# **HIGHWAYS ENGLAND**



## STRATEGIC BUSINESS PLAN 2015-2020

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## 1. Introduction

Highways England is the new Company set up by Government to operate and improve the motorways and major A roads in England.

When the Infrastructure Bill currently being considered by Parliament receives Royal Assent, Highways England will assume responsibility for the Strategic Road Network, and for delivering the Government's vision for that network, from April 2015. The Company has a clear brief set out in the Government's Road Investment Strategy (RIS) and will have committed funding for a five year period to meet the performance expectations set out in that strategy.

Highways England is a public sector company, owned by the Government. 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.

This Strategic Business Plan is the first document to be published by Highways England in response to the Government's RIS. It sets out our main activities and describes how we will go about delivering the Investment Plan and the requirements of a demanding Performance Specification that highlights the levels of performance we are to achieve.

Highways England will be a very different business from the organisation it will succeed. We will have a larger programme of investment to deliver, will work at a much faster pace and with much greater focus on the service we offer our customers.

Over the next few months we will complete our preparations for the launch of the Company. We will mobilise our own people, our contractors and our designers to deliver a huge programme of investment that will make a real difference to businesses, communities and individuals across the country.

Before we commence operating as a company, we will publish our five year Delivery Plan, which will set out our detailed programme, and how we will operate transparently and in the public interest.





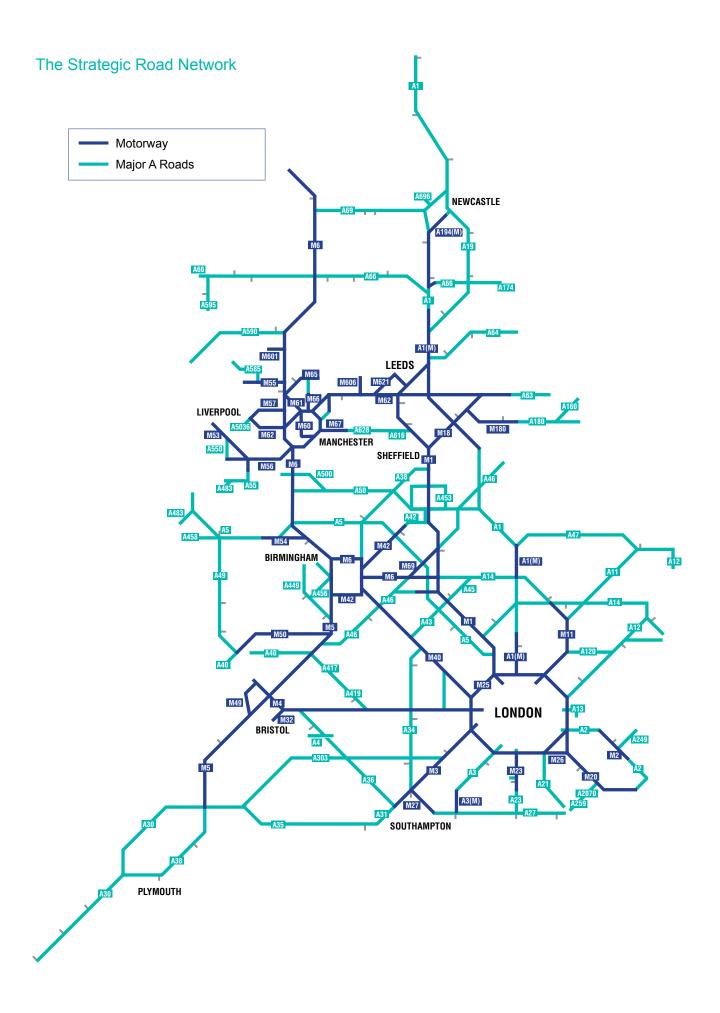
Colin Matthews Chairman





Graham Dalton Chief Executive

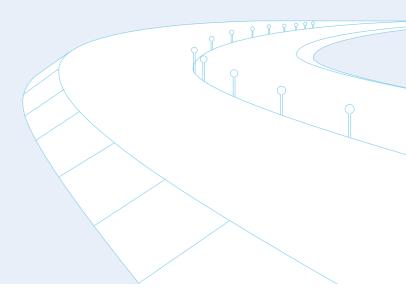
Our primary role is to deliver a better service for road users and to support a growing economy.



#### The Strategic Road Network

The Strategic Road Network (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<sup>1</sup>, 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.



#### The Road Investment Strategy

The RIS sets out an ambitious vision for the future of the network. A vision that by 2040 the network will be smoother, smarter and more sustainable.

In the RIS the Government highlights many of the key challenges faced by the network namely:

- The network is struggling to cope in the face of increasing demand and the volume of high speed traffic
- Delays to journeys deter investment and constrain the ability of business to compete
- Stop-start funding available for roads investment has made it difficult to plan for the long term
- Vehicle emissions and noise significantly impact local communities
- Our customers need better and more up to date information to manage their journeys.

The RIS sets out the investment plan and performance requirements for the network for the next five years, together with a long-term commitment to capital funding totalling more than £11bn. The 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.

There is substantial provision within the RIS to ensure that the programme of investment is delivered in a way that minimises impact on the environment. We will build on recent progress to mitigate the impact of our work and forge closer partnerships with environmental bodies, enabling the plan to be delivered in greater harmony with the environment than in the past.

Our motorways and major roads carry a third of all traffic and two-thirds of all freight.

#### The Performance Specification

The Performance Specification sets out the eight key areas which the Government and the Strategic Roads Network Monitor will measure both the network and company performance. These areas are:

- 1 Making the network safer
- 2 Improving user satisfaction
- 3 Supporting the smooth flow of traffic
- Encouraging economic growth
- Delivering better environmental outcomes
- Helping cyclists, walkers and other vulnerable users
- Achieving real efficiency
- 8 Keeping the network in good condition.

Key performance indicators have been identified for each of these areas with targets being set in all but two. A number of further performance indicators and specified requirements have also been included, or identified for further development.

We will create a safer, more modern and more sustainable network.

Our initial high level response to all the key areas and associated targets is set out under the key themes of this plan. We have highlighted these areas and targets where appropriate to ensure easy identification.

Further details concerning how we will deliver against these key areas and targets will be published in our Delivery Plan before we are formally established as a company. The Delivery Plan will also include details and timescales for those indicators we will measure in addition to those specified by the Government.

This plan outlines the important first steps we will take to create a safer, more modern and more sustainable network. Our customers travel more than 85 billion miles<sup>2</sup> on the network every year. By making the right decisions today, we will make it even safer, more reliable and better connected for everyone.

Road Investment Strategy:

Strategic Vision



## 2. Summary

In this first plan we have set out what we will do, how we will deliver the performance requirements set by the Government, and progress delivery of the Investment Plan in line with the timescales proposed. It will be the first of a series of five year plans in which we will incrementally set out how we will deliver the Government's vision to become a leading infrastructure operator.

In committing to a substantial investment programme to deliver a better network, the Government has acknowledged the need for more autonomy and flexibility in the way the roads are managed and has taken action by creating Highways England, a public sector company owned by Government.

#### What we will do

Over the next decade and beyond we will transform our national roads. We will make best use of the increased certainty of long term funding to enable better journeys on better roads and to improve our service to customers. To do this we will:



Modernise our core motorways and upgrade some of the most important major routes to provide more capacity and better connections

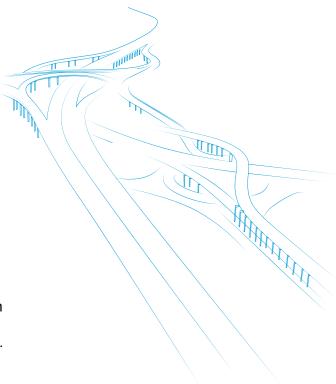


Maintain the network safely and efficiently with minimal impact on drivers and communities



Operate the network to keep traffic moving and our customers better informed.

In the plan we set out what a modern, well maintained and efficiently operated network will look like and the benefits that our customers will experience.



What we will do

#### How we will deliver

The key elements of how we will deliver are covered under five themes, these are:



Planning for the Future – making the best of increased investment and long-term funding certainty for the next decade and beyond



Growing our Capability – creating a high performance organisation enabling our people to perform to the best of their ability, to innovate and keep improving



Building Stronger Relationships – working together to deliver investment where it is most needed

How we will deliver

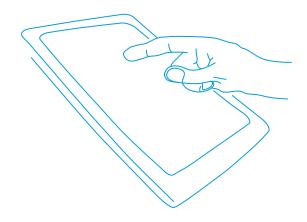


Efficient and Effective Delivery – making our investment go further



Improving Customer Service – delivering a better service that aligns with our customers' needs.

As a government-owned company we will move away from the constraints of being an executive agency. The move towards long term funding certainty, away from stop start decision making and greater commercial flexibility will enable us to respond positively to customer demands and speed up delivery. This will ensure we work alongside our suppliers to gear up to delivering the considerable uplift in investment together with realising the level of efficiencies required.



As a government-owned company we will move away from the constraints of being an executive agency.

#### What this will deliver

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

The key outcomes will be:



Supporting Economic Growth through a modernised and reliable network that reduces delay, creates jobs and helps business compete and opens up new areas for development



Safe and Serviceable Network where no one should be harmed when travelling or working on the network



More Free Flowing Network where routine delays are more infrequent, and where journeys are safer and more reliable

What this will deliver



Improved Environment where the impact of our activities is further reduced ensuring a long term and sustainable benefit to the environment



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.



### 3. What we will do



### Modernise the Network

Tackling congestion and delay, and providing better connections are at the forefront of our plans to provide a modern network that supports a modern economy.

Despite the recent economic downturn traffic levels have remained consistently high. As the economy recovers, performance will continue to deteriorate as the provision of extra capacity has simply been unable to keep pace with demands to use the network.

A modern network will ease congestion, reduce delays and improve journeys for all our customers. A network that is safer, more sustainable and more accessible to all users including pedestrians and cyclists.

#### **Smart Motorways**

network. They connect our major towns and cities and economic hubs including ports and airports. The network transports more than two-thirds of all freight across the country.

Motorways are the heart of our national road

In recent years our Smart Motorways programme has made use of the hard shoulder, utilised advanced technology to add extra capacity and used our Traffic Officer Service to manage traffic effectively across some of the busiest sections of the motorway network. We will build on this by significantly expanding the roll out of Smart Motorways across the country.

By adding more than 400 miles of extra capacity without the need to widen the road, we will create a spine of Smart Motorways which will relieve congestion and reduce delays across the network. Importantly we expect the road to be at least as safe as it was before the changes were made.

#### **Expressways**

In addition to adding capacity to the motorway network, we will begin to upgrade some of our most important major A roads to the new Expressway standard. Making up the majority of the non-motorway network, these roads play an important role in supporting the economy particularly at a regional and local level.

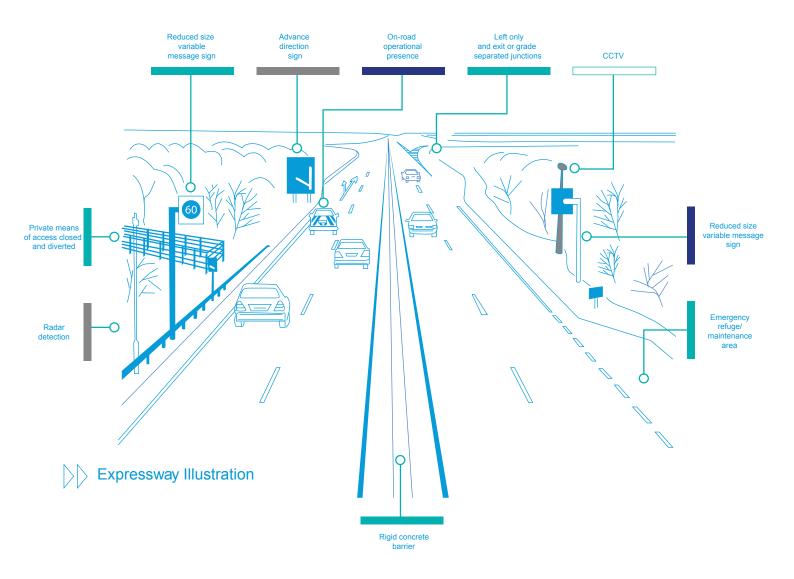
Over the next five years, we will start to improve the way we manage traffic on some of our busiest A roads by transforming them into Expressways, mirroring the journey experience normally associated with our most advanced motorways.

#### Expressways will:

- · Encourage more free-flowing traffic by modernising junctions
- Provide emergency refuge and maintenance areas
- Use advanced technology to detect and help clear incidents more quickly and get traffic moving again.

400 miles of extra capacity.





In time drivers using much of the non-motorway network will experience a service normally associated with our most advanced motorways.

#### Other major investments

We will support regional and local growth by addressing a number of specific bottlenecks and heavily congested routes across the country. For example we will:

 Ease access to the east coast ports and enable significant housing development by improving the A14 and surrounding roads from Cambridge to the A1 near Huntingdon. The scheme will start construction in 2016.

- Consult the public on options for a much needed further Lower Thames Crossing in early 2016, which subject to the necessary planning consents and funding mechanisms, will start construction by 2021.
- Develop and deliver investment of more than £2bn to ease congestion, reduce delays and support local growth.
- Start to tackle a number of persistent and long-standing issues at specific locations on the network including the A303 in the south west, the A1 north of Newcastle and the A27 on the south coast.



85 billion miles of journeys undertaken on SRN per year.

Four million<sup>3</sup> customers using the network every day.

 ${\color{red} {\text{Customers travel on the}} \atop {\text{3rd}^{^{4}}} \text{ safest roads in} \atop {\color{red}}$ 

3rd safest roads in Europe.

The number of killed and serious casualties has almost halved since 2005.

3. DfT Statistics

4. ESTC 8th Road Safety Performance Index Report June 2014

#### A Safer Network

We believe 'no one should be harmed when travelling or working on the Strategic Road Network'. To achieve this ambitious goal, we will implement a comprehensive Safe Systems approach and strategy focussed on safer vehicles, safer roads for safer people.

#### Making the network safer

Key Performance Indicator (KPI): The number of KSIs on the SRN.

Target: Ongoing reduction in network KSIs to support a decrease of at least 40% by the end of 2020 against 2005-09 baseline.

The network is one of the safest in the world. We will make it even safer by continuing to work alongside industry bodies, motoring organisations and enforcement agencies to improve road design, driver behaviour and vehicle maintenance. We will also work with government and other highway authorities to identify a road safety assessment rating system for our roads. This will build upon existing IRAP star rating systems, such as EuroRAP.

Whilst this system is developed, we will use designated funding to deliver a network wide improvement programme designed to ensure more than 90% of the network achieves a safety rating equivalent to EuroRAP 3\* by 2020.

#### More sustainable – reducing our impact

There continue to be significant areas of poor air quality alongside the network and adjoining roads which exceed the UK and EU standards. Vehicles are one of the main sources of carbon and other harmful emissions. The improvements we will make to the network combined with cleaner vehicles, changing driver behaviours and innovative technologies will make a difference. There are no quick fixes or easy solutions to reduce carbon emissions.

## Star rating for safety<sup>5</sup>

50%

of all motorways are rated 3-star and half are 4-star.

### Motorways



4-star

3-star

**78%** 

of dual carriageway 'A' roads are 3-star. The remainder are 4-star (20%) and 2-star (2%).

## Dual carriageway truck 'A' roads



2-star

1-

1-star

62%

of single carriageway 'A' roads are 2-star. Most of the remainder are 3-star (35%) and less than 1% are 1-star.

## Single carriageway trunk 'A' roads



Distribution of total star ratings (smoothed to 3km, RPS1.0 Calculator) 5. Star Rating England's Trunk Road Network However we will play our part to improve air quality in a number of ways including:

- Improve monitoring to identify areas of poor air quality, evaluate proposed measures and to review long term trends
- Support and promote research into mitigation measures and to encourage innovative solutions to improve overall air quality
- Support schemes that bring about positive benefits for local residents and the wider environment.

The effects of excessive noise on people and communities are well recognised. Over the last few years we have been working with Defra to identify those areas on our network that are affected by noise.

#### Delivering better environmental outcomes

KPI: Number of Noise Important Areas mitigated.

Target: Mitigate at least 1,150 Noise Important Areas over Road Period 1.

Increased funding and certainty means we can take action to address many of these issues now. We will reduce the effects of noise for many thousands of people by bringing forward substantive resurfacing and noise mitigation programmes across the network. This will include addressing noise issues at the 1150 Noise Important Areas, through interventions such as use of low noise surfacing. We will also install additional measures such as noise barriers and bunds to combat the disturbance experienced in locations where noise levels are at their highest.

We will continue to adhere to the principles of sustainable development in everything we do. We will improve our performance by finding new and innovative ways to deliver a more sustainable network.

#### More accessible – open to all

We will also improve facilities for people cycling or walking alongside the network. We will again make use of the designated funding to make provision for such groups when designing and building our major schemes and where feasible make it safer and easier for cyclists and pedestrians to access local routes when crossing the network. For cyclists we will:

- Invest £100m to improve access, integration and facilities on and around the network
- Undertake studies at 600 sites identified in conjunction with Sustrans and The National Cycling Charity to decide the best potential solution for each location
- Provide additional professional development training for those engineers and planners responsible for designing schemes to include appropriate cycling provision
- Produce our first National Cycling Strategy by the end of 2015.

## Cyclists, walkers and other vulnerable users

KPI: The number of new or upgraded crossings.

We will continue to improve links to local roads and strengthen connections with other existing and emerging forms of transport. For example we will:

- Work with local authority partners to enable local economic growth, alleviate bottlenecks and better integrate traffic management systems
- Work alongside existing providers and high speed rail to maximise the economic benefit of investment in both road and rail infrastructure
- Support the agreed recommendation of the Davies Commission regarding future airport expansion.



## Maintaining the Network

The much increased investment and commitment we will make over the next five years will ensure a more dependable and durable network that requires less time and money to maintain.

The strategic road network is always open for business. 24 hours a day, seven days a week, all year round. The network carries large volumes of high speed traffic including much of the nation's freight between many of our towns and cities and through many of our most densely populated areas. This almost constant use combined with its complex nature means the network needs maintaining more often and to a higher standard than less busy roads.



21,900 miles of road surface



7,500 miles of embankments and earthworks



18,500 bridges and build structures



14,400 miles of barriers



150,000 technology assets and signs



21,000 miles of drains.

Since 2010 we have successfully reduced the cost of maintenance by nearly a third. We have worked hard to keep the network in a reasonable condition. However, road closures have sometimes been needed to carry out small scale repairs, which wear out more quickly. The economic cost of such closures to commuters, freight and logistic operators and business as a whole has been considerable. This 'find and fix' way of working was a short term and inefficient solution. It now makes sound economic sense to spend more to avoid incurring larger bills in future.

The current annual funding cycle means we often plan work in the spring and summer and carry it out in the autumn and winter. Working when daylight hours are shorter and the weather is poor not only poses additional safety risks to workers, but also means the work undertaken deteriorates at a faster rate than that undertaken in more favourable conditions.

We do more than £100m of construction work every month. The benefits of improved safety, reduced congestion and improved reliability are significant, but as most work is undertaken at night it is rarely noticed. However working at night can cause significant disruption to hauliers and logistic operators who take advantage of less congested roads to transport freight at night.

#### Improving our infrastructure

We will develop more accurate and timely data systems that will predict how assets perform under both normal and stress conditions. This will help us make consistent, evidence based decisions about planning how best to carry out work on the network.

We are committed to delivering even more savings than those we have delivered in the last four years. We will carry out our maintenance work more efficiently reinvesting the savings made to improve the asset and the service we provide.

We will do this by:

- Carefully considering work that needs to be done now and in the future so that we will not need to go back and carry out further work for at least another five years
- Spreading work evenly throughout year, taking advantage of more daylight and better weather to carry out work more safely and efficiently
- Packaging work together so we carry out all major schemes, renewals and routine maintenance in the most efficient manner to minimise disruption
- Better design and greater reliability from the manufacturers of products we use to ensure what we use needs replacing or repairing less often
- Finding new and innovative ways of inspecting and diagnosing faults, identifying problems before they occur and dealing with them early.

We are committed to delivering even more savings than those we have delivered in the last four years.

The scale of investment to maintain and improve the network in future will be considerable. We recognise the potential economic impact and disruption that this work could have so we will actively seek views from drivers, businesses and local communities before planning how the work is carried out.

We will also step up our efforts to inform people about why the work is being undertaken, and the resulting benefits they will see. We will help people make the right choices about their travel arrangements to minimise the risk of delays.

**Encouraging Economic Growth** 

KPI: Average delay (time lost per vehicle per mile).

#### Better management of what we have

We won't neglect routine matters that are important to ensure the safe operation and long term condition of the network.

#### We will continue to:

- Ensure the network can withstand the effects of everyday and increasingly frequent extreme weather events
- Remove litter from the network while informing people of the safety and environmental risks of discarding rubbish
- · Repair potholes when they occur
- Keep traffic signs and signals in good working order
- Manage land immediately surrounding the network to improve biodiversity
- Treat pollutants before they enter the water system and reduce the risk of flooding to communities living adjacent to the network.

We will continue to manage and keep under review those parts of the network currently operated by others on our behalf. Although the earliest Private Finance Initiative contracts do not expire until 2026, we will look to better understand their ongoing maintenance needs to inform our future asset management plans. We will agree with the Government how best to continue operating the Severn Crossings when the concession comes to an end in 2018. We will also work alongside the Motorway Service Area Operators to agree how we continue to meet the needs of customers now and in the future.

#### Keeping the network in good condition

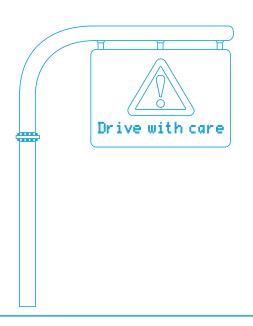
KPI: The percentage of pavement asset that does not require further investigation for possible maintenance.

Target: Percentage to be maintained at 95% or above.

#### Delivering better environmental outcomes

KPI: Delivery of improved biodiversity, as set out in the Company's Biodiversity Action Plan.

Target: The Company should publish its Biodiversity Action Plan by 30 June 2015, and report annually on how it has delivered against the Plan to reduce net biodiversity loss on an ongoing annual basis.



We will keep traffic signs and signals in good working order.



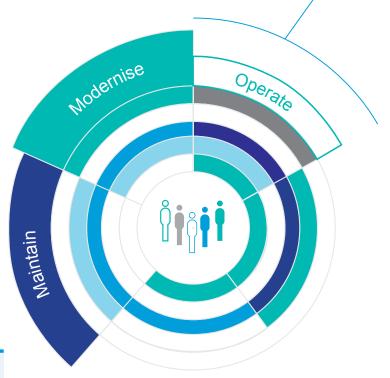
## Operating the Network

Improving availability and making it more free flowing is essential to effective operation of the network.

The network carries high volumes of mixed use traffic including cars, light goods and heavy goods vehicles, coaches and buses. This volume and variety of traffic creates issues not ordinarily experienced on other roads. It also means when both planned and unplanned works and events occur, the delays and disruption to customers and businesses can be considerable.

Our Traffic Officer Service and suppliers work alongside the emergency services to actively clear incidents that cause disruption to peoples' lives and directly impact upon the nation's economy. Although often unavoidable, such delays sometimes result in frustration when customers receive little or no information about the reason, or when they are likely to be able to resume their journey.

Communicating with people when they are using the network in a safe and effective way is now heavily dependent on technology. While recent years has seen a revolution in the availability and accessibility of personal information, the provision of information or the means of transmitting it to those using the network has been unable to keep pace.



#### Supporting the smooth flow of traffic

KPI: Network Availability: the percentage of the SRN available to traffic.

Target: Maximise lane availability so that it does not fall below 97% in any one rolling year.

KPI: *Incident Management*: percentage of motorway incidents cleared within one hour.

Target: At least 85% of all motorway incidents should be cleared within one hour.

## Last year...

Handled 437,000 network incidents

134 full road closures

374 one lane closures

10,000 abandoned or broken down vehicles removed

#### Improving our operations

To minimise cost and delay caused by disruption we will consider how we can better plan roadworks. This will depend on the type of road, the demands of road users in a particular area and the impact on local communities. We will strike a balance between cost and minimising disruption. By communicating more effectively the purpose of roadworks, our customers will better understand their importance and the benefits that will arise. We will keep customers more informed about the work being undertaken and we will help them make the right choices about their travel arrangements to minimise the risk of delays.

We pro-actively provide high quality and timely information which will mean people will know how long their journey will take and be able to make changes to select the best route if circumstances change.

We will work with the private sector and other transport operators to promote the development of technology to increase the number of vehicles that can access the network and reduce the risks associated with driver error on our high speed roads.

We will also develop new and more effective ways to ensure there is less disruption to the network by:

- Working closely with the Police and other emergency services to get the road open more quickly after incidents
- Using new technology and improve training to remove stranded and overturned vehicles
- Developing new control centre equipment that will help our traffic officers manage Smart Motorways, clear incidents more quickly and deal with events more efficiently
- Working with Driver and Vehicle Standards Agency, Police and other agencies to tackle unsafe or unroadworthy vehicles on the network.

It is also important that drivers behave in a way that reduces the risk to others. We will highlight the risks associated with the network and the inherent dangers posed by inappropriate behaviour. We will also encourage and instil a culture across our workforce that fosters safety related innovation, supports open and honest reporting and values safety at the heart of good performance.



Today the Traffic Officer Service:

Attend and clear over

7,000 incidents every month.

Coordinate the resources of the emergency services.

Clean debris from the carriageways.

Manage traffic to reduce incident related congestion.

Keep you informed through electronic message signs and by supplying information for local travel reports.

### 4. How we will do it



## Planning for the Future

We will take a more strategic and long-term approach to planning the network and the business. Changing the way we work will ensure we make the right investment decisions, at the right time to deliver our activities in the most efficient and effective way.

#### **Route Strategies**

In our first few months of operation, we will publish route strategies for the entire network setting out our delivery plans for the next five years. These strategies will provide a clear indication of our priorities for the longer-term. They will help to inform the investment plans of our public and private sector partners and enable our stakeholders and suppliers to engage with us with greater confidence.

This first set of strategies will add detail to the Investment Plan outlined in the RIS and will set a course for how we will deliver the Government's vision and the ambitions set out within this document. The strategies will bring forward solutions that not only unlock jobs and housing, but also take positive action to address many of the congestion, safety and environmental challenges on the network.

We will continue to work closely with the Local Enterprise Partnerships (LEPs) and other local partners, and stakeholders to develop a greater understanding of the challenges facing the network and how best to address them. We have worked collectively with our partners to identify existing and future opportunities to support sustainable growth and development and to balance national priorities with local needs and opportunities.

We will now reflect on the approach taken in these first strategies and the intelligence we have gathered. In particular, we will look at how to secure even closer engagement with stakeholders in acquiring evidence, assessing priorities and agreeing potential solutions. We will then refresh our route strategies by the end of 2016-17 to help us produce our first SRN 'Initial Report' to the Secretary of State, which will inform the development of the next RIS.

These strategies will provide a clear indication of our priorities for the longer-term.

#### Making Growth Happen

We are consulted annually on over 3,000 planning applications, a large number of which have the potential to deliver jobs and housing, and therefore contribute significantly to national prosperity. We will continue to perform this role in a way which maximises the opportunity for growth while ensuring the safe and effective function of the network. We will also continue to engage in shaping Local Plans, and contributing to the Strategic Economic Plans of each LEP.

We will build on the good relationships we have already established with all organisations supporting local economic growth including, LEPs, private developers and local authorities. To further encourage economic growth on and alongside the network, we will produce in consultation with wider public and private sector stakeholders our first Strategic Economic Growth Plan. This plan will set out how we will:

- Better understand the economic development landscape in which the network will operate
- Actively target investment that will create or safeguard jobs or support housing growth
- Forge new and stronger partnerships to unlock future growth
- Work to utilise the Growth and Housing Fund in the RIS, and develop new ways to pool public and private sector funding streams to deliver work on the network

- Work with the freight and logistics sectors and other frequent and extensive users of the network to better understand their needs and help them achieve their business objectives
- Place greater emphasis on schemes that deliver economic growth in the way we assess investment priorities.

#### Forward thinking and Innovation

We will continue to lead the way in developing innovative and forward thinking solutions to challenges on the network. We will develop the knowledge and capability to identify future opportunities to exploit innovative technology. This will enable us to build a strong evidence based approach to inform our future plans.

We will develop and publish our Innovation strategy by Spring 2016. The strategy will address those challenges currently facing the network, the business and our suppliers. It will set out how we will:

- Stimulate new ideas and ways of working notably including new construction materials and processes, road user and worker safety and environmental issues such as air quality, noise and water quality
- Partner with key organisations including Innovate UK and the Transport Systems Catapult to bring forward innovative solutions to the challenges facing the network
- Learn from and share best practice with other leading UK and overseas transport infrastructure organisations
- Establish links with other relevant sectors such as advanced materials and nanotechnology, energy and low carbon technologies and robotics and human centred design.

We will also actively support the testing of driverless vehicles on public roads, which will commence in early 2015, and further investigation and subsequent trialling of cooperative vehicle technology such as heavy goods vehicle platooning systems.

We will forge new and stronger partnerships to unlock future growth.

## **Growing our Capability**

Our people will play a key role in delivering the additional capacity and increased performance requirements set out in the RIS. Our ability to perform well, innovate and continuously improve relies on them.

Our leaders will articulate the organisational vision and communicate a clear strategic narrative to engage our people. Our people will be clear about what is expected of them and will be supported to delivering the increased level of investment. To do this we need to build our capability.

We currently employ more than 3,500 people across the business. To deliver the additional investment we need to increase this number by 600 by early 2016. The majority of these new roles will be in engineering, project and programme management, and other technical areas. Recruitment activity will be underpinned by detailed workforce plans that will detail the capability and skills required. This capacity building will complement the building of capability of our existing workforce.

We will build a high performing infrastructure organisation with a service focused ethos that places the needs of our customers as its prime driver. In particular we will focus on developing effective relationship management skills as we recognise the importance of this in our ability to deliver going forward.

We will empower our people to make informed and balanced decisions. We will create an environment where people feel able to take pragmatic and proportionate risks without compromising their safety, that of their colleagues, road users or the communities we serve. Safeguarding public money will always be of paramount importance. Our approach to meeting this challenge will focus in the following key areas (next page).



We will empower our people to make informed and balanced decisions.



- Create organisational structures to drive efficiency and empower decision making
- Drive collaboration through improved company-wide ways of working
- Use cross functional teams to increase our capacity for innovation
- Develop more streamlined processes to improve information sharing
- · Champion continuous improvement.



#### **BUILD WORKFORCE CAPABILITY**

- Raise standards through effective leadership and management
- Build relationship management skills to drive delivery for our customers
- Drive individual contribution and accountability through performance management
- · Build and sustain our talent.





#### **HOW WILL WE BE DIFFERENT**

- · More diverse and inclusive workforce
- Values and behaviours that will hold ourselves and others to account
- Attract and reward those demonstrating the right behaviours and skills
- Employee Proposition will differentiate us from our competitors
- · Continue to support constructive relations with our workforce.



## **Building Stronger Relationships**

As a new company we will build new relationships, significantly change a number of existing ones and strengthen many others.

In addition to establishing a more independent relationship with Government, we will develop stronger and more productive relationships with both the Strategic Roads Network Monitor and Transport Focus. We will work more collaboratively with our suppliers and bolster our relationship with the great number of stakeholders and partners we frequently engage.

## Working with the Strategic Road Network Monitor

We will establish a positive and cooperative working relationship with the new Strategic Road Network Monitor. We will ensure that they understand our business, the industry that we work in and our customers' priorities. In turn we will act on their feedback, advice and challenge to improve the cost of the service that we provide.

We will provide the Monitor with the information necessary to give confidence to Government and customers about our progress in delivering the requirements of the RIS. To achieve this we will work closely with the Monitor to understand the right balance between routine monitoring and key performance reporting.

#### This will mean:

- Agreeing with Government and the Monitor the baseline for costs and efficiency against which our five year Delivery Plan will be measured
- Agreeing the data and reports that will provide the information the Monitor needs to provide assurance of our performance
- Focusing more resources on illustrating the costs of what we do as well the efficiencies we are achieve
- Working with the Monitor and wider industry to use the expertise both in this country and elsewhere to improve the knowledge and capability of an effective performance and monitoring system.

We will ensure that they understand our business, the industry that we work in and our customers' priorities.

#### **Transport Focus**

Transport Focus (TF) has been established to generate real insight into our customers' priorities and provide a strong and independent voice for their views on the performance of the network and the company. We will help them understand how we interact with our customers and to share our plans for the future. As with the Monitor we will develop clear and effective methods of working to understand what needs delivering over the next five years.

The Performance Specification highlights the importance of customer satisfaction and has set a clear target against which we will be measured. To achieve this we will work with TF to:

- Improve our focus on customers to better communicate what we will be doing, and to actively build their views into our plans
- Develop a more effective measure of customers' views on our performance
- Build on and learn from other transport sectors, so that their needs are more effectively represented in the future.

#### Working with Government

Our existing relationship with Government will fundamentally change. Under the terms of our licence we will be required to deliver the Investment Plan and the expected level of service detailed in the Performance Specification. This way of working will form the basis of our new relationship with Government.

As a company, we will work with Government as our shareholder to effectively manage the transition process and establish lasting partnership that delivers the requirements of the Performance Specification.

#### Working with our Suppliers

The level of complexity and scale of the investment challenge means we must have access to the best people, skills and equipment. The capacity and capability of suppliers to respond will require a significantly greater and more flexible approach to the way we deliver.

We will develop durable and more flexible ways of working with our suppliers and partners across all activities. We will share aims and objectives, impart knowledge to ensure we deliver the right solution at the right cost, and incentivise performance. To do this we will:

- Build our capability and decision making through better intelligence, more effective use of tools and improved data
- Develop a more active approach to planning, delivery and decision making to manage smaller schemes, routine maintenance and our larger programmes
- Integrate work more effectively to better understand and control the impact of our investment
- Develop a joint and collaborative approach to delivering our largest and most complex projects
- Take a more innovative approach to delivery with earlier and stronger collaboration
- Change the way we specify and package our work to maximise productivity, and minimise disruption to customers.

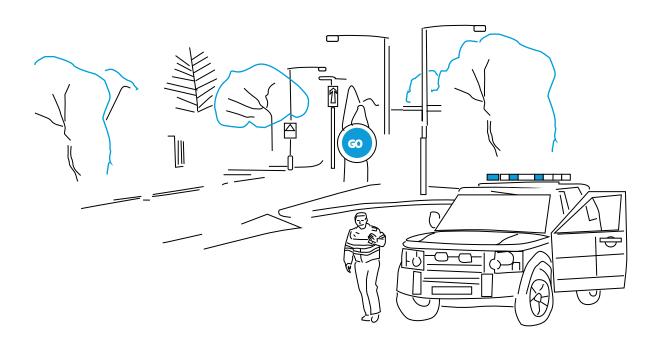
The recently commissioned Collaborative Delivery Framework has appointed 26 companies to help deliver a modern network. The framework is designed to incentivise and reward close collaboration between designers, contractors, and ourselves, to help us procure in the most cost-effective way.

#### Strengthen existing relationships

We will continue to engage with the partners, organisations and other bodies with an interest in the Strategic Road Network.

#### We will:

- Work proactively to engage enforcement agencies to clear incidents more quickly and effectively, remove dangerous and illegal vehicles from the network and to work in partnership to deliver the service set out in the Performance Specification
- Consult with representatives of the freight and road haulage sectors to assist future network planning
- Share knowledge with Road Safety
  Partnerships and other safety bodies to
  ensure an informative and evidence led
  approach to delivering a safer network.



We will develop a joint approach to delivering our largest and most complex projects.



## **Efficient and Effective Delivery**

Long-term funding certainty coupled with increased flexibility will be central to our ability to plan, prioritise and deliver in new ways. This will be essential if we are to work with our suppliers to meet the scale of challenge set out in the RIS.

#### Managing our work

We will organise projects and schemes we deliver into programmes and portfolios of investment. We will complete our major and minor works on the network in a way that reduces the need to return for at least another five years. This approach will ensure we balance the costs and risks of delivering our work with the cost and risks of disruption.

Aggregating programmes into significant portfolios of work will deliver better results and generate greater economic benefit from the investment. This will enable us to start and complete schemes earlier, deliver the benefits in a more cost efficient way and establish a viable and transparent pipeline of future activity. This encourages a long-term, whole life approach to asset management, fosters innovation in the supply chain and promotes regular reviews of the approach taken to inform future plans.

We will organise projects and schemes into programmes and portfolios of investment.

#### Programme delivery

We will structure our delivery programmes around common areas such as particular products, skills or objectives. This will generate synergies during product development and delivery and benefits including:

- Economies of scale and better value from delivering larger and longer contracts
- Staged procurement of services rather contracting on a standalone basis
- Capability to deploy people, plant, and machinery more effectively
- Develop and integrate construction and maintenance work to minimise the impact on customers
- Manage risks across programmes of work rather than at a project or scheme level
- Reduce equipment failures through better diagnosis and product design.

We will extend our efforts to deliver work and to purchase materials at all levels of both our current and potential suppliers. We will further develop our engagement with the wider supply chain through bulk purchasing arrangements. This approach will combine demand across the business. It will mean we are able to buy products and services at a lower cost, driving innovation and reducing waste across the supply chain.

To join up our delivery programme and ensure investment is directed where it is most needed, we will implement an integrated portfolio management approach by the end of 2015.

This function will provide:

- Decision support to select the right programmes and projects
- Standards and processes to ensure consistency of delivery
- Independent oversight, scrutiny and challenge to ensure things are done right first time
- Assurance, coaching and mentoring to build a competent workforce
- Better transparency, accountability and decision making
- Effective identification and management of risk.

We will deliver quicker, more efficiently and right first time achieving substantial efficiency savings at least £1.212bn across our investment programme. In our Delivery Plan we will set out more detail about how we will deliver these substantial efficiency savings.

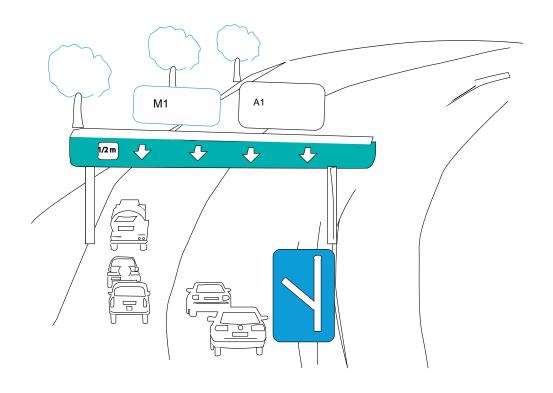
#### Achieving real efficiency

KPI: Cost savings: savings on capital expenditure.

Target: Total savings of at least £1.212bn over Road Period 1 on capital expenditure.

KPI: Delivery Plan Progress: progress of work, relative to forecasts set out in the Delivery Plan, and annual updates to that Plan, and expectations at the start of Road Period 1.

Target: Meet or exceed forecasts.





## Improving Customer Service

We will actively listen to all our customers. We will actively seek their feedback, respond positively to comments received and take action where appropriate.

The Government has rightly set us a clear target to achieve a 90% satisfaction score by 31 March 2017.

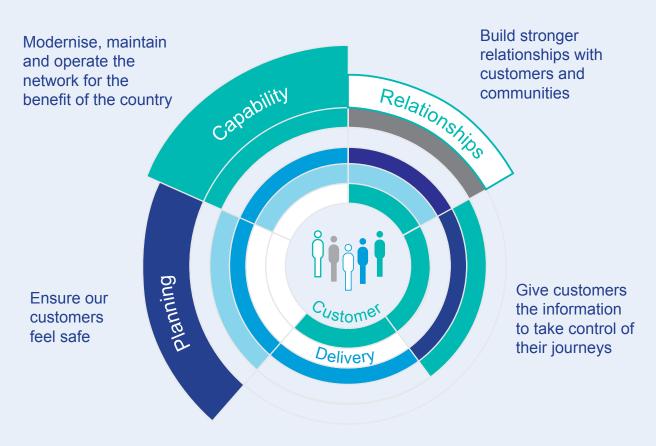
We will improve our service to customers around our customer value proposition.

#### Improving user satisfaction

KPI: The percentage of National Road Users' Satisfaction Survey respondents who are Very or Fairly Satisfied.

Target: Achieve a score of 90% by 31 March 2017 and then maintain or improve it.

## Our customer value proposition encompasses 5 areas



Reduce delays and improve the customer experience

We will undertake and regularly update our research programme to improve our understanding of our customers' needs, their priorities, and perceptions about the service we provide. This information will enable us to work with Transport Focus to develop a new and improved customer service measure by 2017.

We will create a customer panel through which we will secure direct and timely feedback from our customers. We will use this approach to test products and services with a diverse range of our customers to better align what we do with their needs and to help shape and determine our future investment priorities.

We will provide better quality, more available and more easily accessible of information to our customers. We will make full use of current and emerging technology to deliver relevant data and network information directly to our customers and make it widely available for others to use.

We will provide better quality, more available and more easily accessible of information to our customers.

### 5. What this will deliver



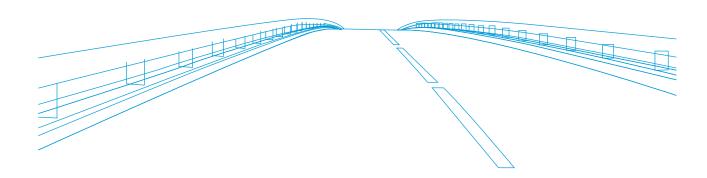
## Supporting Economic Growth

The Strategic Road Network plays a vital role in helping to improve productivity and driving economic growth. It can greatly increase mobility so that people are able to access better and more rewarding jobs. It can open up new markets and suppliers, so that businesses can compete more effectively at home and abroad. It can create opportunity by opening up land for development and break down barriers between areas of affluence and economic deprivation.

We have outlined ambitious plans to deliver a modern, well maintained and operated network that helps make growth happen. By 2020 our customers will be using many more miles of Smart Motorways, the first major A roads will be transformed into high quality Expressways, and work to address delays and some of the most significant bottlenecks that constrain growth and discourage business investment will be well underway.

We will also take a longer-term and more efficient approach to repairing and renewing the network, keeping it available and clearing incidents more quickly, all of which will contribute to minimising delays resulting in less disruption to business. Frequent and detailed feedback from those regularly using the network together with reflecting upon our data will also help us better understand the links between congestion and growth.

We recognise that in our role as managing and operating the network will no longer be enough if we are to support growth at national, regional and local levels. As a company we will proactively seek opportunities to deliver a more free-flowing and better connected network that matches the ambitions of our customers, partners and that set out by Government in its Road Investment Strategy.



We will take a longer-term and more efficient approach to repairing and renewing the network.



#### A Safe and Serviceable Network

Four million people use the network every day. It is one of the most heavily used networks anywhere in Europe. Even with this volume of traffic our roads are among the safest anywhere in the world. This plan sets out our high level plans for building on this in order to make the network even safer.

The Government's target to reduce the number of people killed or seriously injured on the network by 40% by 2020 is challenging, but one we will work hard to deliver. The safety of those using or working on the network is paramount. No one should be harmed when travelling or working on the strategic road network.

Our comprehensive and systematic approach to safety will mean safer roads, safer vehicles and safer people. Safety will continue to be at the core of our work as we modernise, maintain and operate our roads not only for drivers, but also cyclists, pedestrians and other road users. The introduction of Expressways, work to upgrade junctions and removal of some of the worst bottlenecks will all reduce the risk of incidents, as will the ring fenced funding to support wider safety initiatives, cycling and network accessibility.

Better maintained road surfaces and infrastructure will also contribute to making the network safer. Our fully implemented asset management principles will underpin a delivery programme that maintains the road surface in line with, or above those set out in the Government's performance specification.

Working alongside the Driver and Vehicle Standards Agency, the Police and other agencies will reduce the number of poorly maintained vehicles on the network. Improvements in vehicle technology will further mitigate the risks of driver error. Our work alongside manufacturers, enforcement agencies and wider government will provide the necessary platform for the wider application of such technology. Designated funding will actively encourage more innovation and use of technology to aid road safety.

The up to date and more readily accessible information we make widely available to our customers will keep them better informed about the inherent dangers of using the network. It will help people make safe and informed decisions in advance of and during their journeys and encourage everyone to respect other road users those who work on the road. We will support courteous and compliant drivers and efforts to reduce the levels of anti-social behaviour through information and ultimately enforcement. We will also work with our partners to raise awareness and address a range of issues which impair driving, such as fatigue, distraction, alcohol and drugs.

The safety of those using or working on the network is paramount.



## Free Flowing Roads

The Government's performance specification sets out its ambition for a free flowing network. They have set challenging targets to maintain network availability and to clear the majority of incidents within an hour, although acknowledging that other factors including the scale of investment and the role of other partners will be an important factors these targets being in achieved.

The level of work required should not be underestimated. By 2020 we will be delivering around three times the work currently carried out on the network, so some impact on journey times is inevitable. Minimising the impact of this disruption on the economy, environment and people's everyday lives will be a major priority for the new company.

Lane availability will not fall below 97% in any given year, as where and how work will be delivered is carefully planned to minimise disruption. Existing and innovative ways will keep customers better informed about when work will be carried out, why it is necessary and the benefits that will result once it is complete. Feedback from customers and Transport Focus will actively inform our work scheduling and communications so that we are constantly improving what we do.

Advances in technology will continue to reduce the number and severity of incidents on the network and enable them to be cleared more quickly. Our Traffic Officer Service will work even closer with the emergency services and other partners to return the network to full operation as quickly as possible after incidents occur. At least 85% of motorway incidents being cleared within one hour and changes to the remainder of the network will be challenging. However the introduction of Expressways and the extensive programme of junction improvements will result in smoother, more reliable traffic flows on many of non-motorway routes.

In this plan we have outlined the scale of investment required over the next five years and beyond to deliver a modern and well maintained network. A network that is less congested, where routine delays are more infrequent, and where journeys are safer and more reliable.

At least 85% of motorway incidents being cleared within one hour.



## Improved Environment

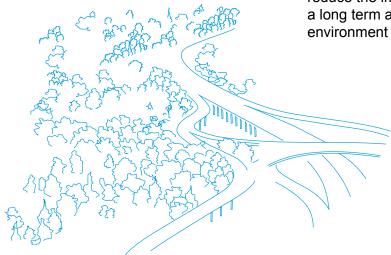
Road transport contributes significantly to the nation's greenhouse gas emissions. Air quality, noise, biodiversity, the wider landscape, flooding and water quality are all environmental issues that are affected by the network. Improvements in our approach to design and construction, quieter road surfacing and species protection have been widely acknowledged as positive ways we have reduced the impact of our work.

The Government recognises the challenge of assessing the environmental impact of the network. We will work with them, industry and other stakeholders to develop better ways to establish a meaningful way to measure the better outcomes that need to be achieved. However this plan clearly demonstrates our commitment to working with partners to make significant progress over the next five years.

Substantial low noise resurfacing and other noise reduction measures will improve the lives of thousands of people at more than 1150 locations on the network. Innovative solutions will ensure wider air quality benefits are delivered and areas immediately surrounding the network will better managed, providing better links to the natural habitat. Improved water quality will be achieved by the installation of more sustainable drainage systems and the risk of flooding to communities who live alongside the network will be reduced.

We will provide more detail about our commitment to reduce the impact and long-term sustainability of our work in our Delivery Plan and our Biodiversity Action Plan. The latter will be published by June 2015.

The scale of investment and certainty of the Government's funding commitment to the network means we can build on the significant progress of recent years. We will continue to ensure our activities do not adversely impact the environment and in future will further reduce the impact of our activities to ensure a long term and sustainable benefit to the environment and the communities we serve.



The Government recognises the challenge of assessing the environmental impact of the network.



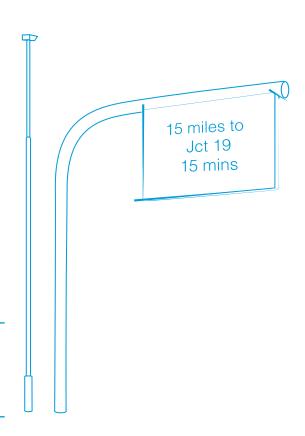
## Accessible and Integrated Network

The network connects many of our towns and cities, enables long distance journeys which often start and end on the local road network and ensures people and goods are able to access our key economic hubs including ports, airports and freight distribution centres.

Many of our towns and cities have grown in response to demographic changes. As a consequence in certain locations, the network itself, or the lack of it, has inadvertently become a barrier to vehicles and other roads users safely accessing local roads, or key economic hubs.

The Government has reiterated its commitment to promote greater transport choice by encouraging walking and cycling and generally more active lifestyles. It expects the network to address barriers to the safe movement of vulnerable users across and alongside the network and prevent future ones from occurring.

In addition to providing better integrated cycling facilities and crossing points at over 200 locations on the network, better training and development of our designers, engineers and planners will increase the awareness of the needs of cyclists and other vulnerable users. The provision of further dedicated funding will mean a more accessible and easier network to navigate. Better integration between networks including local roads, existing and emerging rail links and ports and airports will also benefit road users, businesses and the wider communities located on or near the network.



The provision of further dedicated funding will mean a more accessible and easier network to navigate.



# Appendix I – Funding Profile: 5 Year Budget/Plans

#### Spending Round 2013 (SR13) investment period (6 years)

Capital Expenditure		5 Year pe	riod (RIS	1 period)		5 Year (RIS 1)	Part period RIS 2	6 Year Total
£m	2015-16	2016-17	2017-18	2018-19	2019-20	<b>Total</b> to 2019-2020	2020-21	<b>Total</b> to 2020-2021
C	Capital Ex	penditur	e					
N	/lodernise	e/Enhanc	e					
Enhancements								
Major and smaller projects	1,049	1,086	1,494	1,774	2,215	7,618	3,099	10,717
includes specific funding for:								
Cycling, safety and integration						175	75	250
Environment						225	75	300
Innovation						120	30	150
Air quality						75	25	100
Growth and housing						80	20	100
Sub-total	1,049	1,086	1,494	1,774	2,215	7,618	3,099	10,717
	Ма	intain/Re	new					
Capital Renewals	718	726	732	738	744	3,658	750	4,408
Operate/Support								
Plan/Operate/Support/ Protocols	15	15	15	15	15	75	15	90
TOTAL Capital Expenditure	1,782	1,827	2,241	2,527	2,974	11,351	3,864	15,215

#### Spending Round 2013 (SR13) investment period (6 years)

Operating expenditure (Resource)		5 Year pe	eriod (RIS	1 period)		5 Year (RIS 1)	Part period RIS 2	6 Year Total
£m	2015-16	2016-17	2017-18	2018-19	2019-20	<b>Total</b> to 2019-2020	2020-21	2020-21
Resource								
Maintain/Renew								
Maintenance (and renewals)	285	290	295	300	306	1,476	311	1,787

The Long term capital investment and maintenance and renewals projections shown are as announced in the Statement of Funds Available (SoFA) in the RIS.

The Government has announced that funding of £742m will be available in 2015-16 for our planning, operating and support activities.

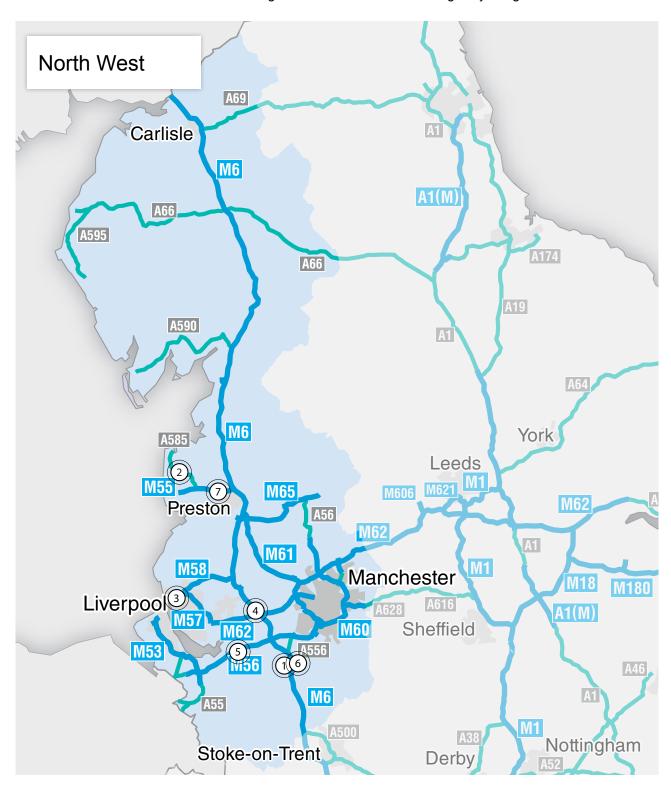
Capital expenditure: Improving and enhancing through investment.

Operating expenditure (resource): Operating and maintaining the existing network.



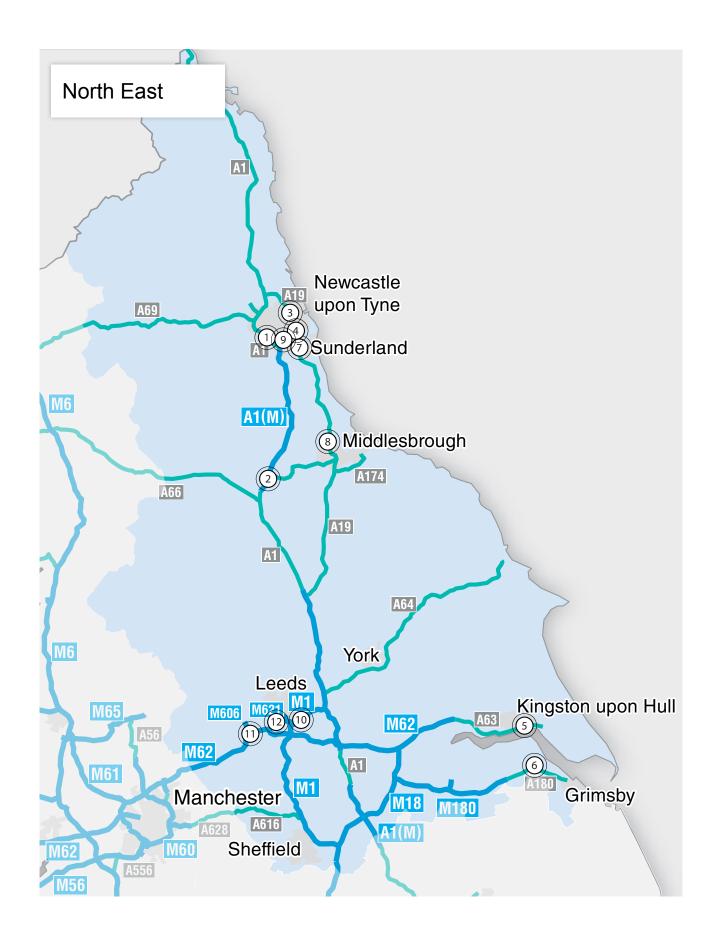
## Appendix II - Investment Mapping

The following section details the schemes that will be under construction during Road Period 1. We have therefore not included any feasibility studies or schemes that will begin in Road Period 2. Finally, we haven't included schemes that will be funded through other sources other than Highways England.



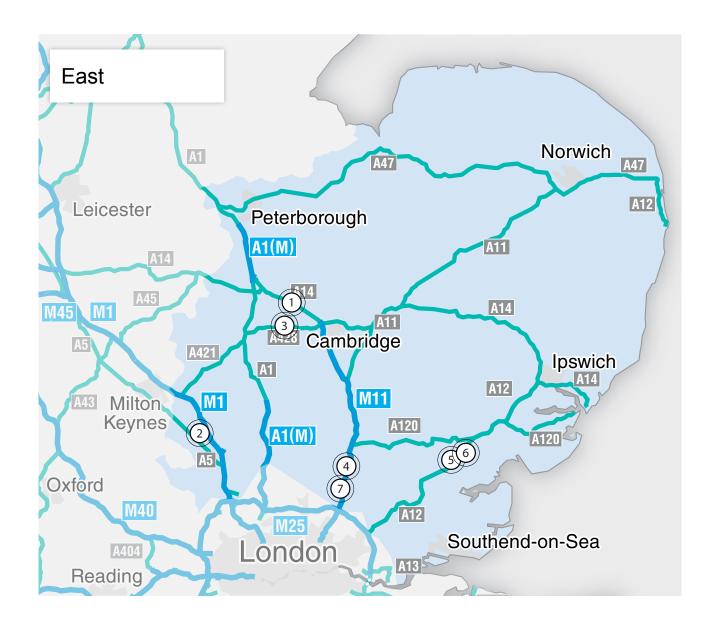
### North West

	Scheme Name	Scheme Description
1	A556 Knutsford to Bowdon	A556: Knutsford: Replacement of the A556 between the M56 and the M6 with grade separated dual carriageway, including a bypass around Mere, improving a road that serves as the main southern access to Manchester.
2	A585 Windy Harbour - Skippool	A585: Windy Harbour to Skippool: New bypass of two congested junctions on the A585(T) at Fleetwood north of the M55; this will reduce the impact of traffic on two villages and remove a major bottleneck on the main road to Fleetwood.
3	A5036 Princess Way - Access to Port of Liverpool	A5036: Princess Way: Comprehensive upgrade to improve access to the Port of Liverpool to much better access along the A5036 link; this is a central element of the Liverpool Local Growth Deal.
4	M6 Junction 22 upgrade	M6 J22: Upgrading the M6 J22 by providing additional capacity; extending and signalising the current gyratory and provision of new facilities for Vulnerable Road Users.
5	M56 new Junction 11a	M56: New J11a: Provision of a new junction to serve Preston; this will provide a new link to the Mersey Gateway Bridge and support the Daresbury Enterprise Zone.
6	M6 Junction 19 Improvements	Upgrades to the M6 at J19, to help the movement of traffic from the upgraded A556 to the new section of Smart Motorway from Cheshire to Stoke.
7	M55 Junction 2	Addition of the 'missing' J2 to the M55, to connect to the Lancashire CC-delivered Preston Western Distributor Road.



### North East

	Scheme Name	Scheme Description
1	A1 Coal House to Metro Centre	A1: J67 (Coal House) to J71 (Metro Centre): Increasing lane capacity from two to three lanes in each direction within the highway boundary; creating parallel link roads between the Lobley Hill and Gateshead Quay junctions.
2	A1 Leeming to Barton	A1: J51 (Leeming) to J56 (Barton): Upgrading to three lane motorway standard completing the remaining non-motorway section on the strategic M1/A1(M) route between London and Newcastle.
3	A19 Coast Road	A19: (A1058 junction): Upgrading the existing grade separated roundabout to a three level interchange to increase capacity and improve safety; together with the A19 Testos, raises the A19 to Expressway standard from Yorkshire to north of Newcastle.
4	A19 Testos	A19: Junction with the A184: A grade separated junction providing free flowing access to the southern side of the Tyne Tunnel; together with the A19 Coast Road scheme this will raise the A19 to Expressway standard from Yorkshire to the north of Newcastle.
5	A63 Castle Street	A63: Castle Street Hull: Grade separation of the A1079 Mytongate Junction in Hull to reduce congestion and improve safety; improvements to the surrounding roads including new pedestrian and cycle access across the A63.
6	A160/A180 Immingham	A160/A180: Port of Immingham: Improvements to the junction between the A160 and A180 near Immingham plus a full dual carriageway link from the A180 to the Port of Immingham.
7	A19 Down Hill Lane junction improvement	A19: Junction with the A1290: Provision of a replacement junction at Downhill Lane to improve capacity and unlock development near the Nissan Factory, including the proposed International Advanced Manufacturing Park.
8	A19 Norton to Wynyard	A19: Norton to Wynyard: Widening the Billingham Bypass to daul three lanes; replacing the concrete surface with low-noise surfacing.
9	A1 and A19 technology enhancements	A1(M) and A19: New technology at motorway standard; includes detection loops, CCTV cameras and variable message signs to provide better information for drivers and active traffic management across Tyne and Wea.
10	M1 Junction 45 improvement	Improvements to J45 to allow increased capacity, and to support the nearby Aire Valley enterprise zone.
11	M62/M606 Chain Bar	M62: J26 (M606 Chain Bar): Provision of a slip road to provide a direct link from the M62 westbound to the M606 northbound; reduces congestion from the main part of the existing junction.
12	M621 Junctions 1-7 improvements	Junction enhancements and localised widening of sections of the M621 in central Leeds.



### East

	Scheme Name	Scheme Description
1	A14 Cambridge to Huntingdon	A14 J20 (Ellington) to J33 (Milton): Major upgrade between the A1 and A10 at Milton, widening to dual three lanes, creating a bypass for Huntingdon and new distributor roads for local traffic and remodelling key junctions.
2	A5-M1 Link Road	New junction 11a on the M1 near Luton/Dunstable, plus a new road to link to the nearby A5. This effectively acts as a bypass for Dunstable, where the A5 currently goes through the town centre. The scheme supports a large housing development at Houghton Regis.
3	A428 Black Cat to Caxton Gibbet	A428: Dualling of remaining single carriageway section between Caxton Gibbet west of Cambridge and the M1, including a grade separated junction at the A1 Black Cat roundabout.
4	M11 Junctions 8 to 14 - technology upgrade	M11: J8 (Stansted Airport) to J14 (Cambridge - Girton Interchange): Technology improvements, including emergency roadside telephones, signals on slip roads, Motorway Incident Detection and Automatic Signalling, variable message signs, CCTV cameras and gantries; work to take place in three phases.
5	A12 Chelmsford to A120 widening	A12: J19 (Chelmsford north) to J25 (A120 interchange): Widening to provide three lanes of capacity between Chelmsford and Colchester, improving safety and reducing congestion.
6	A12 whole-route technology upgrade	A12: M25 J28 and Ipswich: Traffic management technology improvements along the whole route, including detection loops, CCTV cameras and Variable Message signs to allow better information to drivers and active traffic management of traffic on the route.
7	M11 Junction 7 junction upgrade	Extra capacity on J7 near Harlow through significant upgrades and more technology.

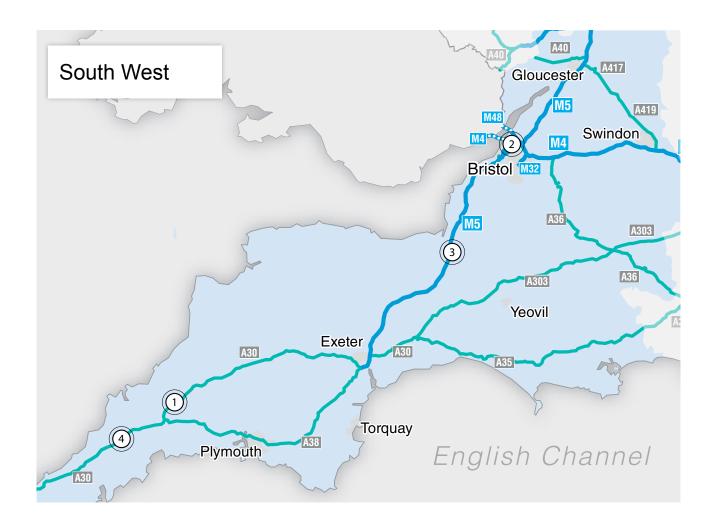


#### **Midlands**

	Scheme Name	Scheme Description
1	A453 Widening	A453: Upgrading between Nottingham and the M1 replacing rural sections with dual carriageway and widening urban sections to two lanes in each direction; improving junctions along the route.
2	A14 Kettering bypass widening	A14: J7-9 at Kettering: Widening to dual three lane.
3	M1 Junction 19 improvement	M1: J19: Reconstruction of the Catthorpe Interchange to provide free flowing movement between the A14 and M6, the A14 and M1, and the M6 and M1.
4	A45-A46 Tollbar End	A45-A46: Replacement of the Tollbar End roundabout with a grade separated junction, plus associated improvements to the adjacent sections of the A46 and A45.
5	A50 Uttoxeter	A50 Uttoxeter: Replacement of two roundabouts on the A50 at Uttoxeter in Staffordshire with grade separated junctions.

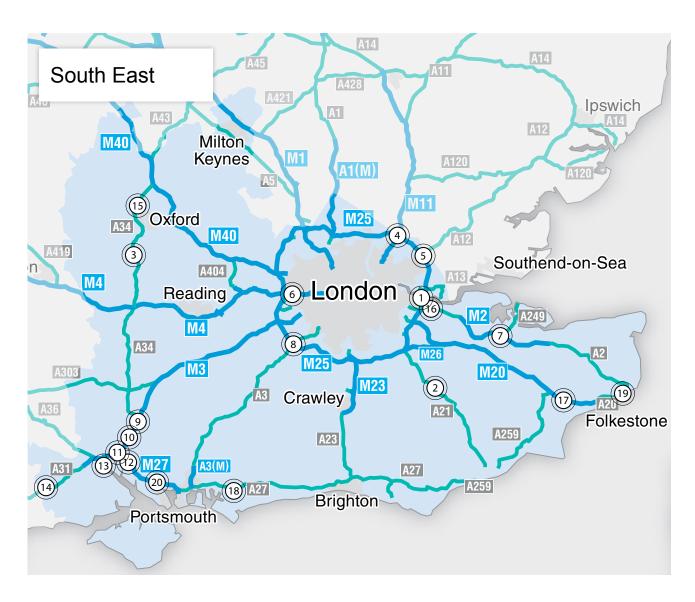
### Midlands continued

	Scheme Name	Scheme Description
6	A52 Nottingham junctions	A52: Nottingham: Package of measures to improve junctions along the A52, including signalisation and junction reconstruction.
7	A500 Etruria widening	A500: Etruria: Widening the A500 between Wolstanton and Porthill near the Etruria Valley development north of Stoke-on-Trent; this complements measures on the local road network funded under the Stoke-on-Trent and Staffordshire Growth Deal.
8	M6 Junction 10 improvement	M6: J10 (Walsall): Providing additional capacity at the junction, including the replacement of both bridges allowing the widening of the roundabout to four lanes as part of the Black Country Local Growth Deal.
9	A5 Dodwells to Longshoot widening	A5: Hinckley: Widening of the section of A5 near Hinckley to dual carriageway where it carries traffic for both the A5 and A47.
10	M42 Junction 6	M42: J6 (Birmingham Airport): Upgrading the junction to allow for better movement of traffic on and off the A45, supporting access to the airport and preparing capacity for the new HS2 station.
11	A46 Coventry junction upgrades	A46: Coventry junction upgrades: Upgrading the roundabouts at Binley and Walsgrove to provide grade separated junctions on the A46; upgrading the trunk road sections of the A45/A46 between the M6 and M40 to Expressway standard.
12	A45/A6 Chowns Mill junction improvement	A45/A6 Chowns Mill, Higham Ferrers: Improvements, including segregated lanes, signalisation and construction of some additional carriageways at the A45/A6 junction at Higham Ferrers in Northamptonshire.
13	M5 Junctions 5, 6 and 7 junction upgrades	M5: J5 (Droitwich north) to J7 (Worcester south): Significant expansion to J6 near Worcester with improvements to approach roads and additional measures to improve capacity on J5 and J7.
14	A43 Abthorpe Junction	A43: Abthorpe Junction, Towcester: Providing additional capacity at the A43 Abthorpe Junction (see also A5/A43 Towcester Relief Road).
15	M54 to M6/M6 Toll link road	M54 to M6/M6 Toll: Adding north facing access between the M54 and the M6 and M6 Toll between J10a and J11.
16	A14 Junction 10a	A14: A new grade separated J10a east of Kettering, along with closure of east facing slip roads at J10, to support the East Kettering Sustainable Urban Extension.
17	A5 Towcester Relief Road	A5/A43: Towcester: Measures to improve the A43 and A5 as part of the Towcester southern extension and a new link road to the south of the town, allowing traffic to bypass central Towcester (see also A43 Abthorpe junction).
18	A38 Derby Junctions	A38 Derby: Replacement of three roundabouts to provide grade separated interchanges, raising the A38 in the East Midlands to Expressway standard and removing the conflict between local and long distance traffic.
19	M1 Junctions 24 and 24a	Developer-funded upgrade to the M1 to link J24A and J24, with a direct link from the A50 to the southbound M1 for the first time.



### South West

	Scheme Name	Scheme Description
1	A30 Temple to Higher Carblake	A30: Temple to Higher Carblake: Upgrading the A30 to dual carriageway, replacing the current single carriageway north of Bodmin and connecting the existing high quality dual carriageway.
2	M49 Avonmouth Junction	M49: New junction to provide strategic access to Severnside and Avonmouth; this will support the Enterprise Zone and local growth in the Bristol area.
3	M5 Bridgwater Junctions	M5: J23 (A39 interchange): Upgrading of the junction to provide better access to Hinkley Point and Huntspill Energy Park.
4	A30 Chiverton to Carland Cross	A30: Chiverton to Carland Cross: Upgrading the A30 to dual carriageway north of Truro, linking existing dual carriageways around Bodmin with the Redruth Bypass; coupled with the Temple to High Carblake scheme with will improve the A30 to Expressway standard between Camborne and the M5.

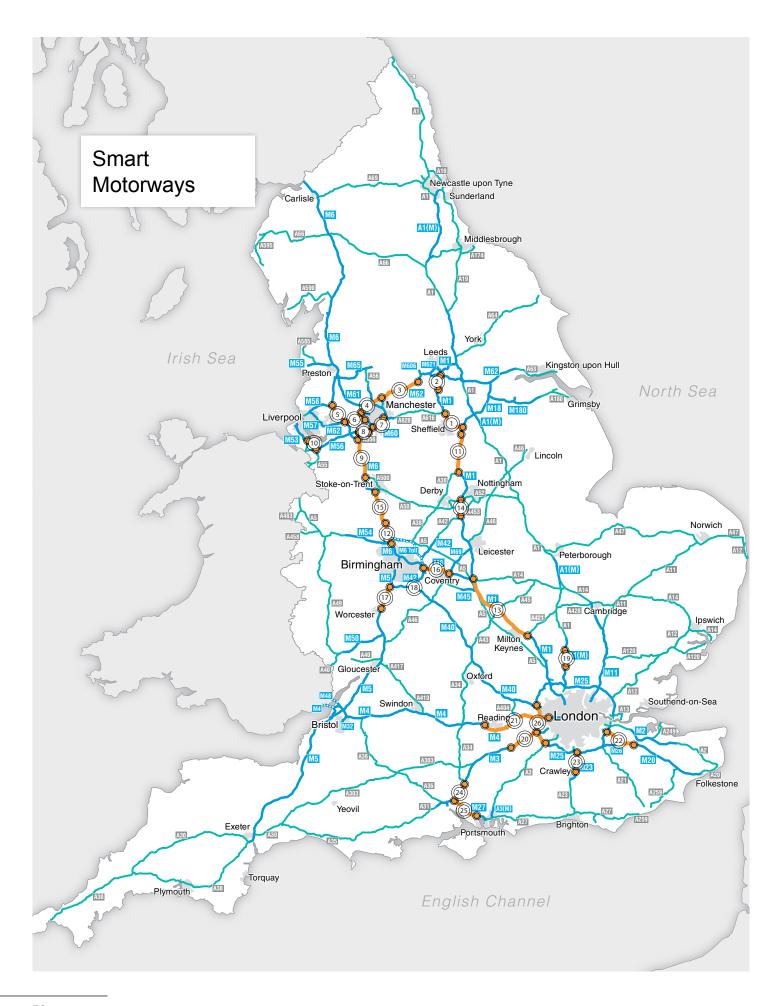


### South East

	Scheme Name	Scheme Description
1	M25 Junction 30	M2:5 J30 (A13): Comprehensive expansion of the junction including free-flowing links from the southbound M25 to the eastbound A13. The scheme improves access to ports in the Thames Estuary.
2	A21 Tonbridge to Pembury	A21: Tonbridge to Pembury: Dualling of the A21 between Tonbridge and Pembury, linking existing high quality dual carriageway north of Tonbridge with existing dual carriageway to the south and providing a grade separated junction at Longfield Road.
3	A34 Technology enhancements	A34: M4 (J13) to M40 (J9): Technology improvements, including detection loops, CCTV cameras and other driver information systems.
4	M25 Junction 25 improvement	M25: J25 (Cheshunt): Junction improvements to provide widening, signals and free flow left turn.

### South East continued

	Scheme Name	Scheme Description
5	M25 Junction 28 improvement	M25: J28 (Brentwood): Upgrading the interchange with the A12 to provide dedicated left turn lanes and improvement of the gyratory system.
6	M4 Heathrow slip road	M4: J4 and J4a (access to Heathrow Airport): Improved access to Heathrow Airport through improved pinch point signing and signals; underpass for non-motorised users and local environmental mitigation.
7	M2 Junction 5 improvements	M2: J5 (A249): Additional capacity at the junction through improvements to slip roads and enhanced approaches to the junction.
8	M25 Junction 10/A3 Wisley interchange	M25: J10 (A3 Wisley): Improvement of the interchange to allow free-flowing movement in all directions, together with improvements to the neighbouring Painshill interchange on the A3 to improve safety and reduce congestion.
9	M3 Junction 9 improvement	M3: J9 (A34): Comprehensive package of improvements, to include new links and widening and remodelling of J9 to allow more free flowing connections and reduce congestion.
10	M3 Junction 10-11 improved sliproads	M3 J10-11 (Winchester south): Improvements for merging traffic to include technology, widening and lane realignment; lane gain and lane drop will smooth flow of traffic onto the M3 and assist flow to Southampton Port.
11	M3 Junctions 12-14 improved sliproads	M3: J14 (M27 interchange) to J12 (Eastleigh) northbound: Carriageway widening and junction reconfiguration to improve capacity through the junction.
12	M27 Southampton Junctions	M27: J5 (Southampton Airport) to J8 (A3024): Widening and signalisation of slip roads and access routes to J8, and replacement of rail bridges in Southampton (on local road network) to reduce pressure on the motorway.
13	M271/A35 Redbridge roundabout upgrade	M271/A35: Junction improvements to provide a dedicated left turn lane for traffic leaving the M271 for Southampton Port and free flow traffic from the Port onto the M271 (a 'hamburger' roundabout).
14	A31 Ringwood	A31: Ringwood: Widening to three lanes and junction improvements providing more capacity for local traffic; adjustments to nearby road network to provide improvements for pedestrians; addresses safety and congestion issues.
15	A34 Oxford Junctions	A34: Oxford: Improvements at Peartree and Botley interchanges.
16	A2 Bean and Ebbsfleet Junctions	A2: Bean and Ebbsfleet Junctions: Improvements to the junctions on the A2 near Bluewater to enable major developments in the vicinity of Ebbsfleet.
17	M20 Junction 10a	M20: J10a (Ashford): New junction to support major development to the south east of Ashford.
18	A27 Chichester improvement	A27 Chichester Bypass: Upgrading the four junctions on the Chichester Bypass.
19	A20 Access to Dover	A20: Access to Dover: Local improvements to improve access to the Port of Dover from the M20; includes redesigning two junctions to provide free flow journeys for lorries resulting in improvements to safety and air quality.
20	M27 Junction 10	Developer-funded improvements to M27 J10, providing access both east and west in place of the current junction layout. Helps significant housing growth around Fareham.



### **Smart Motorways**

	Smart Motorway Scheme	Smart Motorway Description
1	M1 Junctions 32-35A	M1: J32 (M18 interchange) to J35a (A616): Upgrading to Smart Motorway including hard shoulder running.
2	M1 Junctions 39-42	M1: J39 (Denby Dale) to J42 (M62 interchange): Upgrading to Smart Motorway including hard shoulder running.
3	M62 Junctions 20-25	Smart Motorways across the Pennines, from Rochdale to Brighouse. Links two existing Smart Motorway sections to create a continuous smart route from Leeds to Manchester.
4	M60 Junction 8 to M62 Junction 20: Smart Motorway	M60: J8 to M62 J20: Upgrading to Smart Motorway between J8 and J18 on the M60, plus Smart Motorways with all lane running on the M62 from J18-20.
5	M6 Junctions 21A-26	M6: J21a (M62 Croft interchange) to J26 (Wigan): Upgrading to Smart Motorway including hard shoulder running; this links to the Smart Motorway scheme on the M62 J10-12 to the east.
6	M62 Junctions 10-12	M62: J10 (M6 Croft interchange) and J12 (M60 Winton interchange): Upgrading to Smart Motorway including hard shoulder running; this links with the M60 Smart Motorway schemes to the east and M6 schemes to the west.
7	M60 Junctions 24-27 and J1-4	M60: J24 (M67 Denton interchange) to J27 (A560) and J1 (Stockport) to J4 (M56): Upgrading the south eastern quadrant of the M60 to Smart Motorway including hard shoulder running on the contiguous section from J24 to J4.
8	M56 Junctions 6-8	M56: J6 (Manchester Airport) to J8 (A556): Upgrading to Smart Motorway including hard shoulder running; together with improvements to the A556, M6 J19 and M6 Smart Motorway this forms part of a comprehensive upgrade to Manchester's southern access.
9	M6 Junctions 16-19	M6: J16 (A500) to J19 (A556): Upgrading to Smart Motorway including hard shoulder running; along with other improvements to the M6 and M1 this forms the top end of the "smart spine" linking London and the north west.
10	M53 Junctions 5-11	M53: J(A41) to J11 (M56 Stoak interchange): Upgrading to Smart Motorway including hard shoulder running.
11	M1 Junctions 28-31	M1: J28 (Mansfield) to J32 (Sheffield): Upgrading to Smart Motorway including hard shoulder running; together with existing improvements to the south, this creates a Smart Motorway link between Derby, Nottingham and Sheffield.
12	M6 Junctions 10a-13	M6: J10a (M54) to J13 (Stafford): Upgrading to Smart Motorway including hard shoulder running.
13	M1 Junctions 13-19	M1: J13 (Milton Keynes south) to J19 (Catthorpe Interchange with M6/A14): Upgrading to Smart Motorway, including hard shoulder running; along with other improvements this is an important part of the "smart spine" linking London and the north west.
		M1: J24 (A453, East Midlands Airport ) and J25 (A52 between Nottingham and Derby): Upgrading to Smart Motorway, including hard shoulder running.
(14)	M1 Junctions 23a-25	M1: J23a (A42) to J24 (A453, East Midlands Airport ): Upgrading to Smart Motorway including hard shoulder running, to link with previously announced Smart Motorway scheme on the M1 J24 to J25.
15	M6 Junctions 13-15	M6: J13 (Stafford south) to J15 (Stoke south): Upgrading to Smart Motorway including hard shoulder running. Along with other improvements, this is an important link in the "smart spine" linking London and the north west.

# Smart Motorways continued

	Smart Motorway Scheme	Smart Motorway Description
16	M6 Junctions 2-4	M6: J2 (M69 interchange) to J4 (M42 interchange): Upgrading to Smart Motorway including hard shoulder running. Along with other improvements this is part of the "smart spine" linking London and the north west.
17	M5 Junctions 4a-6	M5: J4a (M42 interchange) to J6 (Worcester): Upgrading to Smart Motorway including hard shoulder running.
18	M40/M42 interchange Smart Motorways	M40/M42 interchange: Upgrading to Smart Motorway from J16 of the M40 and from J3 to J3a of the M42 including the introduction of all-lane running to the existing Smart Motorway section between J3 and J3a of the M42.
19	A1(M) Junctions 6-8 Smart Motorway	A1(M): J6 (Welwyn north) to J8 (Hitchin): Upgrading to Smart Motorway including widening of two lane section to dual three lane and hard shoulder running.
20	M3 Junctions 2-4a	M3: J2 (M25 interchange) to J4a (A327 Farnborough): Upgrading the M3 to Smart Motorway including hard shoulder running.
21	M4 Junctions 3-12	M4: J3 (Uxbridge) to J12 (Reading west): Upgrading to Smart Motorway, linking Reading to Heathrow.
22	M20 Junctions 3-5	M20: J3 (M26 interchange) to J5 (Maidstone): Upgrading to Smart Motorway including hard shoulder running.
23	M23 Junctions 8-10	M23: J8 (M25 interchange) to J10 (Crawley): Upgrading to Smart Motorway, improving connections to Gatwick Airport.
24	M3 Junctions 9-14	M3: J9 (Winchester/A34 interchange) to J14 (M27 interchange): Upgrading to Smart Motorway, linking with the Smart Motorway scheme on the M27.
25	M27 Junctions 4-11	M27: J4 (M3 interchange) to J11 (Fareham): Upgrading to Smart Motorway, linking with the Smart Motorway scheme on the M3.
26	M25 Junctions 10-16	M25: J10 (A3) to J16 (M40 interchange): Upgrading Smart Motorway and substantial widening of J11 (Chertsey); this provides for four lane running through junctions on the M25 between J10 and J16 leading to five lane Smart Motorway.



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