested areas in England are cities, with Manchester having the worst problems outside of London.<sup>xvii</sup>

These road delays will not only affect commuters or people travelling in the course of their daily business; they will also lead to delays in delivery of freight to warehouses, shops, factories, offices, and homes. Three quarters of freight transport within Great Britain is by road,<sup>xviii</sup> so this is an important issue for businesses across the country.

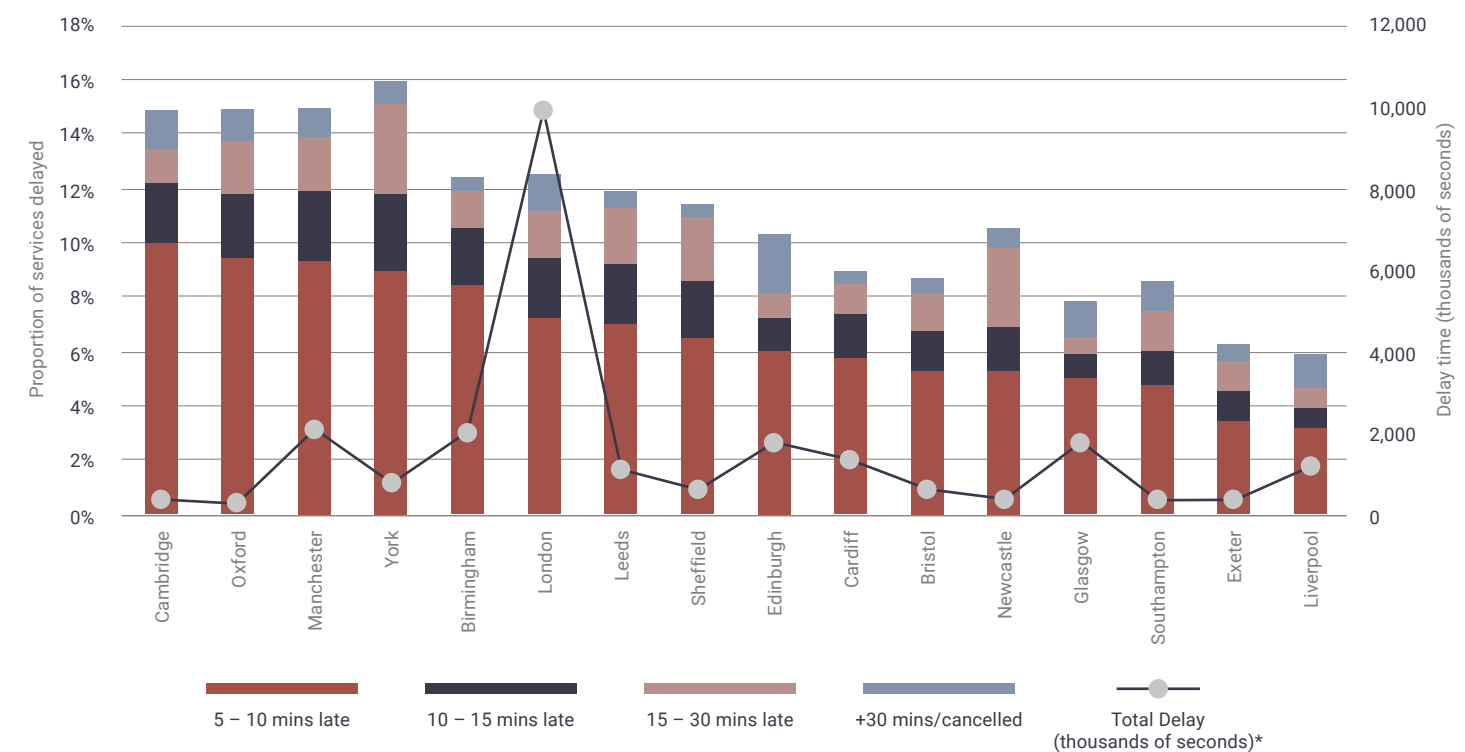
Delays on passenger rail journeys can also cause significant problems. Neither the Department for Transport nor the Office of Rail and Road publish data on delays by cities,<sup>xix</sup> so we have used data from the Open Data Institute covering 11 weeks of journeys to analyse this.

Figure 1: Average seconds per vehicle per mile delay on locally-managed A roads 2018, selected cities



Source: WPI Economics analysis of DfT data<sup>xx</sup>

Figure 2: Delays by city and duration, 7am-10am arrivals



Source: WPI Economics analysis of ODI data<sup>xxi</sup>

\*Includes delays of under five minutes

**...the recent trouble faced by Northern Rail passengers, is estimated to have led to a loss of close to a million hours and imposed a disbenefit of £38m on the Northern Powerhouse.**

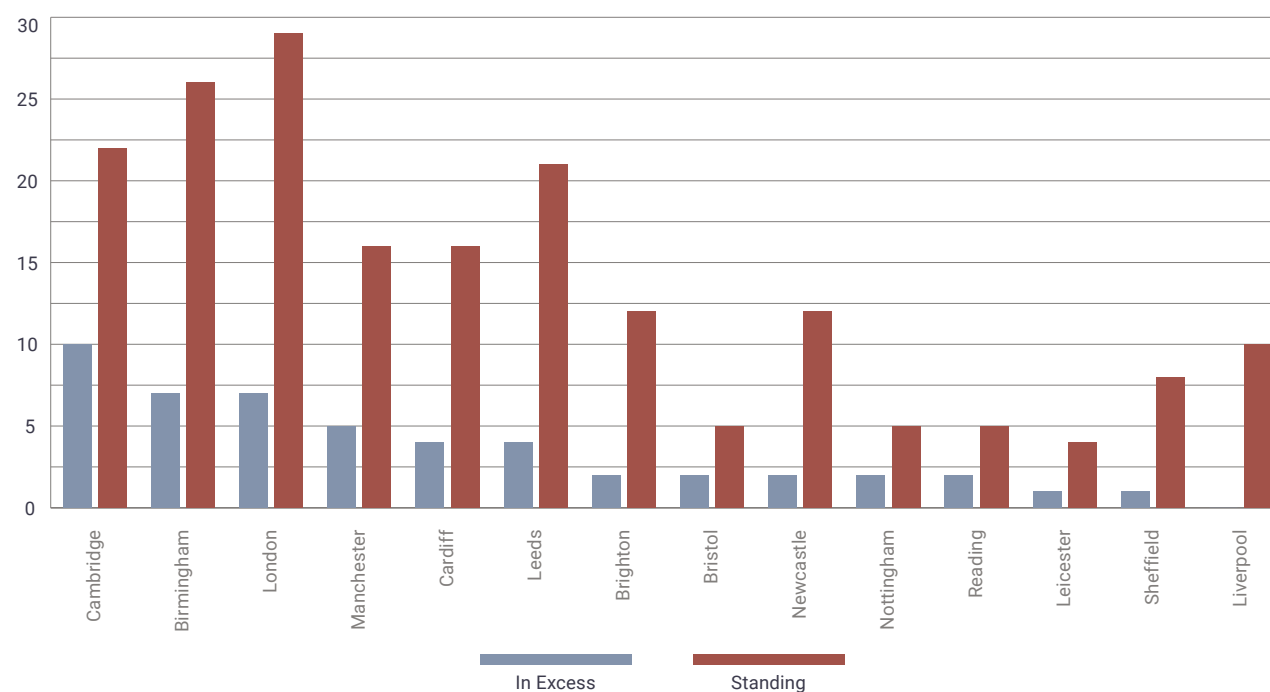
The costs can be significant. For example, the recent trouble faced by Northern Rail passengers, is estimated to have led to a loss of close to a million hours, and imposed a disbenefit of £38m on the Northern Powerhouse (this does not include problems faced by TransPennine Express passengers during the same period).<sup>xxii</sup>

Neither the road nor rail delay data distinguishes by cause of delay, but infrastructure problems are likely to be a major driver; at a national level, 60% of rail delays are attributable to Network Rail. In addition, improvements such as relief routes can help to address delays regardless of their ultimate cause.

### Crowding

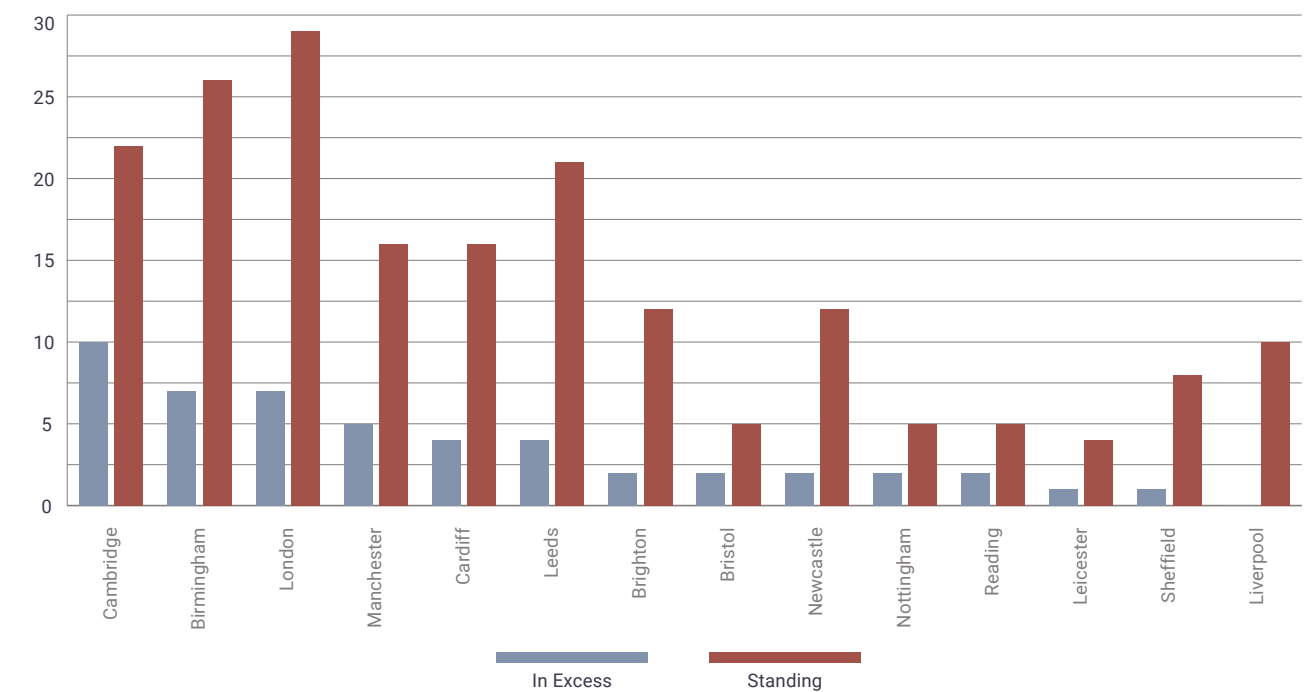
On rail services we can also look at crowding. Delays cause frustration and stress, but even when trains are on time, crowded services can make the journey unpleasant, as well as making it more difficult to work while travelling, which then means longer working days and less family or leisure time, or a less productive workforce.

Figure 3a: Proportion of rail passengers in excess of capacity and standing during one-hour AM peak arrivals, 2018



Source: WPI Economics analysis of DfT data<sup>xxiii</sup>

Figure 3b Proportion of rail passengers in excess of capacity and standing during one-hour PM peak departures, 2018



Source: WPI Economics analysis of DfT data<sup>xxiv</sup>

These charts show that London has relatively high proportions of passengers standing at both peaks, but that other cities (such as Birmingham and Cambridge) have similar issues, and several cities have issues at one or the other. When looking at passengers in excess of capacity, meanwhile, more severe problems than London are seen in Cambridge in the morning peak, and Brighton, Bristol, Nottingham, Cambridge, and Cardiff in the evening peak. Because of the importance of underground travel in London, it is also important to note that the system is regularly severely crowded.<sup>xxv</sup>

### Journeys made harder, or not made at all

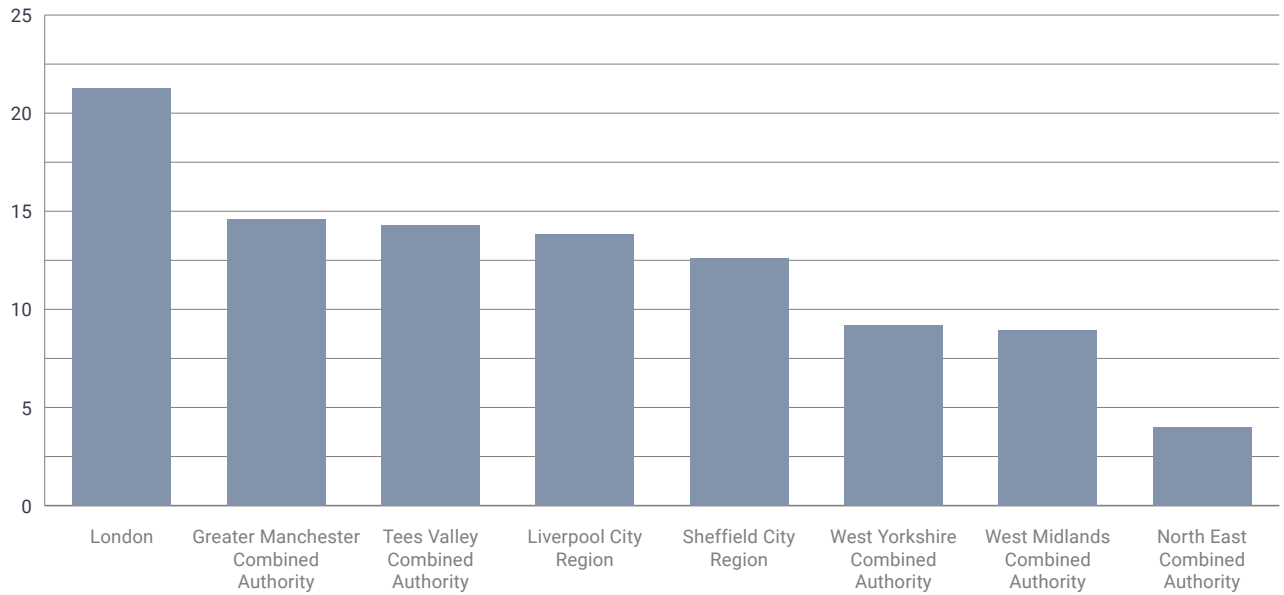
Crowding and delays affect journeys made when infrastructure is already in place. But we can also look at how a lack of adequate transport connectivity affects people's day-to-day lives. This is harder to observe, but the two areas outlined below provide some evidence for the impact of inadequate infrastructure.

### Commuting and workforce mobility

Better transport infrastructure can enable people to commute further (in miles), but poor infrastructure can also lengthen the duration of commutes.

One way of looking at the effect of transport infrastructure on commutes is to look at the decisions people make with regards to where they work and live. A simple summary of this can be seen by looking at the proportion of a region's workforce that do not live in the region. Figure 4 shows that London has by far the highest proportion of workers who live outside the region, in part facilitated by the already high quality of transport links into the region that both encourages businesses to set up there and encourages people to commute.

Figure 4: Proportion of workers who do not also live in the region, London / combined authorities



Source: WPI Economics analysis of ONS / 2011 census<sup>xxvi</sup>

These differences in ‘pull’ are not solely down to transport infrastructure. Some of these differences might also partly be explained by the region size or geography (for example, if a major economic centre is close to the region boundary), or economic factors such as house prices. Nonetheless the idea that transport infrastructure is holding back movements between cities and regions is supported by other analysis.<sup>xxvii xxviii xxix</sup>

As the case study in Box 2 shows, this is not only an issue for workers looking for new jobs; it can also affect an individual employer with offices in more than one location.

### Box 2: Poor infrastructure affecting business ability to promote staff

In early 2018, Barclays had a director-level vacancy in its Manchester office. It had staff in Leeds and Manchester who were at a stage where they could apply, but none did so due to concerns about the commute, whether by road or by rail.

Barclays eventually filled the position, but were not able to choose from as wide a field of candidates as they had hoped – and those staff in Leeds were prevented from taking the next step in their careers by the state of transport infrastructure in the North.

Similar issues were raised by other participants at our roundtables. One organisation noted that they strongly encouraged staff to live in the city where they worked, due to concerns about the reliability of the commute from elsewhere.

Source: Private communication, used with permission

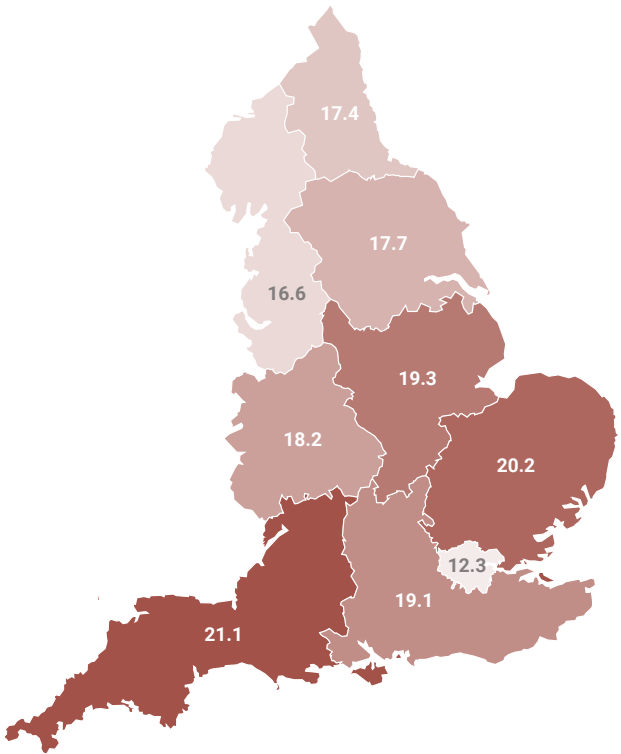
None of this is to say that all regions should aspire to match London in length of commute, or in proportion of ‘out-of-region’ workforce. There are costs as well as benefits to this, with regard to placemaking, public health, and life satisfaction; it is for local and regional decision-makers to weigh up these trade-offs.

It is, however, a clear indication of the sorts of benefits that might be delivered if other regions and cities across the UK had a similar quality of transport infrastructure to offer commuters. For example, analysis of the potential benefits of Northern Powerhouse Rail suggests that it would increase the number of people with access to the four core cities or Manchester Airport within 90 minutes to 7 million (from 2 million today).

### Access to local amenities

One key purpose of transport infrastructure is to connect people to jobs. However, infrastructure is not just about jobs, but also about connecting people to GPs, schools, hospitals, food stores, and town centres. Figure 5 shows the significant disparities across different regions in the average length of time it takes people to reach eight key services (medium sized centres of employment with 500 to 4,999 jobs, primary schools, secondary schools, further education, GPs, hospitals, food stores and town centres) by public transport or walking.<sup>xxx</sup>

Figure 5: Average minimum travel time to reach eight key services by public transport or walking, 2016 (minutes)



Source: WPI Economics analysis of DfT data

### Perceptions of infrastructure

As well as the reality of infrastructure performance, perceptions of infrastructure quality also matter. They matter nationally for people deciding where to live and for businesses deciding where to set up or expand, and internationally for global companies considering where to invest.

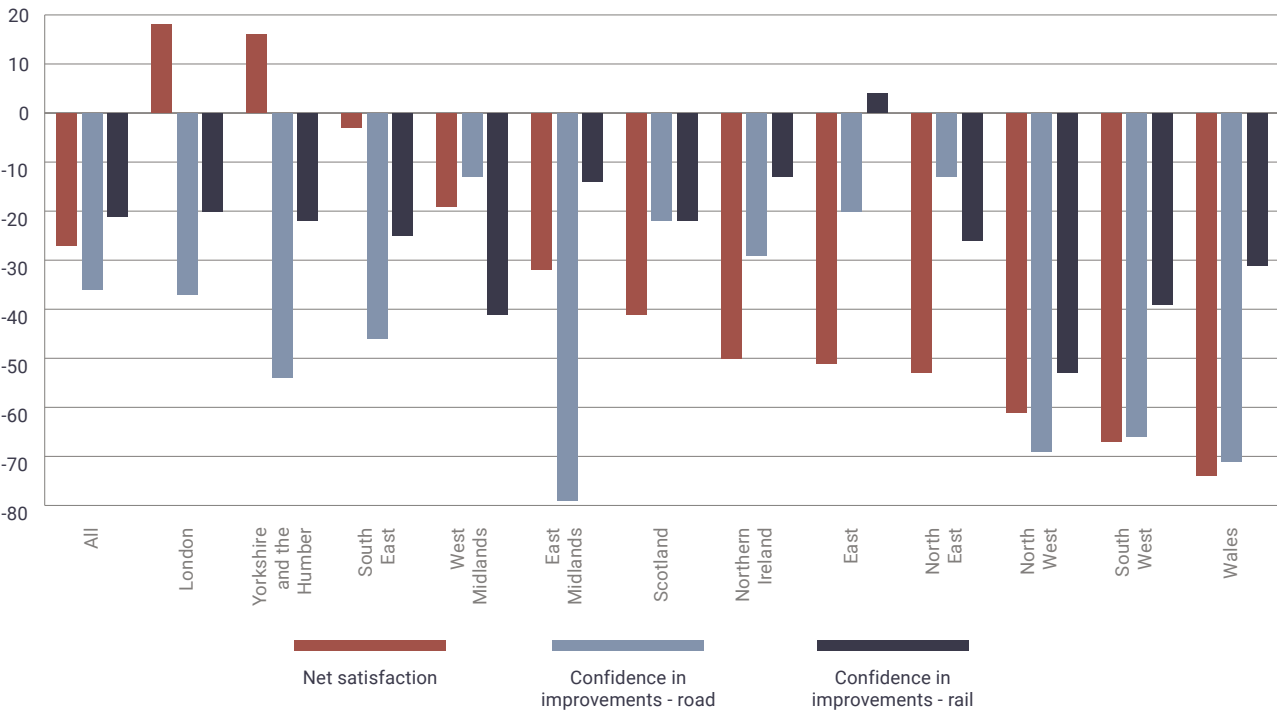


Perceptions within the UK

Perhaps unsurprisingly, the highest levels of net dissatisfaction with infrastructure are found in more rural parts of the UK, although the North West and North East are not far behind. Even those regions with net satisfaction with their infrastructure have close to a third of respondents who are dissatisfied, demonstrating the need for improvements across the country.

Another important factor is business confidence in future investment. Figure 6 also shows that businesses across the UK lack confidence that infrastructure investment will lead to improvements over the course of this Parliament.

Figure 6: Business net satisfaction with regional infrastructure, and confidence in improvements



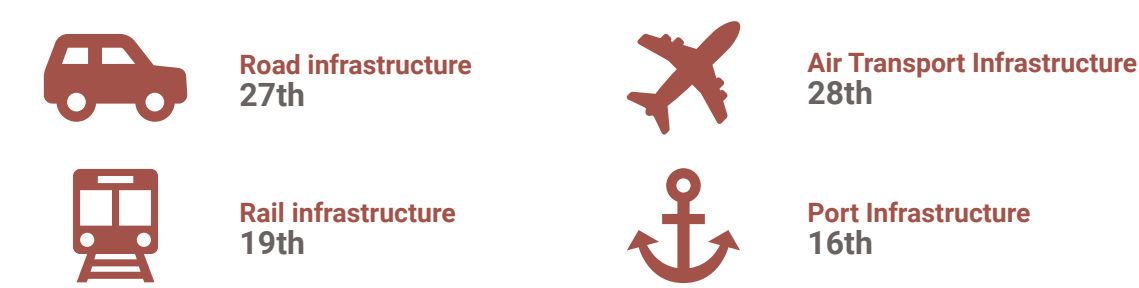
Source: WPI Economics analysis of CBI data<sup>xxxii</sup>

Together these show that UK businesses are neither satisfied with, nor confident about, the future prospects of transport infrastructure. This lack of confidence is likely to hold back investment in the UK, so it should be of clear concern to policymakers.

Global perceptions

Every year, the World Economic Forum surveys businesses around the world to create its Global Competitiveness Index. In its 2018 report, the UK ranked 8th overall for its competitiveness, but its ranking on transport infrastructure was notably lower, as Figure 7 demonstrates, suggesting that transport infrastructure is one factor holding the UK back from being even more globally competitive.

Figure 7: Ranking of United Kingdom for infrastructure quality



Source: World Economic Forum<sup>xxxiii</sup>

Together, national and global perceptions of infrastructure suggest a significant need to improve business perceptions of existing infrastructure and to develop confidence that necessary improvements will be delivered.

A need for investment across the country

It is clear from the analysis in this section that significant issues exist across the country and that there is a clear and urgent need for action in all parts of England.

The businesses we spoke to at our roundtables all recognised this; they emphasised the fact that, by expanding customer bases and access to suppliers, improved links to and in other regions are vital to the success of businesses. Our discussions in Leeds and Liverpool also demonstrated the commitment of businesses across the country to supporting and driving growth in the capital; both as a way of attracting international investment across the country and because of London's status as one of just three UK regions (alongside the East and South East) with a net fiscal surplus.<sup>xxxiii</sup> Equally, discussions in London focused on the obvious need to boost transport investment in other parts of the country and, in doing so, drive productivity increases and growth.

This means that, while there was an understandable focus on the need for investment in their own region, there was also a desire to invest right across the country in local, regional, pan-regional and national schemes.



# Spotlight on the North West



Workers in the North West commute for 29 minutes and travel 8.2 miles on average



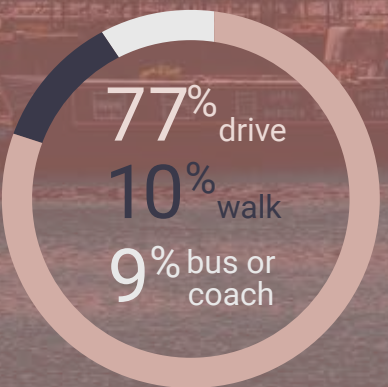
In the one-hour morning peak, 21% of passengers into Manchester stand



The average delay on Liverpool's locally- managed A roads is 96 seconds per vehicle per mile



Between 7am and 10am, 15% of trains arriving into Manchester are delayed by 5 minutes or more



The top three main methods of commute for residents of the North West are driving (77%), walking (10%), and bus, coach, or private bus (9%)



61% of people in the North West are a 30-minute or less journey by walking or public transport from a large employment centre

Businesses in the North West have a strongly negative view of regional transport infrastructure, and strongly believe greater devolution would improve their transport infrastructure



# Spotlight on Leeds and West Yorkshire



Workers in Yorkshire and the Humber commute for 25 minutes and travel 8 miles on average



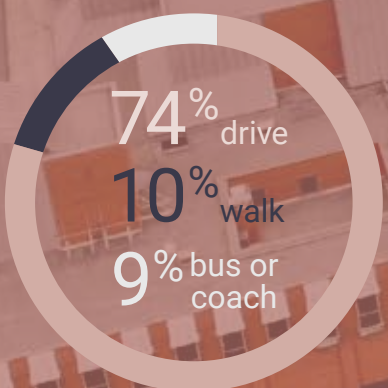
In the one-hour morning peak, 15% of passengers into Leeds stand



The average delay on Bradford's locally-managed A roads is 64 seconds per vehicle per mile



Between 7am and 10am, 12% of trains arriving into Leeds are delayed by 5 minutes or more



The top three main methods of commute for Bradford residents are driving (74%), walking (10%), and train (9%)



56% of people in Yorkshire and the Humber are a 30-minute or less journey by walking or public transport from a large employment centre

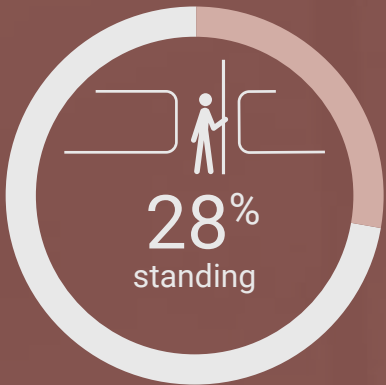
Businesses in Yorkshire and the Humber have a net positive view of regional transport infrastructure, and strongly believe greater devolution would improve their transport infrastructure



# Spotlight on London



London workers commute for 46 minutes and travel 11.3 miles on average



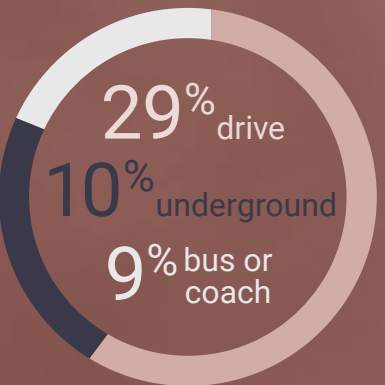
In the one-hour morning peak, 28% of passengers into London terminals stand



The average delay on London's locally-managed A roads is 102 seconds per vehicle per mile



Between 7am and 10am, 12% of trains arriving into London are delayed by 5 minutes or more



The top three main methods of commute for London residents are driving (29%), underground, light rail, or tram (25%), and bus, coach, or private coach (15%)



76% of people in London are a 30-minute or less journey by walking or public transport from a large employment centre



Businesses in London have a net positive view of regional transport infrastructure, and on balance believe greater devolution would improve their transport infrastructure

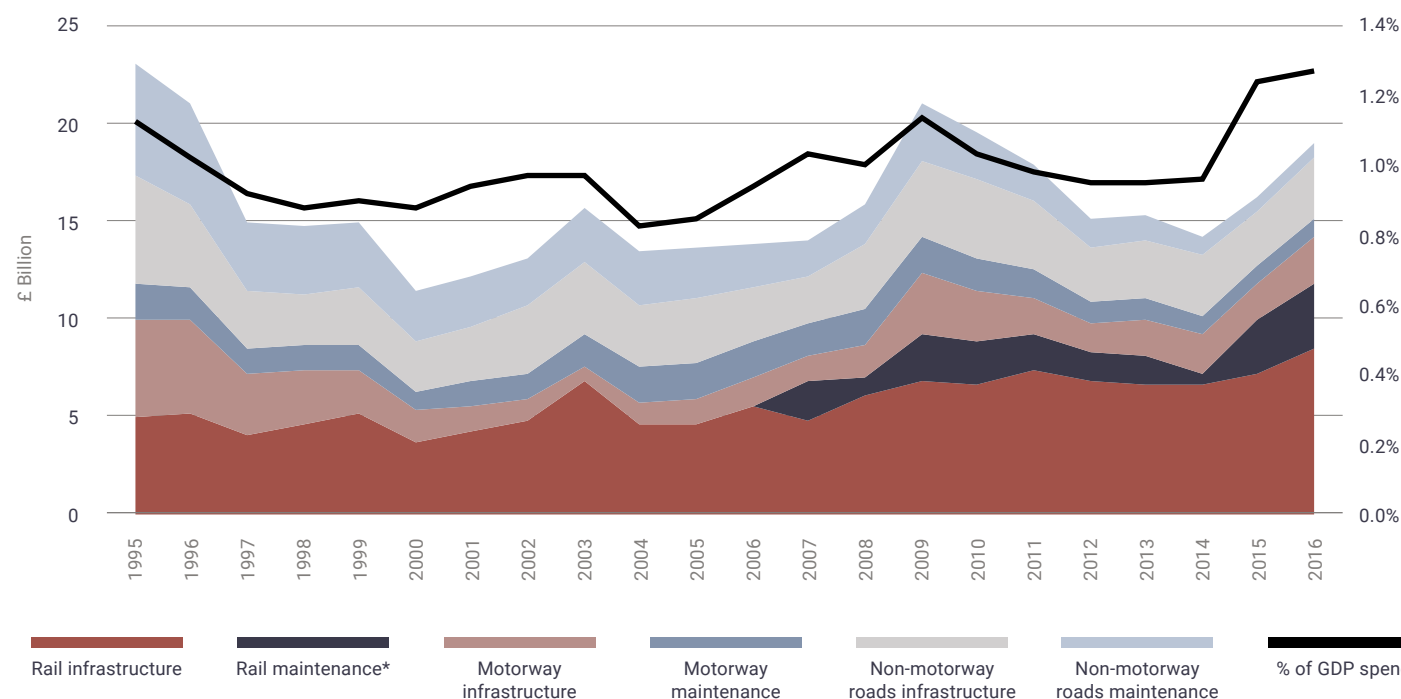
## CHAPTER 3 Key areas for action

The previous chapters have highlighted business attitudes towards, and key concerns about, transport infrastructure across England. Throughout the course of this work we have consistently heard stories about the problems transport infrastructure causes for people and businesses and their frustration that more cannot be done quickly to provide the country with world-class infrastructure. But why is this the case? Our roundtables, conversations with stakeholders, and wider analysis identified several factors that together are holding England's infrastructure back.

### Historical underinvestment

According to the OECD, in 2016 the UK spent £29.6bn on road and rail infrastructure investment and maintenance. On investment alone, this was 0.93% of GDP; if maintenance was also included, this rose to 1.27% (comparable to the NIC's fiscal remit for all infrastructure, of which the vast majority is transport<sup>1</sup>).

Figure 8: UK road and rail infrastructure spending, 2016 prices



Source: WPI Economics analysis of OCED data<sup>xxiv</sup>

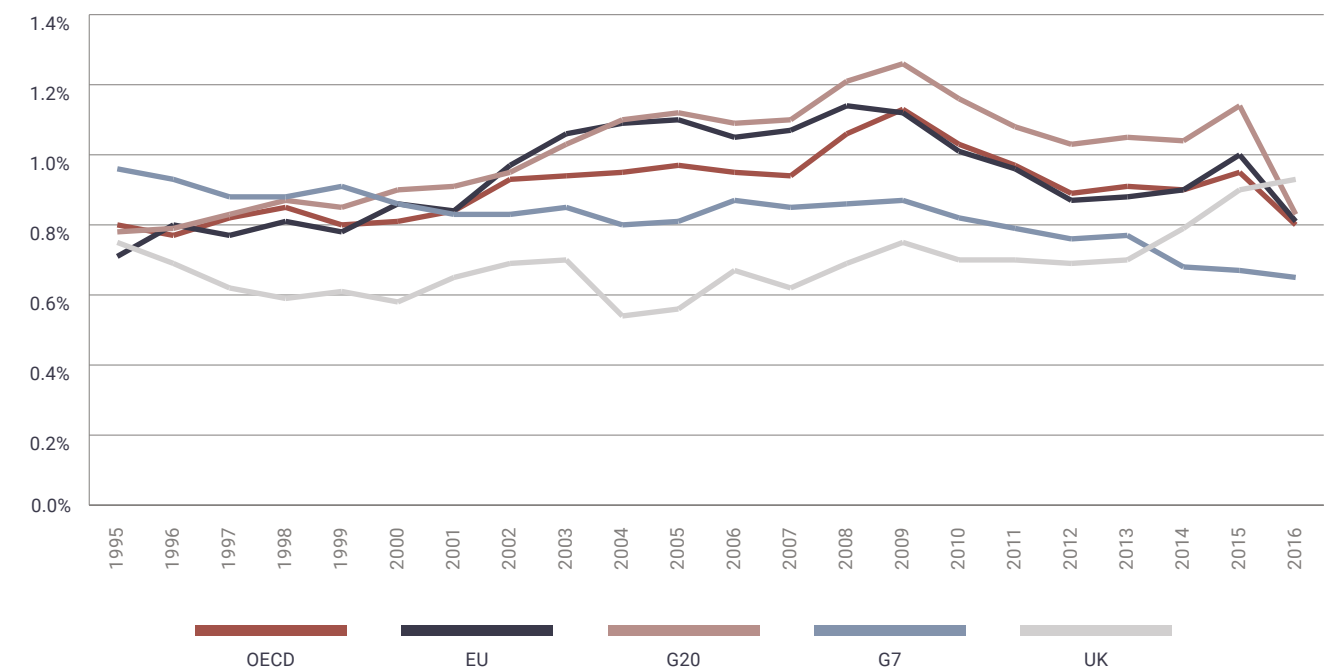
Notes: \*no data available before 2007. Chart only includes road and rail as the majority of other investments are made by the private sector

<sup>1</sup> This is in part because other major infrastructure investment areas are off-balance sheet (such as energy, which is passed through to customer bills)

The UK's spend on new asset investment in recent years compares well to other similar economies. For the last five years for which data is available, the UK spent a greater proportion of GDP on inland transport infrastructure investment than Italy, Germany, Canada, and the USA, although France and Japan both spent more.

However, this masks a much lower historic rate of investment as a proportion of GDP. Figure 9 shows that, prior to 2014, the UK's investment in road and rail infrastructure had consistently lagged behind other major competitors as a percentage of national GDP.

Figure 9: Investment on road and rail infrastructure, over time (% GDP, selected countries)



Source: WPI Economics analysis of OCED data<sup>xxv</sup>

This has clearly been accepted as problematic by the Government, which has set the National Infrastructure Commission (NIC) a fiscal remit of between 1% and 1.2% of GDP up to 2050. The potential size of the impact of previous underinvestment can be seen against this new benchmark. Between 1995 and 2016, if at least 1.2% of GDP had been spent on transport infrastructure investment and maintenance, close to an additional £80bn would have been invested in the UK's roads and railways.

**If we had spent 1.2% of GDP on transport infrastructure between 1995 and 2016, we would have invested nearly £80bn more.**

Source: WPI Economics, NIC

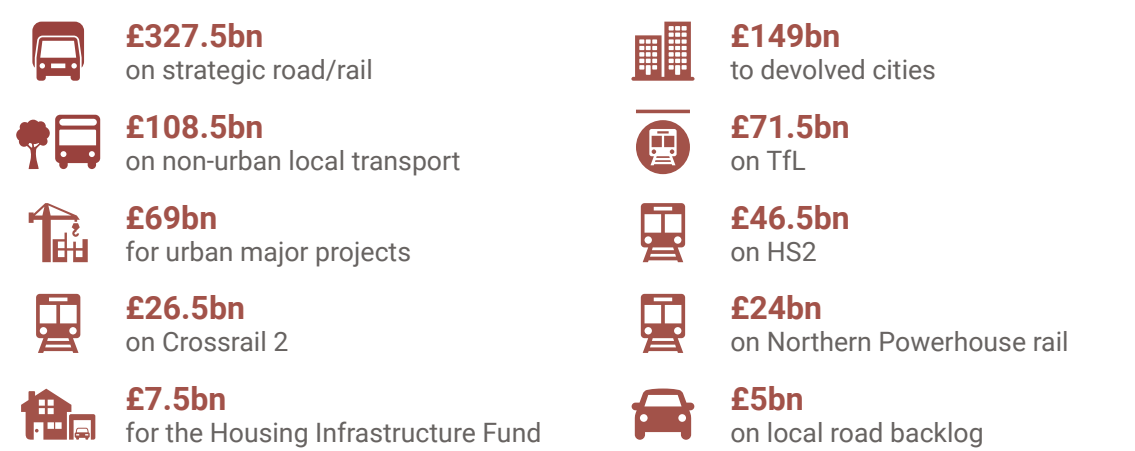


International comparisons are also challenging because the needs and costs of development of infrastructure are varied. For example, relative to comparable EU countries, land values in the UK are inflated by the fact that we are relatively densely populated, meaning that any given infrastructure project may be comparably more expensive. Equally, as an investment, expenditure on transport infrastructure should be judged on its return (both economic and social). In both cases, there is a strong argument that we may need to spend more on infrastructure projects (in absolute terms and as a proportion of GDP) than other countries.

(Uncertainty in the) investment pipeline

The National Infrastructure Commission (NIC) published its National Infrastructure Assessment in mid-2018.<sup>xxxvi</sup> This, set out its proposals for infrastructure investment within its fiscal remit of between 1% and 1.2% of GDP up to 2050. The vast majority of this proposed spending was on transport infrastructure investment and maintenance. Figure 10 breaks this spending down by category.

Figure 10:  
NIC-proposed spending on transport infrastructure to 2050, 2018/19 prices<sup>2</sup>



Source: WPI Economics analysis of the National Infrastructure Assessment<sup>xxxvii</sup>  
Note: Strategic road / rail includes separated Network Rail and Highways England budgets until 2030, when NIC combines them into a single 'Strategic Road / Rail' pot.

The potential benefits of some of these schemes are significant. For example, on the next page we outline some of the potential benefits of Crossrail 2 and Northern Powerhouse Rail. The intent here is obviously strong, but participants throughout this project highlighted real concerns about the political posturing, positioning and uncertainty that surround many of these critical investments (and others, including a third runway at Heathrow which, although privately financed, require approval by government) and reported that this negatively impacted on their confidence of growth in the future.

<sup>2</sup> The figure for HS2 is as published in the National Infrastructure Assessment, and does not attempt to reflect the announcement made on 3rd September 2019 (<https://www.gov.uk/government/speeches/hs2-update-3-september-2019>) that the total cost may rise to £81-£88 billion in 2019 prices, from a total budget (including costs already incurred) of £62.4 billion.

**High Speed 2 (HS2)** will free up capacity on railways in Britain by providing new, fast rail links, and directly connect eight of Britain's ten largest cities. It has three phases:

- **Phase 1** of the project will connect London and the Midlands, with the first passengers due to travel on the service between 2028 and 2031.
- **Phase 2** of the project will connect the Midlands and Crewe, with the first passengers due to travel on the service between 2028 and 2031.
- **Phase 2b** of the project will connect the Midlands to Leeds, and Crewe to Manchester, with the first passengers due to travel on the service between 2035 and 2040.

Key benefits it will bring include:

- Carrying over 300,000 passengers a day across the rail network.
- Releasing capacity on the West Coast Main Line for additional commuter services to reduce track congestion and train crowding.
- Reducing delays and improving reliability through updated rail infrastructure.
- Faster journeys between Birmingham, Manchester, Sheffield, Leeds, London, Newcastle, Glasgow, Edinburgh and many other towns and cities enabling local and regional economic growth.

**Crossrail 2** would connect national rail networks in Surrey and Hertfordshire, through central London, providing new capacity to crowded parts of the network. The project has yet to be approved, although it was recommended by the National Infrastructure Commission, and could start operation in the 2030s. Key benefits Crossrail 2 is expected to bring include:

- Enabling the development of 200,000 new homes across the region;
- Supporting 60,000 new jobs across the UK supply chain and 200,000 new jobs once completed;
- Increasing London's rail capacity by 10 per cent;
- Bringing 800 stations across the UK within one interchange; and
- Providing additional capacity for up to 270,000 more people to travel into London during peak periods, relieving congestion and over-crowding on Tube and regional rail services.

**Northern Powerhouse Rail** is a major rail infrastructure project planned in the North of England. It would provide significantly improved connectivity between cities in the north, linking the north's six main cities and Manchester Airport, and be delivered over a period of thirty years.

Like Crossrail 2, it has yet to receive formal approval, but it was also recommended by the National Infrastructure Commission in its 2018 National Infrastructure Assessment. Key benefits Northern Powerhouse Rail would bring include:

- Increasing GVA across the North by up to 15% compared to 'business as usual';
- Boosting productivity by 4%; and
- Supporting 850,000 additional jobs across the North.

Northern Powerhouse Rail is only one part of Transport for the North's plans for the Northern economy, which includes a series of pan-Northern transport objectives covering road and rail.



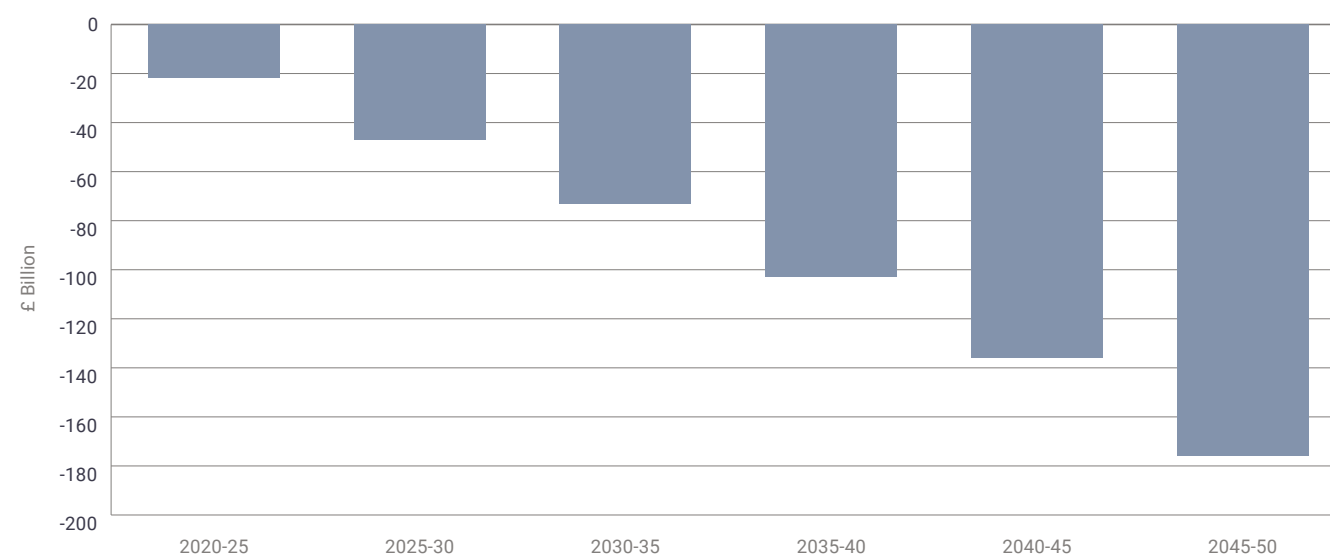
If these concerns about political commitment are warranted, there is a real chance that, while the NIC has outlined strong ambitions, these will not be delivered. In practical terms this could mean that the projects outlined above are not delivered and, as a country, we continue to invest less than is needed in transport infrastructure.

## Spending 1% of GDP on infrastructure rather than 1.2% between 2020 and 2030 would mean close to £50bn less investment.

Source: WPI Economics, NIC

Even if plans change and the NIC's broad fiscal remit is met, we see that the difference between 1% and 1.2% of GDP makes a significant difference. Figure 11 uses the NIC's figures to present scenarios of what different spending choices mean in terms of cumulative investment between now and 2050. It shows that spending 1% of GDP on infrastructure rather than 1.2% would reduce spend by £47bn between now and 2030, rising to £73bn by 2035 and over £100bn by 2040.

Figure 11: Cumulative funding gap compared to spending 1.2% of GDP on transport infrastructure



Source: WPI Economics analysis of the National Infrastructure Assessment<sup>xxviii</sup>

## Too little local, regional and pan-regional responsibility

The effectiveness of infrastructure investment is not just about the overall the size of the investment; decision-making, governance and accountability are all equally important. Businesses we spoke to were frustrated by the lack of decision-making and financial powers that their local, regional and pan-regional leaders had, and the perceived negative impact this has had on their ability to secure the priority investments in their local areas.

Recent years have seen moves to tackle this issue with significant devolution, including the creation of Mayoral Combined Authorities that have a wider range of economic and fiscal powers. There have also been specific policy announcements, including the Transforming Cities Fund, announced in the 2017 Budget and extended in 2018. All of these (and others) are welcome steps towards giving locally-accountable bodies the power to prioritise infrastructure projects that will benefit their regions and meet their priorities. However, there is clearly a strong appetite amongst businesses to go much further.

A range of other experts, commentators and reports have also come to this conclusion and have made recommendations for further devolution of decision-making and financial powers. These include the London Finance Commission, chaired by Professor Tony Travers,<sup>xxix</sup> and a similar principle was endorsed by leaders across the North at the Convention of the North in September 2018. Most recently, the National Infrastructure Commission has set out a programme of devolution of infrastructure funding to accompany its spending proposals (box 3).

### Box 3: National Infrastructure Commission devolution proposals

#### Devolution of powers

##### By mid-2019:

- Government should set out devolved infrastructure budgets for individual cities for 2021-26.

##### By 2020:

- Government should pass legislation requiring cities to be given regularly five-year infrastructure budgets.

##### By 2021:

- Metro mayors and city leaders should develop and implement long-term integrated strategies for transport, employment, and housing; and
- Government should ensure city leaders have the right powers to deliver these strategies – including the power for Metro Mayors to take decisions on major housing development sites.

Source: National Infrastructure Commission<sup>xl</sup>

These measures would provide greater control of local and regional decision-making to accountable bodies that know their areas. They are very much in line with what businesses suggested would be effective and, if successful, could clearly deliver a real change in the effectiveness of decision-making and delivery of critical transport infrastructure across the country. However, our discussions with experts and policymakers highlighted a range of challenges to devolution. Three recurring themes were that:

1. Existing roles are split between a wide range of organisations with responsibilities for different areas or modes of transport, including national bodies such as Highways England or Network Rail, sub-national transport bodies such as Transport for the North, and regional bodies such as Transport for Greater Manchester. And within those bodies there can be a range of functions that need to work together coherently, such as Network Rail’s signalling, land and property, and track functions. Unless managed effectively, devolution risks further confusing an already complex picture;
2. Current structures are supported by a range of experienced experts in policy, finance, delivery and management (amongst others). Further devolution would ultimately require many of these functions to be taken on by local, regional and pan-regional bodies, and there was a concern that, in some cases, such bodies lacked the experience and capacity to do so. This was seen as a significant delivery risk; and
3. Devolution of decision-making is not appropriate for all schemes, particularly those that cover large parts of the country, such as the core HS2 route, and there will also still be a role for central government in setting some overarching national priorities that devolved authorities need to meet. Additionally, in some cases investment in local infrastructure can deliver national benefits (see Box 4), so some local schemes could still be decided upon centrally if they meet central government’s priorities.

Whilst very real, it is apparent that none of these issues are insurmountable. Of course, concerns around experience and capacity would need to be addressed, and some decisions would need to continue to be taken centrally. However, even where decision-making remains centralised, this needs to be done following engagement with local and regional bodies. National schemes can have major impacts on local areas, as the current debate about whether Northern Powerhouse Rail goes through Bradford City Centre demonstrates,<sup>xlii</sup> and links between national and regional or local infrastructure are essential to unlock the full range of benefits, as Sir John Armitt, Chair of the National Infrastructure Commission, recently made clear.<sup>xliii</sup>

Overall, it is also clear that, rather than being an argument for the maintenance of the status quo, the existing complex nature of the system and continued delays and underinvestment demonstrate that this is a system that is very much in need of reform.

### Box 4: Local infrastructure, national benefits

As many as six out of ten deep sea containers end up nearer to Liverpool than the South – but 90% are handled through Southern ports. This not only means that port employment and activity is more concentrated in the South than necessary; it also means up to 200 million more miles of HGV traffic on Britain’s roads, causing congestion, pollution, and damaging roads.

If the Port of Liverpool could take more of this freight, these harmful effects could be avoided, but at the moment this is constrained by the quality of road and rail access from the Port of Liverpool to other destinations within the UK. Improving these links, and in particular freeing up freight paths, could deliver benefits across the UK.

Source: Peel Ports<sup>xliii</sup>

### Increasing financial control

As well as having greater control of decisions, there were strong arguments from businesses that local and regional governments should have a greater role in managing and raising finances for investment in transport infrastructure.

On the latter, businesses were clear that it was not only the taxpayer that should invest in transport infrastructure. For example, for some areas of infrastructure (such as energy) this can be funded through household bills, which significantly reduces the central government spend required.

For transport infrastructure, greater investment is not only felt by the people who will have new, more reliable and faster journeys available to them - it also benefits businesses by improving the infrastructure that they rely on. So there is a strong argument that businesses, and local populations, that benefit should contribute to the cost of funding these projects. There are, of course, historic and ongoing examples that include the Workplace Parking Levy in Nottingham (used to fund transport upgrades), the Mersey and Tyne Tunnels, Crossrail 1 and the Thames Tideway Tunnel.

However, despite these examples, on the whole, local and regional government is currently highly constrained in its ability to raise and manage finances for infrastructure investment.

For example:

- Grants and funds received from central government (e.g. Local Growth Fund, “Gain Share” and Transforming Cities Fund) can come with strict stipulations on how and when the money can be spent. Whilst this might not seem particularly problematic, given the long-term nature of transport infrastructure investment, it is vital that finances are used strategically, rather than simply to meet arbitrary spending requirements (e.g. within a particular three-year period).
- Recent attempts to increase the limited range of financial powers (e.g. of Combined Authorities) have had limited impact and potentially important Levying powers within the Local Government Finance Bill 2017 (for example, the Mayoral Infrastructure Levy and the creation of new Enterprise Zones), did not come in to place because the Bill fell as a result of the General Election. Powers, including borrowing powers, that do exist have also proven harder to use in practice. For example, whilst the ability to borrow is helpful, repayments needs to be financed in future, meaning that a revenue stream also needs to be created. This is a particular issue outside London, as despite recent reforms and extensions of greater powers to Combined Authorities, TfL still has greater flexibility to raise and manage local funds and set its own priorities.<sup>xliv</sup>

Both of these points mean that, if local areas are going to have both greater control of existing funds and the ability to raise funds for infrastructure investment, new ideas and approaches will need to be taken forward.

This was recognised by our roundtable participants and interviewees, who had no expectation of ‘something for nothing’ and were keen to explore in more depth how they could meaningfully contribute. A recent example has been Government’s challenge to London to contribute half of the cost of Crossrail 2, and London businesses’ response to this by setting out a range of options that could help to meet that challenge (see box 5).<sup>xlv</sup>

Box 5: Funding and financing options put forward for Crossrail 2

- Net operating surplus once services are in operation
- Business Rates Supplement
- Developer contributions through a Mayoral Community Infrastructure Levy
- Over-station development
- Current fares income
- Council tax
- Sharing future economic growth from a scheme
- Land value capture
- Re-assessing financing assumptions
- Use of private finance to reduce upfront costs
- Asset sales

Source: London First<sup>xlv</sup>

Tailoring financial contributions

It is immediately clear that not all of these mechanisms will always be appropriate or achievable for every infrastructure project. In others, a number of mechanisms could be used in conjunction, or alternative mechanisms may be available, as Box 6 shows. This example follows a similar principle of ‘sharing in future growth’, where growth is measured as increased revenue from passenger numbers rather than in increased Exchequer receipts.

Box 6: Potential alternative funding mechanism

The rail line to Stansted Airport has been identified as in need of significant investment. Since 2005, average journey times from Liverpool Street have increased by 10 minutes, and the proportion of Stansted passengers accessing the airport by rail has dropped by eight percentage points in the same period.

One option for funding the required improvements could be to open the farebox, and allow Stansted, in return for a contribution to the infrastructure development, to take a share of the increased rail ticket sales on the Stansted Express that would follow.

Source: Transport Select Committee,<sup>xvii</sup> Manchester Airports Group<sup>xviii</sup>

However, alongside the recognition of the need for co-funding, businesses were also clear that the expectations placed on regions to co-fund their infrastructure need to be realistic. For example, in areas less-densely populated than London and where land values and potential uplifts in value may be lower (while still significant), the ability to raise money from rate payers and those seeing land value uplift is reduced.

It is also clear that existing inadequate infrastructure is part of what has held regions outside of London back in recent decades, and this poor growth and lower consequential ability to pay cannot be used as a reason not to fund necessary and valuable projects. Indeed, if this happened, those regional inequalities would be locked in for future generations. It is these considerations that partly inform the National Infrastructure Commission’s recommendation that cities outside London receive an additional £43bn by 2040 for investment in urban transport.<sup>xlix</sup>

Overall, this suggests that across the country, aside from the choice of co-payment mechanism, there are likely to be two axes against which the scale and nature of co-payment should be flexed, depending on the location:

- **Scale of co-payment:** Projects in less densely populated areas, with lower existing levels of growth and / or gross value added per capita are likely to be more weighted towards central government funding, rather than local funding; and
- **Timing of co-payment:** Projects in less densely populated areas, with lower existing levels of growth and / or gross value added per capita are likely to be more weighted towards ongoing contributions once a project is complete than upfront contributions.

Making decisions on costs and benefits

Any devolution of decision-making and financial powers to local, regional and pan-regional bodies will require these bodies to make clear and transparent decisions over the projects they will take forward. For central government project funding, the Department for Transport uses the approach set out in their Transport Appraisal Guidance (WEBTag) to assess and appraise projects.<sup>l</sup> Whilst it would be possible to continue to use this approach for regional as well as national projects, this was seen as unhelpful by businesses who cited WEBTag as a block to infrastructure investment outside of the South East because of the weight it places on immediate and highly certain benefits.

It was argued that this meant that projects that upgrade the speed or capacity of existing routes have an in-built advantage over projects that create new links, where usage levels are uncertain and will take time to be realised while travel patterns adjust. This could risk giving priority of national funding to projects that primarily benefit London given the size of its population and existing passenger base, and priority of regional funds to projects that increase or improve existing capacity.

In some respects, these concerns are unwarranted. Transformational projects can be, and have been, taken forward under current guidance. For example, the Government’s Transport Investment Strategy identifies four key strategic priorities for its investment:<sup>li</sup>

- Create a more reliable, less congested, and better-connected transport network that works for the users who rely on it;
- Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities;
- Enhance our global competitiveness by making Britain a more attractive place to trade and invest; and
- Support the creation of new housing.

A national project that has uncertain or intangible economic benefits may still, for example, strongly support the creation of new housing, and therefore still pass a Government appraisal. However, decisions about housing, economic development and transport are often split between several Government bodies which means that decision-making can be slow and fragmented. Where a transport scheme is part of an integrated economic development strategy or unlocks housing development, the benefits of the entire plan



need to be considered in the round and fragmentation of decision-making avoided.

There is evidence from existing transformational schemes that they can deliver benefits far beyond those indicated by a cost-benefit analysis (see Box 7) and the Institute for Government has argued that research on cost-benefit analysis practices should focus on the dynamic impacts of investment.<sup>lii</sup>

Box 7: The Jubilee Line Extension

The Jubilee Line Extension, which extended the line from Green Park to Stratford, was opened in 1999. A 1991 study gave it a transport benefit cost ratio (BCR) of 0.95:1, with non-transport benefits of 0.8:1, meaning a total BCR of 1.75:1.

In 2004, however, after the extension had opened, a further study estimated its cost-benefit ratio to be considerably higher, at a total of 2.75:1, with 64% of this benefit coming from non-transport benefits. This shows the transformative benefit infrastructure investment can bring beyond just transport benefits – as well as the risk of undercounting these benefits.

Source: Eddington<sup>liii</sup> and Banister<sup>liv</sup>

For those projects that still require a decision from central government, improving such practices could bring significant benefits to decision-making quality. However, given the need to develop tools and approaches to support decisions on national to local schemes it is likely that more will need to be done to deliver a step-change in decision-making processes.

A lack of long-term confidence and certainty

Securing funding and getting approval for infrastructure projects is only the start; the challenge then is to see the scheme through to the end. This is not always a given. Schemes can overrun in time or cost, and changing political leadership can put projects at risk, particularly for controversial, large and long-term projects.

Among our roundtable participants there was some uncertainty even about whether already-approved projects such as HS2 or the third runway at Heathrow will be delivered - never mind Crossrail 2 or Northern Powerhouse Rail.

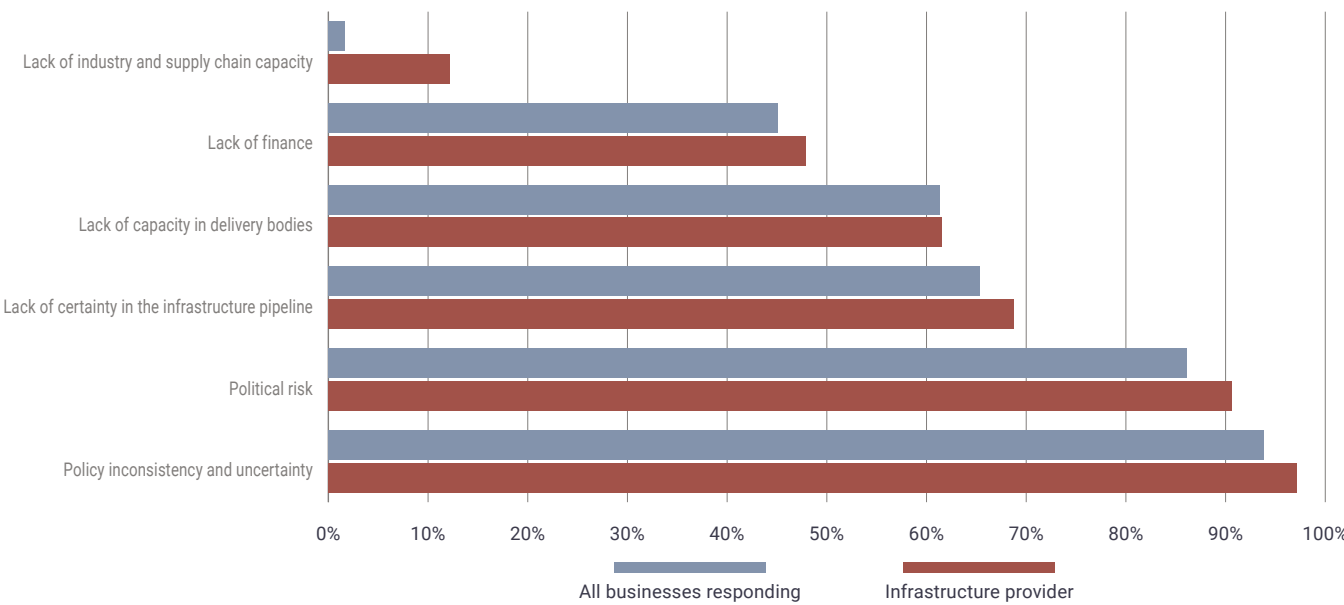
This was a serious concern for participants, who were highly supportive of both HS2 and Northern Powerhouse Rail. As a North-South rail ‘spine’, businesses felt that HS2 is crucial in its own right as well as for making other schemes possible and maximising the potential benefits of schemes such as Northern Powerhouse Rail. As such, suggestions in 2018 that Phase 2b of HS2, which would run between Crewe-Manchester and West Midlands-Leeds, could be cancelled were met with alarm. These can only have been exacerbated by the recent announcement by the Transport Secretary of a review of the entire HS2 project chaired by Douglas Oakervee. This review will inform a government decision on whether and how to proceed and includes in its terms of reference the potential to reduce the scope of the project including building only Phase 1.

This continued uncertainty is frustrating for businesses and local people, who want to know that the promised benefits will be realised, and when – in part because businesses may make investment decisions on the basis of expected infrastructure improvements. It is also likely to drive up the cost of delivering future projects, as the companies delivering these need to price in more risk to their bids.

This uncertainty is also seen in survey data. When asked about the factors holding back infrastructure improvement the three top net factors businesses cited were policy inconsistency and uncertainty, political risk, and lack of certainty in the infrastructure pipeline.

As a North-South rail ‘spine’, businesses felt that HS2 is crucial in its own right as well as for maximising the potential benefits of schemes such as Northern Powerhouse Rail.

Figure 12: Factors (net) holding back infrastructure improvement



Source: CBI<sup>lv</sup>

A lack of certainty also reduces the capacity for the infrastructure sector to undertake multiple projects simultaneously. Infrastructure projects need engineering capacity, architectural, and project management skills to succeed, as well as materials. We heard, for example, that delays to securing funding for Crossrail 2 risks losing vital skills and expertise from engineering, who rather than moving from Crossrail 1 to Crossrail 2 are currently working abroad.

Greater certainty is needed to provide infrastructure companies with the confidence that setting up a base in the UK will provide a steady stream of projects to compete for, and to give time for skilled workers to be trained (whether electrification engineers, civil engineers, planning professionals, etc). The UK is increasingly competing in a global market for these companies, so certainty of longevity of decision-making is vital if companies are to commit to the forward planning and the opportunity cost that major infrastructure projects require.

A long-term plan gives the whole sector the time and the confidence to plan, respond, and invest. Another option that could be explored alongside this is to separate projects into discrete phases or chunks, to help them progress more quickly. This may be particularly true for initiatives like Northern Powerhouse Rail (which is a programme of projects, rather than a single project), but could also be explored for projects such as Crossrail 2.

CHAPTER 4

# Recommendations

This report has shown the current need for further infrastructure investment across England, and the tangible impacts inadequate infrastructure has on people and businesses. There are clearly many areas where change is needed, but our recommendations below focus on the key foundational elements of a high-performing infrastructure system.

### Funding levels

**Sufficient funding is essential for infrastructure. Government has set the NIC’s fiscal remit at 1-1.2% of GDP; it should now go beyond that and use the upcoming Spending Review to commit to a minimum of 1.2%.**

If the Government committed to this floor, there would be the obvious question of what would happen if this were not spent. Lower spend in any one year should not be an immediate concern, as spending profiles should not be dictated by an arbitrary target. However, where realised spending is consistently below 1.2% with no clear strategy for increased spending in future years, a mechanism should be developed to ringfence the underspend and devolve the budget to regional authorities to spend on meeting local priorities.

### Boosting confidence

**Government should commit to taking forward HS2 and NPR**

As well as a lack of confidence that Government will invest enough, there is significant uncertainty among businesses as to whether the later phases of HS2 will go ahead, as well as other major projects like Crossrail 2, Northern Powerhouse Rail and the third runway at Heathrow. This causes frustration and harms confidence in future improvements, which in turn affects investment decisions and holds back growth. It also hinders plans for investment in regional and local schemes that will be needed to make the most of these national and pan-regional schemes. Government should reconfirm and publicly commit to taking forward Northern Powerhouse Rail, all phases of HS2 and Crossrail 2.

### Decision-making and devolution

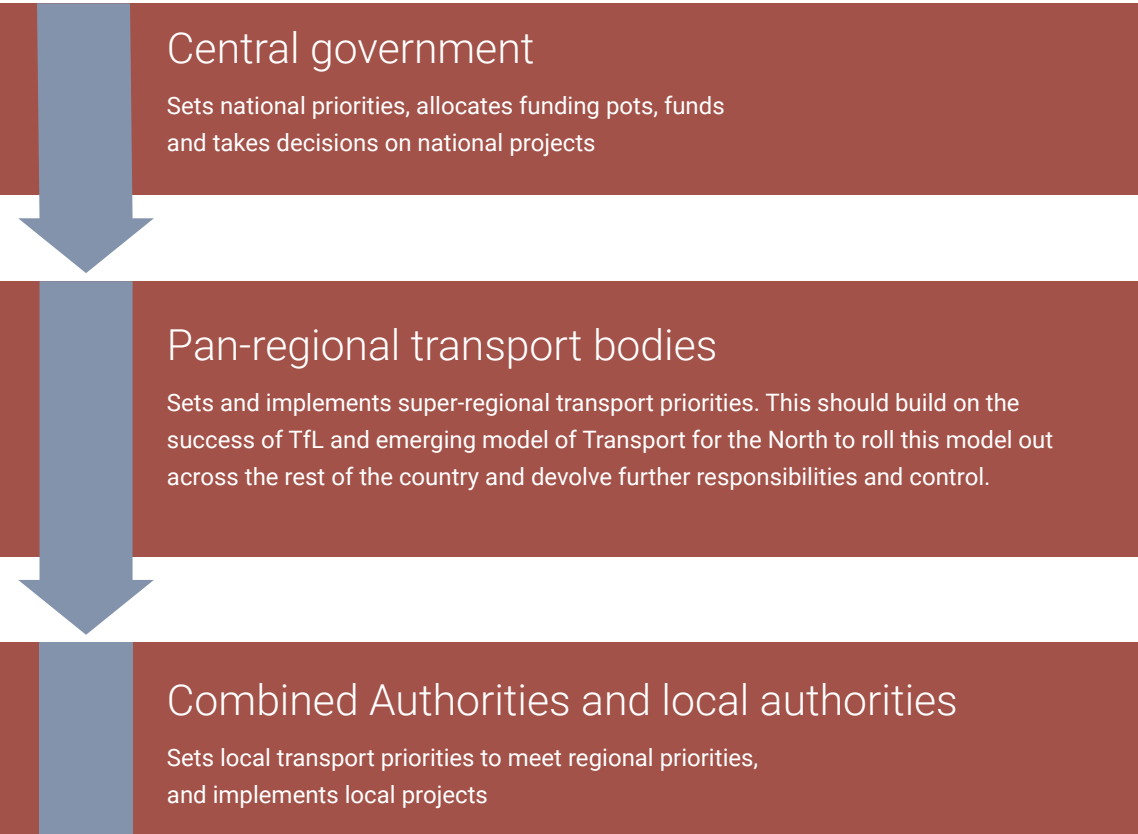
**Government should go further to devolve budgetary control, decision-making and implementation responsibilities to pan-regional and regional bodies and local authorities. Given the complexity of delivering this, it should adopt a three-stage process.**

#### Stage 1: Setting direction

The first step is for the Government to clearly outline a new blueprint for how local, regional, pan-regional and national decision makers can work together to deliver the transport infrastructure that England needs.

A guiding principle for this should be that decisions are taken at the lowest level possible. Local bodies are more accountable than central government for their decisions locally, and so have a powerful incentive to take the decisions that are right for their area, as well as to oversee the delivery of improvements. However, there are also clear roles for pan-regional and national governance structures to ensure that strategic priorities are delivered across the country. Transport for London and Transport for the North already provide an indication of how this model might evolve. However, to be successful, this would need to be replicated across the country and further decision-making and budgetary control would need to be transferred to these organisations. Figure 13 provides an indication of how this structure might fit together.

Figure 13: Potential high-level structure of devolved decision-making



#### Stage 2: Developing the detail

Once this blueprint has been developed, there are many detailed decisions to be made, including about how budgets and strategies are set. For example, consideration will need to be given to the existing proposals from the NIC. To take this forward, we believe that the NIC should be given a formal remit and a budget to consult with the full range of business, political and policymaker stakeholders and put forward detailed proposals for how a new system might be delivered over the course of this Parliament.

#### Stage 3: Delivering change

The Government should then respond to this proposal and outline how it will manage the change – including what it means for resourcing of new and existing decision-making bodies (e.g. Mayoral Combined Authorities will likely need larger budgets – as will the pan-regional transport authorities).

This third stage should include consideration of how existing appraisal methods could be improved to ensure that cost-benefit approaches based on WEBTag can be used appropriately as part of integrated decision-making alongside economic development strategies or housing plans. This is likely to require significant consultation with experts, economists, businesses and political leaders / policy makers across the country.

### Extending fiscal freedoms

The Government should also set out a strategy for how it will extend fiscal freedoms to new and existing regional and local bodies, including details of how it will approach co-funding of investment in future. This could include:

1. Reintroducing legislation that fell with the Local Government Finance Bill 2017, and ensuring that all freedoms are extended to bodies that have operational responsibility for setting transport infrastructure investment strategy; and
2. Setting out the principles against which levels of co-funding will be determined across the country.

### Control over services

**The Government should test the possibility of devolving primary responsibility for regional train services to regional bodies like Transport for the North and Transport for London.**

We have developed this decision-making structure in Figure 13 in the context of thinking about transport infrastructure, but it can equally apply to transport services, particularly rail. At present, with the exception of Merseyrail, franchises are specified and awarded centrally by the Department for Transport.<sup>1</sup> While there will always be a need for co-ordination where franchises run services on tracks in other regions, or that are shared with other operators, there is no reason why this needs to be done centrally.

This thinking has already been applied through the possibility of Combined Authorities introducing bus franchising. Along similar lines, the rail review currently underway<sup>lv</sup> should seriously consider devolving primary responsibility for regional service specification, and franchise awarding and management, to regional bodies such as Transport for the North.

### Driving the agenda forward

**Businesses and local and regional governments should speak with a unified voice on the importance of investment and local decision-making on transport infrastructure**

Businesses and regions across the country agree on the need for infrastructure – and the more they can demonstrate and articulate this, the more effective they will be. To this end, there should be a unified voice to make the case to government both for infrastructure spending and greater devolution of funding and decision-making powers.

There are already considerable efforts to bring together businesses to make this case, including the London Infrastructure Summit and the Convention for the North. To build on these, business groups should come together to create an annual National Infrastructure Forum, as well as explicitly inviting and engaging high-profile and senior figures such as the Chief Executive of the National Infrastructure Commission and the Chancellor of the Exchequer.

Such a move would represent a real and powerful application of the intent set out in Growing Together for England’s regions to speak with one voice to their mutual benefit.<sup>lvii</sup> Regional and national business groups, as well as Metro Mayors and local leaders, should create a single National Infrastructure Forum to ensure the Government delivers on this agenda.

This recommendation would also help to address the issue of long-term lack of certainty, by providing a consistent supportive voice for major infrastructure projects from proposal to completion. The first three themes the Forum should focus on are funding, devolution and decision-making, and appraisal methods, as set out above.

1 The Great Northern franchise, for example, runs 278 services daily into London King’s Cross

## Conclusion

Transport infrastructure is ultimately about connecting people, whether to jobs, public services, leisure activities, or simply each other. It lays the foundation for economic growth and for communities, and is a crucial part of creating good places and ultimately a country that works for all its residents.

But Britain’s infrastructure at present has significant room for improvement. Road delays and crowded trains are all too common in cities across the country, leading to lost productivity and a poorer quality of life for millions of people. Perhaps even more damaging, although harder to directly observe, are opportunities missed by the lack of reliable, convenient transport links between places, particularly in the North, which holds our regions back.

This report has outlined businesses’ view on how the transport needs of different parts of the country differ, as well as where they overlap. There is clearly a need for investment in the near-term to make the current infrastructure network function as well as possible (such as road maintenance or signal upgrades), as well to create new links between transport modes and places and expand capacity in the longer-term. While the balance of needs for these different types of investment might differ between regions, a key message in this report is that both are necessary throughout the country.

There are positive steps being taken, in particular the National Infrastructure Commission’s recent National Infrastructure Assessment, the creation of sub-national transport boards, and revitalised city leadership from the new metro mayors. But more needs to be done to ensure that this momentum is not lost, and to build business and public confidence that promises of future investment will be delivered upon.

This cannot be done by any single initiative; it needs a package of related actions. Much like a single point of failure can affect a large section of the rail network, a failure in any one of these areas can have significant knock-on effects, even if everything else is operating well. But if government commits to taking this agenda forward, the actions themselves will have real impacts and will also provide a clear signal to businesses inside and outside the UK that we are serious about maximising our potential.

The need for cross-country investment has been evident for some time, but for too long it has been an ambition rather than a reality. It is now time to put that right and deliver the infrastructure that all of Britain needs. It’s time to move Britain forward.



# Endnotes

i Network Rail (nd.). Public performance measures. Available here: <https://www.networkrail.co.uk/who-we-are/how-we-work/performance/public-performance-measure/>

ii See for example Eddington, R. (2006). The Eddington Transport Study: Main Report: Volume 1. DfT. Available here: <http://webarchive.nationalarchives.gov.uk/20090115123436/http://www.dft.gov.uk/162259/187604/206711/volume1.pdf>

iii Royal College of Physicians (2016). Every breath we take: the lifelong impact of air pollution. Available here: <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

iv Defra (2015). Valuing the impacts of air quality on productivity. Available here: [https://uk-air.defra.gov.uk/library/reports?report\\_id=832](https://uk-air.defra.gov.uk/library/reports?report_id=832)

v ONS (2014). Measuring National Well-being, Commuting and Personal Well-being, 2014. Available here: <http://webarchive.nationalarchives.gov.uk/20160129145729/http://www.ons.gov.uk/ons/rel/wellbeing/measuring-national-well-being/commuting-and-personal-well-being-2014/index.html>

vi Royal Society for Public Health (2016). Health in a Hurry: The impact of rush hour commuting on our health and wellbeing. Available here: <https://www.rsph.org.uk/our-work/policy/wellbeing/commuter-health.html>

vii Rosewell, B., & Venables, T., (2015), High speed rail, transport investment and economic impact. Available at <https://www.gov.uk/government/publications/high-speed-rail-transport-investment-and-economic-impact>

viii Centre for Cities (2018). The wrong tail. Available here: <http://www.centreforcities.org/wp-content/uploads/2018/05/2018-06-05-The-wrong-tail.pdf>

ix ONS (2018). UK trade in goods and productivity: new findings. Available here: <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/uktradeingoodsandproductivitynewfindings/2018-07-06>

x Civil Aviation Authority (2018). Size of reporting airports February 2018 - January 2019. Available here: [https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard\\_Content/Data\\_and\\_analysis/Datasets/Airport\\_stats/Airport\\_data\\_2017\\_annual/Table\\_01\\_Size\\_of\\_UK\\_Airports.pdf](https://www.caa.co.uk/uploadedFiles/CAA/Content/Standard_Content/Data_and_analysis/Datasets/Airport_stats/Airport_data_2017_annual/Table_01_Size_of_UK_Airports.pdf)

xi Leeds Bradford Airport (2017). Route to 2020: Strategic development plan. Available here: <https://prlx-k8s-lba.s3-eu-west-1.amazonaws.com/About-LBA/masterplan-2017-update.pdf>

xii This can be because infrastructure projects make new journeys possible, which increases desire to live there (and therefore land values and development viability), or that it means new housing won't overload existing transport systems, which can make development more likely to be approved.

xiii TfL (2017). Bakerloo line extension to support new housing and jobs. Available here: <https://tfl.gov.uk/info-for/media/press-releases/2017/february/bakerloo-line-extension-to-support-new-housing-and-jobs>

xiv Crossrail 2 (nd.). New homes. Available here: <http://crossrail2.co.uk/discover/new-homes/>

xv ONS (2018). Travel to work methods and the time it takes to commute from home to work, Labour Force Survey, 2007 to 2016. Available here: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/adhocs/008005traveltoworkmethodsandthetimeittakestocommutefromhometoworklabourforcesurvey2007to2016>

xvi NWBLT (nd.) North West Business Leadership Member Transport Survey Report. Available here: <http://www.nwbtl.com/wp-content/uploads/2018/03/NWBLT-Transport-Survey-Publication.pdf>

xvii National Infrastructure Commission (2018). Manchester tops traffic congestion league. Available here: <https://www.nic.org.uk/news/manchester-tops-traffic-congestion-league/>

xviii DfT (2017). Transport Statistics 2017. Available here: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/661933/tsgb-2017-report-summaries.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/661933/tsgb-2017-report-summaries.pdf)

xix The ORR publishes data for London only.

xx DfT (2019). Road congestion and reliability statistics. Available here: <https://www.gov.uk/government/statistical-data-sets/average-speed-delay-and-reliability-of-travel-times-cgn#average-speed-and-delay-on-local-a-roads-cgn05>

xxi ODI (2018). Visualising rail disruption – travel smarter. Available here: <https://theodi.org/project/visualising-rail-disruption-travel-smarter/>

xxii See <http://www.northernpowerhousepartnership.co.uk/publications/devolving-our-railways-learning-the-lessons-from-a-summer-of-northern-rail-chaos/>.

xxiii DfT (2018). Rail passenger numbers and crowding on weekdays in major cities in England and Wales, 2018. Available here: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/820770/Rail\\_Passenger\\_Numbers\\_and\\_Crowding\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820770/Rail_Passenger_Numbers_and_Crowding_2018.pdf)

xxiv DfT (2018). Rail passenger numbers and crowding on weekdays in major cities in England and Wales, 2018. Available here: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/820770/Rail\\_Passenger\\_Numbers\\_and\\_Crowding\\_2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/820770/Rail_Passenger_Numbers_and_Crowding_2018.pdf)

xxv TfL (nd.). Crowding data. Available here: <http://crowding.data.tfl.gov.uk/>

xxvi ONS (nd.). Location of usual residence and place of work (OA level). Available here: <https://www.nomisweb.co.uk/census/2011/wf01bew>

xxvii DfT, (2014). HS2 Plus: A report by David Higgins. Available here: <http://assets.hs2.org.uk/sites/default/files/inserts/Higgins%20Report%20-%20HS2%20Plus.pdf>

xxviii HS2, (2014). Rebalancing Britain: from HS2 towards a national transport strategy. Available here: <http://assets.hs2.org.uk/sites/default/files/Rebalancing%20Britain.pdf>

xxix TfN (nd.) Transport, productivity and rebalancing the UK. Available here: <https://transportforthenorth.com/wp-content/uploads/TfN-Paper-Transport-productivity-and-rebalancing-the-economy.pdf>

xxx DfT (2018). User access to key services by journey time. Available here: <https://www.gov.uk/government/statistical-data-sets/user-access-to-key-services-by-journey-time-jts02>

xxxi CBI (2017). Foundations for growth: CBI/AECOM infrastructure survey 2017. Available here: [http://www.cbi.org.uk/index.cfm/\\_api/render/file/?method=inline&fileID=69D441DD-8751-4BDE-863F3606CA132E6E](http://www.cbi.org.uk/index.cfm/_api/render/file/?method=inline&fileID=69D441DD-8751-4BDE-863F3606CA132E6E)

- xxxii Schwab, K. (2018). The Global Competitiveness Report 2017-18. World Economic Forum. Available here: <http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf>
- xxxiii Khatun, F. (2018). Country and regional public sector finances: financial year ending 2018. ONS. Available here: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/articles/countryandregionalpublicsectorfinances/financialyearending2018>
- xxxiv OECD (nd.). Transport Infrastructure investment and maintenance. Available here: [https://stats.oecd.org/BrandedView.aspx?oecd\\_bv\\_id=trspirt-data-en&doi=g2g55573-en](https://stats.oecd.org/BrandedView.aspx?oecd_bv_id=trspirt-data-en&doi=g2g55573-en)
- xxxv OECD (nd.). Transport Infrastructure investment and maintenance. Available here: [https://stats.oecd.org/BrandedView.aspx?oecd\\_bv\\_id=trspirt-data-en&doi=g2g55573-en](https://stats.oecd.org/BrandedView.aspx?oecd_bv_id=trspirt-data-en&doi=g2g55573-en)
- xxxvi National Infrastructure Commission (2018). National Infrastructure Assessment. Available here: [https://www.nic.org.uk/wp-content/uploads/CCS001\\_CCS0618917350-001\\_NIC-NIA\\_Accessible.pdf](https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf)
- xxxvii National Infrastructure Commission (2018). National Infrastructure Assessment. Available here: [https://www.nic.org.uk/wp-content/uploads/CCS001\\_CCS0618917350-001\\_NIC-NIA\\_Accessible.pdf](https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf)
- xxxviii National Infrastructure Commission (2018). National Infrastructure Assessment. Available here: [https://www.nic.org.uk/wp-content/uploads/CCS001\\_CCS0618917350-001\\_NIC-NIA\\_Accessible.pdf](https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf)
- xxxix London Finance Commission (2017). Devolution: a capital idea - The report of the London Finance Commission. Available here: [https://www.london.gov.uk/sites/default/files/devolution\\_-\\_a\\_capital\\_idea\\_lfc\\_2017.pdf](https://www.london.gov.uk/sites/default/files/devolution_-_a_capital_idea_lfc_2017.pdf)
- xl National Infrastructure Commission (2018). National Infrastructure Assessment. Available here: [https://www.nic.org.uk/wp-content/uploads/CCS001\\_CCS0618917350-001\\_NIC-NIA\\_Accessible.pdf](https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf)
- xli Next Stop Bradford (nd.). Next Stop Bradford: Bringing Northern Powerhouse Rail to Bradford City Centre. Available here: <https://www.nextstopbradford.com/>
- xlii Tute, R. (2018). Sir John Armitt urges ministers to spend an extra £43bn to “make the most” of HS2. Infrastructure Intelligence. Available here: <http://www.infrastructure-intelligence.com/article/aug-2018/sir-john-armitt-urges-ministers-spend-extra-%C2%A343bn-%E2%80%9Cmake-most%E2%80%9D-hs2>
- xlili Dwan, M. (2016). Port of Liverpool – connecting global markets to the heart of the UK. Available here: <https://www.peelports.com/blogs/2016/port-of-liverpool-connecting-global-markets-to-the-heart-of-the-uk>
- xliv Wilcox, Z., Nohrovà, N. and Bidgood, E. (2014). Delivering change: Making transport work for cities. Centre for Cities. Available here: <http://www.centreforcities.org/reader/delivering-change-making-transport-work-for-cities/tfl-model-transport-investment-management-uk-cities/>
- xlvi London First (2018). Paying for Crossrail 2. Available here: <https://www.londonfirst.co.uk/sites/default/files/documents/2018-07/PayingForCrossrail2.pdf>
- xlvi London First (2018). Paying for Crossrail 2. Available here: <https://www.londonfirst.co.uk/sites/default/files/documents/2018-07/PayingForCrossrail2.pdf>
- xlvii House of Commons Transport Committee (2017). Rail franchising: Ninth report of 2016-17. Available here: <https://publications.parliament.uk/pa/cm201617/cmselect/cmtrans/66/66.pdf>

- xlvi Manchester Airports Group (2016). Written evidence submitted by Manchester Airports Group. Available here: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/transport-committee/rail-franchising/written/34323.pdf>
- xlix National Infrastructure Commission (2018). National Infrastructure Assessment. Available here: [https://www.nic.org.uk/wp-content/uploads/CCS001\\_CCS0618917350-001\\_NIC-NIA\\_Accessible.pdf](https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf)
- l DfT (2018). Transport analysis guidance: WebTAG. Available here: <https://www.gov.uk/guidance/transport-analysis-guidance-webtag>
- li DfT (2017). Transport Investment Strategy. Available here: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/624990/transport-investment-strategy-web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624990/transport-investment-strategy-web.pdf)
- lii Davies, N., Atkins, G., and Slade, D. (2018). How to transform infrastructure decision making in the UK. Institute for Government and Project Management Institute. Available here: [https://www.instituteforgovernment.org.uk/sites/default/files/publications/IfG\\_infrastructure\\_decision\\_making\\_WEB.pdf](https://www.instituteforgovernment.org.uk/sites/default/files/publications/IfG_infrastructure_decision_making_WEB.pdf)
- liii Eddington, R. (2006). The Eddington Transport Study: Main Report: Volume 1. DfT. Available here: <http://webarchive.nationalarchives.gov.uk/20090115123436/http://www.dft.gov.uk/162259/187604/206711/volume1.pdf>
- liv Banister, D. and Thurstain-Goodwin, M. (2011). Quantification of the non-transport benefits resulting from rail investment. Journal of Transport Geography. Available here: <https://www.sciencedirect.com/science/article/pii/S0966692310000712>
- lv CBI (2017). Foundations for growth: CBI/AECOM infrastructure survey 2017. Available here: [http://www.cbi.org.uk/index.cfm/\\_api/render/file/?method=inline&fileID=69D441DD-8751-4BDE-863F3606CA132E6E](http://www.cbi.org.uk/index.cfm/_api/render/file/?method=inline&fileID=69D441DD-8751-4BDE-863F3606CA132E6E)
- lvi DfT (2018). Government announces ‘root and branch’ review of rail. Available here: <https://www.gov.uk/government/news/government-announces-root-and-branch-review-of-rail>
- lvii London First, North West Business Leadership Team, Business North, and the Northern Powerhouse Partnership (2018). Growing Together in partnership with Cities and regions collaborating on shared priorities. Available here: <https://www.londonfirst.co.uk/sites/default/files/documents/2018-05/GrowingTogether.pdf>

WPI Economics Limited

11 Tufton Street

London

SW1P 3QB

@WPI\_Economics

**[wpieconomics.com](http://wpieconomics.com)**

WPI Economics Limited, registered address 28 Church Road, Stanmore, Middlesex, England, HA7 4XR, is a registered as a limited company in England and Wales under company number 10086986.

**September 2019**

