

Highways England Asset management strategy England's strategic road network is valued at £128 billion, and its real value is in connecting the country, supporting the growing economy and bringing friends and families safely together.

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This strategy helps us to deliver our commitments, and continue our journey as an asset management organisation which is fully focused on safeguarding the future of one our nation's most important assets.



I am pleased to introduce Highways England's first asset management strategy, which describes our approach to managing the network, providing our customers with the service they really need.

'Asset management' is a frequently used term, but what does it mean to us at Highways England? It is often associated purely with maintenance, and while repairing a road is asset management, it is only part of what Highways England does. Ultimately it is about how we use our assets - bridges, roads, drainage, technology, data and even our staff skills and capabilities, and those of our suppliers - to deliver a service to our customers.

Good asset management is about understanding our customers and stakeholders, identifying what they need, and then using our assets effectively to deliver the right level of service. We want to understand what satisfies our customers, and what we can do to influence this. For example, how does picking up litter, responding to complaints, or the condition of our bridges affect our customers' experience of our network? As a publicly funded organisation, we balance investment across our activities to make the most of every pound we spend. To balance asset performance, risk and investment for our customers, we need access to the right data about asset condition and performance. We also need the tools and skills to understand what the data is telling us. For example, information to better identify where the network is at risk of flooding, or better inspection data to help us spot defects early or predict where they might occur in the future.

Everyone at Highways England is involved in asset management. Our ambition is to connect our activities better, so that we work together to deliver and continuously improve the service we provide. This might mean changing the way we design and build new assets, engage with our customers, clean signs, manage incidents or replace assets.

This strategy helps us to deliver our commitments, and continue our journey as an asset management organisation which is fully focused on safeguarding the future of one our nation's most important assets.

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Mike Wilson, Highways England Chief Highways Engineer

# Introduction

We connect the country – by maintaining, operating and improving the strategic road network (SRN) across England safely, reliably and effectively. Our network is made up of a diverse range of physical 'assets', such as roads, bridges and technology equipment. To operate these assets and deliver a good service to our customers, we make decisions supported by important non-physical assets, such as our data and information.

One of our main priorities is managing these assets effectively and efficiently, to deliver the outcomes our customers and shareholders want. By adopting an asset management approach, we can align our strategy and planning activities to create, maintain, operate and renew all of the assets that make up the SRN. Asset management links all our activities, and supports our three imperatives: safety, customer service, and delivery.

The way we deliver our asset management determines how successful we are in meeting the commitments set out in our strategic business plan.

We set out our vision for the future of the SRN in Connecting the country: planning for the long-term. To achieve this longer-term vision, looking as far ahead as 2050, we have set out several drivers for change. Asset management is critical for helping us respond to these drivers. It helps to drive the continuous change and improvement needed, so that we continue to get the best value from the SRN for our customers and our shareholder.



## Our drivers for change



#### Climate change

Deliver a resilient network to cope with extreme weather events, for example having sufficient drainage capacity to manage extreme rainfall.



## Technology

Opportunities to exploit new data, information and materials.



#### Connected autonomous vehicles

Leading to a fundamental change in the assets we provide, for example 'virtual' signs shown on in-car displays.



#### Skills

Attracting and retaining a skilled workforce within the growing infrastructure sector.



#### Increasing customer expectations

Greater accountability expected from more direct customer funding through vehicle excise duty.

## Ageing assets

Maintaining the performance and safety of an ageing asset base.



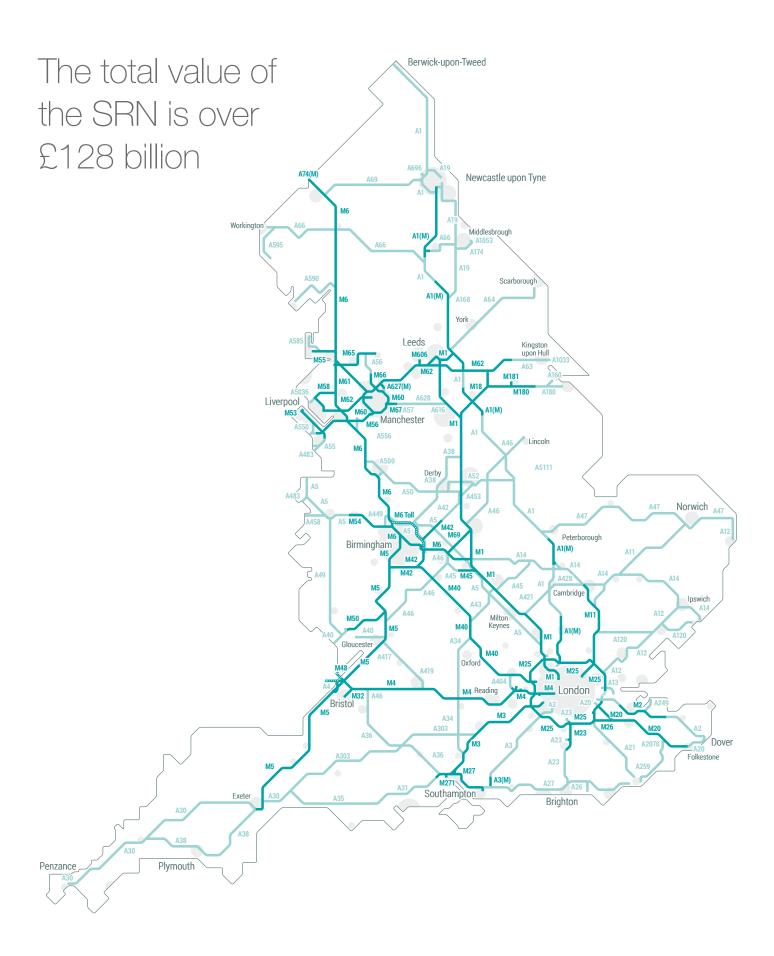
#### Increased network demand

Managing customer disruption resulting from major improvement work, including third party projects such as HS2.



#### **Financial constraints**

Become more efficient to manage financial and other resource constraints.



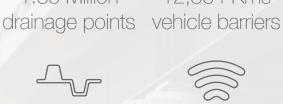




1.35 Million 12,864 Kms



13,588 Kms geotechnical



70,000 Road sensors





121,746 Lights



assets

# Document structure

This strategy describes how we deliver our asset management policy, which sets out our senior leadership commitment and overall approach to asset management.

Sections 1 and 2 of this strategy describe the line of sight from our licence requirements, to delivering work on the ground. They also explain how we will connect activities across our organisation to plan and deliver the service our customers expect.

Sections 3 and 4 describe how we will make our asset management policy a reality, setting out the actions we will take to drive excellence in asset management. This builds on what we have achieved since we were established in 2015.

Section 5 describes how we will continue to review and improve our approach to sustain our performance over the long term.



# Supporting our objectives

Asset management is a critical component in helping us comply with our licence and the road investment strategy.

The Department for Transport (DfT) sets out what we must do, and provides funding through 5-year 'Road Periods'. The Office of Rail and Road monitors how we deliver our strategic business plan, including key performance indicators, and Transport Focus represents our customers' interests.

This diagram sets out the connections between our licence and our asset management approach.

## **66 Highways England is managed and publicly funded through 5 year 'Road Periods' 99**

Our imperatives: safety, customer service and delivery **Highways England** licence Sets out our purpose, and what we must achieve in managing the strategic DfT's Road road network **Investment Strategy 2** Provides government's strategic vision and Strategic priorities for the strategic business plan road network Provides the company's strategic direction based on the vision and objectives in the Road **Delivery** plan Investment Strategy Sets out how we will deliver the activities in the Asset management strategic business plan and timescales involved policy Explains the importance of asset management in delivering our vision, our approach to asset management and senior Asset management management strategy commitment to it Explains what asset management means in practice to our customers, stakeholders and our Asset management people development plan Plan for asset management improvements needed to Asset group deliver the asset strategies management policy Set out our approach to managing specific asset groups (such as drainage, pavements and structures) in response to the commitments and funding agreed for the current Road Period Our imperatives: safety, customer service and delivery

# Our asset management strategy

Asset management runs throughout our organisation, and our approach has been developed since we were established in 2015. We learn from what works well in other countries and sectors, to shape a positive asset management culture across our company, our suppliers and the highways sector.

We know that we make the best decisions about how and when to create, maintain, operate and renew our assets when we share common objectives and work together. Our vision is to create a culture and establish ways of working that make sure all our asset management activity is aligned and flows through:

- Establishing customer needs
- Setting our strategy and securing funding in response to these needs
- Planning how we deliver our commitments
- **Delivery** of these activities on our network

For our decisions to be effective, all parts of our organisation need to contribute and have a line of sight from our licence requirements, imperatives and future vision, through to on-the-ground delivery. We have made progress during Road Period 1 and our asset management strategy sets out how we will embed this further in Road Period 2. We will make aligning our priorities across the organisation our default way of working. Our strategy promotes a culture of more aligned decisionmaking, making sure that asset investment decisions that affect the network now, also support the network we are building for the future. We do this by making sure the right people are involved in making balanced investment decisions, drawing on information and knowledge from across our organisation and supply chain.

We work across the whole asset lifecycle; understanding that asset decisions we make may affect future service provision. This means that we plan and account for emerging and evolving challenges around customer expectation, climate change and new technology. This strategy sets out how we make sure that the decisions we make are framed by this lifecycle perspective.

Finally, our strategy is to seek **continuous improvement**; that lessons learnt from our activities enhance our overall approach to asset management, and we continually improve our ways of working.

**66 Linking strategic planning and service delivery 99** 

Our people will understand the role of our assets in delivering a service, and feel personally responsible for their part in delivering that service. When they identify something which may put that service at risk, they will take personal responsibility for making sure that it is resolved in a way that prevents it reoccurring.

# Our asset management culture

We are building a strong asset management culture across the company, so all our employees and suppliers know how they make a difference to the service we provide to our customer. We all have a role to play in asset management. Personal ownership of these activities and bringing our teams together to provide good service, is what makes us a successful asset management organisation – doing the right thing at the right time.

## 66 £15bn investment made in Road Period 1, including £11bn of capital expenditure 99

#### We enhance our culture through (

**Asset management leadership:** Our asset management strategy is framed by a commitment from our senior leadership teams to guide the approach and the supportive behaviours we need to be successful. It emphasises the role that we and our supply chain can each play in improving our performance.

Asset management governance: The Executive Asset Management Steering Group is a sub-group of the Highways England Executive Committee. It is accountable for the implementation of our asset management policy and strategy through our asset management approach across the company. This group owns our asset management development plan, which sets out our improvement activities to deliver this strategy over the next five years. This plan defines how we will clarify and strengthen the relationships between asset management activities, decision-making, risk management and information sharing across the organisation.

**Asset management ownership:** This strategy reinforces a collective responsibility for the condition and performance of the strategic road network. To be able to take individual responsibility, we need clear roles and a common understanding of how we work as one organisation. Our people are experts in their specialist fields. Good asset management connects this expertise, sharing risks and priorities so that we deliver the service required by our customers and stakeholders.

We enhance our culture through

# Delivering our asset management approach

We will deliver our asset management approach by developing our organisation in the six areas set out in our asset management policy .



## Focusing on customer service

We design, build, maintain and operate our assets to deliver a level of service that meets the expectations of the travelling public.



## Using our asset knowledge to manage risk

We collect asset data to produce the information we need to make informed decisions. We understand asset risk and with our knowledge of asset performance and cost, we make balanced intervention decisions.



## Linking strategic planning and service delivery

We have published a long-term vision for the strategic road network, and we develop costed investment programmes for the existing and forthcoming Road Period to help deliver our vision.



## Making better whole life decisions

Building an asset is just the start – we consider how assets will be maintained and operated to shape their initial design and construction. We understand that asset decisions we make may affect future service provision.



## Right intervention at the right time

We have the tools and information to understand the existing needs of the asset, together with predicted future need. This helps us to identify programmes of work to maintain asset condition and performance.



## Empowering and connecting our people

We provide clarity on our asset management approach and expectations. We enable training and development so that all our people have the skills and tools they need to deliver their role at all levels of the company.

The tasks and areas for improvement are included in our asset management development plan. These improvement projects are owned and delivered by all parts of our organisation and are summarised on the following pages.



Our approach to asset management means that the way we design, construct and operate the assets is actively shaped by the needs of, and impact on, our customers. We understand that the network is used by a wide range of different customers with varying needs and concerns. To make sure our customers influence and can understand our asset management delivery, we plan to:

- consult our stakeholders on our asset management vision and objectives, and the programme that delivers them
- develop levels of service that balance cost, risk and performance, and consider both customer and government needs
- communicate with our stakeholders to help them understand how our asset management delivery plans respond to their requirements
- review customer feedback to make sure that our approach to maintaining assets responds to their requirements



## Linking strategic planning and service delivery

To ensure that the long-term vision of the network, as required by our licence and set out in Connecting the country: planning for the longterm, is delivered on the ground, we plan to:

- implement asset group strategies, which translate our strategic objectives into approaches for managing specific asset types, such as pavements, drainage and structures
- introduce a new asset class steward role to support our existing teams, to make sure major asset types are managed consistently across the country
- develop a 'national infrastructure renewals plan' for Highways England, to enable regional teams to develop programmes of work aligned with our strategic commitments
- introduce a 'performance management framework' to set out who owns each of the activities which support delivery of our strategic commitments





To deliver the most from our investment choices we must identify efficient and timely interventions on our assets. To achieve this, we plan to:

- further develop decision support tools to allow us to make complex decisions about asset interventions, optimising cost, risk and performance
- refresh our renewals programme prioritisation process so that schemes with the most significant impact on our objectives are prioritised
- develop asset management plans that evidence, record and share our decisions about asset interventions



# Using our asset knowledge to manage risk

Addressing the requirements of our licence, our approach to asset management includes plans to develop and maintain high-quality asset information. This improved asset information will allow us to better evaluate the risks to our network, meaning we make more informed decisions about the maintenance and operation of our assets. We plan to:

- establish clear requirements for asset data, now and in the future
- understand our requirements for asset information systems that enable us to consistently store, manage and access our data in a controlled manner
- develop asset inventory and condition capture tools to obtain information more quickly and efficiently
- implement a risk-based approach to prioritising and justifying interventions, based on their impact on road users



# Making better whole life decisions

Our approach to asset management means that we assess whole-life cost interventions at all stages of the asset lifecycle, rather than focusing on short-term or project-driven choices. We balance affordability with long term planning, recognising the challenges of delivering sustainable service now and in the future. We plan to:

- review our governance processes to make sure that they take whole-of-lifecycle considerations into account, considering the needs of all our stakeholders
- improve our cost information so that more accurate whole-life cost calculations can be made

## Empowering and connecting our people

Our people will deliver our asset management approach. To ensure that our people and stakeholders understand their related roles in delivering it, we plan to:

- consult our stakeholders on the development and delivery of our asset management strategy and the asset management development plan, and what it means for them
- define the roles, responsibilities, skills and capabilities for key asset management positions
- develop a supporting training programme to increase the capability of our staff and improve our maturity as an asset management organisation



# Monitoring and improving our asset management strategy

Delivering asset management improvement is not a one-off task. We will establish mechanisms to review and improve our asset management performance, and actively share what we're doing with our stakeholders, customers and colleagues.

**Continuous improvement:** Our asset management steering group is committed to learning from our experiences to improve the way we work. Our asset management governance and assurance framework introduces annual, senior reviews of our approach to asset management. These reviews assess our progress and drive continuous improvement.

Team-led improvements are as important as policy changes and management reviews. Every day, our people are delivering the asset management activities that allow us to achieve our objectives. A direct 'line of sight' between their work and our strategic goals means that their contribution is clear. People who understand why a task is important, not just when and how to do it, are our most important resource in identifying new and better ways of achieving our goals and maintaining a culture of continuous improvement.

Research and innovation: During Road Period 2, we will continue to collaborate with research institutions, academia, infrastructure operators, industry, and with other road authorities, for example through the Conference of European Directors of Roads. This activity is essential for us to continue to access and learn from good practice from around the world. We will compare our asset management approach against other similar infrastructure-owning organisations. Our own breakthrough innovations usually come about from our capital programmes and projects, combined with the incremental improvements we discover in our day-to-day delivery. We will establish a process to formalise and embed 'learning from experience' and breakthrough innovations, so that adoption of change is delivered in a controlled way.

**Communication:** By effectively communicating with our stakeholders and our people, in ways relevant to them, we can better understand each other and build a shared asset management culture. Our asset management communication will be two-way. We will listen to our stakeholders and customers, to make sure that we understand our audiences nationally, regionally and locally, reflecting their feedback in our asset management approach.

**Review of this strategy:** This strategy supports the delivery of our organisational objectives, as shown in section 1. We recognise that our asset management activities will last as long as our assets. This version of the strategy has been produced to align with the planned objectives for Road Period 2 (2020-25). We will update this strategy when our organisational objectives change, and review it on an ongoing basis to make sure its content is still relevant to the challenges we face.

**66 Empowering and connecting our people 99**  Our asset management steering group will track our progress in delivering this asset management strategy and our asset management development plan. If you need help accessing this or any other Highways England information, please call 0300 123 5000 and we will help you.

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