

London to Scotland East Route Strategy





















Contents

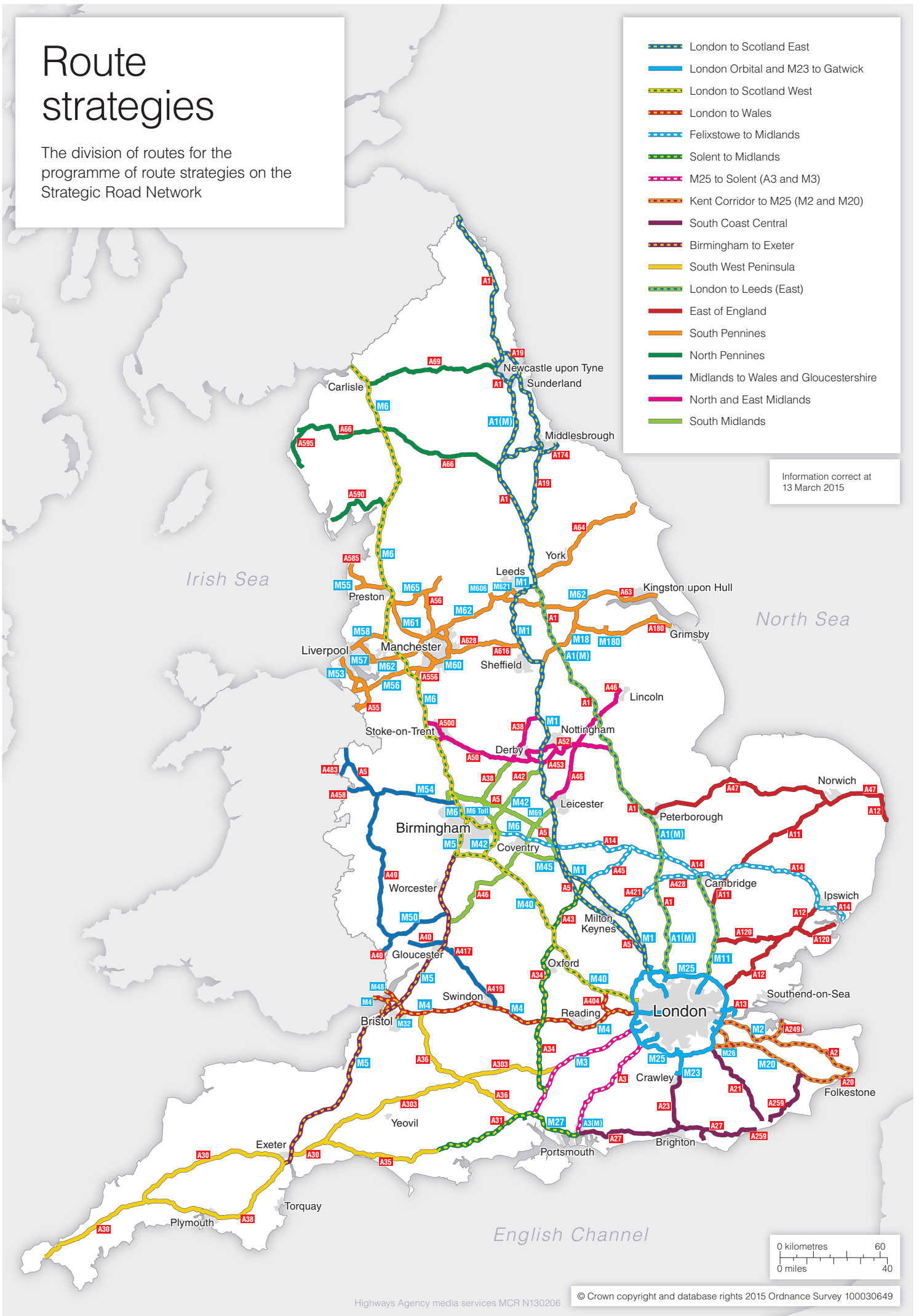
1. Introduction	5
Purpose of route strategies	5
Setting the first Road Investment Strategy	6
What we will do	7
What we will deliver	8
2. The main issues and challenges	10
Summary of the evidence report	10
3. Our Investment Priorities	12
Modernising the route	13
Maintaining the route	13
Operating the route	14
Expressways	15
4. Planning for future investment	16
The investment planning cycle	16
Preparing for the next round of route strategies	17
ANNEX A	18

Route strategies

The division of routes for the programme of route strategies on the Strategic Road Network

-  London to Scotland East
-  London Orbital and M23 to Gatwick
-  London to Scotland West
-  London to Wales
-  Felixstowe to Midlands
-  Solent to Midlands
-  M25 to Solent (A3 and M3)
-  Kent Corridor to M25 (M2 and M20)
-  South Coast Central
-  Birmingham to Exeter
-  South West Peninsula
-  London to Leeds (East)
-  East of England
-  South Pennines
-  North Pennines
-  Midlands to Wales and Gloucestershire
-  North and East Midlands
-  South Midlands

Information correct at 13 March 2015



1. Introduction

Highways England is the new public sector company owned by government and set up to operate and improve the motorways and major A roads in England, otherwise known as the Strategic Road Network (SRN).

The SRN is arguably the biggest and single most important piece of infrastructure in the country. It is at the core of our national transport system. Its many arteries connect our major towns and cities, ensure commuters make it to work every day and help millions of us visit our friends and families.

Our motorways and major A roads are the most heavily used part of the national road network. They carry a third of all traffic and two-thirds of all freight, provide business with the means to get its products and services to their customers, gives access to labour markets and suppliers and encourage trade and new investment. It is essential to the growth, wellbeing and balance of the nation's economy.

Our primary role is to deliver a better service for road users and to support a growing economy. We will work in the interests of taxpayers, road users, and the millions of people who rely on the network every day.

Purpose of route strategies

The route strategies process provides an opportunity for us to be clear about what we intend to do where, why and when. We will operate within five year spending control periods known as a Road Period. The first Road Period has an overall capital investment of £11.3bn from 2015/16 to 2019/20.

Our route strategies will outline our priorities for the Road Period and beyond. These documents also provide a transparent frame of reference for future delivery including details about our proposed investment to improve asset condition; and our vision for the Customer Operations service.

The clarity of route strategies, coupled with the new funding certainties of the Road Investment Strategy (RIS) and the plans set out in our Strategic Business Plan and Delivery Plan, will enable customers, stakeholders, partners and suppliers to engage with Highways England with confidence and reduced risk.

This will help to generate future efficiencies for our investment plans and performance improvements, improving customer experience, and better inform the strategic investment plans of our public and private sector partners.

This route strategy for London to Scotland East route is a culmination of two years of work listening to our stakeholders, customers, partners and suppliers.

It has informed the Road Investment Strategy – Investment Plan for Road Period 1 (2015/16 to 2019/20) and is our statement of how we will tackle the most important challenges and opportunities for our customers as set out in the route strategy evidence report for this route. This strategy also shows how we will work toward delivering the ambitions set out in our Strategic Business Plan, and the Government's RIS at a route level.

Setting the first Road Investment Strategy

During September and October 2013 we held a series of engagement events across the country to inform the development of the evidence base for route strategies. We invited over 800 stakeholders to provide evidence and contribute to discussions about the current and future performance of the Strategic Road Network, in their local area and to identify local priorities.

In April 2014 we published a set of 18 route evidence reports and technical annexes. The reports established the necessary evidence base to help identify performance issues on routes and to anticipate future challenges.

Following the publication of the evidence reports, during stage two of the route strategies process from May to November 2014, we identified over 200 locations nationwide for further study and over 250 potential investment options and areas for study. These were evaluated and sifted against five themes; network performance and safety, a good neighbour to the environment and communities, customer experience, strategic access and connectivity and helping us grow.

From the sifting process a number of investment options were identified and these were used to inform the Government's RIS, which was published in December 2014.

The RIS sets out the investment plan and performance requirements for the network for the next 5 years, together with a long-term commitment to capital funding totalling more than £11bn with a further £4.2bn for the first year of Road Period 2. This long-term investment will enable us to start work on delivering a modern and sustainable network that will tackle congestion, supports economic growth and provides better connections across the country.

In December 2014, we also published our first Strategic Business Plan (SBP) setting out our main activities over the 5-year Road Period. It describes how we will go about delivering the investment plan and the requirements of a demanding performance specification. Supporting the SBP will be a five year Delivery Plan which will set out our detailed programme, and how we will go about changing the way we work and delivering the performance specification.

To address the increasing demands from a growing population and to meet and exceed our customer expectations over the next 25 years, we will create a modern, technologically advanced road network that is smoother, smarter and sustainable and continues to enable the nation's economy to grow and remain competitive.

Over the coming decades the SRN must provide significantly higher levels of integration with other transport developments to improve domestic connectivity, encourage trade and investment, and enable British businesses to compete in international markets.

By 2040, we want to have transformed the busiest sections of the SRN to deliver the safer, more stress-free journeys that our customers desire, and the enhanced reliability and predictability that is so important to business users and freight. We see the SRN working more harmoniously with its surroundings, impacting less on local communities and the environment.

We know it will take time to make this vision a reality but we have already started our work and the planned investment during Road Period 1 will take us a step closer to making this vision a reality.

Realising this will require a network that works in a fundamentally more effective way. This means updating infrastructure to make the best use of technology, improving how drivers, vehicles and non-users interact both on and with the network, and placing the customer at the heart of how the network is managed.

What we will do

As described in our Strategic Business Plan, to improve the capacity and performance of the network we will:



Modernise the network

Provide more capacity and better connections by:

- 1 Developing a national spine of Smart Motorways and adding new capacity at key points on the network
- 2 Upgrading key non-motorway routes to the new Expressway standard
- 3 Doing more to ensure the network has a positive impact on the environment and neighbouring communities
- 4 Improving facilities for cyclists, pedestrians and other road users



Maintain the network

Take a longer term and more efficient approach to maintaining our roads by:

- 1 Upgrading some of the busiest junctions and alleviating many of the worst bottlenecks
- 2 Resurfacing much of the network and improving the condition of our other assets
- 3 Designing and packaging our work in a way that improves productivity and minimises the disruption to our customers



Operate the network

Keep traffic moving and better inform our customers by:

- 1 Improving information to help people make better decisions before and during their journeys
- 2 Increasing availability through better planned road works
- 3 Working with others to respond more effectively to incidents that cause the most congestion

What we will deliver

The increased investment in the SRN over the next 5 year road period will deliver substantial benefits for road users, communities and the nation as a whole.

The key strategic outcomes of the planned investment will be:



Supporting economic growth through a modernised and reliable network that reduces delays, creates jobs and helps business compete and opens up new areas for development.



A safe and serviceable network where no one should be harmed when travelling or working on the network.



A more free-flowing network where routine delays are more infrequent and journeys are safer and more reliable.



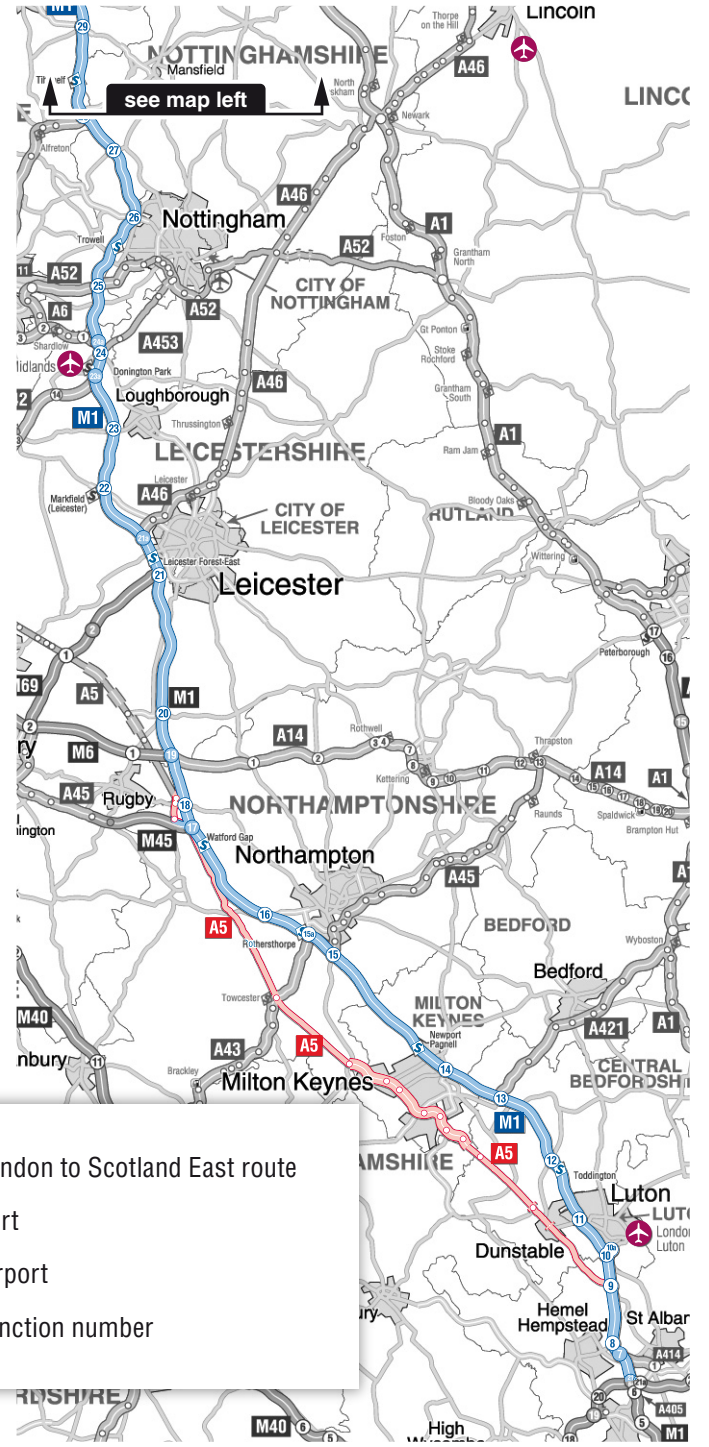
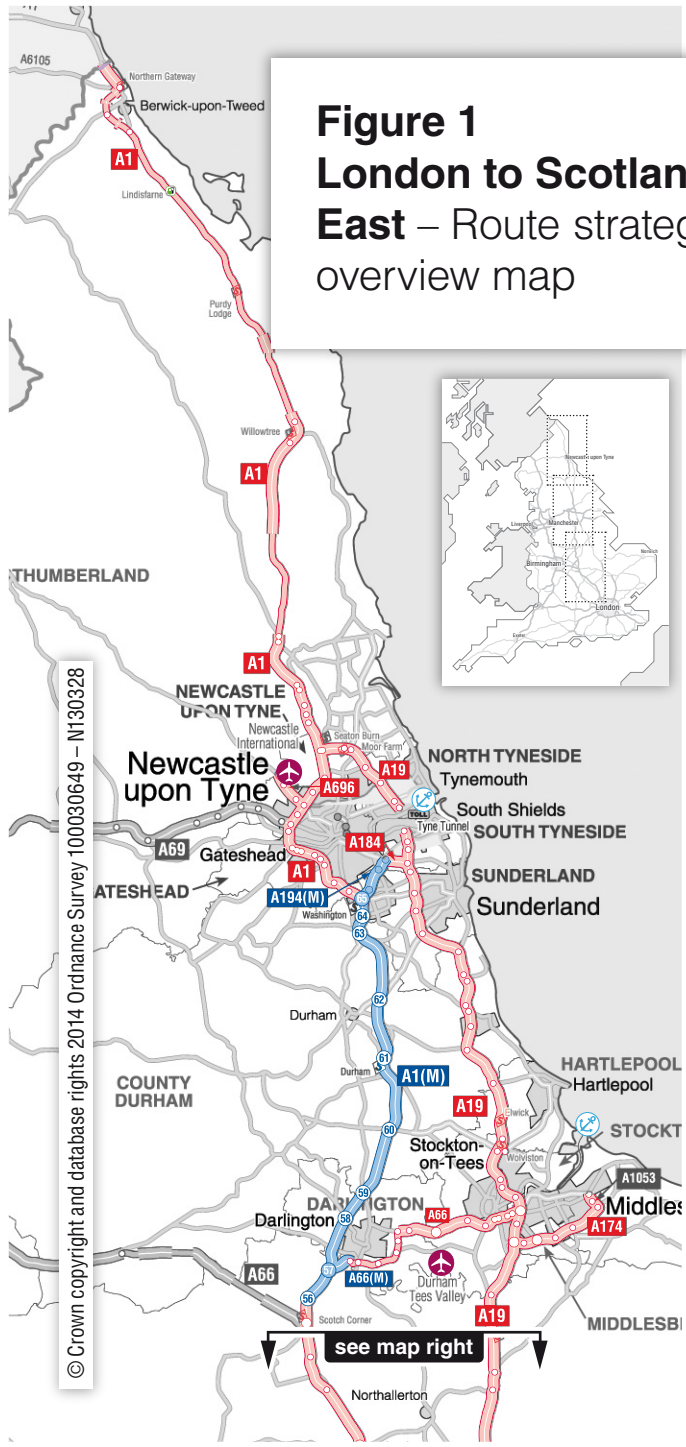
An improved environment where the impact of our activities is further reduced ensuring a long-term and sustainable benefit to the environment.







A more accessible and integrated network that gives people the freedom to choose their mode of transport and enable safe movement across and alongside the network.

As we describe the investment priorities over this Road Period and into the next, we will indicate the primary strategic outcomes of the scheme. In everything we do, we will continue to adhere to the principles of sustainable development and continue to improve links with local transport and strengthen connections with other transport modes.

Figure 1
London to Scotland
East – Route strategy
 overview map



Legend:

-  London to Scotland East route
-  Port
-  Airport
-  Junction number

© Crown copyright and database rights 2014 Ordnance Survey 100030649 – N130328

2. The main issues and challenges

Summary of the evidence report

The London to Scotland East route provides a strategic link between London, Scotland and many key towns and cities, including; Milton Keynes, Leicester, Nottingham, Derby, Leeds, Middlesbrough, Newcastle Upon Tyne and Sunderland. It is also important for other major conurbations not served directly by the route. It is a major focus for development across a wide range of these areas.

The route serves a number of key national and international gateways including Luton Airport, Daventry Rail Freight Interchange, East Midlands Airport, Newcastle Airport and the Port of Tees.

The current capacity challenges are focused on the sections of the route that are around the main towns and cities. These sections accommodate both commuters and strategic traffic. They also tend to be the key areas where economic development is planned.

On the A1 north of Richmond, and on the entire length of the A19, the route has limited technology provision.

There are important structures along the route which will require maintenance within the Road Period. These include the M1 structures across the River Trent floodplain near Nottingham, the Tinsley Viaduct on the M1 at junction 34 and the Lofthouse Interchange on the M1 at junction 42.

It is anticipated that the Allerdene railway bridge on the A1 near Gateshead will also require significant works, and possible replacement of the bridge, within the Road Period.

There are twenty one Air Quality Management Areas which the route passes close to or through. These will present a particular challenge as care will be required when developing any improvements.

Ensuring appropriate provision for vulnerable users on trunk road sections, especially cyclists, will be a key challenge for this Road Period.

The following locations were identified as high priorities by stakeholders during the workshops:

- Various M1 Junctions including 6a,14, 21, 21a, 24, 24a, 25, 28, 34, 42,43 and 44;
- A5 junctions at each end of the section through Bletchley and Milton Keynes and the mainline through Towcester;
- M1 mainline southbound from Junction 21 and between Junctions 23a to Junction 24;
- Various A66 junctions around Darlington and in Stockon-on-Tees;
- A1(M) Junction 58;
- A174 / A1053 near Middlesbrough, including the A174/A1053 Greystones Roundabout;
- A19 between the A174 Parkway junction and A689 Wolviston junction;
- A19 / A189 Moor Farm junction; and
- A194(M) / A184 Whitemare Pool Junction.

Figure 2 summarises some of the key issues and challenges that are likely to be experienced on this route during the 5 years from 2015.

Figure 2
 Key opportunities and challenges for the route

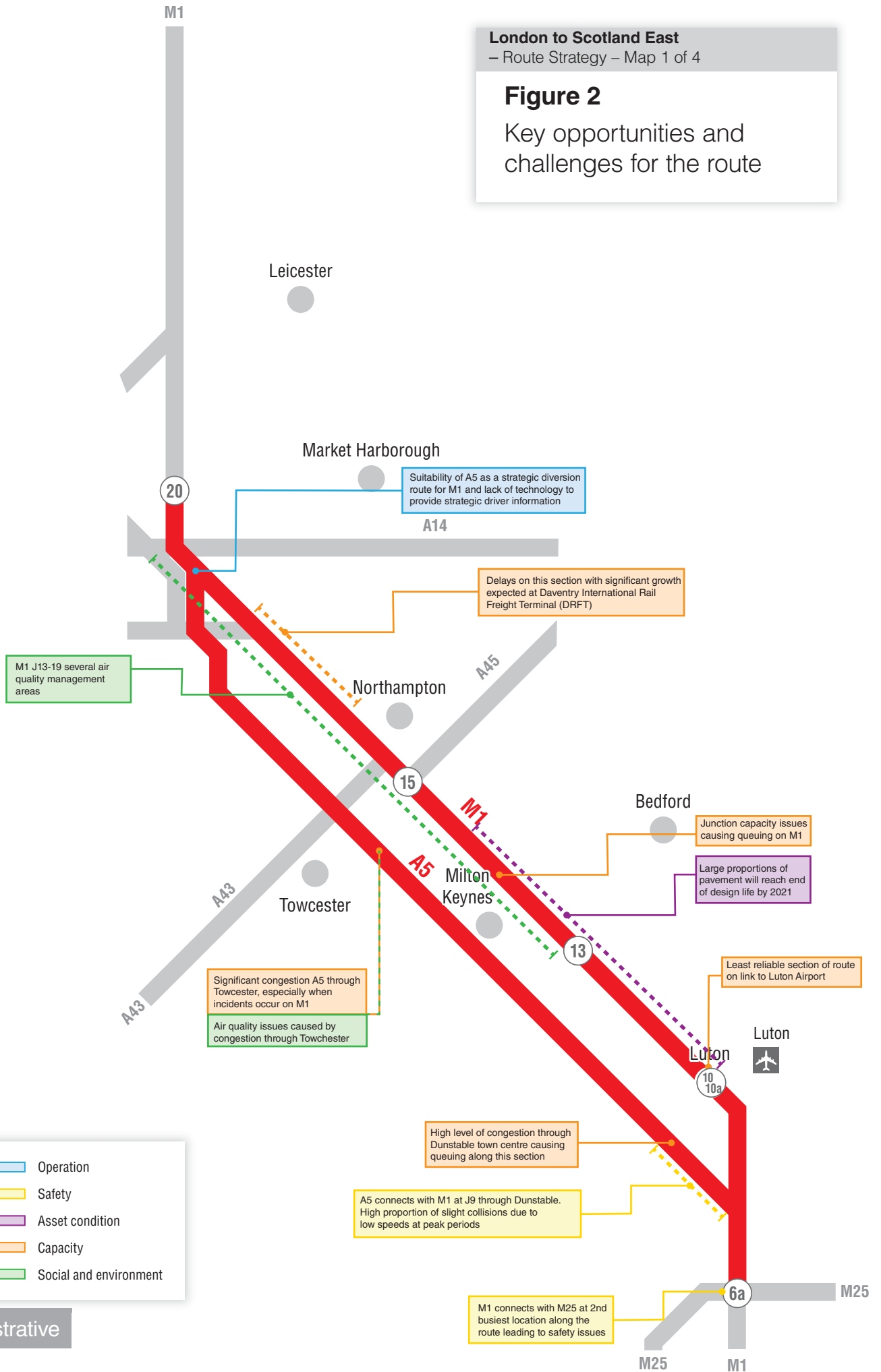
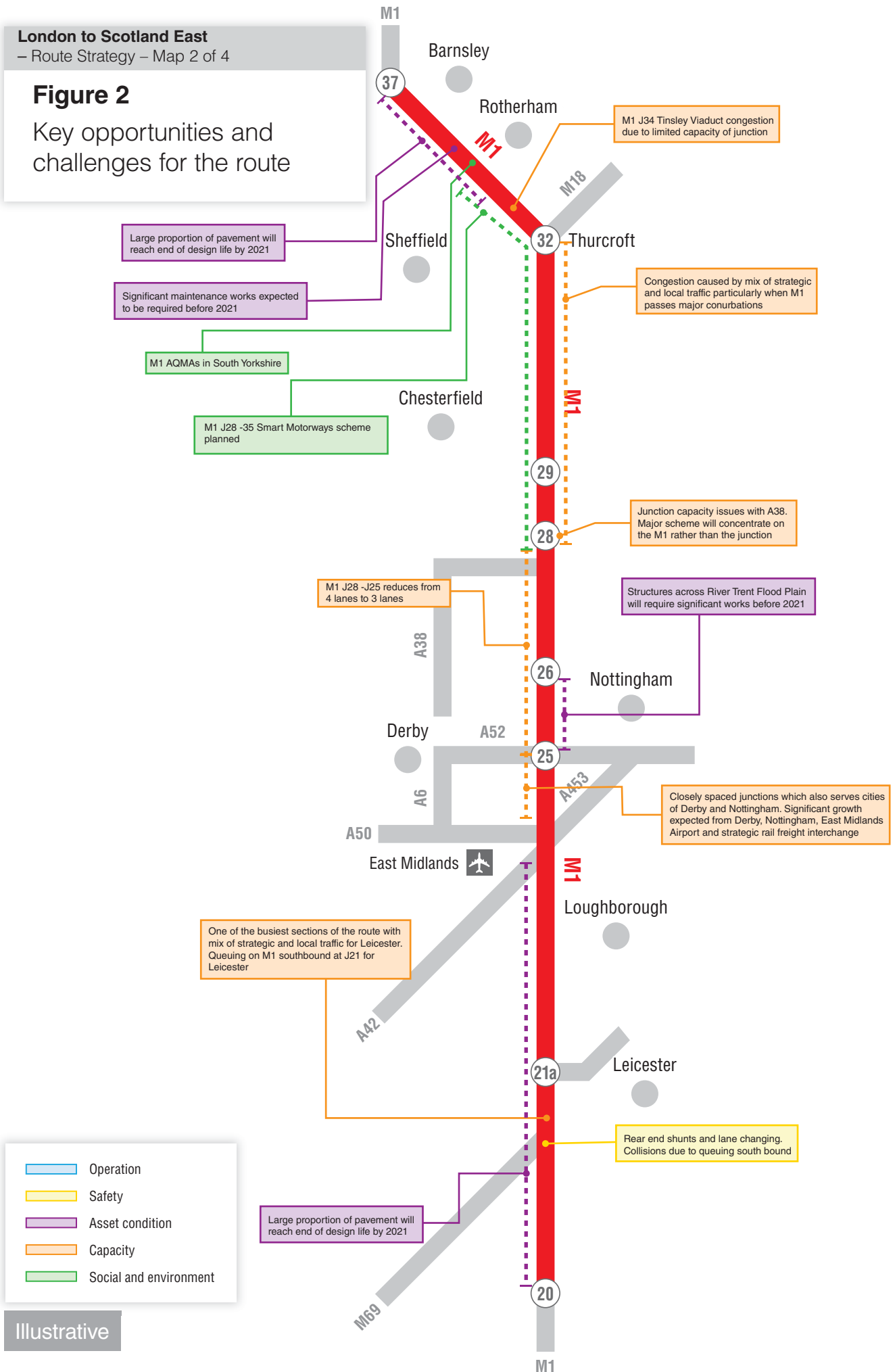


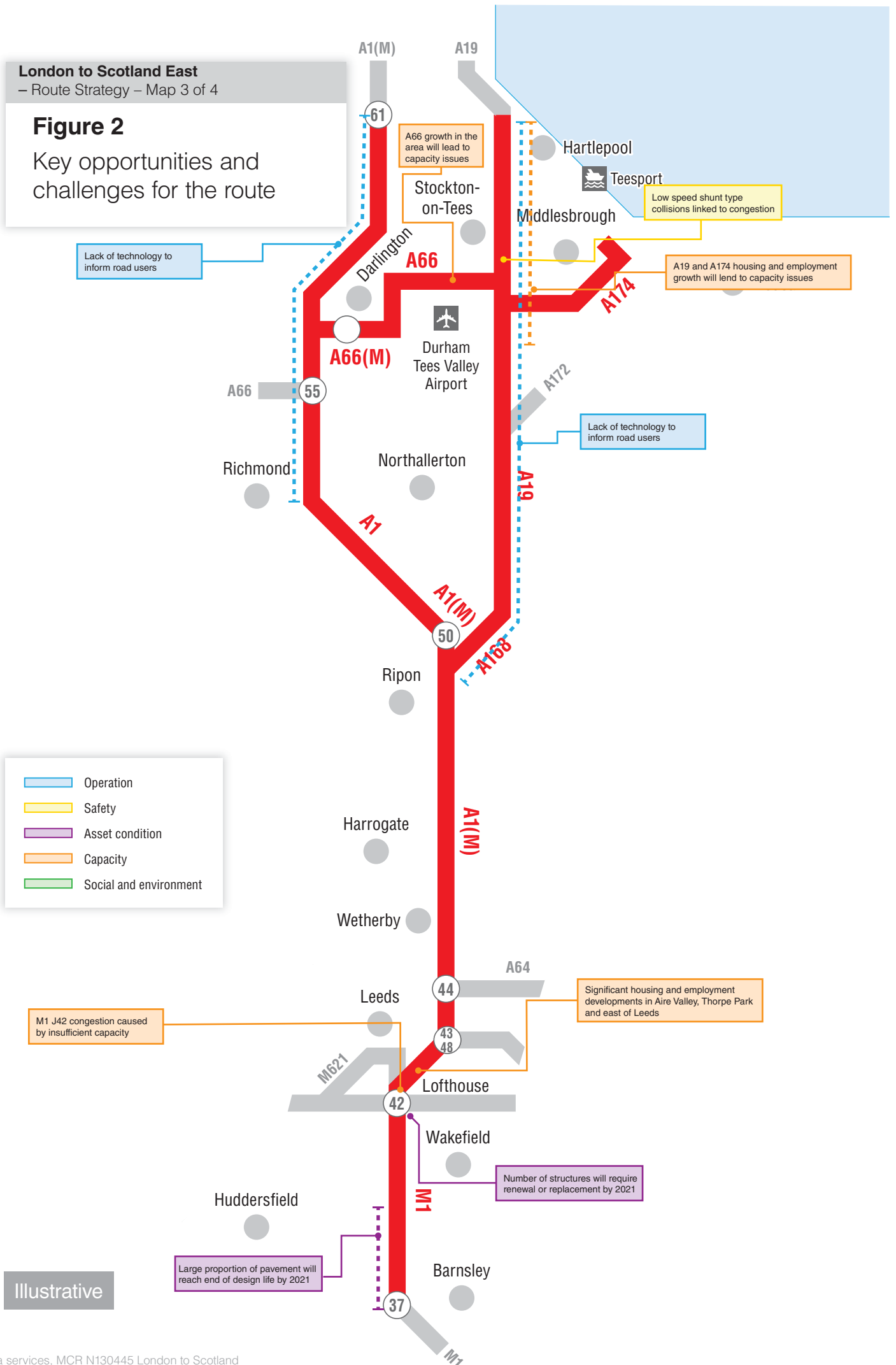
Figure 2
 Key opportunities and challenges for the route



- █ Operation
- █ Safety
- █ Asset condition
- █ Capacity
- █ Social and environment

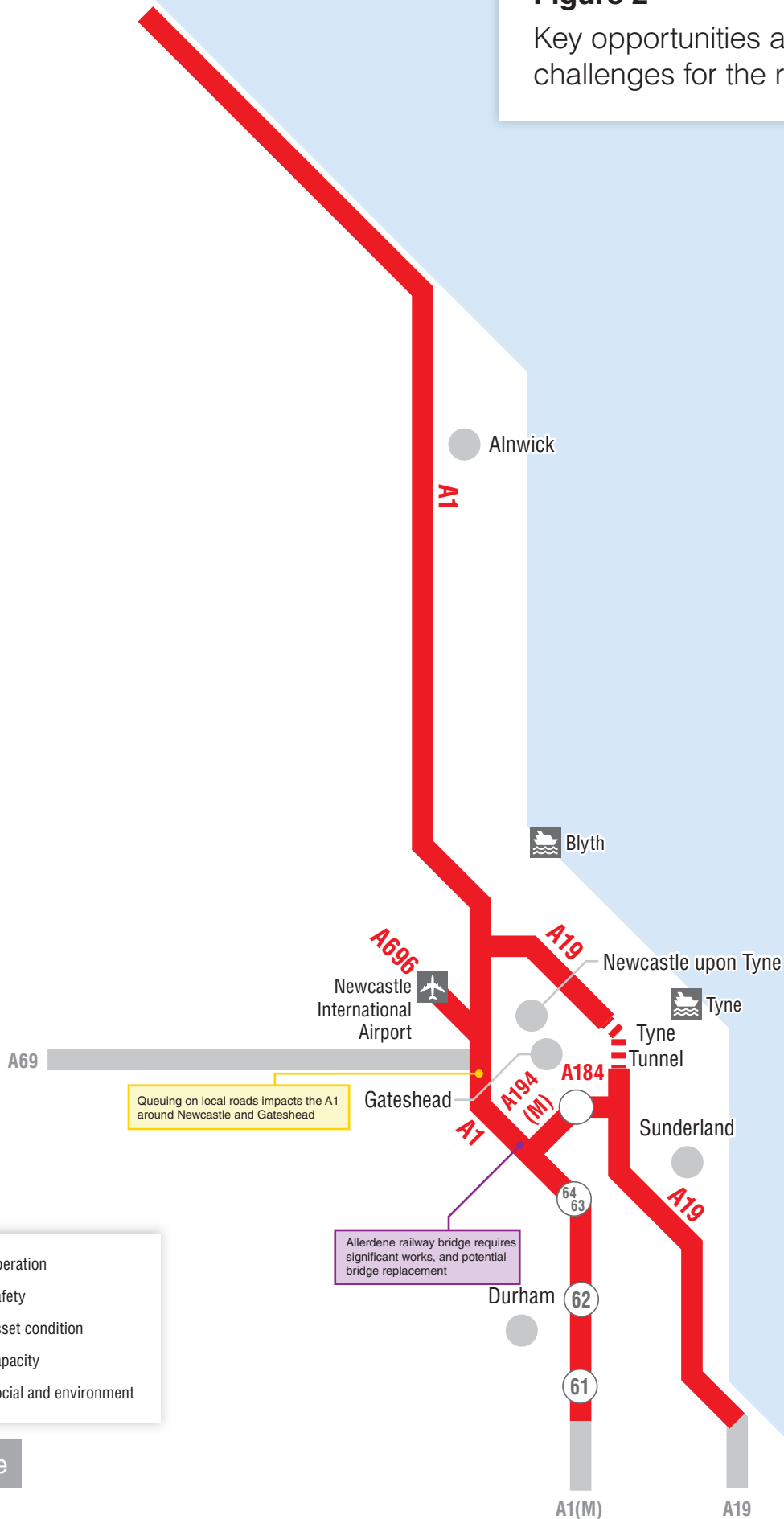
Illustrative

Figure 2
 Key opportunities and challenges for the route



Illustrative

Figure 2
Key opportunities and challenges for the route



Illustrative

3. Our Investment Priorities

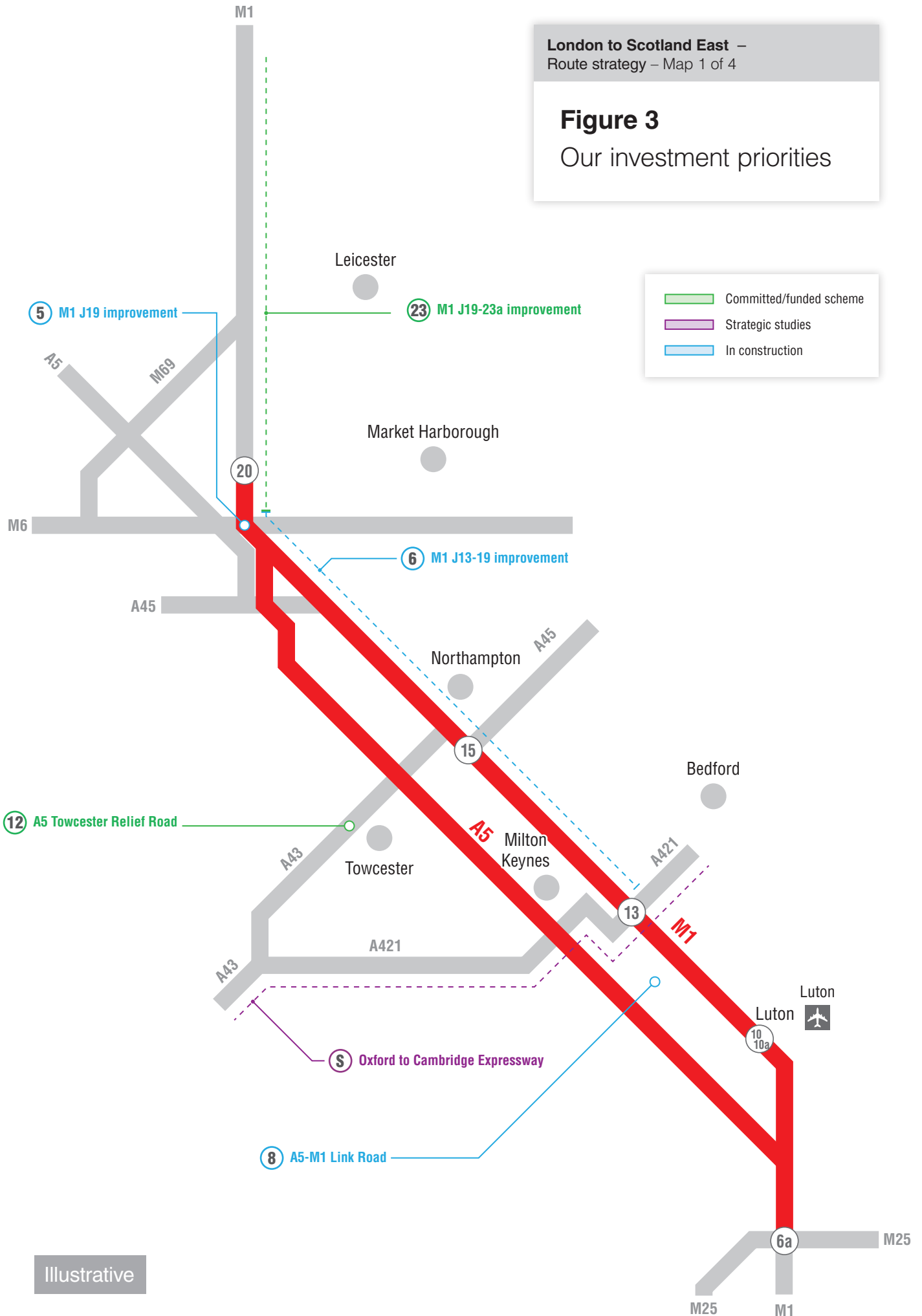
In this section, we have combined the newly announced schemes in the RIS with existing programmes of work to identify our investment priorities on this route for the period 2015-2020, and an indication of committed priorities beyond this. The investment on this route aims to address some of the main issues and challenges identified in the route strategy evidence reports. The process for planning network investment for future road periods is summarised in Section 4.

A series of dedicated funds were also announced in the RIS, providing the opportunity to deliver enhancements for cycling, safety and better integration as well as environmental improvements and air quality mitigation. A further fund will support growth and housing.

We are currently identifying the primary opportunities we hope to support through these ring-fenced funds, and our plans will be updated annually and on an iterative basis throughout this road period, drawing on the priorities identified in our evidence reports.

Figure 3 shows the locations on this route where major roads schemes are currently in construction and where the Department for Transport has announced committed/funded schemes which have either development or full funding and, where relevant, strategic studies.

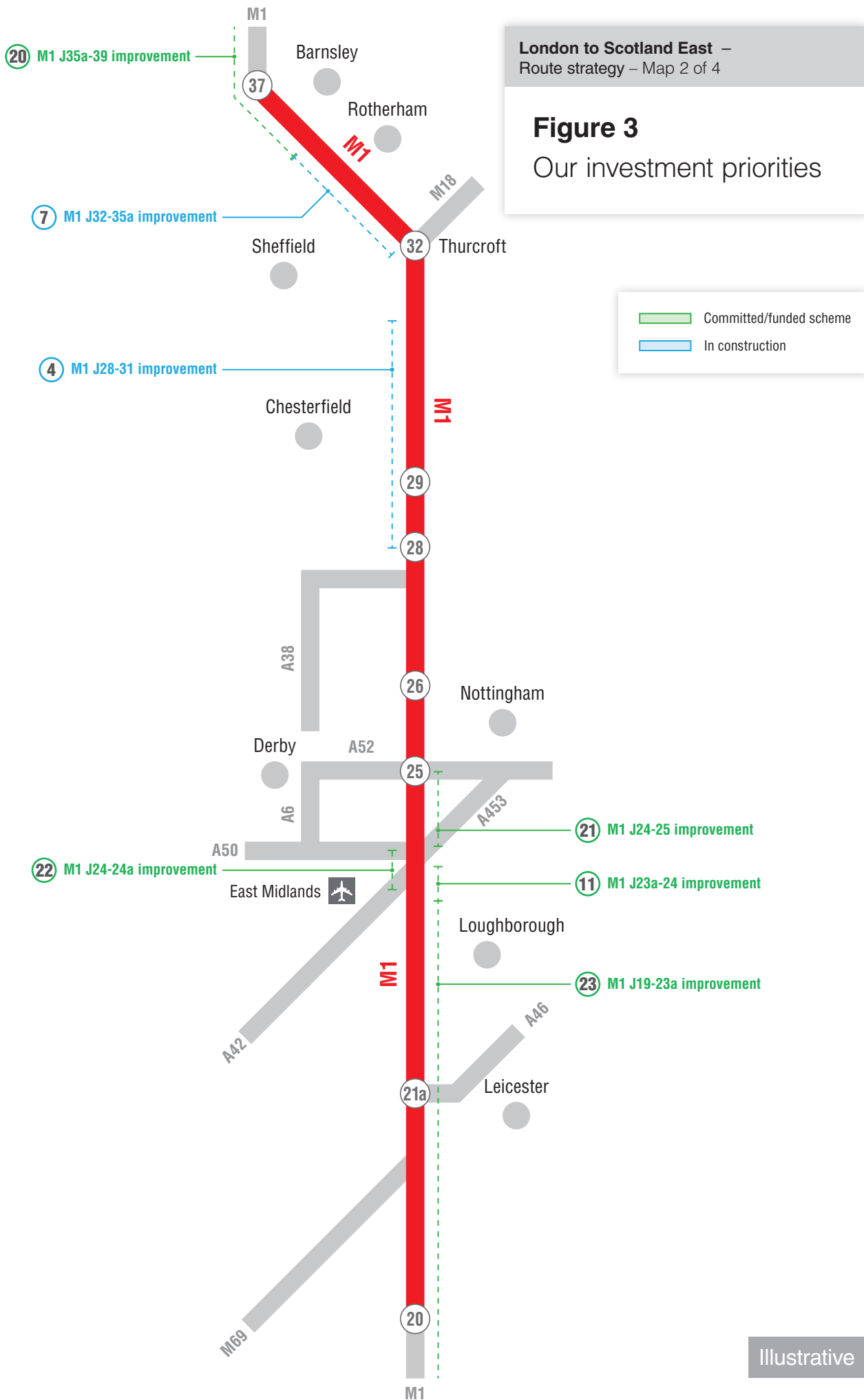
Figure 3
Our investment priorities



Illustrative

Figure 3

Our investment priorities



Illustrative

Figure 3
Our investment priorities

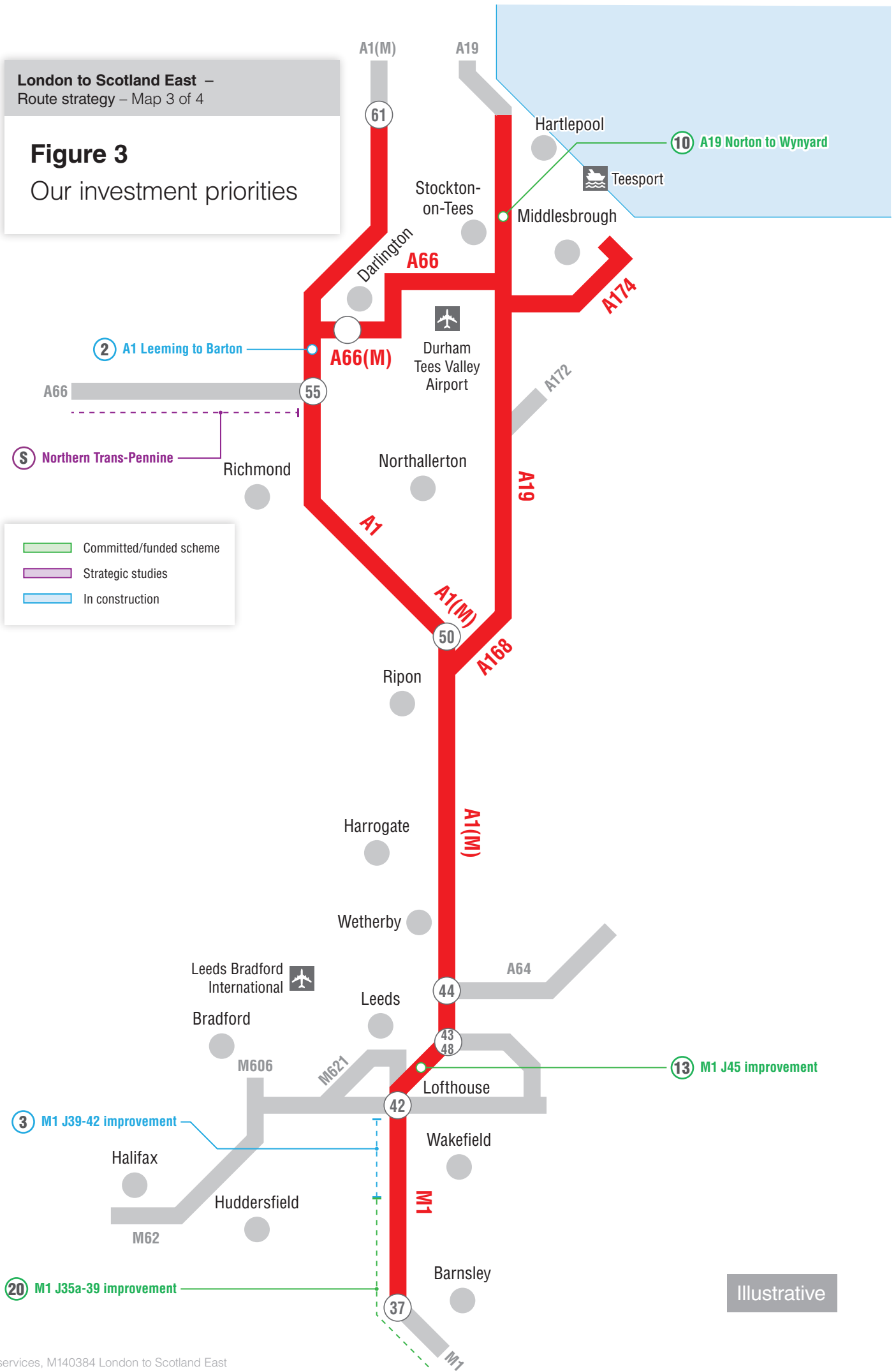
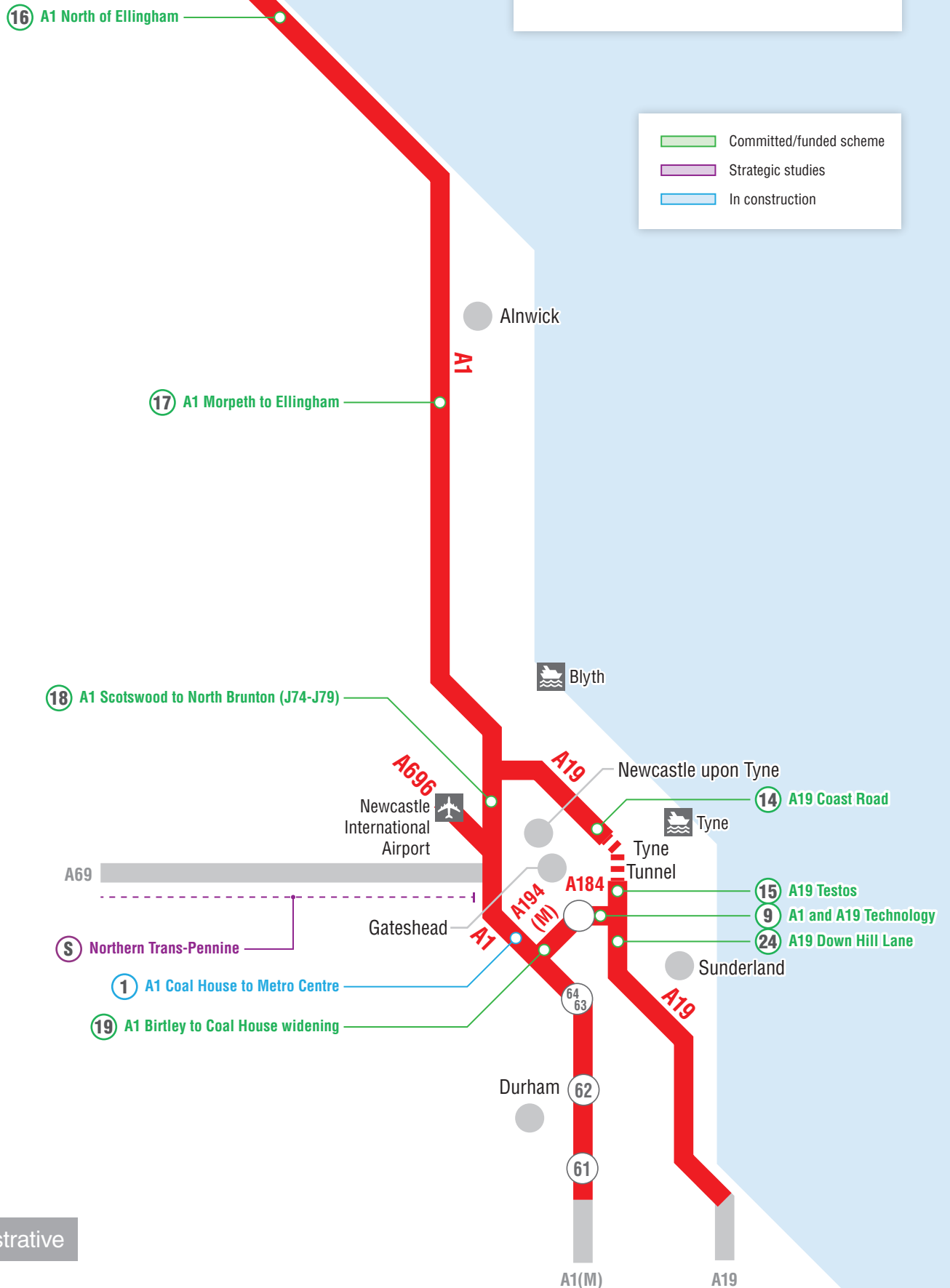


Figure 3
Our investment priorities



Illustrative

Modernising the route

There are currently seven key road projects in construction on this route, including the M1 junction 39 to 42 which is due to open for traffic in autumn 2015, and the A1 Coal House to Metro Centre.

Fifteen road projects have committed funding and provided that the necessary statutory approvals are granted and the schemes continue to demonstrate public value for money, these will start construction during Road Period1.

A further two projects have full committed funding ready to start construction early in Road Period2, again provided that the necessary statutory approvals are granted and the schemes continue to demonstrate public value for money.

Further details on all of these schemes can be found in Appendix A.

In considering the delivery of our major road schemes we have identified indicative start dates, to give an indication of when work is likely to commence on site. These dates will be subject to continuous review during the Road Period and updates will be provided in our Delivery Plan.

In addition to the key investment priorities, the Department for Transport are also commissioning a series of six strategic studies to address some of the most fundamental challenges on the road network. Two of these strategic studies, Oxford to Cambridge Expressway and Northern Trans-Pennine, interact with this route.

Further information on these strategic studies can be located in Annex A

Maintaining the route

As part of maintaining this route, we plan to upgrade some of the busiest junctions and alleviate many of the worst bottlenecks.

There is one project at M1 junction 45 that has committed funding and provided that the necessary statutory approvals are granted and the scheme continues to demonstrate public value for money, will start construction during Road Period 1.

As we take a longer term and more efficient approach to maintaining our roads, we will look for opportunities to programme these improvements alongside other modernisation or renewal activities.

Many of our routes carry a combination of strategic, freight and commuter traffic with hundreds of thousands of vehicles travelling on our roads daily. Our challenge is maintaining a network that is in demand 24 hours a day, 7 days a week, all year round and is also key to supporting the nation's economy. This heavy use of the network combined with its complexity means the network requires maintenance more often and at a higher standard than less busy roads.

Maintaining the SRN is important to keeping it functioning and available to our customers. In July 2013, Government committed additional funding to the renewal of the strategic and local road network. On the strategic road network, this allowed for the renewal of up to 80% of roads. At present, renewals are planned on an annual basis. As we enter this new system of funding over the longer, 5- year periods, we will work to deliver efficiencies in how we plan for and undertake renewal activity. The annual cycle of funding has often resulted in planning work in the spring and summer before carrying it out in the autumn and winter when the weather is poor. A longer-term and more integrated view of maintenance and modernisation, based on better asset knowledge, will offer greater benefits in terms of minimising disruption to our customers and ensuring best value whole-life cost from the asset.

Key facts about this route

999
miles

14%
of national traffic in
2014

18.6
billion vehicle kilometres
travelled on this route in 2014

Our programme of renewals for 2015/16 is well understood and by December 2015, we plan to have our programme for renewal and small-scale improvement programme defined for 2016/17. At the same time, we will develop a methodology for getting inputs for regional delivery plans that will adopt a longer term view (3-5 years or beyond) and will be updated annually and on an iterative basis throughout Road Period 1.

The development of our plans will be controlled by regional programme boards and coordinated through an integrated portfolio management approach that packages together all our renewals, major schemes, and routine maintenance activities for both now and in the future. This will mean we can carry out all necessary works in one go, working towards an aspiration of not having to go back and carry out further work on any given part of the network for at least five years.

In 2014 across the whole of the SRN total traffic was recorded at 137.4 billion vehicle kilometres (bvkm). The London to Scotland East route accounted for 14% of this (18.6 bvkm).

Over the course of the 5 years to 2020, our current understanding is that we might need to resurface up to 60% of the roads on this route and we plan to spend approximately £300.8m in doing so. This will include an initial budget of £59.0m during financial year 2015/16.

As we develop our longer term programme of renewals and assumptions are refined, we expect this will change. We will report on and refresh our Delivery Plan annually.

The indicative 5 year funding on renewal of roads for this route is shown below in Table 1, however this is subject to change and will be updated annually in the Delivery Plan.

Table 1 - Provisional five year funding for renewals of roads

2015/16	2016/17	2017/18	2018/19	2019/20	TOTAL
£59.0m	£59.7m	£60.1m	£60.6m	£60.1m	£300.8m

We are also working towards the renewal of some key structures on this route such as the Allerdene railway bridge over the East Coast Main Line in Gateshead and have allocated an initial budget of £12.1m for the renewal of structures during financial year 2015/16.

Technology is already performing an increasingly important role in ensuring the safety and reliability of the route. We are continuing to use more technology to help us collect data and disseminate key information that informs road users and our staff about incidents and congestion ensuring network users are well-informed and supporting traffic operations.

During 2015/16 we plan renew essential communication and electrical infrastructure, such as emergency roadside telephones, variable message signs and CCTV.

Operating the route

We want to operate our network in such a way that we can keep traffic moving and better inform our customers. A key part of that is improving the information we provide to people before and during their journeys to help them make better decisions. There are a range of activities we will undertake in this Road Period to improve how we operate our roads. We are currently planning our programmes of works, and we will update this annually and on an iterative basis throughout Road Period 1.

Operational capability and response to Congestion

We will continue to upgrade our Regional Control Centres systems through joint strategic initiatives which will interlink all key command and control systems into a single more efficient operating system, enabling remote operation and response from any control centre.

This will improve our effectiveness, resilience and our ability to flex operational capability at particularly busy times or during emergency incidents. Improving the data and information gathering from Regional Control Centres and the National Traffic Operation Centre, will help us to develop our website, mobile applications and social media sites to become the trusted source of information

on live road conditions. This will help our customers make informed decisions about their journeys.

Incident prevention measures and better management of incidents

Through our Traffic Officer Service we work hard to deliver a reliable service to customers through effective traffic management and the provision of accurate and timely information. While we already do this well, we understand the importance of continually improving this service to our customers with the aim of achieving 90% customer satisfaction.

We will develop and deliver an incident prevention strategy to identify gaps in our current approach and to identify and develop interventions to address these. We will also deploy on-road operational resource to some of the busiest A-roads.

Throughout Road Period 1, we will continue to work with our partners to refine and improve strategic development of the initiatives and protocols aligned to the Collision, Lead, Evaluate, Act, Re-open (CLEAR) initiative and the Joint Emergency Services Interoperability Programme. This includes close liaison with other roads responders, such as emergency services or other government vehicle enforcement agencies to reopen the network quickly after major incidents. Strengthening collaborative partner relationships like these will also assist us to operate the strategic and local road networks more effectively around planned events.

Managing network capacity effectively

We will deliver better planning, scheduling and management of road works to ensure that we do not occupy road space for longer than necessary. This will include carrying out multiple improvements and/or maintenance schemes at the same time, with the intention of not returning to the same area within any five year period.

Actively listening to our customers and seeking their feedback

Our customer panel is in place and is made up of around 1,000 customers representing our full range of customers and neighbours

that use or are directly affected by our network. The panel is representative of each of our regions, with known demographics, user type and network usage. We will further develop this panel to ensure we are able to capture a reliable insight about our customers' opinions. This panel will help us to better understand where and how we need to improve or develop new services and also test concepts and ideas before full development.

Transport Focus has been appointed as a watchdog for our company and will represent the voice of motorists and other road-users. We will develop a positive and constructive working relationship with them to better understand the needs and views our customers in order to continuously improve the services we provide.

It is also our intention to develop and publish a Customer Service Strategy by December 2015. This will explore how we need to adapt and improve our customer satisfaction research, to enable us to gain a better understanding of what our customers want. We will improve the way our customers interact and communicate with us through the Customer Contact Centre.

Expressways

An Expressway will provide a high-standard route normally associated with our modern Smart motorways, on the all purpose trunk road network. It will transform those busy all-purpose roads by creating a free-flowing route where currently there are frequent junctions and local turnings causing congestion.

We will deliver improvements on the A1 north of Newcastle and the A19 sections of this route, by removing infrastructure barriers and delivering a higher quality journey experience, improving the operation of these sections to an Expressway standard.

Throughout Road Period 1 we will continue to develop the standards for the Expressways concept with the aim of proposing and constructing a number of further schemes in Road Period 2.

4. Planning for future investment

The investment planning cycle

Roads Reform paved the way for longer term funding for the SRN, and now through The Infrastructure Act funding will be allocated for 5-year Road Periods.

So that we spend this money wisely, Highways England and the Department for Transport will implement a planning cycle for future investment. This is outlined in Part 6 of our Licence to operate.

Route strategies

Highways England is required by the Infrastructure Act and our Licence to prepare and publish route strategies covering the whole of the SRN. These will continue to involve our stakeholders in identifying evidence-led investment priorities.

Strategic Road Network Initial Report

Building on the investment priorities identified through route strategies and advice from the monitor and watchdog, this will be Highways England's proposition on investment on the strategic road network over the next road period.

Draft Road Investment Strategy

Informed by the SRN Initial Report, Government will produce a draft RIS containing a strategic vision, statement of funds available, investment plan and performance specification.

Draft Strategic Business Plan

Highways England's draft SBP will outline all activities and deliverables for the next road period, and based on route strategies, advise the Secretary of State on how best to deliver the strategic vision and performance specification, outlining where when and how best to intervene on the SRN.

Efficiency Review

The Secretary of State may ask the independent monitor to carry out an efficiency review to help determine whether the draft SBP will deliver an appropriate level of performance for the funds invested, and if the programme offers value for the taxpayer.

Finalise RIS and SBP

The Secretary of State will confirm and issue the final RIS together with Highways England issuing the final SBP. The SBP will include a Delivery Plan describing the activities, deliverables and funding on a year by year basis. The Delivery Plan will be reported on and refreshed annually.

Mobilise

Highways England will then undertake a period of mobilisation, including discussions with the supply chain and other preparations ahead of the SBP coming into force at the beginning of the next Road Period.

Preparing for the next round of route strategies

Route strategies will continue to play an essential role in setting the government's RIS. In future, route strategies will be the main mechanism through which future investment priorities including improvements, maintenance and customer operations will be identified.

These route strategies are the culmination of the work done in our first investment planning cycle, and they have provided useful inputs to the first RIS, but we are looking to review and improve upon this platform. We welcome views from all of our stakeholders on what worked well, and where we could make improvements and would encourage you to let us know so that we can consider this as we prepare for the next round of route strategies.

As we develop our approach, we will seek advice from the independent monitor and watchdog, and once agreed with the Secretary of State, we will publish our approach.

However, we continue to believe that route strategies should be based on robust evidence and input from a broad range of stakeholders. Throughout the first round of route strategies intelligence gathering, the input of our customers and stakeholders was vital to the development of the evidence reports. We are committed to this approach and we will continue to listen and act on what you say to us.





We understand that our stakeholders and customers have local knowledge and experience of using and living alongside our routes. We need to ensure that we capture this knowledge as best we can, while still taking account of our wider Government commitments and responsibilities.





We will review progress and update these route strategies by the end of 2016/17, in time to feed into our first SRN Initial Report. If you were involved, or kept informed, in this round of route strategies, we will be in touch later this year with our plans.






If you are new to route strategies, but would like to become involved, please do let us know by contacting our Customer Contact Centre by telephone 0300 123 5000.





ANNEX A





Annex A




No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
1.	<p>A1 Coal House to Metro Centre</p> <p>Widening the A1 south of Gateshead from two to three lanes between junctions 67 and 71, plus new parallel link roads between junctions 68 and 69 to remove traffic from the main carriageway.</p>	Widening to three lanes	In construction	2016/17	
2.	<p>A1 Leeming to Barton</p> <p>Upgrading the A1 between Leeming and Barton to three-lane motorway standard; connecting together the two sections of the A1(M) in the north of England and completing the motorway link from the Teesside and Tyne and Wear to the rest of England.</p>	Upgrade to motorway standard	In construction	2017/18	
3.	<p>M1 J39-42 improvement</p> <p>Upgrading the M1 to Smart Motorway, including the use of hard-shoulder running, between junction 39 (Denby Dale) and junction 42 (M62 interchange) near Wakefield.</p>	Upgrade to Smart Motorway	In construction	2015/16	
4.	<p>M1 J28-31 improvement</p> <p>Upgrading the M1 to Smart Motorway between junction 28 (Mansfield and junction 31 (Sheffield). Together with existing improvements to the south, this creates a Smart Motorway link between Derby, Nottingham and Sheffield.</p>	Upgrade to Smart Motorway	In construction	2015/16	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
5.	<p>M1 J19 improvement</p> <p>Reconstruction of the Catthorpe Interchange linking the M1, M6 and A14. In addition to the existing free-flowing connections between the M1 and M6, the improvement will allow free-flowing movement between the A14 and the M6, and the A14 and the M1 north.</p>	Upgrade interchange	In construction	2016/17	
6.	<p>M1 J13-19 improvement</p> <p>Upgrading the M1 to Smart Motorway between junction 13 (Milton Keynes South) and junction 19 (M6 Catthorpe interchange). Coupled with other improvements, this is an important link in the 'smart spine' linking London and the North West.</p>	Upgrade to Smart Motorway	2015/16	2021/22	
7.	<p>M1 J32-35a improvement</p> <p>Upgrading the M1 to Smart Motorway, including the use of hard-shoulder running, between junction 32 (M18 interchange) and junction 35A (A616) around Sheffield and Rotherham.</p>	Upgrade to Smart Motorway	In construction	2016/17	
8.	<p>A5-M1 Link Road</p> <p>A new junction 11a on the M1 north of Luton, plus a road linking to the A5 north of Dunstable. This will effectively serve as a diversion for the A5 through Dunstable, allowing strategic traffic to bypass the town. The scheme creates the capacity for major development at Houghton Regis and the developer has agreed to provide part of the funding.</p>	New junction	In construction	2017/18	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
9.	<p>A1 and A19 Technology</p> <p>New technology including vehicle detection loops, CCTV cameras and driver information signs, to allow better information to drivers and more effective management of traffic across Tyne and Wear.</p>	New technology	2016	TBC when construction programme is known	
10.	<p>A19 Norton to Wynyard</p> <p>Widening of the A19 Billingham bypass in Teeside to three lanes, between the A139 and the A689, including replacement of the concrete surface with low-noise surfacing.</p>	Widening to three lanes	By end 2019/20	TBC when construction programme is known	
11.	<p>M1 J23a-24 improvement</p> <p>Extends the previously announced M1 Smart Motorway junctions 24-25 improvement to junction 23a (East Midlands Airport).</p>	Upgrade to Smart Motorway	By end 2019/20	TBC when construction programme is known	
12.	<p>A5 Towcester Relief Road</p> <p>A new link road to the south of Towcester, agreed as part of the Towcester southern expansion, allowing traffic to bypass the town centre.</p>	New link road	By end 2019/20	TBC when construction programme is known	
13	<p>M1 J45 improvement</p> <p>Improvements to junction 45 of the M1, to the east of Leeds near the Aire Valley enterprise zone, through signalisation and improved slip roads.</p>	Junction improvements	2017	TBC when construction programme is known	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
14.	<p>A19 Coast Road</p> <p>Replacement of the junction between the A19 and the A1058, allowing free-flowing movement for traffic along both the A19 and A1058. This provides uninterrupted access to the northern end of the recently widened Tyne Tunnel. Together with the A19 Testos, this scheme raises the A19 to expressway standard from Yorkshire to north Newcastle.</p>	Junction replacement	2016/17	2018/19	
15.	<p>A19 Testos</p> <p>Grade separation of the junction between the A19 and A184 providing free-flowing access to the southern end of the Tyne Tunnel. Together with the A19 Coast Road, this scheme raises the A19 to expressway standard from Yorkshire to north Newcastle.</p>	Upgrade to Expressway	2018/19	2020/21	
16.	<p>A1 North of Ellingham</p> <p>Measures to enhance the performance and safety to include; three sections of climbing lanes, five junctions with improved right turn refuges, and better crossing facilities for pedestrians and cyclists.</p>	Safety and performance enhancements	2018	TBC when construction programme is known	
17.	<p>A1 Morpeth to Ellingham</p> <p>Thirteen miles of upgrade to dual the carriageway linking the Morpeth and Alnwick bypasses with the dual carriageway near Ellingham, to create a continuous, high quality dual carriageway from Newcastle to Ellingham.</p>	Upgrade to dual carriageway	Still being developed	TBC when construction programme is known	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
18.	<p>A1 Scotswood to North Brunton (J74-J79)</p> <p>Four and a half miles of narrow lane widening to allow three lanes of traffic through the junctions, with four lanes between some junctions.</p>	Widening to three lanes	Still being developed	TBC when construction programme is known	
19.	<p>A1 Birtley to Coal House widening</p> <p>Online widening south of Gateshead to three lanes. Alongside this enhancement, separate maintenance schemes will replace and improve the Allerdene Bridge, which carries the A1 over the East Coast Main Line. Constructed nearly 40 years ago, the bridge requires regular maintenance works to keep the bridge operational.</p>	Widening to three lanes	Still being developed	TBC when construction programme is known	
20.	<p>M1 J35a-39 improvement</p> <p>Upgrading the M1 to Smart Motorway between junction 35a (A616) and junction 39 (Denby Dale) near Barnsley. Together with other Smart Motorways already under construction in Yorkshire, this will provide a full Smart Motorway link between Sheffield and Leeds; and together with improvements in the East Midlands will provide a fully upgraded link between Leeds and London.</p>	Upgrade to Smart Motorway	Road Period 2	TBC when construction programme is known	
21.	<p>M1 J24-25 improvement</p> <p>Upgrading the M1 to Smart Motorway between junction 24 and junction 25 in the East Midlands.</p>	Upgrade to Smart Motorway	2016/17	2017/18	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
22.	<p>M1 J24-24a improvement</p> <p>As part of the transport mitigation measures associated with the new Roxhill rail freight interchange, developers are proposing to fund improvements to junctions 24 and 24a on the M1, including removal of the roundabout at junction 24a, a new direct southbound link from the A50 to the M1 and better links to junction 24.</p>	Junction improvements	Still being developed	TBC when construction programme is known	
23.	<p>M1 J19-23a improvement</p> <p>Upgrading the M1 to Smart Motorway between junction 19 (M6 Catthorpe interchange) and junction 23a (East Midlands Airport). Coupled with other improvements, this will complete a Smart Motorway corridor between London and Yorkshire. It also includes an upgrade to junction 21 to provide better links between the M1 and M69, reducing pressure on the main junction and to improve access to south Leicester.</p>	Upgrade to Smart Motorway	Road Period 2	TBC when construction programme is known	
24.	<p>A19 Downhill Lane</p> <p>Significantly enhanced capacity on the junction between the A19 and the A1290 in Sunderland, supporting local plans for an International Advanced Manufacturing Park to the north of the existing Nissan Plant</p>	Junction capacity improvements	2018	TBC when construction programme is known	

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
S.	<p>Oxford to Cambridge Expressway</p> <p>Some of the fastest growing towns in England are located in a belt to the north of London. However transport connections between cities such as Cambridge, Milton Keynes and Oxford are notably poor and create an artificial barrier between hubs of knowledge-based growth. With better links, the synergies between these cities would be stronger, and would do more to drive growth in nearby towns.</p> <p>Much of this Expressway can be created through improvements to the existing road network. This investment plan commits to widening the A428 from Caxton Gibbet to the Black Cat Roundabout, which will create an Expressway from Cambridge to Milton Keynes. The A34 near Oxford could also form part of the route.</p> <p>However, a gap remains between the M1 at Milton Keynes and the M40 near Oxford: traffic travelling the 30 miles between the two cities by dual carriageway has to take a 60 mile route. Growth around Milton Keynes and Bicester creates strong arguments for upgraded transport infrastructure in the area. This study will examine the case for creating an Expressway to connect the towns and cities of the 'Brain Belt' together. It will also look at other enhancements on existing roads along the route, including the A34 around Oxford.</p> <p>This work will take into account work already planned to improve the rail network in this area.</p>	TBC	TBC	TBC	TBC

No.	Schemes Overview	Scheme Type	Construction Starts	Open to Traffic	Strategic Outcomes
S.	<p data-bbox="152 177 488 209">Northern Trans-Pennine</p> <p data-bbox="152 261 1059 596">Between Leeds and Manchester in the south and Edinburgh and Glasgow in the north, there is no complete dual carriageway link between the east and west of the country. This is one of the most visible gaps in the UK transport network, and is seen as a barrier to business in the north of England. It also leaves the economy of the north of England heavily dependent on one road – the M62 – to provide strategic east-west connectivity.</p> <p data-bbox="152 655 1081 836">There is potential to create a new strategic corridor in the region and link the A1 and the M6. Doing so could help the economies of the North East and Cumbria, as well as improve journeys between England and Scotland.</p> <p data-bbox="152 879 1081 1161">The two main east-west roads in this area, the A69 and A66, have been partially upgraded over the years. Both roads have a mix of high-quality dual carriageway and single carriageway. This study will examine the case for dualling one or both of these roads and making other improvements along their length. In doing this, we would further help the development of a northern powerhouse.</p>	TBC	TBC	TBC	TBC

© Crown copyright 2015.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence: visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the **Information Policy Team, The National Archives, Kew, London TW9 4DU**, or email psi@nationalarchives.gsi.gov.uk.

This document is also available on our website at www.highways.gov.uk

If you have any enquiries about this publication email info@highwaysengland.co.uk or call **0300 123 5000***. Please quote the Highways England publications code **PR113/14**.

Highways England Creative job number M140416.

*Calls to 03 numbers cost no more than a national rate call to an 01 or 02 number and must count towards any inclusive minutes in the same way as 01 and 02 calls. These rules apply to calls from any type of line including mobile, BT, other fixed line or payphone. Calls may be recorded or monitored.

Registered office Bridge House,
1 Walnut Tree Close, Guildford GU1 4LZ

Highways England Company Limited registered in
England and Wales number 09346363