

Delivery Plan

2021-2022





New Skipool Bridge Junction

Cover photo: Traffic officer and hybrid traffic officer vehicle at Chelston Depot, Somerset

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Foreword



Last year, we set out our ambitious plans for the strategic road network between 2020 and 2025 in our *Delivery plan*. In this first annual update, we focus on the work we will do over the coming year.

The backdrop to our work this year has, of course, been a global pandemic. Despite providing challenges, the COVID-19 pandemic has shown how our work and our roads truly connect not only the regions of England, but all the nations of the UK. We have played a critical role in the national response: our roads have kept shops, industry and, increasingly, individual homes supplied. They have enabled vital medical supplies and equipment to get to hospitals, and helped key workers get to their workplaces. And our people, despite the many challenges they have faced, have helped keep our roads open, and traffic moving.

At the same time, we have made a good start with delivering our plans for the five-year road period. We have completed three major road projects, and started work on a further five. In 2021-22 we will build on this progress and plan to start work on a further 10 projects, with seven set to open to traffic.

Safety is our first priority in all of our activity. In April 2021 we published our *Smart motorways stocktake: First year progress report* which sets out our progress in delivering the Department for

Transport's *Smart motorway evidence stocktake and action plan*. Our progress report also set out the latest evidence on the safety of smart motorways, and commitments we are making to accelerate measures to further help drivers feel safe and be safer on our roads.

Environmental sustainability in the way that we work has never been more important. We want our roads to work more harmoniously with the communities and habitats alongside them, and with the built, natural and historic environments that surround them. This year we will continue to work to reduce carbon emissions from both our own and our supply chain's activities, in support of the government's ambition to reach net zero carbon by 2050.

We will continue to embrace innovation and emerging technologies across all our activities. We will be ambitious, working with stakeholders to trial solutions and develop schemes that protect people and places, and improve the quality of life for everyone. By

doing so we expect far-reaching benefits related to how we design schemes, organise our work and provide information to customers.

We will do all of this while continuing to deliver efficiency savings for the taxpayer. Our recently published efficiency report sets out our milestone delivery for 2020-21, and how we will go about achieving our ambitious £2.23bn target for the end of the second road period.

We have made clear progress over the past year which we are committed to building on in 2021-22. Our work helps connect people and communities, in turn creating job and social opportunities and helping businesses and the economy thrive.

Nick Harris

Acting Chief Executive, Highways England

Executive summary

In this *Delivery plan update* we set out what we will deliver in 2021-22. In all that we do, we will meet our three imperatives of safety, customer service and delivery of the government's Road Investment Strategy.

The safety of the people who travel on our roads, and those who work on them, remains our top priority. Our *National incident and casualty reduction plan* sets out how we plan to improve safety on our roads, and deliver the performance targets we have been set for RIS2. Our work in 2021-22 will include reviewing the design standards of our roads, and challenging poor driver behaviours. We will develop measures to check that our interventions are reducing the risk of incidents occurring on our network.

We will continue our programme to upgrade safety barriers to provide greater protection to motorists in the event of an incident. Through a programme of safety campaigns, our aim will be to encourage changes in driver behaviour, in areas such as what to do in a breakdown. And we will do all we can to support the health, safety and wellbeing of our people and supply chain, for example by using our data to predict and prevent incidents.

Customer service is central to all that we do. In 2020-21 our RIS2 measure of road user satisfaction, the Strategic Road User Survey (SRUS), was suspended by Transport Focus due to social distancing restrictions on such face-to-face surveys. An alternative online survey will start in 2021-22. Nevertheless we

have found alternative ways to use road user feedback to shape our work. We have been trialling new ways for our customers to reach us online, and this year we will promote these so that people find it easier to share their views with us. We will also improve the information, including signage, that we provide to drivers on our roads.

We know that delays on our roads cause stress for our customers, and have wider impacts on the economy. We will focus on three main areas: reducing delays caused by incidents, addressing congestion hotspots and optimising our approach to roadworks on our network. We will do this by making continuous improvements to our operational procedures, as well as making use of new and emerging technology.

We will ensure that the diverse needs of our customers are considered. For example, we are working with AccessAble, a leading provider of venue accessibility information, to develop disability access guides for all 113 motorway service areas on our network. This work will help disabled road users plan their journeys and rest breaks.

In 2021-22 we will also make improvements to the information we provide for drivers on our network. This will include improving the accuracy of our road closure information as well as our variable signs and signals. In 2020-21 we completed a review of our diversion route signage. We will now roll out improved signage to help road users navigate these routes more easily. This work will all help to improve customers' experience as they travel on our roads.

In terms of our delivery, this year we will see major milestones reached at some of our most high profile and nationally significant projects. At our A303 Amesbury to Berwick Down scheme, we will carry out archaeological excavation work ahead of main construction work starting in 2023-24. And at the Lower Thames Crossing, we will submit a revised statutory planning application. Both projects will provide significant regional and national benefits when complete, including improving journey times, access to employment and an economic boost.

By starting work on 10 major enhancement schemes, and opening seven to traffic, we aim to reduce journey times, increase reliability and improve connectivity. We will also continue the programme of actions and improvements which resulted from the smart motorway stocktake published by the Department for Transport in March 2020. This includes installing stopped vehicle detection on eleven more schemes in 2021-22.

We recognise the importance of continuing to minimise the impact our work has on the environment. Our work in 2021-22 will include further delivery of our programme to minimise noise from our network for people who live alongside it. We will also assess where we can

act to tackle poor air quality. And through our fleet strategy, we will increase the proportion of our vehicles that are ultra-low emission. As part of our commitment to achieve no net loss of biodiversity by the end of 2025, we will progress our work to protect the wildlife and habitat alongside our roads. This will include delivering a series of biodiversity workshops and training events to our project teams and suppliers.

Our designated funds will continue to address a range of issues beyond the traditional focus of roads investment. In 2021-22 these funds will be invested in many different types of schemes. These include addressing congestion hotspots, better integrating our network with other transport modes, improving flooding resilience and remotely monitoring the condition of the lighting on our network.

We will embrace innovation and emerging technology in areas such as our approach to design, workflow and providing information to customers. We will continue to digitise our standards; interlinking design, construction and operational phases to support our emerging digital roads vision. We will run global competitions to encourage the brightest minds from academia and industry to help us identify, test and trial solutions to a range of issues on our network.

As well as delivering on the requirements of the current government's Road Investment Strategy, we will progress planning for the third road period. This year we will work on developing our overall approach and priorities for 2025 to 2030. We will start engagement work on our new route strategies, as well as continuing planning work on all of the pipeline schemes for RIS3. This work will inform our preparations for both the next road period and beyond.

Improving safety for all

Safety is our first imperative, and all our activity is aimed at achieving our ultimate objective of no one being harmed travelling or working on our roads, by 2040. This year, our work continues to be based on the 'Safe System' approach which includes safe roads and roadsides, safe vehicles and safe people. We will make safety improvements to our roads and encourage positive driver behaviour, as well as higher standards of vehicle safety. We will create a culture where we can continue to learn and improve, and to use our safety data to help those who work on our roads get home safely. Our response to the government's smart motorway stocktake is covered in the Enhancements section of this report.

Key Performance Indicators	
KPI 1.1	The number of people killed or seriously injured (KSI) on the SRN
Performance Indicators	
PI 1.2	The total number of people killed or injured on the SRN
PI 1.3	The number of non-motorised and motorcycle users killed or injured on the SRN
PI 1.4	The number of injury collisions on the SRN
PI 1.5a and 1.5b	Accident Frequency Rates for Highways England Staff and Supply Chain
PI 1.6	The % of traffic using iRAP 3 star or above rated roads



A traffic officer on the M6 West Midlands

Our RIS2 commitments: Improving safety for all

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 1.1 and PI 1.1 - 1.4</p> <p>Target: Ongoing reduction in number of people KSI on the SRN to support a decrease of at least 50% by the end of 2025, against the 2005-09 average baseline</p>	<p>Publications:</p> <p>Publishing a revised <i>National incident and casualty reduction plan</i>, which will include our plans for how we will support and enable our customers to make positive, safe choices about how they use our network.</p> <p>Publishing a guide on measures that can be used to improve the safety of motorcyclists on our network.</p> <p>Continuing to improve how we consider and deliver suicide prevention in the design and delivery of our major enhancement schemes. We will publish new design standards for this by the end of 2021-22.</p> <p>Working with others:</p> <p>Implementing and chairing a regional Post Collision Fatal Working Group with representatives from our organisation, the police and other interested parties.</p> <p>Developing an 'opt-in' project with commercial vehicle operators where they are informed of incidences where we have identified issues (such as close following) involving their vehicles.</p> <p>Research into the effectiveness of delivering online road safety awareness initiatives and evaluation techniques. The approach provides the opportunity to widen the delivery of more cost-effective road safety interventions with greater benefits.</p> <p>Delivering joint operations with our road safety partners to raise awareness of road safety messages and encourage compliance with the legal requirements of driving.</p> <p>Evaluating, in partnership with Roads Victims Trust and Cambridgeshire Vision Zero Partnership, the impact of post collision victim support services and the extent to which there is scope for these to be delivered more widely.</p> <p>Safety campaigns:</p> <p>Running safety campaigns to encourage and support positive safety behaviours among drivers, in areas such as close following and HGV safety.</p> <p>Distribute, through police commercial vehicle units, Fresnel lenses to help improve the visibility for left-hand drive HGVs. This will contribute to the reduction in 'side swipe' collisions.</p> <p>Delivering load security training to reduce the number of lost load and debris incidents.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>PI 1.5a and 1.5b</p>	<p>Delivering improvements through our Home Safe and Well (HSW) approach. Improvements in this period will include:</p> <ul style="list-style-type: none"> ■ running a safety leadership programme, starting with our operational colleagues. ■ improving our health, safety and wellbeing procedures, to ensure they are further simplified and more accessible for those who use them. ■ developing our systems which ensure those at greatest risk have the right tools and equipment available to them so they can undertake their roles safely. ■ updating our accident and incident reporting software to a system that's easier to use for our employees and supply chain colleagues. The new system will allow far greater analysis to be carried out, as part of our 'Data as a service' provision. <p>As part of our focus on becoming a learning organisation, we will also:</p> <ul style="list-style-type: none"> ■ conduct research into why incidents and near misses happen between people and machinery on sites, and how we can use our current data to predict and prevent accidents and harm to our workforce. ■ engage with leading infrastructure clients to compare our approaches to relevant aspects of our safety strategies, so we can learn and implement improvements, where relevant. ■ Revise our HSW performance reporting, including the use of leading indicators, used to drive performance improvement. This will make it easier to use, and we will be able to do comparisons with the approaches used by other leading infrastructure organisations.
<p>Descriptive commitment: Work with Transport Focus to investigate a rate-based measure for non-motorised user casualties</p> <p>Target: N/A</p>	<p>Following our research and engagement in 2020-21, we found this measure is not feasible at present. We are seeking formal agreement to close this commitment.</p> <p>We are now considering other information that we could provide to demonstrate our commitment to improving routes and facilities for walkers, cyclists, and horse-riders, including consideration and improvements relating to safety.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>PI 1.6</p> <p>Descriptive commitment: iRAP baseline to be established in 2021, and 2025 –forecast developed, based on latest iRAP methodology</p> <p>Target: Development to be completed during year 2</p>	<p>Continuing work to update the International Road Assessment Programme (iRAP) star rating for our roads. Following this we will produce a 2025 forecast.</p> <p>In addition, we will work to build capacity among those with responsibility for safer network design to ensure that the principles underpinning star rating improvements are part of the design process.</p>



A traffic officer attends to an incident on the M42, West Midlands

Providing fast and reliable journeys

The reliability of journey times on our network is particularly important to our customers. While they recognise incidents happen, they also expect them to be cleared as soon as possible. We have three strategic focus areas for mitigating delay: reducing the impact of incidents, innovating to address congestion and optimising our roadworks. This year we will continue to improve our operational procedures, conduct research and trials and use new technology to achieve these objectives.

Key Performance Indicators	
KPI 1.1	Average delay
KPI 2.2	Roadworks network impact
KPI 2.3	Incident clearance rate
Performance Indicators	
PI 2.4	Delay on smart motorways
PI 2.5	Delay from roadworks
PI 2.6	Journey time reliability
PI 2.7	Delay on gateway routes
PI 2.8	Average speed



Variable Message Sign on the M6, West Midlands

Our RIS2 commitments: Providing fast and reliable journeys

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 2.1 and PI 2.4 - 2.8</p> <p>Target: Performance to be no worse at the end of the second road period than it is at the end of the first road period</p>	<p>Publishing a delay ambition plan. This will outline our high-level approach to achieving our ambition for average delay.</p> <p>Building a forward programme of research into delays and journey times.</p> <p>Continuing to work to embed the monitoring of delay from roadworks for major schemes, to drive performance improvements and share best practice.</p> <p>Our work on trialling whether we can influence how and when our customers travel to reduce congestion will continue in the north east, at the M1 junctions 33 to 34. As our trials continue, we will use the data to develop tools we can use operationally to directly tackle congestion hotspots.</p>
<p>KPI 2.2</p> <p>Target: Roadworks network impact to not exceed the monthly average target of weighted lane metre days set for each year (see Annex B for figures)</p>	<p>Begin reporting on our new expanded metric for which the development, validation and target setting were completed during 2020-21.</p> <p>Continuing to enhance our approach to road works, by working with our supply chain to ensure highest safe speeds are utilised in all cases. For our major schemes we will introduce a check and challenge process to ensure highest safe speeds are being adopted.</p> <p>Publishing, on behalf of the Department for Transport, refreshed road works guidance in the <i>Traffic Sign Manual</i>, which provides advice to traffic authorities on the use of traffic signs and road markings.</p>
<p>KPI 2.3</p> <p>Target: 86% of motorway incidents cleared within one hour</p>	<p>We have completed a trial of wheel skates and battery booster packs. These tools help our traffic officers to clear vehicles that could not be rolled away due to handbrakes being locked on, or where braking systems have been deployed. Both tools performed well during the live trials, and an order was placed to equip every vehicle in our fleet with this equipment. These will be rolled-out during 2021-22.</p> <p>The lighting we use at scenes of an incident to indicate that lanes are closed is both heavy, and costly to maintain. We have been trialling a move to a LED solution that is more economical to run and is lighter, and therefore easier, for traffic officers to deploy. It also releases valuable space in the back of the vehicles. The roll out will be concluded during 2021-22.</p> <p>Concluding our live trial of products that use encapsulation and enzyme-based technology to clear spillages. We will use the resulting evidence to set standards for the types of products we wish to use to deal with spills in future, to reduce the incident management timeline.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>Descriptive commitment Working with Transport Focus, investigate the development of new metrics on journey time reliability which reflects more accurately road users' understanding of reliability, and delay in roadworks</p> <p>Target: Feasibility to be completed during the second road period</p>	<p>Assessing the feasibility of these new metrics. The outcome of these feasibility assessments will determine whether and when these metrics will progress to the following development stages.</p>
<p>Descriptive commitment Investigate new PIs on delays from incidents and delays on the local road or SRN boundary, and an alternative performance measure for smart motorways operation to keep track that these roads are delivering their intended journey-time related objectives.</p> <p>Target: Feasibility to be completed during the second road period</p>	<p>Assessing the feasibility of these new metrics. The outcome of these feasibility assessments will determine whether and when these metrics will progress to the following development stages.</p> <p>In principle, we have agreed to close our commitment to investigate a delay on the local road/SRN boundary metric as there was no value in developing this further (Note: formal approval for closure will be documented later).</p>
Other supporting activities	Our activities during 2021-22
<p>Other operational improvements</p>	<p>Delivering improved approaches and ways of working for control room activities and communications, with on-road resources designed based on a pilot in one region and agreed with all key parties for national deployment.</p> <p>Continuing the roll out of our next generation traffic management system, CHARM, to the remaining five Regional Control Centres.</p> <p>Beginning our next cyclical period for traffic officer work instructions, reviewing the format and style of current work instruction to improve their ease of use. This will help ensure we continuously improve safety and the experience our customers receive.</p>



A well-maintained and resilient network

We continue our careful stewardship of the strategic road network to ensure it is kept in good condition. Our ongoing maintenance and renewals programme helps to ensure that our assets are safe, maintained and modernised. This year we will also work to improve our asset information and systems, progress the roll out of asset delivery across our operational areas and continue our work to best deal with adverse weather.

Key Performance Indicators	
KPI 3.1	Pavement condition
Performance Indicators	
PI 3.2	Structure condition
PI 3.3	Technology availability
PI 3.4	Drainage resilience
PI 3.5	Geotechnical condition



Maintenance work on the M5, West Midlands

Our RIS2 commitments: A well-maintained and resilient network

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 3.1</p> <p>Target: 95% of the network (excluding DBFOs) requiring no further investigation</p>	<p>Continuing to use asset management modelling to inform decisions on our schemes to ensure that the target is met.</p> <p>Completing the validation of our new condition metric. This will include shadow running the metric, with analysis of results and recommendations for future use, as well as target levels.</p> <p>On successful completion of the validation stage, the new metric will replace our existing KPI from April 2022.</p>
PI 3.2	<p>Continuing to report the structures condition metric used in RIS1.</p> <p>Working with the Department for Transport to review our structure condition bands, to reflect our current asset management practices.</p>
PI 3.3	Continuing our ongoing performance monitoring of our roadside assets to ensure that they are accurate and functioning.
PI 3.4	<p>Progressing work on weather normalisation of this metric, following the completion of a pilot study to test the feasibility of this improvement. Our further development of a national process will be determined by the findings of the pilot study. Following this, we will undertake validation prior to an expected introduction of the metric from 2024-25.</p> <p>We have introduced new national processes for recording flooding events and will implement ongoing assurance of those processes.</p> <p>Continuing to investigate the use of new technology, including systems to support improved customer reporting of flooding.</p>
PI 3.5	<p>Continuing to use this metric to monitor asset performance and inform decision making.</p> <p>Developing guidance on a common approach to the prioritisation and planning of principal geotechnical inspections across our service areas.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>Descriptive commitment: Implement the Asset management development plan (AMDP) for the second road period</p> <p>Target: Annual deliverables</p>	<p>Our AMDP has been incorporated into an asset management transformation roadmap. Progress will be reported annually, and the report will be signed off by our Asset Management Steering Group. We will publish the first report in 2021-22.</p> <p>Key deliverables for 2021-22 will include the following:</p> <ul style="list-style-type: none"> ■ Developing an Asset management systems strategy; a documented strategy for the company's asset management systems, including an implementation roadmap. ■ Revising our asset class strategies. We will update these to include guidance on prioritising renewals schemes. ■ Defining our cross-company asset management roles and responsibilities. This will underpin our existing end-to-end asset management approach. ■ Developing and rolling out training materials for structures asset management to the business. ■ Carrying out a comprehensive review of our routine maintenance approach. This will provide a more consistent approach underpinned by an affordable and effective standard, which is driven by reliable and accessible data.
<p>Descriptive commitment: Investigate an improved structure condition metric during the second road period, and an alternative indicator for technology assets</p> <p>Target: Feasibility to be completed during the second road period.</p>	<p>Progressing to the feasibility stage of the new structures metric, which will involve further consultation with stakeholders and investigation of the availability of data. Further development work will depend on the findings of the feasibility stage.</p> <p>Undertake the feasibility stage for our alternative technology asset metric. This phase will lay out our initial investigations into alternative options, potential data sources and costs to implement.</p>
Other supporting activities	Our activities during 2021-22
<p>Maintenance</p>	<p>Carrying out regular inspections and maintenance, such as litter clearance, graffiti removal and ensuring sign and road marking visibility.</p> <p>Continuing to actively respond to defects on the network such as pothole damage caused by incidents and weather events. This will ensure the safety of road users and balancing these activities alongside our proactive cyclic maintenance programme.</p> <p>Build optimised five-year work plans, integrating renewals, planned and reactive maintenance and Major Projects works.</p>



Other supporting activities	Our activities during 2021-22
Renewals	<p>Continue the cyclical renewal of our core assets such as asphalt roads, drainage and signage.</p> <p>Ramping up our RIS2 structures renewal programme, to counteract the effects of weather and general fatigue on some of our largest structures. Renewals will be prioritised using expert advice and knowledge, balanced against our aim to limit disruption.</p> <p>Ramping up our RIS2 concrete roads renewal programme, with the replacement or renewal of more than 125 lane miles of roads which are nearing the end of their life.</p> <p>Continuing our programme to replace steel and concrete barriers.</p> <p>Designing our renewals activity to be more carbon efficient and reducing the requirement for carbon intensive equipment.</p> <p>In the renewals deliverables table on the right, we have summarised the key renewal activities we will carry out in 2021-22 for the five main asset classes. We have also provided information on some of the supplementary asset classes.</p>
Asset Delivery roll out	We fully adopted Asset Delivery in Area 12 (Yorkshire & Humberside) in Q1 2021-22 and, are completing the phased transition to Asset Delivery in Area 3 (within the South East region) in Q3 2021-22.
Dealing with adverse weather	<p>Beginning phase 2 of our winter vehicles replacement programme, which will run over the next two financial years.</p> <p>Completing a study to determine the best locations for replacement weather stations, utilising expert Met Office research to guide our upcoming major replacement programme.</p> <p>Building on the results of last winter's new severe weather warning trial, we will engage with key stakeholders and determine whether to roll out this new format.</p> <p>Working with the Met Office to improve our hazard and impact forecasting for wind events, in order to give us more opportunity to make target decisions for sections of our network.</p>

Renewals deliverables for 2021-22

Asset	Number	Unit	Description
Monitoring			
Asphalt road surface (pavement)	925.8	Lane miles	Total length of existing asphalt road surface resurfaced
Concrete road surface (pavement)	63.0	Lane miles	Total length of existing concrete road surface reconstructed and replaced with asphalt surface
Safety barriers (steel)	237.3	Miles	Total length of steel safety barriers installed or renewed
Safety barriers (concrete)	1.6	Miles	Total length of concrete safety barriers installed or renewed
Significant structures	26.0	Number	Number of significant structures
Assurance			
Road markings	3,450,000	Linear metres	Length along the centre line of the road markings, including markings on new or replacement road surfacing
Kerbs	13,400	Linear metres	Total length of kerbs laid or renewed
Safety barriers (steel)	382,000	Linear metres	Total length of steel safety barriers installed or renewed
Safety barriers (concrete)	2,600	Linear metres	Total length of concrete safety barriers installed or renewed
Drainage	148,000	Linear metres	Total length of drainage installed or renewed
Geotechnical	2,900	Linear metres	Total length of embankment/cutting treated parallel to the carriageway
Traffic signs (non-electrical)	1,100	Number	Number of permanent non-electrical traffic signs installed or replaced
Guardrail	800	Linear metres	Total length of new or replacement pedestrian guardrail
Boundary fencing	64,000	Linear metres	Total length of new or replacement boundary fencing
Lighting	1,050	Number	Number of road lighting columns installed or replaced
Bridge joint	450	Number	Number of bridge deck expansion joint installations installed or renewed
Bridge bearing	90	Number	Number of bridge bearing units installed or renewed
Parapet	5,100	Linear metres	Total length of vehicle parapet installed or renewed
Waterproofing	32,500	Square metres	Total surface area treated for waterproofing
Motorway communications equipment	215	Number	Number of new or replaced motorway communications equipment items
Technology renewals	370	Number	Number of technology assets renewed or improved

Delivering better environmental outcomes

We are continuing our journey to ensure that our roads to work in harmony with the environment and the communities that live beside them. This year our work in this area will ramp up, and will include delivering noise mitigation to households, proposing air quality improvement measures, and establishing a programme of biodiversity improvements. We will also reduce carbon emissions from our own activities, and incentivise our supply chain to do the same.

Key Performance Indicators	
KPI 4.1	Noise
KPI 4.2	Biodiversity
KPI 4.3	Air quality
KPI 4.4*	Highways England carbon emissions
Performance Indicators	
PI 4.5	Supply chain carbon emissions
PI 4.6	Condition of cultural heritage assets
PI 4.7	Water quality
PI 4.8	Litter

*This is a new KPI introduced in 2021-22 with a baseline figure of 88,147 tonnes of carbon



Ecology survey work on the A38, South West

Our RIS2 commitments: Delivering better environmental outcomes

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 4.1</p> <p>Target: 7,500 households benefiting from noise reduction in mitigated 'noise important areas</p>	<p>Laying lower noise road surfaces, erecting noise barriers and installing glazing and ventilation in people's homes. Our noise reduction schemes will deliver mitigation to at least 1000 households.</p> <p>Publishing our <i>Noise mitigation policy</i>.</p>
<p>KPI 4.2</p> <p>Target: Achieve no net loss of biodiversity across all Highways England activities by the end of the second road period (130,848.1 biodiversity units)</p>	<p>We have produced our RP2 biodiversity baseline (130,848.1 biodiversity units), which is a modelled estimate of the number of biodiversity units we held at the start of RP2. This baseline is informed by habitat mapping, knowledge of the performance of RP1 activities and our biodiversity forecast model. We will use this baseline to report on the overall change in biodiversity units from RP2 activities.</p> <p>Delivering monthly biodiversity surgeries and training events to our employees, to support continued culture change.</p> <p>Working with partners to identify and deliver opportunities to support improved environmental outcomes through our existing operational and major projects activities.</p>
<p>KPI 4.3</p> <p>Target: Bring links agreed with the department and based on the Pollution Climate Mapping model into compliance with legal NO2 limits in the shortest timescales possible</p>	<p>Following our assessment of the network, we will progress measures that can be taken for the identified links. These include speed limit trials, traffic management measures or constructing barriers.</p> <p>Publish our agreed assessment reports of these measures.</p> <p>Supporting local authorities with clean air plans, such as through the design and provision of SRN signing for their Clean Air Zones.</p> <p>Working with local authorities as they implement and operate electric van try-before-you-buy schemes to help maximise benefits.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 4.4</p> <p>Target: Reduce Highways England's carbon emissions as a result of electricity consumption, fuel use and other day to day operational activities during the second road period by 75% from April 2017- March 2018 baseline of 88,147 tonnes</p>	<p>Increasing the amount of LED lighting and smarter controls on the network to reduce electricity consumption.</p> <p>Progressing our fleet strategy with at least 25% of our car fleet being Ultra Low Emission Vehicles (ULEV) by 2022.</p> <p>Progressing the installation on our premises of electric vehicle charging infrastructure for our fleet.</p> <p>Reviewing travel policies and hire car contracts to influence the greater utilisation of electric vehicles.</p> <p>Conducting energy audits on our office locations to support improved energy usage.</p> <p>Furthering improvements to data and collation from all sources to improve our consumption reporting.</p>
<p>PI 4.5</p>	<p>Providing our Excel based carbon tool to allow suppliers in major projects and operations to record materials, transport, energy and waste. The carbon tool applies emissions factors and records greenhouse gases from activity in tonnes of carbon dioxide equivalents.</p> <p>Incentivising our suppliers to improve performance in carbon management.</p> <p>Progressing a programme to update the <i>Manual of Contracts for Highways Works</i>. We will ensure the carbon impacts of our specifications are considered and assured before adoption.</p>
<p>PI 4.6</p>	<p>Updating our cultural heritage management plans, and working towards a complete baseline of cultural heritage assets within the SRN.</p> <p>Reporting a change in heritage score whenever works affect a heritage asset, such as the refurbishment of damaged milestones, in partnership with The Milestone Society.</p>

KPI/PI/Descriptive commitment	Our activities during 2021-22
<p>PI 4.7</p>	<p>Continuing to mitigate existing discharges that pose a risk of pollution, identifying opportunities for restoring waterbodies to a more natural condition and removing obstacles for fish and eel migration.</p> <p>Updating our forward programme of water quality schemes in collaboration with the Environment Agency.</p> <p>Commissioning further research to explore microplastic pollution in road runoff, and any associated impacts on the wider environment.</p>
<p>PI 4.8</p>	<p>Continuing to monitor and clean our litter hotspots, supporting Keep Britain Tidy's Great British Spring Clean campaign and encouraging our staff to volunteer their time to collect litter.</p> <p>Supporting a national anti-littering campaign to help change the behaviour of those who litter.</p>
<p>Descriptive commitment: Investigate, and as appropriate develop, new environmental metric(s) informed by the natural capital approach</p> <p>Target: Feasibility to be completed during the second road period</p>	<p>Completing a feasibility study of these metric(s).</p> <p>If we conclude that the metric(s) are feasible, the output of this study will include a timetable for development and validation.</p>
<p>Descriptive commitment: Investigate and assess incorporating into new and existing contracts air quality standards for supply chain vehicles deployed on Highways England work, and associated reporting requirements</p> <p>Target: End of the second road period</p>	<p>Assessing, through a questionnaire to our supplier community, levels of market capability, preparedness and ambition.</p> <p>Reviewing existing contract provision and considering implementing beneficial provisions into both legacy and new contracts.</p>

Meeting the needs of all users

Through all that we do, we want to ensure customers are at the centre of our decision making. We work with various stakeholder groups to understand what all our users need from our roads. This year, our work will include helping Transport Focus to restart its user satisfaction survey to guide further improvements, optimising our on-road signs and signals and improving our diversion routes.

Key Performance Indicators	
KPI 5.1	Road user satisfaction.
KPI 5.2	Roadworks information and accuracy.
Performance Indicators	
PI 5.3	Timeliness of information provided to road users through electronic signage.
PI 5.4	Ride quality
PI 5.5	Working with local highways authorities to review diversion routes for unplanned events.



Cyclists on the A27, South East

Our RIS2 commitments: Meeting the needs of all users

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 5.1</p> <p>*Target: Achieve an 82% road user satisfaction score, with year-on-year increases in following years</p>	<p>Following the suspension of the Strategic Road User Survey (SRUS) in March 2020 due to social distancing restrictions, Transport Focus has developed an alternative online survey method. We will work with them to restart this in 2021-22.</p> <p>If the long-term survey methodology changes in this way, we will work with Transport Focus to baseline the new methodology to help set a new target for future years.</p>
<p>KPI 5.2</p> <p>Target: Achieve 90% accuracy of roadworks information seven days in advance of works by 2024-25, with an increasing trajectory of improvement through the second road period from the level of performance achieved by the end of the first road period</p>	<p>Maintaining our focus on further accuracy improvements across RIS2 by undertaking further data analysis and spreading regional best practice.</p> <p>Developing our plans and forecasting for Years 3 and 4.</p> <p>Rolling out and embedding the <i>Roadworks accuracy toolkit</i>.</p> <p>Establishing the Roadworks Accuracy Working Group, comprising of network availability subject matter experts from all regions.</p>
<p>PI 5.3</p>	<p>Further embedding this metric within our regions, sharing best practice and monitoring performance of the metric.</p> <p>Ongoing optimisation of our automatically set speed limits. We will also undertake an on-road trial to optimise the number of signs and signals that we set for incidents, to help improve customer compliance and journey times.</p> <p>Gaining customer insight on awareness and preferences of in-vehicle information, including the type of information wanted and how it is displayed. This will be used to help develop our capability to provide in-vehicle information in the future.</p>
<p>PI 5.4</p> <p>Descriptive commitment: Develop with Transport Focus during the second road period a measure of ride quality which reflects road users' experience of the network</p> <p>Target: End of year 2</p>	<p>Completing the development and validation stages for this metric.</p>

*Due to the social distancing restrictions no data was available during 2020-21 and due to the alternative methodology the suspension of 2021-22 target has been approved.

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>PI5.5</p>	<p>Two of our regions have trialled the use of new legends on our roadside, providing customers with enhanced information about the diversion they are following. Feedback on these signs will then be used to inform their wider adoption.</p> <p>Completing further surveys and adding the findings from these to our existing programme of improvements.</p>
<p>Descriptive commitment: Investigate expanding the scope of the timeliness of electronic signage information PI to potentially include the time take to adjust and clear signs</p> <p>Target: Feasibility to be completed during the second road period</p>	<p>Using data gathered during the first year of this metric's operation, we will be making recommendations on changing the scope of this metric.</p>
<p>Descriptive commitment: Work with Transport Focus to develop satisfaction surveys for cyclists and walkers that can be user, if possible, as the basis of a PI later in the second road period</p> <p>Target: During/end of the second road period</p>	<p>Transport Focus has been applying lessons learned from pilot satisfaction surveys to inform options for a new survey in RIS2. The intention is to develop a purely qualitative approach, where they will seek to understand user perceptions and needs about specific locations on our network.</p> <p>Once a pilot of this new approach has been completed, we will continue to work with Transport Focus to consider how these surveys could be used as part of a performance indicator.</p>
<p>Descriptive commitment: Work with Transport Focus to develop satisfaction surveys for logistics and coach managers that can be used, if possible as the basis of a PI later in the second road period</p> <p>Target: During/end of the second road period</p>	<p>Transport Focus has recently implemented a logistics and coach managers' satisfaction survey. We will be exploring how we can measure our performance using these results to establish the feasibility of developing a performance metric.</p>

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>Descriptive commitment: Investigate expanding the scope of the working with local highways authorities PI to include diversion routes linked to planned roadworks</p> <p>Target: End of the second road period</p>	<p>Assessing the feasibility of expanding the scope of our existing metric.</p>
Other supporting activities	Our activities during 2021-22
<p><i>Customer service strategy</i></p>	<p>Launching an updated <i>Customer service strategy</i>, defining our commitments in investment and maturity towards delivering the experiences our customers expect to their satisfaction.</p> <p>Supporting the launch of the strategy with the development of roadmaps for our employees to connect with the strategic themes, and to understand their contribution to customer service.</p> <p>Enhancing our customer maturity and developing our relationships with our customers.</p>
<p><i>Customer service annual plan 2021-22</i></p>	<p>The annual plan will launch in Q1 and will follow the themes in the new strategy, setting out what we will deliver to make a difference for our customers.</p> <p>The initiatives include physical deliverables, as well as cultural changes within our business to support a customer centric approach.</p>
<p>Transforming our customer contact approach</p>	<p>As part of our customer contact approach programme we will be:</p> <ul style="list-style-type: none"> ■ Continuing to roll out our customer feedback channels so customers can provide their thoughts on our services, including telephone responses and social media. ■ Enhancing our customer contact performance measures, focusing on the quality of telephone calls. ■ Improving accessibility features on our website. ■ Reviewing and update our internal correspondence guidance and scorecard. ■ Improving availability and quality of information for our customers to self-serve their enquiries.
<p>Embedding equality, diversity and inclusion</p>	<p>Targeting clear and relevant safety messages to reach diverse groups and informing them of access improvements made to our services and network.</p> <p>Launching motorway service area disability access guides, to help our disabled road-users plan their journeys and rest breaks at those services that will best meet their individual needs.</p>

Achieving efficient delivery

The principles governing our delivery are set out in our *Efficiency and inflation monitoring manual*, and our approach is set out in the RP2 *Efficiency delivery plan*. Our year-end efficiency report evidences our delivery and our trajectory to date. We will continue to work across our organisation and supply chain to make further efficiency savings for the taxpayer, reinvesting this money in our network.

Key Performance Indicators	
KPI 6.1	Total efficiency
Performance Indicators	
PI 6.2	Cost performance index and schedule performance index



Our RIS2 commitments: Achieving efficient delivery

KPI / PI / Descriptive commitment	Our activities during 2021-22
<p>KPI 6.1</p> <p>Target: Demonstrate efficiency of £2.23bn of capital and operational expenditure by the end of the second road period</p>	<p>Our year-end efficiency report will include commentary on the impact of change control, and summarise primary and secondary evidence. It will demonstrate delivery of both the annual agreed milestone, and our trajectory towards meeting the 2025 target.</p> <p>Reviewing forward supplier plans for the next three to five years, identifying and driving opportunities for improvement and focus, as well as aligning key messages.</p> <p>Assessing supplier maturity against industry benchmarks, such as supply chain management, procurement and programme management, which will be used to shape individual supplier development plans.</p> <p>Progressing a significant procurement exercise on our Scheme Delivery Framework. This framework consolidates expenditure into more specialist categories, allowing us to contract with a greater number of small and middle-sized enterprises (SMEs) and offering a more efficient delivery model.</p> <p>Leading and supporting our supply chain to increase their Lean capability, using our lean maturity assessment.</p> <p>Continuing our collaborative work with the Lean Construction Institute UK, through the programme to train up to 1,500 of our Tier 2 and Tier 3 operatives in Lean techniques.</p>
<p>PI 6.2</p> <p>Descriptive commitment: Investigate and look to develop new or improved metrics to monitor cost and schedule for enhancement scheme development and construction, engaging with ORR</p> <p>Target: N/A</p>	<p>Continuing to mature the performance and baseline data supporting the Earned Value (EV) reporting for projects in construction.</p> <p>As the data improves, we will begin to explore the opportunity to extend EV measurement alongside other measures of construction performance, as set out in the government construction playbook, published in December 2020.</p>

Enhancements

Major enhancement schemes are a crucial element of our balanced investment portfolio. These schemes reduce journey times, increase reliability and improve connections for our customers. This year we plan to start work on 10* major improvement projects, and open seven** for traffic. We will invest over £2 billion of our capital funding to complete some of the enhancements started in the first road period, as well as developing and constructing some of the new enhancement schemes. We will also continue to respond to the government's smart motorway stocktake and action plan.

Our activities during 2021-22

Responding to government's smart motorway stocktake

In March 2021 we launched our latest national public information campaign, 'Go left', to give drivers clear information about what to do in a breakdown. We will run the campaign again in Autumn 2021.

Use the new design standard, published in October 2020, to inform the design of the seven dynamic hard shoulder (DHS) to all lane running (ALR) upgrades. We have progressed six of the seven schemes through the preliminary design and survey stages, and, will complete the seventh in Q3 2021-22.

Subject to Parliamentary approval, we plan to publish The Highway Code update by Autumn 2021. The update will provide more guidance for motorists driving on high speed roads, including smart motorways.

Continue to work collaboratively with the recovery industry and drive forward the commitments made in the strategic partnership agreement signed in March 2020.

The new standard for places to stop in an emergency on a smart motorway will be adopted to schemes entering the design phase***.

Complete the monitoring of the impact of the 10 new emergency areas on the M25 to understand if they have reduced the level of live lane stops. We will present a report to the Department for Transport by the end of August 2021.

Continue our work to consider, by April 2022, a national roll out programme of more places to stop in an emergency on existing smart motorways, where places to stop in an emergency are more than one mile apart.

Our activities during 2021-22

Responding to government's smart motorway stocktake

Accelerate the completion of our sign installation programme, so that by September 2022 we will have installed around 1,000 additional signs in between places to stop in an emergency.

We have made location information for all smart motorway emergency areas available to sat nav providers. Over the next year we will work with the Department for Transport to review whether the data is being shared with drivers.

We have completed an independent review of the widths of 249 emergency areas. We are now working on completing assessments to help guide our next steps for widening any narrow emergency areas.

Install radar Stopped Vehicle Detection (SVD) technology on every existing ALR scheme by end of September 2022. All new schemes will have radar SVD technology installed before they open, including the six schemes currently in construction.

Deliver the roll out of changes to our traffic officer patrols on smart motorway sections where the average distance between places to stop in an emergency is more than one mile. This will support the aim, by July 2021, to reduce the average time it takes traffic officers to attend incidents from 17 to 10 minutes.

We have completed work with the Society of Motor Manufacturers and Traders (SMMT) to jointly understand eCall and bCall functions in newer cars, and to communicate the benefits to road users. We are working with stakeholders to agree the key messages for a public information campaign that will run later in 2021.

Continuing our programme, by September 2022, to have upgraded all enforcement cameras across the whole smart motorway network, to enable automatic detection of Red X violations that can then be enforced by the police.

Use the Driving for Better Business programme to raise awareness of the benefits of using Advanced Driver Assistance Systems. We will particularly focus on Automatic Emergency Braking. We will work with the Department for Transport to explore making it illegal to switch off Automatic Emergency Braking.

We intend to publish the findings of our safety reviews into clusters of incidents on sections of the M6 and M1 smart motorway in the Summer 2021.

We will continue to monitor our network, to evaluate whether existing and new motorway designs are as safe as, or safer than, the conventional motorways they replaced. We will produce a second monitoring report of annual safety performance.

* Note, we started work on A31 Ringwood six months ahead of the 2021-22 commitment and A38 Derby junction start of works is subject to change.

** Note, A61 Westwood Roundabout project was opened for traffic four months ahead of the 2021-22 commitment and we have accelerated plans to open A19 Norton to Wynyard from 2022-23 to 2021-22 Q3.

*** With some exceptions where not feasible to construct additional emergency areas, such as where junctions intersect or on bridges.

Our activities during 2021-22

Enhancement schemes in the north

In the north we are committed to open four schemes for traffic which started work in the first road period. One of these, the A61 Westwood roundabout, was opened four months ahead of schedule on 28 February 2021 providing an improved roundabout between A61 and A616. The remaining three schemes are on schedule, these include:

- A19 Testos near Sunderland.
- Major improvements at junction 19 on the M6 and the A556 in Cheshire.
- A19 Norton to Wynyard, which has accelerated planned opening from 2022-23 to 2021-22 Q3.

We will start work on:

- A1 Birtley to Coal House which will widen the A1 south of Gateshead to dual three lanes, including the replacement of the Allerdene Bridge.
- M62 junctions 25-30 upgrading the dynamic hard shoulder to all lane running.

We will begin the statutory planning approval process for A66 Northern Trans-Pennine, Mottram Moor link road and A57 link road projects.

Enhancement schemes in the midlands

In 2021-22 we will open two schemes for traffic:

- Upgraded M6 between junction 13 (Stafford) and junction 15 (Stoke south).
- A45/A6 Chowns Mill junction between the A45 and A6.

We will start work on:

- Upgrading the dynamic hard shoulder on the M6 junction 4 to 5 to all lane running.
- The M54 to M6 Link Road following the completion of the statutory planning process.

We will also announce our preferred route to improve the capacity of the single carriageway and junctions of the A46 at Newark.

A19 Norton to Wynyard (North-East). Case study for scheme in construction acceleration.

Highways England continues to set challenging targets for our major projects. Many of our processes were streamlined as part of the 2012 Accelerated Roads initiative, ensuring that we could meet our challenging commitments and reducing the overall construction period in some cases. Active management of the portfolio and flexible application of these processes enables us to go further, bringing forward delivery of some schemes whilst re-profiling more challenging projects to optimise overall benefits delivery. We are also applying digital delivery and early collaboration with the supply chain to achieve even greater efficiencies in cost and schedule beyond those already embedded within our baselines.

In the Tees Valley, we have supported economic growth by reducing congestion on the A19 adding an extra lane in both directions between Norton and Wynyard and are aiming to deliver this scheme six months ahead of the planned date of early 2022-23.

A collaborative approach between Highways England and Balfour Beatty Atkins challenged the original design against the required outcomes, this identified a number of programme efficiency opportunities to support acceleration of the project construction.

One innovation was to change the retaining wall construction method from gabions to sheet piles. Sheet piles are quicker to install and require less excavation and working space. Lessons learnt from the first phase of sheet piling enabled further changes to make subsequent phases even more efficient, such as bringing in an additional piling rig.

The treatment of the concrete sections was also changed. The original design proposed a 'crack and seat' of the existing concrete surfacing. A revised method was proposed, which enabled the concrete to remain intact before being overlaid with a lower noise surfacing, removing a major construction operation.

The project has also been able to reuse 50% of the existing drainage runs, having surveyed the existing drainage, reducing the amount of replacement work required.

Reducing the construction time also delivered cost reductions. It also reduced environmental impact from: reduced construction traffic; less material excavated/imported for sheet piles than using gabions; less dust and noise from the revised surfacing approach; and the reuse of existing drainage saved disposal and replacement costs.

Our activities during 2021-22

Enhancement schemes in the south and west

In 2021-22 we will open two schemes for traffic:

- A34 Newbury to Oxford enhancements.
- M27 junctions 4-11

We committed to start work on seven new projects in 2021-22. One of these, A31 Ringwood, started work on 31 March 2021, six months ahead of its September 2021 commitment. The remaining six schemes are on schedule, these include:

- M27 Southampton junction 8.
- Upgrading the M25 junction 28.
- Upgrading the M25 junction 10.
- A303 Sparkford to Ilchester.
- M2 junction 5.
- Accelerating the safety improvements on the A21. This work, originally being developed for possible delivery in Road Period 3 is now a committed RIS2 scheme and will start in 2021-22.

Following the Development Consent Order approval for A303 Amesbury to Berwick Down, archaeological specialists will undertake a comprehensive programme of excavation and work to preserve any archaeological finds ahead of construction.

We will re-submit our Development Consent Order submission to the Planning Inspectorate for the Lower Thames Crossing. Having recently appointed our integration partner, we continue to form an integrated client team to support the further development and procurement of the Lower Thames Crossing.

We have started the statutory planning approval process for A417 Air Balloon.

Enhancement schemes in the east

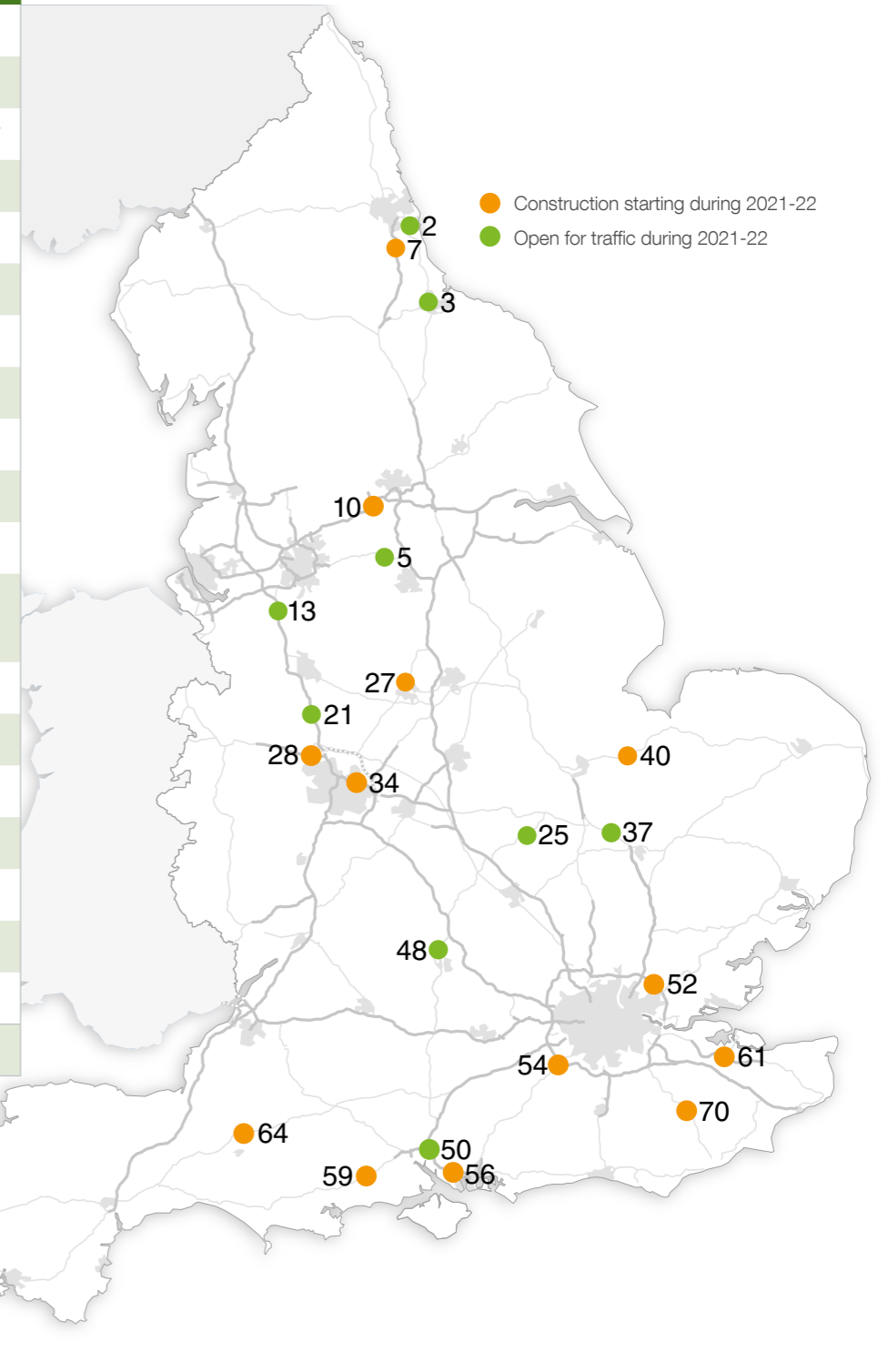
We will further progress the statutory planning consultations on the five A47 schemes to provide dualling and junction upgrades on the A47 near Peterborough and Norwich.

We will continue to progress the design and begin the statutory planning approval process for schemes which are due to start before the end of the second road period, including dualling of the A428 Black Cat to Caxton Gibbet and widening of the A12 between junction 19 (Chelmsford) to junction 25 (A120 interchange).

Enhancement schemes starting works and opening for traffic in 2021-22

The map below shows the schemes which start works or open for traffic in 2021-22.

No.	Name
2	A19 Testoś
3	A19 Norton to Wynyard*
5	A61 Westwood Roundabout**
7	A1 Birtley to Coal House
10	M62 junctions 25 to 30
13	M6 junction 19
21	M6 junctions 13 to 15
25	A45/A6 Chowns Mill junction
27	A38 Derby junctions***
28	M54 to M6 link road
34	M6 junctions 4 to 5
48	A34 Newbury to Oxford enhancements
50	M27 junctions 4 to 11
52	M25 junction 28
54	M25 junction 10
56	M27 Southampton junction 8
59	A31 Ringwood****
61	M2 junction 5
64	A303 Sparkford to Ilchester
70	A21 safety package



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* Note, we have accelerated plans to open A19 Norton to Wynyard from 2022-23 to 2021-22 Q3.
 ** Note, A61 Westwood Roundabout project was opened for traffic four months ahead of the 2021-22 commitment.
 *** Note, A38 Derby junction start of works is subject to change.
 **** Note, we started work on A31 Ringwood six months ahead of the 2021-22 commitment.

Designated funds

Designated funds are a series of ring-fenced funds to address a range of issues over and above the traditional focus of road investment. Our *Designated funds plan* sets out the outcomes we want to achieve with these funds. Through our designated funds advisory group, we will continue to work with key stakeholders to ensure we develop schemes which deliver against both our fund plan and our stakeholder objectives. This year we will invest in schemes to reduce congestion, improve cycling infrastructure, address flooding risk and develop off-site construction.

Our activities during 2021-22

Safety and Congestion fund

We will be investing £30 million to deliver a safety and congestion programme which goes beyond our business as usual activities. Schemes we will be investing in will include:

Introducing suicide prevention measures on Gracious Lane overbridge that spans the A21 in the South East. We will be installing 1.8m high parapet with mesh infill and bespoke rear anti-access panels.

We will reduce the number of injury collisions that are occurring on the exit slip roads at junction 30 of the M62 by increasing the capacity and preventing vehicles from using the hard shoulder of the slip road to avoid traffic queuing.

On the A30 at Helland we are looking at feasibility options to provide safer connectivity to common land. A new crossing is required to reduce risk and improve safety.

Installing permanent clearway signs to prevent vehicles from stopping on the verges of the A27 between Lewes and Beddingham. The aim of the scheme is to prevent dangerous driving, reduce vehicle and pedestrian incidents and lower congestion.

Delivering pedestrian connectivity over the A46 at RAF Newton. This will provide direct connectivity between the RAF Newton site and critical transport and infrastructure facilities, enabling 300 homes to be built.

Our activities during 2021-22

User and Communities fund

We will be investing £32 million across a programme of works to better integrate our network with other transport networks and to improve outcomes for communities. Schemes we will be investing in will include:

Working with bus operators and the City of York to improve driver information and increase Park and Ride patronage to reduce traffic volumes on the local road network.

Completing work to support end to end journeys on the A47 through improved bus infrastructure serving the smaller villages just off the main road.

Continuing the A30 Saints Trails project which, in partnership with Cornwall Council, will deliver four new multi user trails including links between Newquay, Perranporth, St Newlyn East, St Agnes and Truro. This transformational investment will create a 30km network of trails, and will link housing and employment growth areas, connect coastal communities, provide sustainable access to key services and help address congestion and air quality issues.

Working on the M5 Coastal Communities Cycling route, which is a match funding project with North Somerset Council. This will create a new mile long walking and cycling path reducing the distance to travel for those cycling and walking and removing the need for cyclists to negotiate a motorway junction and a busy A road.

Completing work on signage studies and on-road trials to test the impact of using fewer signs and signals, including variable speed limits to manage incidents. This contributes to improving the information available to customers, their sense of control and helping them to feel safe.

Environment and Wellbeing fund

We will be investing £88 million to support our vision of a greener, more sustainable road network. Schemes we will be investing in will include:

Noise

Starting phase two of our noise insulation scheme which has been designed to deliver improvement to the maximum number of households. The scheme focussing on larger Noise Important Areas and will provide replacement acoustic glazing and ventilation for homes closest to our network.

Continuing to develop and deliver barrier and resurfacing schemes which will reduce noise for our neighbours.

Our activities during 2021-22

Environment and Wellbeing fund

Biodiversity

Supporting improvements in biodiversity on the A303 Stonehenge as our partnership project with Environment Agency, RSPB and Natural England begins its delivery phase. As well as delivering biodiversity units by improving habitats, the project will also enhance 3km of the River Avon Watercourse, improve the landscape within a National Character Area and improve the setting of a public footpath alongside the River Avon.

Progressing projects in partnership with The Wildlife Trusts across England. We will undertake a range of surveys supporting the move from feasibility towards delivery of 20 projects, which altogether we expect to deliver over 2000 biodiversity units, supporting our biodiversity KPI in achieving no net loss by the end of RP2.

Landscape

Starting construction on a green bridge over the A3 which will re-connect two sites of special scientific interest (SSSI) habitats at Wisley Common and Ockham Common, mitigating historic severance caused by construction of the A3 40 years ago.

Cultural heritage

Working with the National Trust on a project to remedy historic severance caused by the SRN at their Saltram estate in Devon.

Working with the National Trust on Slindon Park on the A27 to improve the access to the site.

Working with Hull City Council on a project to construct a docking structure and access to the Spurn Lightship, so that it can be brought in to use as a museum piece that demonstrates Hull's maritime history.

Flooding and water quality

Working in partnership with the Environment Agency on a project to provide improved resilience to flooding in Portreath in Cornwall. Based on the latest available hydraulic modelling it is estimated that 75 residential properties and 10 non-residential properties will benefit from this work.

Air quality

Delivering signage on the M60 and key radial routes around Greater Manchester, to sign the Greater Manchester Clean Air Zone. Continuing our programme to improve air quality on pollution climate mapping links identified in collaboration with DEFRA.

Our activities during 2021-22

Innovation and Modernisation fund

We will be investing £40 million to research and develop emerging technologies which have the potential to revolutionise travel on our roads. This includes new ways to improve safety and provide smoother journeys for our customers. Schemes we will be investing in will include:

Continuing the roll out of Grid Key, which will allow us to remotely monitor the condition of lighting assets, allowing us to reduce the need for road workers to travel to sites to carry out electrical testing. This will provide more efficient working practices, a safer working environment for our road workers, as well as leading to better journey time reliability and less disruption for customers by reducing the need to close motorway lanes.

Investing in the off-site development of standardised, modular products for installation on our roads, such as the emergency areas located at the roadside. Building the products in a factory-like environment next to our network can reduce the cost of construction and increase the speed of installation, reducing the impact of our schemes on customers. Having completed the concept phase, the work is now moving to a development and trial phase.

Trialling of in-vehicle information and advice, to contribute to the UK's standards and guidance for connected roads. One scheme will install technology on the M5 junction 23 traffic signals and 20 HGVs that use the access route to allow the vehicles to 'talk' to our infrastructure. This will minimise delays by providing advice to the vehicles on what speed to travel at to encounter a series of green signals without stopping. This will provide better journey time reliability and reduce emissions from the HGVs.

Trialling the adoption of low-carbon and longer lasting materials on the M42 junction 6 scheme, reducing capital carbon and ultimately maintenance requirements.

Preparing for the third road period

We continue to plan for the next road period alongside delivering the current Road Investment Strategy (RIS2) as set by government. This includes engaging with customers and stakeholders on their needs from our network, in both the short and longer term. This year, this work will include developing our overall approach for delivery of RIS3, engaging with stakeholders on our route strategies - and progressing the development of our pipeline RIS3 schemes.

Our activities during 2021-22

Developing the next Road Investment Strategy Programme

Developing the approach, plans and priorities for the programme of work we will undertake over the next five years to support the delivery of the next Road Investment Strategy.

Working to understand emerging priorities for RIS3 and how these align with our imperatives and priorities, particularly in how we will meet our longer-term commitments in relation to decarbonisation and safety. This work will form the basis for agreeing the requirements and timeline for RIS3. It will also underpin the development of our Strategic Road Network Initial Report which will be published later in RP2.

Continuing to build on our early engagement with the Office of Rail and Road and Transport Focus to understand their emerging views and how these could inform the development of our plans.

We will also be developing our wider engagement approach for RIS3 in conjunction with the DfT.

Engagement with sub-national transport bodies (STBs)

The engagement plan for full delivery of our route strategies will begin, involving a comprehensive communication plan developed with the STBs with feedback from all interested parties.

This will include sharing data and intelligence, and developing an understanding of the strategic, regional and local needs of the strategic road network.

Our activities during 2021-22

Engagement with sub-national transport bodies (STBs)

Engaging with STBs on our two strategic studies; the M4 to Dorset Coast and the Role of the Urban SRN.

Developing our pipeline of RIS3 schemes

Continue work on planning the named pipeline schemes for possible inclusion RIS3 (see Annex D).

Of the 32 pipeline projects named in RIS2, the A21 safety package has been brought forward to be delivered in RP2.



How we run our organisation

To deliver the commitments we set out in our *Delivery plan*, we will continue to develop our people and our organisation. Highways England 2025 (HE2025) is our internal organisational plan for the second road period, and it will help us build capability and maturity across our functions. We will continue our apprentice and graduate recruitment, our management development programme and build a more inclusive and collaborative company culture. Alongside this, we will manage our PFI contracts and deliver protocol services on behalf of the DfT.

Our activities during 2021-22	
Highways England 2025 (HE2025)	<p>Establishing a fit for purpose Transformation Portfolio Office.</p> <p>Providing an integrated portfolio view of the HE2025 programme to enable direction and oversight to ensure that the programme delivers.</p> <p>Refining our HE2025 programme reporting and governance to ensure overview of critical elements.</p> <p>Refining and further developing end-to-end processes for demand forecasting and operational technology.</p> <p>Identifying further priority process areas to review and develop.</p> <p>Selecting a new corporate process management solution.</p>
Right People, Places and Skills	<p>Further developing on improving our image and branding, measured by our employer reputation scoring through sources like Glassdoor and Indeed, and the success rates on our campaigns.</p> <p>Continuing our investment in early talent with a further 81 apprentices and graduates in our recruitment pipeline, and an increased focus on digital and environmental capabilities.</p> <p>Implementing a sharing of our apprenticeship levy investment with small and medium-sized enterprises (SMEs) which has been delayed from 2020-21 due to COVID-19.</p>

Our activities during 2021-22	
Right People, Places and Skills	<p>Setting up steering groups to support the movement of talent across the organisation, and strengthen our early talent approach.</p> <p>Completing a critical skills analysis across the business aligned to our strategic and cross-cutting activities. This will ensure that we have the right organisation development activity in place.</p> <p>Using a strategic workforce planning tool to inform capability and resource requirements across our Major Projects and Safety, Engineering and Standards directorates.</p>
Accountable Leadership	<p>Deliver leadership development through our people manager essentials and Management Development Programme (MDP).</p> <p>Deliver a consistent change and organisational design approach across the organisation, and develop organisation capability to lead and deliver effective change.</p> <p>Deliver internal communication and engagement campaigns on RIS2, <i>Strategic business plan 2020-2025</i> and HE2025.</p>
A diverse and inclusive culture	<p>Continue with our internal campaign to encourage people to share their diversity data to enable evidence based decisions and activity.</p> <p>Promote Highways England as an inclusive employer through our recruitment advertising, and improve the diversity of recruitment and development in areas with lower representation.</p> <p>Create shared common goals and continue to support and develop our employee networks.</p> <p>Achieve improved or new equality, diversity and inclusion (EDI) standards and benchmarks.</p>
IT Transformation	<p>Transforming services</p> <ul style="list-style-type: none"> ■ Investment in additional internal resource to help build capabilities within the IT Directorate to support the operation of the SRN. ■ Invested in key new technologies, systems and collaboration tools to help accelerate programme delivery.

Our activities during 2021-22	
IT Transformation	<p>Enabling our people</p> <ul style="list-style-type: none"> ■ Create plans to exploit modern technology including utilisation of greater automation. ■ We are currently working on organisation culture to support the way in which we work, for example enhancing our capability and approach to cyber security and data protection to help counter any potential threat. <p>Improving delivery</p> <ul style="list-style-type: none"> ■ We have significantly streamlined the decision making process to help support planned delivery roadmaps, including a strategic governance forum. ■ We have introduced a portfolio approach to demand planning to ensure that we optimise available funding and delivery capability.
Private Finance Initiative (PFI) funding	<p>We currently operate 11 design, build, finance and operate (DBFO) contracts, awarded to the private sector through PFIs. These relate to roads which are funded and managed by private companies for a set period of time. During 2021-22 we will:</p> <ul style="list-style-type: none"> ■ Work with our providers to ensure there is no degradation in service and asset condition due to the negative financial effect of COVID-19. ■ Continue to work closely with the Infrastructure and Projects Authority and DfT on agreeing the reconciliation of unitary charge payments from the impact on traffic for the last and upcoming financial years. ■ Continue to collaborate with the PFI providers where the formal first stage of handback begins for pavement and structure stock this financial year. ■ Continue engagement with the Infrastructure and Projects Authority on their national programme of health checks on all PFI's coming toward handback.
Delivering the Protocol services	<p>We will continue to deliver the functions included in the seven protocols we agreed with the Secretary of State relating to activities which are not core to our role as a strategic highways company. These are:</p> <ul style="list-style-type: none"> ■ Abnormal loads: We are responsible for authorising the movement of abnormal loads within Great Britain and for planning routes for the largest and heaviest abnormal loads within England and Wales. This includes managing and maintaining the electronic service delivery system which allows on-line management of roads and structures for abnormal loads movement.

Our activities during 2021-22	
Delivering the Protocol services	<ul style="list-style-type: none"> ■ Dartford Crossing free-flow: We will performance manage our service providers to ensure the collection of the Dart Charge and enforcement management services. ■ Dartford and local authority pension schemes: We are responsible for discharging the liabilities from DfT's commitment to fund any future deficits for these pension schemes. ■ National salt stocks: We will maintain a strategic salt stock as an emergency reserve for local highway authorities. We will also manage the allocation of the salt and co-ordinate its collection by local authorities. ■ M6 Toll: We will be responsible for fulfilling government's M6 Toll concession arrangements, including matters relating to road signage and incident liaison. ■ Severn River Crossings: We will operate and maintain the M4 and M48 Severn River Crossings on behalf of the Secretary of State. We will ensure effective operation, service and safety continuity of these national assets. ■ Technical regulations: We will continue the ongoing development and maintenance of standards, guidance and specifications for all works on the motorway and all-purpose trunk road network. These will underpin the efficient delivery of cost effective improvement, maintenance and operation of motorways and all-purpose trunk roads in the United Kingdom. <p>In addition, we will deliver cross-government projects that sit outside of the RIS2:</p> <ul style="list-style-type: none"> ■ We will continue to develop and deliver a second-generation free-flow changing service (primarily driven by Dartford Crossing – Dart Charge replacement) and will implement a new multi-package service delivery model during the second road period, while maintaining service continuity and ongoing collection of road user charges. ■ We will manage the Historical Railways Estate on behalf of the Secretary of State. The future of this estate, including who will be responsible for managing it from April 2022 onwards, will be decided during the second road period.



Employees in our Bedford office

Annexes



Annex A: Funding table

£m	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Operations and maintenance (Opex)	1,034	1,014	1,037	1,050	1,119	5,254
Operations and maintenance (Capex)	296	328	233	257	272	1,385
Renewals	706	863	853	872	972	4,267
Enhancements	2,140	2,311	2,940	3,296	3,421	14,108
Designated funds	161	184	190	205	195	935
RP3 preparation and development	31	45	83	94	103	357
How we run our network (Opex)	167	146	162	171	174	820
How we run our network (Capex)	76	85	66	66	85	379
Total	4,612	4,977	5,565	6,012	6,339	27,505

Note: Some activities are classified differently in this table compared to the Statement of Funds Available (SoFA)
The RP3 preparation and development total shown above does not include OxCam which is shown elsewhere in the table above.

This *Delivery plan* has been set out according to Highways England capital baseline. As agreed with the government this plan will be delivered within the £27,358m as set out in the RIS and which was re-profiled in Spending Review 2020 as well as including additional funding (£146m) for the acceleration of the A66 as part of Project Speed. It is noted that there will be a government spending review during 2021-22 that may change the profile of funding.

We have been allocated additional funding of £80m during 2020-21 to 2021-22 for deliverables outside the scope of RIS2 such as: the Historical Rail Estate (HRE), Operation Brock, the moveable barrier on the M20. These amounts are not included in the table above which captures the funding within the scope of RIS2 only.



Annex B: Performance metrics

Key Performance Indicators (KPIs)

Unique ID	Metric	Target	Target type	Unit	2020-21 performance target	2021-22 performance target	2022-23 performance target	2023-24 performance target	2024-25 performance target
Outcome: Improving safety for all									
1.1	The number of people killed or seriously injured (KSI) on the SRN	Ongoing reduction in the number of people KSI on the SRN to support a decrease of at least 50% by the end of 2025, against the 2005-09 average baseline	Achieve	Number	Ongoing reduction				At least a 50% reduction in KSIs by the end of 2025, against the 2005-09 average baseline
Outcome: Providing fast and reliable journeys									
2.1	Average delay	Performance to be no worse at the end of the second road period than it is at the end of the first road period	Ambition	Seconds per vehicle per mile	N/A	N/A	N/A	N/A	Ambition of being no worse than at the end of the first road period
2.2	Roadworks network impact	Roadworks network impact to not exceed the monthly average target of weighted lane metre days set for each year	Achieve	Weighted lane metre days	97.5% (against first road period network availability metric)	43 million	47 million	48 million	47 million
2.3	Incident clearance rate*	86% of motorway incidents cleared within one hour	Achieve	%	86%	86%	86%	86%	86%
Outcome: A well-maintained and resilient network									
3.1	Pavement condition (road surface)	Percentage of the network (as defined by Highways Agency Pavement Management System, excluding DBFOs) requiring no further investigation to be maintained at 95% or above	Achieve	%	95%	95%	Target for year 3 onwards will be based on the concept of road surface in good condition and determined through parallel running using the new metric trialled in the first road period		

*We will continue to monitor this metric to understand any impacts from the smart motorway stocktake.

Unique ID	Metric	Target	Target type	Unit	2020-21 performance target	2021-22 performance target	2022-23 performance target	2023-24 performance target	2024-25 performance target
Outcome: Delivering better environmental outcomes									
4.1	Noise	7,500 households benefiting from noise reduction in mitigated 'noise important areas', defined by Defra, using funding from the Environment and wellbeing fund during the second road period	Achieve	Number	N/A	N/A	N/A	N/A	7,500 households benefiting from noise reduction in mitigated noise important areas
4.2	Biodiversity	Achieve no net loss of biodiversity across all Highways England activities by the end of the second road period	Achieve	Biodiversity units	N/A	N/A	N/A	N/A	No net loss over RP2. No less than 130,848.1 biodiversity units
4.3	Air quality	Bring links agreed with the department and based on the Pollution Climate Mapping model into compliance with legal NO2 limits in the shortest timescales possible	Achieve	Number of links	Following periodic reviews of the Pollution Climatic Mapping model by DfT and Joint Air Quality Unit, they will recommend the number and locations of existing sections of the SRN (links) likely to exceed the annual mean NO2 legal limit value. We will undertake a detailed assessment of those links and, after agreement of the outcomes with DfT and Defra, we will, where required, introduce measures to help support compliance in the shortest timescales possible				
4.4	Highways England carbon emissions	Reduce Highways England's carbon emissions as a result of electricity consumption, fuel use and other day to day operational activities during the second road period by 75% from April 2017- March 2018 baseline of 88,147 tonnes	Achieve	Tonnes of carbon	N/A creating baseline	Ongoing reduction	Ongoing reduction	Ongoing reduction	22,037 tonnes
Outcome: Meeting the needs of all users									
5.1	Road user satisfaction	Achieve an 82% road user satisfaction score in 2020-21 and 2021-22, with year-on-year increases in following years	Achieve	%	82%*	82%*	Road user satisfaction targets for post 2021-22 will be reviewed during 2021-22		
5.2	Roadworks information timeliness and accuracy	Achieve 90% accuracy of roadworks information seven days in advance of works by 2024-25, with an increasing trajectory of improvement through the second road period from the level of performance achieved by the end of the first road period	Achieve	%	Increasing trajectory of improvement through the second road period from the level of performance achieved by the end of the first road period				90%
Outcome: Achieving efficient delivery									
6.1	Total efficiency	Demonstrate efficiency of £2.23bn*** of capital and operational expenditure by the end of the second road period	Achieve	£bn	£233.3m**	N/A	N/A	N/A	£2.23bn

Table 1 KPIs

*Due to the social distancing restrictions no data was available during 2020-21 and due to the alternative methodology the suspension of 2021-22 target has been approved.

**This is an indicative efficiency milestone and not a performance target.

***We have agreed a revised efficiency target with government to reflect changes to the Smart Motorway Programme.

Performance Indicators (PIs)

Unique ID	Metric	Unit
Outcome: Improving safety for all		
1.2	The total number of people killed or injured on the SRN	Number
1.3	The number of non-motorised and motorcycle users killed or injured on the SRN	Number
1.4	The number of injury collisions on the SRN	Number
1.5a	The accident frequency rate for Highways England staff	Accidents per 100,000 hours worked
1.5b	The accident frequency rate for Highways England supply chain employees	Accidents per 100,000 hours worked
1.6	The % of traffic using iRAP 3 star or above rated roads	%
Outcome: Providing fast and reliable journeys		
2.4	Delay on smart motorways	Seconds per vehicle per mile
2.5	Delay from roadworks	Minutes per hour travelled
2.6	Journey time reliability	Seconds per vehicle per mile
2.7	Delay on gateway routes	Seconds per vehicle per mile
2.8	Average speed	Mph
Outcome: A well-maintained and resilient network		
3.2	Structures condition	Average condition score/critical condition score/% of structures rated 'good' in opinion of inspector
3.3	Technology availability	% of time when available and functioning
3.4	Drainage resilience*	% length of carriageway that does not have an observed significant susceptibility to flooding
3.5	Geotechnical condition	% length in good condition
Outcome: Delivering better environmental outcomes		
4.5	Supply chain carbon emissions	Tonnes of CO2e and tonnes of CO2e/£m
4.6	Condition of cultural heritage assets	Condition score
4.7	Water quality	Km of watercourse enhanced
4.8	Litter	% of SRN where litter is graded at A or B
Outcome: Meeting the needs of all users		
5.3	Timeliness of information provided to road users through electronic signage	Average time (mins:secs) to set manual signs and signals on motorways
5.4	Ride quality	% of pavement asset delivering ride quality consistent with the three-metre Enhanced Longitudinal Profile Variance value in Highways England's standards
5.5	Working with local highways authorities to review diversion routes for unplanned events	% of local highway authorities engaged with
Outcome: Achieving efficient delivery		
6.2	Cost performance index and schedule performance index	Index

*From 2024/25 it is intended that this metric will be weather normalised.

Descriptive commitments

Commitment description	Completion date
Outcome: Improving safety for all	
Work with Transport Focus to investigate a rate-based measure for non-motorised user casualties	N/A
iRAP baseline to be established in 2021, and 2025 forecast developed, based on latest iRAP methodology	Development to be completed year 2
Outcome: Providing fast and reliable journeys	
Working with Transport Focus, investigate the development of new metrics on journey time reliability which reflects more accurately road users' understanding of reliability, and delay in roadworks	Feasibility to be completed during the second road period*
Investigate new PIs on delays from incidents and delays on the local road or SRN boundary, and an alternative performance measure for smart motorways operation to keep track that these roads are delivering their intended journey-time related objectives	Feasibility to be completed during the second road period*
Outcome: A well-maintained and resilient network	
Implement the Asset Management Development Plan for the second road period	Annual deliverables
Investigate an improved structure condition metric during the second road period, and an alternative indicator for technology assets	Feasibility to be completed during the second road period*
Outcome: Delivering better environmental outcomes	
Investigate, and as appropriate develop, new environmental metric(s) informed by the natural capital approach	Feasibility to be completed during the second road period*
Investigate and assess incorporating into new and existing contracts air quality standards for supply chain vehicles deployed on Highways England work, and associated reporting requirements. A more detailed timetable for these investigations will be produced in year 1 of the second road period, as well as potential implementation opportunities identified by that stage	Year 1/End of the second road period
Outcome: Meeting the needs of all users	
Review Strategic Roads User Survey performance in year 2 of the second road period to determine the road user satisfaction targets for post 2021-22	End of year 2
Develop with Transport Focus during the second road period a measure of ride quality which reflects road users' experience of the network	End of year 2
Investigate expanding the scope of the timeliness of electronic signage information PI to potentially include the time taken to adjust and clear signs	Feasibility to be completed during the second road period*
Work with Transport Focus to develop satisfaction surveys for cyclists and walkers that can be used, if possible, as the basis of a PI later in the second road period	During/end of the second road period
Work with Transport Focus to develop satisfaction surveys for logistics and coach managers that can be used, if possible, as the basis of a PI later in the second road period	During/end of the second road period
Investigate expanding the scope of the working with local highways authorities PI to include diversion routes linked to planned roadworks	Feasibility to be completed during the second road period*
Outcome: Achieving efficient delivery	
Investigate and look to develop new or improved metrics to monitor cost and schedule for enhancement scheme development and construction, engaging with ORR	N/A

Table 3 Descriptive commitments

* Further stages to be confirmed following reviews

Annex C: Enhancements scheme list

Enhancements

North-east schemes

Scheme number	Scheme	Start of works	Open for traffic
1	A1 Scotswood to north Brunton	Started	2022-23 Q2*
2	A19 Testos	Started	2021-22 Q3
3	A19 Norton to Wynyard	Started	2021-22 Q3**
4	M621 junctions 1 to 7	Started	2022-23 Q4
5	A61 Westwood roundabout	Started	Opened***
6	A1 Morpeth to Ellingham	2022-23 Q2	2024-25
7	A1 Birtley to Coal House	2021-22 Q2	2024-25
8	A19 Down Hill Lane	Started	2022-23 Q2*
9	A63 Castle Street	Started	2024-25
10	M62 junctions 25 to 30 upgrade dynamic hard shoulder running to all lane running	2021-22 Q4	2022-23 Q4

* This scheme open for traffic date has been advanced ahead of the original Delivery Plan date.

** We have accelerated plans to open A19 Norton to Wynyard from 2022-23 to 2021-22 Q3.

*** Note, this scheme opened for traffic four months ahead of the 2021-22 commitment.

North-west schemes

Scheme number	Scheme	Start of works	Open for traffic
11	A585 Windy Harbour to Skippool	Started	2023-24
12	M62 junctions 20 to 25	2022-23 Q4	RP3
13	M6 junction 19	Started	2021-22 Q3
14	A66 Northern Trans-Pennine	2023-24 Q4	RP3
15	A5036 Princess Way	2023-24 Q4	RP3
16	M6 junctions 21a to 26	Started	2022-23 Q4
17	Mottram Moor Link Road and A57 link road	2022-23 Q4	RP3
18	M56 junctions 6 to 8	Started	2022-23 Q2*
19	M60/M62/M66 Simister Island interchange	2024-25	-

*Scheme open for traffic date rescheduled as part of smart motorways stocktake first year progress report 2021 plans.

Midlands schemes

Scheme number	Scheme	Start of works	Open for traffic
20	A500 Etruria	Started	Opened
21	M6 junctions 13 to 15	Started	2021-22 Q4*
22	M42 junction 6	Started	2024-25
23	A46 Coventry junctions	Started	RP3
24	M40/M42 interchange	Started	2023-24
25	A45/A6 Chown's Mill junction	Started	2021-22 Q4
26	M1 junctions 13 to 19	Started	2022-23 Q4
27	A38 Derby junctions	2021-22 Q2**	2024-25
28	M54 to M6 link road	2021-22 Q4	2024-25
29	A5 Dodwells to Longshoot***	Cancelled	Cancelled
30	A52 Nottingham junctions	Started	2023-24
31	M6 junction 10	Started	2022-23 Q1****
32	A46 Newark bypass	2024-25	-
33	M42 junctions 4 to 7 upgrade dynamic hard shoulder running to all lane running	2023-24 Q4	2024-25
34	M6 junctions 4 to 5 upgrade dynamic hard shoulder running to all lane running	2021-22 Q2	2022-23 Q3****
35	M6 junction 5 to 8 upgrade dynamic hard shoulder running to all lane running	2022-23 Q4	2024-25
36	M6 junctions 8 to 10a upgrade dynamic hard shoulder running to all lane running*****	2022-23 Q2	2023-24

* Scheme open for traffic date rescheduled as part of smart motorways stocktake first year progress report 2021 plans.

** Scheme start of works will subject to change following a judicial review challenge on the Secretary of State Development Consent Order decision.

*** A5 Dodwells to Longshoot scheme will be considered as part of the A5 Hinckley to Tamworth pipeline proposal.

**** This scheme open for traffic date has been advanced ahead of the original Delivery Plan date.

***** We have accelerated start of works to 2022-23 Q2 and open for traffic to 2023-24.

East schemes

Scheme number	Scheme	Start of works	Open for traffic
37	A14 Cambridge to Huntingdon	Started	Opened
38	A47 Wansford to Sutton	2022-23 Q4	2024-25
39	A47 Great Yarmouth junctions	2023-24 Q4	2024-25
40	A47 Guyhirn junction	Started	2022-23 Q1*
41	A47 north Tuddenham to Easton	2022-23 Q4	2024-25
42	A47 Thickthorn junction	2022-23 Q4	2024-25
43	A47 Blofield to north Burlingham	2022-23 Q4	2024-25
44	A428 Black Cat to Caxton Gibbet	2022-23 Q2**	RP3
45	A12 Chelmsford to A120	2023-24 Q4	RP3
46	M1 junctions 10 to 13 upgrade dynamic hard shoulder running to all lane running	2022-23 Q2	2023-24

* This scheme open for traffic date has been advanced ahead of the original Delivery Plan date.

** Scheme start of works may be subject to change.

South-east schemes			
Scheme number	Scheme	Start of works	Open for traffic
47	M4 junctions 3 to 12	Started	2022-23 Q1*
48	A34 Newbury to Oxford enhancements	Started	2021-22 Q4
49	M3 junctions 9 to 14	Started	2023-24
50	M27 junctions 4 to 11	Started	2021-22 Q4*
51	M25 junction 25	Started	2022-23 Q3**
52	M25 junction 28	2021-22 Q4	2024-25
53	M25 junctions 10 to 16	2022-23 Q2	RP3
54	M25 junction 10	2021-22 Q4	2023-24
55	M3 junction 9	2023-24 Q4	RP3
56	M27 Southampton junction 8	2021-22 Q2	2022-23 Q4
57	A27 Arundel bypass	2023-24 Q4	RP3
58	A27 Worthing and Lancing improvements	2024-25	RP3
59	A31 Ringwood	Started***	2022-23 Q4
60	A2 Bean and Ebbsfleet	Started	2022-23 Q1**
61	M2 junction 5	2021-22 Q2	2024-25
62	A27 East of Lewes package	Started	2022-23 Q4
63	Lower Thames Crossing	2022-23 Q4****	RP3
70	A21 Safety Package*****	2021-22 Q1	2024-25

* Scheme open for traffic date rescheduled as part of smart motorways stocktake first year progress report 2021 plans.

** This scheme open for traffic date has been advanced ahead of the original Delivery Plan date.

*** Note this scheme has started work six months ahead of 2021-22 commitment.

**** Scheme start of works may be subject to change.

***** Scheme added to RIS2 enhancement portfolio.

South-west schemes			
Scheme number	Scheme	Start of works	Open for traffic
64	A303 Sparkford to Ilchester	2021-22 Q3	2023-24
65	A303 Amesbury to Berwick Down	2023-24 Q2	RP3
66	A358 Taunton to Southfields	2024-25	RP3
67	A30 Chiverton to Carland Cross	Started	2023-24
68	A417 Air Balloon	2022-23 Q4	2024-25
69	M4 junctions 19 to 20 and M5 junctions 16 to 17 upgrade dynamic hard shoulder running to all lane running	2022-23 Q2	2023-24

Housing infrastructure fund schemes and Housing Investment Grant schemes			
Scheme	Region	Start of works	Open for traffic
A120: Tendring/Colchester Border Garden Community*	East	2022	2024
M5 junction 10 and link road*	South-west	2022	2024
A249: Swale transport infrastructure*	South-east	2021	2024
M6: South Lancaster Growth Catalyst – junction 33a*	North-west	2024	RP3
A5 Dordon to Atherstone**	East	RP3	RP3

* These schemes will be delivered by local authorities with our support and are subject to future planning decisions.

** This scheme will be delivered by Highways England and is subject to future planning decisions.

Schemes delivered by third parties with a funding contribution from Highways England			
Scheme	Region	Start of works	Open for traffic
A5 Towcester relief road	Midlands	2021-22	RP3
M11 junction 7a	East	Started	2022-23
M55 junction 2	North-west	Started	2023-24
M62 junction 19	North-west	Started	2022-23

These schemes will be delivered by third parties with our support and are subject to future planning decisions.

Annex D: Pipeline of proposed future schemes

North schemes	Midlands schemes
A19 North of Newcastle junctions	M6 junction 15 Potteries Southern Access
A64 Hopgrove	A483 Pant-Llanymynech Bypass (in cooperation with the Welsh Government)
M1 Leeds Eastern Gateway	M1 North Leicestershire extra capacity
M1/M62 Lofthouse Interchange	M1 Leicester Western Access
M6 junctions 19-21a Knutsford to croft extra capacity	A5 Hinckley to Tamworth*
M1 junctions 35a-39 Sheffield to Wakefield extra capacity	*In cooperation with work funded by the Ministry of Housing, Communities and Local Government on the A5 Transport Corridor.
A1 Doncaster to Darrington	
M6 junction 22	
Manchester South East junction improvements	

East schemes	South and west schemes
A47/A1101 Elm Road junction	Severn Resilience Package
A11 Fiveways junction	A404 Bisham junction
M11 junction 13 Cambridge West	A2 Brenley Corner
A12/A14 Copdock interchange	A303 Phase 2 upgrade
A120 Braintree to A12**	A3/A247 Ripley South
Tilbury link road	A2 Dover Access
	A27 Lewes to Polegate
	A27 Chichester improvements
	M27 Southampton Access
	A38 Trerulefoot-Carkeel safety package
	A404/M40 junction 4 High Wycombe

**The A120 Braintree to A12 proposed timeline is currently being investigated in order to coordinate with the A12 Chelmsford to A120 scheme.

Annex E: Changes we have made

Changes to business commitments		
Item	Reason for change	Changes from Delivery plan
Growth and Housing Fund scheme: M181 terminating junction*	The design for this scheme was completed but the scheme did not progress to construction as planned. This is because the project is to be jointly funded with a developer and the necessary amount of match funding has not been found to date.	Expected start of scheme construction has changed from 2020-21 to 2021-22.
Proportion of our apprenticeship levy available to invest in SME apprenticeships	This has been delayed from 2020-21 due to Covid-19.	Implementing a sharing of our apprenticeship levy investment with SMEs changed from 2020-21 to 2021-22.
Noise barrier on the M621 (junctions 6 to 7) near Leeds	The programme has been extended due to embankment stabilisation work required at the location.	Project extended from 2020-21 to 2022-23.
A19 Testos cycleway	Upgrading the cycleway did not demonstrate value for money so was not progressed in year.	Closure of 2020-21 commitment.
Local accessibility and signage studies, trialing and testing the impact of using fewer signs and signals	We have extended our trial to allow better alignment with the CHARM programme which is changing the way we manage these assets.	Project extended from 2020-21 to 2022-23.
Delivering the UK's first automated lane closure system	The automated lane closure trial could not be undertaken due to delays caused by Covid-19.	Project delayed due to Covid-19 from 2020-21 to 2021-22.
M5 J25-26 Park and Ride signage	The scheme did not represent value for money so was not progressed in year.	Closure of 2020-21 commitment.
Deliver a self-cleansing ditch scheme	Field tests have been completed of the new technology, however there has been a slight delay to evaluation and reporting as the laboratory was re-purposed to support Covid-19 vaccine development.	Project delayed due to Covid-19 impact from 2020-21 to 2021-22.

*Subject to third party funding contribution.

Glossary

Changes to the major enhancements programme		
Item	Reason for change	Changes from Delivery plan
M2 junction 5	Start of works has been revised following a delayed public inquiry.	Start of works is deferred from 2020-21 to 2021-22 Q2.
A303 Sparkford to Ilchester	Start of works has been revised following a delay to the Development Consent Order decision.	Start of works is deferred from 2020-21 to 2021-22 Q3.
A21 safety improvements	It has been agreed with the DfT to accelerate the delivery of this project and transfer from the RIS3 pipeline and into the RIS2 enhancement portfolio.	Work originally planned for Road Period 3 will now start in 2021-22 Q1.
A303 Amesbury to Berwick Down	Start of works has been revised following a delay to the Development Consent Order decision and a financial re-plan.	Start of works is deferred from 2022-23 to 2023-24 Q2.
A66 Northern Trans-Pennine	Programme delivery movement accelerated following the spending review.	Start of works accelerated from 2024-25 to 2023-24 Q4.
A5 Dordon to Atherstone Housing Infrastructure scheme	It has been agreed with DfT that this scheme will be added to RIS2 schemes and will be delivered by Highways England with funding from Housing Investment Grant.	The scheme will be recorded and reported alongside Housing Infrastructure Fund schemes.
A5 Dodwells to Longshoot	The scheme has been cancelled for delivery as a RIS commitment following the outcome of a value for money assessment, concluding it delivered poor value for money.	Removal from Delivery Plan list of RIS2 schemes.
M27 Junctions 4 to 11		Open for Traffic is deferred from 2021-22 Q2 to 2021-22 Q4.
M56 Junctions 6 to 8	Scheme open for traffic date updated to ensure radar SVD technology is installed before opening, aligned to the published year 1 progress report on the All Lane Running Motorway stocktake.	Open for Traffic deferred from 2021-22 to 2022-23 Q2.
M4 Junctions 3 to 12		Open for Traffic is deferred from 2021-22 to 2022-23 Q1.
M6 Junctions 13 to 15		Open for Traffic is deferred from 2021-22 Q2 to 2021-22 Q4.

Alliance model	The model used to deliver the majority of our SMP outputs in the second road period. The alliance will consist of Highways England and six other parties (three delivery, two design and one production hub) who will engage with each other in one contract which will be based on an NEC4 document.
All lane running	A smart motorway which includes the permanent conversion of a hard shoulder to a running lane and features regular emergency areas.
Ambient air quality directive	European Commission directive which sets limits for key pollutants within the outdoor air.
Asset Delivery	This approach enables us to directly manage maintenance operations and scheme delivery. Through Asset Delivery, we will improve our asset knowledge and increase our control, including over interventions, planning and sequencing. This will improve safety and quality, as well as reducing disruption and delivering better long-term value for money.
Asset management	The coordinated activity of an organization to realise value from assets.
Benchmarking	Benchmarking is a widely used tool for drawing inferences about the potential for efficiency improvements. Where it is targeted and implemented appropriately, it can provide useful insights and challenge.
CAVs	Connected and Autonomous Vehicles.
CHARM	Common Highways Agency Rijkswaterstaat Model project.
Complex Infrastructure Programme	Our Complex Infrastructure Programme (CIP) is comprised of enhancement schemes above £500 million in estimated cost, and relates to the delivery of nationally important infrastructure. They are known as Tier 1 schemes as they are subject to staged approvals by DfT, and we work closely with government in their development and delivery.
Designated funds	During the first road period, the government created a series of designated funds, to address a range of issues over and above the traditional focus of road investment, including: growth and housing, innovation, environment, air quality, and cycling, safety and integration.
DfT	Department for Transport.
Digital roads	Digital roads is a concept we have developed based on using connectivity, data and technology to improve the way the SRN is designed, built, operated and used.
DMRB	Design Manual for Roads and Bridges.
Driving for Better Business	A government-backed Highways England programme to help employers in both the private and public sectors reduce work-related road risk, decrease the associated costs and improve compliance with current legislation and guidance.
Environment Agency	A non-departmental public body sponsored by the Department for Environment, Food and Rural Affairs, with responsibilities relating to the protection and enhancement of the environment in England.
First road period	The initial road period that followed roads reform (2015-2020).
HGV	Heavy goods vehicle.
Housing Infrastructure Fund	A government fund available to local authorities for infrastructure to unlock housing.
HS2	High Speed 2.
International Road Assessment Programme	The umbrella programme for Road Assessment Programmes (RAPs) worldwide that are working to save lives.

IPA	Infrastructure and Projects Authority.
IT	Information technology.
KPI	Key performance indicator – a key metric used to define and measure progress towards organisational objectives.
Lean	Method which creates more effective business processes by eliminating wasteful practices and improving efficiency.
Licence	Sets out the Secretary of State's aims, objectives and conditions for Highways England.
Metric	The individual measurements that we are judged on, that fit within the performance specification.
National Traffic Information Service	Provides up-to-the-minute traffic information for the strategic road network in England.
Nationally Significant Infrastructure Project	Major infrastructure projects which require a type of consent known as 'development consent' under procedures governed by the Planning Act 2008.
Noise important area	Areas in England are adjacent to major roads.
ORR	Office of Rail and Road.
PFI	Private Finance Initiatives.
Protocols	Additional services to our day-to-day operational activities, not core to our role as a strategic highways company.
Rapid Engineering Model	Highways England digital approach to automated design.
Regional Delivery Partnerships	The Routes to Market Regional Delivery Partnerships incentivise suppliers to improve safety and deliver increased value. This approach contains incentives for results including: shorter and more accurate roadworks; more efficient, local buying; innovation; and increased environmental benefits.
RIS1	First Road Investment Strategy (2015-2020).
RIS2	Second Road Investment Strategy (2020-2025).
RP2	Road period 2 (2020-2025).
RIS3	Third Road Investment Strategy (2025-2030).
Road Investment Strategy	Government's long-term strategy for the strategic road network. It is where government sets the performance and investment objectives for Highways England and the funding it will make available for each Road Period.
Route strategies	Route strategies present a high-level view of performance and constraints on existing road network as well as recommending areas for further study.
Routes to Market programme	Highways England has provided forward visibility to help our supply chain to make plans to commit resources and people, to encourage innovation and to bring new highway suppliers into the market. It consists of Asset Delivery, Regional Delivery Partnership, Smart Motorways Alliance and Complex Infrastructure Programme.
Second road period	Road period 2 (2020-2025).
Smart motorways	Motorways that use technology to manage the flow of traffic, controlled from Highways England control centres. They monitor traffic and set variable speed limits and signs to help keep the traffic flowing safely and freely.
SRN	Strategic road network.
Strategic road network	The network of roads managed by Highways England, comprising motorways and some A roads
Transport Focus	The 'watchdog' responsible for gathering the views of SRN users and using them to shape policy and decision making.

Notes

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