



Annual Assessment of National Highways' performance: End of the second road period April 2020 to March 2025

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Office of Rail and Road

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Foreword

This year's assessment of National Highways' performance and delivery covers the year 2024 to 2025 and the whole of the second road period (RP2, 2020 to 2025). This year I would like to take the opportunity to reflect on the evolution of the framework that governs the strategic road network (SRN), and the circumstances that have characterised the wider operating environment over the road period.



Roads reform: a decade delivering better highways

The end of RP2 marked ten years of Roads Reform. This was a fundamental change to how the SRN would be operated, maintained and improved to support economic growth. It was intended to provide long term certainty and a more flexible approach to delivery to drive innovation and efficiency in the sector for taxpayers and achieve improved outcomes for road users and communities.

A decade on, we continue to see the intended benefits of Roads Reform that started in the first road period (RP1, 2015 to 2020) and have been built on in RP2. This is important for the public and businesses: a third of all motorised traffic and over two thirds of lorry miles in England are driven on the motorways and main A-roads of the SRN. A high performing, safe, reliable network is vital to maintaining and supporting growth to the economy and will continue to be so in the future.

Role of ORR

ORR has played a key role in working with National Highways to help the company deliver these and other benefits over the past decade, on behalf of government. We have focused on identifying risks early to stop them becoming issues that affect road users. We have helped the company to mitigate or manage those risks so that public money is spent efficiently and road users have safe, reliable journeys. We do this in a way that is transparent, accountable, proportionate, consistent and targeted only where action is needed.

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Our role has grown over the period too. The previous government asked us to undertake a [review of the data and evidence](#) used to underpin its understanding of safety on all lane running smart motorways, a topic that has attracted public interest throughout the period. Also, at the request of government, for the past three years we have produced an annual safety report looking at a variety of safety matters on the SRN.

The end of the road period is an opportunity for us to reflect and learn lessons and consider how we can more efficiently and effectively undertake our role. We will revise our [holding to account policy](#) before the start of the third road investment strategy (RIS3) to reflect those lessons.

Our assessment of RP2

Across RP2 we have seen National Highways develop its maturity and capability. It was the first time that all parties – the Department for Transport, National Highways, HM Treasury, Transport Focus and ORR – went through the full process of setting a multi-year road investment strategy (RIS). As we have finalised our views on how the company has performed and delivered over RP2, we have felt it important to recognise this in our conclusions.

Our assessment sets out what National Highways has achieved in RP2, and how it has learned lessons from both its successes and where it has fallen short of its RIS2 commitments. We have also indicated how we expect the company to apply these lessons and further develop capability in the interim period (2025 to 2026) and into the third road period (RP3) and beyond, to continue to deliver benefits for road users, taxpayers and the wider public.

We have reflected on where National Highways began at the start of RP2, where it is now and where we expect it to be in the future.

In our end of period assessment for RP1 we reported that National Highways had made good progress in its first five years, but moving forward as an established company, more would be expected of it. This included on safety improvements, customer engagement, and efficiently delivering a larger programme of works than in RP1.

In our advice to government before the start of RP2 we highlighted that National Highways had been challenged to deliver a portfolio that was larger and more complex than in RP1. We also identified the importance of ensuring clarity in any changes to funding during the period so that it was clear to the company, and to stakeholders and Parliament, what it had been asked to deliver.

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RP2 started in April 2020. This coincided with the first lockdown triggered by the pandemic. This meant that National Highways began RP2, like everyone else in the country, responding to events that were not anticipated when RIS2 was set. The pandemic affected the company's ability to achieve its key performance indicator (KPI) targets in the first year of RP2 in different ways. Some targets became more difficult, for example because of workplace social distancing, while others were less challenging, for example due to reduced levels of traffic on the SRN. In year 2 of RP2, travel restrictions put in place for the pandemic eased and, as traffic levels across the SRN returned to close to normal levels, the company was able to return to business as usual.

Changes and challenges

During RP2, National Highways delivered the Department's smart motorway action plan. This was a significant task that was not part of the original plans for RIS2. It led to the national emergency area retrofit (NEAR) programme to build an additional 151 emergency areas on all lane running smart motorways. The work was delivered to a short timescale and affected large sections of the SRN. This had a negative impact on the company's delay and user satisfaction metrics.

Some of the risks around the RIS2 programme, both within and outside of National Highways' control, crystallised during the road period. For example, economic and inflationary pressures due to the war in Ukraine, wider commercial pressures and planning consent complexities. These issues added to the company's delivery challenges and, in some cases, resulted in changes to its plans and funding that it was required to manage, including 89 changes to its enhancements programme.

We examined some of the factors that were within National Highways' control in more detail in our 2024 investigation into the company's compliance with its licence and delivery of RIS2. We found that the company was non-compliant with its licence in respect to provision of data and information to allow us to perform our statutory duties. However, in response to our conclusions and wider observations, it committed to implementing improvements. The company developed a comprehensive improvement plan that it continues to deliver at pace. These activities are intended to help the company better understand and explain the trade-offs it must make to deliver on behalf of road users. They demonstrate a commitment to transparency and to building capability to ensure that the company takes decisions efficiently and effectively and help set it up for success in the future.

The future

As we work together with National Highways and the Department to develop and assess RIS3, I am mindful of what we have collectively achieved. The company achieved its efficiency targets for both road periods, delivering over £3 billion of efficiencies. Over the past ten years it has improved environmental outcomes in areas of carbon, noise, air quality and biodiversity, and the decrease in road casualties over the same period shows that the SRN is safer than it has ever been.

But more is being asked of the SRN than originally intended. The network continues to age and is required to withstand the increasing and diverse impacts of climate change. This is coupled with a tight fiscal environment. To ensure that it is able to sustain and support growth by connecting the nation it is vital that public funds are invested wisely. This assessment sets out lessons learned from RP2 that National Highways will need to apply to set itself up successfully to meet these challenges.

ORR will continue to hold National Highways to account in the interests of road users and taxpayers.

John Larkinson, Chief Executive

1. Executive summary

Introduction

1. National Highways was set up as a government owned company in 2015, tasked with managing the strategic road network (SRN) – the motorways and major A-roads in England. In its second road investment strategy (RIS2) the government specified a set of outcomes and investments that it required the company to deliver over the second road period (RP2), from 1 April 2020 to 31 March 2025.
2. The Office of Rail and Road (ORR) holds National Highways to account to deliver RIS2, its broader licence commitments and how it achieves its targets. This report sets out our assessment of the company's performance and delivery in the final year of the road period and over the whole of RP2. References to performance and delivery between 1 April 2024 and 31 March 2025 will be referred to as 'the final year of RP2' or 'year 5' throughout this document.

Summary of performance

RP2 delivery and achievements

National Highways has shown that it is continuing to deliver efficiently by exceeding its RIS2 target to achieve £2.0 billion of efficiency improvements in RP2.

3. National Highways reported £2.2 billion of efficiency improvements against its target of £2.0 billion. The company made the largest efficiency improvements in renewals (£764 million) and the operating costs of its business (£538 million).
4. The government made changes to RIS2 outputs during RP2 that reduced National Highways' funding. This was in response to a period of high inflation, delays to achieving planning consent for enhancements schemes, smart motorway programme changes and wider government cost pressures. As a result, government reduced the efficiency target three times during RP2, following reviews by ORR of the company's proposed changes.
5. Despite these challenges, National Highways achieved significant efficiency savings as a direct result of being able to long term plan against a multi-year funding settlement, delivering better value for the taxpayer. By making these efficiency

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savings the company was able to deliver government's revised outputs and manage the effects of high inflation without requiring additional funding.

6. During RP2, we challenged National Highways' forecasting of efficiency, supporting evidence and management of risks to efficient delivery. The company responded positively to our challenge and made improvements in these areas that we expect it to build on in future road periods.
7. National Highways has incorporated inflation and other adjustments to the way efficiency is reported for cost increases outside its control. We have worked closely with the company to ensure these 'headwind' adjustments are reported appropriately, alongside our core role of monitoring and reviewing evidence for its reported efficiency.

National Highways has delivered significant improvements for road users in RP2. The company has opened 30 major enhancements schemes for traffic, achieved better environmental outcomes and met targets for clearing incidents, mitigating the impact of roadworks and maintaining the road surface. However, it has not achieved everything that it originally planned in RP2 for reasons both within and outside of its control. We are pleased that the company has committed to improve in areas where it has not achieved its targets, such as delays and road user satisfaction.

8. In RP2, National Highways has delivered improvements for road users and benefits for wider stakeholders. The company has:
 - (a) opened 30 enhancements schemes for traffic and had a further 11 under construction at the end of RP2;
 - (b) delivered government's smart motorway action plan, as well as the challenging national emergency area retrofit (NEAR) programme that has added 151 new emergency areas to the all lane running smart motorway network;
 - (c) supported reliable journeys for road users by meeting its targets for clearing incidents and mitigating the impact of roadworks on the SRN;
 - (d) achieved three of its environmental key performance indicators (KPIs) by achieving no net loss of biodiversity, mitigating noise for 7,776 households, and delivering seven schemes to reduce public exposure to poor air quality; and

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- (e) met its performance target for the proportion of the road surface in good condition and matured in its asset management capabilities through obtaining ISO 55001 certification.
9. However, National Highways did not achieve everything that was set out in RIS2. It did not deliver:
- (a) 11 enhancements to the committed dates for reasons that were within National Highways' control, specifically supply chain management and asset data issues;
 - (b) two of its five renewals outputs commitments for reasons that were within National Highways' control; and
 - (c) five out of 12 KPI targets (either missed or are likely to be missed) due to reasons both within and outside of its control. National Highways has:
 - (i) across RP2 improved the timeliness and accuracy of its roadworks information, and delivered reductions in its corporate carbon, but not by enough to achieve its targets;
 - (ii) delivered its plans for managing delays on the SRN and improving customer service. Despite this, the company has missed its ambition to mitigate levels of delay, and its target for road user satisfaction; and
 - (iii) made progress on safety, but it is improbable that it will achieve its KPI target of a 50% reduction in the number of people killed or seriously injured on the SRN by the end of 2025, compared to the 2005 to 2009 baseline.
10. We have looked at National Highways' RIS2 deliverables in the round – including KPIs, performance indicators (PIs) and narrative commitments. On balance we are content that on the evidence provided by the company, and its commitment to implement improvements, further action by ORR is not warranted. We expect the company to collate the lessons it has learned into a continuous improvement plan that it will implement over a timebound period. This should ensure that the company – and the wider Roads Reform framework – promote continuous performance and efficiency improvements in the third road investment strategy (RIS3) and beyond.

Learning lessons and future growth

As National Highways seeks to build on its performance and delivery in RP2, it must reflect on the lessons learned from both its successes and where it

has fallen short of expectations. In particular, we expect the company to have more robust plans in place to enable it to better evidence the consequences of the decisions it takes during the road period. This is important to ensure that the company continues to deliver improved outcomes for road users and better value for taxpayers.

11. National Highways' ability to identify issues, evidence its decision making and actions taken, acknowledge shortcomings, understand causes and implement lessons learned is critical to its future success. The company needs to take forward improvements it has identified, notably that it starts the road period with clear, unambiguous plans and clearly evidences and justifies deviation from those plans, articulating the impact on performance for road users and investment of public funds.
12. During the first two years of RP2, we highlighted concerns about National Highways' capability underpinning its performance and delivery. For example, we identified that the company's plans were insufficient to deliver its KPI target of no net loss of biodiversity by the end of the road period. Our challenge and increased engagement prompted the company to develop a stronger plan that ultimately enabled it to achieve the target.
13. We identified other areas where National Highways' capability and planning similarly did not match the expected outcomes in the early part of the road period. This included the company's performance in relation to road surface condition and traffic officer response times on smart motorways. Again, through our proactive interventions the company identified and made the necessary improvements to meet its targets, so road users experienced smoother, safer journeys.
14. Even so, as the road period progressed, we saw an increasing number of areas where National Highways' performance had dipped, and risks that we raised previously identified had crystallised. The number and breadth of our concerns, and the proximity to the end of the road period, meant that, in February 2024, we launched an investigation to understand the reasons for the dip in the company's performance and to identify improvements that it could make to rectify this.
15. Our investigation found National Highways to be non-compliant with its licence (condition 7.3(e)) in relation to information the company must collect, record and provide to us to enable us to carry out our statutory functions to ensure that it is delivering efficiently and effectively for road users and taxpayers. We subsequently identified improvements that the company needed to make to address this.

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16. The investigation further identified areas that National Highways needed to improve, particularly on how it gathered and provided evidence on how it made decisions and how it learned lessons and applied them to improve performance and/or delivery. For example:
- (a) in relation to the RIS2 pavement condition KPI, we found that National Highways was unable to demonstrate that the regional level plans it had put in place were well aligned to achieving its national target; and
 - (b) for the KPI target to mitigate delays on the SRN, we found that National Highways was unable to consistently quantify the benefits of the actions it was taking to improve performance. This limited its ability to assess whether these actions were effective and therefore provided good value for money.
17. Improvements in the timeliness and detail of the information that National Highways provides to us will better support its and our understanding of the risks and mitigating actions the company is implementing or needs to do so in future. The company's continuous improvement in these areas will support our own efforts to be proportionate and targeted in our approach and ensure that we can provide timely and well evidenced advice to government, and transparency to the public, about the performance and efficiency of the company.
18. National Highways responded positively to the investigation and developed a comprehensive improvement plan to respond to the findings. The actions in the plan aim to improve National Highways' capability, evidence and assurance, and planning. In particular, it set out how it aimed to improve the quality, relevance and timeliness of the evidence and information it provides to ORR.
19. National Highways made good progress delivering the plan over the last year of RP2 and is continuing to do so in the interim period. It is important that the company continues to implement at pace the improvements it has identified in its plan. This includes improving its ability to understand the basis upon which it makes interventions, their impacts and how these translate into improved performance and delivery for road users.
20. Through our engagement with National Highways during this end of road period assessment, it has identified further lessons learned that it will apply moving forwards to drive better efficiency, delivery and performance. Specifically, the company has:
- (a) developed a decision making framework to support whole company improvements to how it gathers and understands the evidence it uses to make

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decisions. From the interim period, we expect this to start generating better information and to allow National Highways to more proactively identify and react to emerging risks;

- (b) set out a programme of analysis and research to improve its understanding of delays on the SRN and support development of regional delay plans. The aim of which is to improve National Highways' ability to prioritise the actions that it takes to reduce delays to ensure that these are as targeted and effective as possible; and
- (c) developed and implemented improved regional plans that demonstrated a more assured approach to achieving its national pavement condition KPI.

21. In addition to those lessons identified by National Highways, on the basis of what we have observed of the company's performance and delivery, and the work we have commissioned and undertaken over RP2, the company should also demonstrate going forward how it:

- (a) has learned from RP2 the importance of evidencing the reasons for deviation from its original plans;
- (b) continues to improve its capability to demonstrate the impacts of its decisions on the performance of, and future risks to, the network;
- (c) continues to improve its asset management capability and understanding of its asset base, maturing its capability and governance to support growing renewals delivery; and
- (d) has mitigated the causal factors of missed commitments (specifically commercial management and scheme asset data issues) to reduce the likelihood of future recurrence.

22. We have seen evidence that the improvements that National Highways has delivered in RP2 – internal capability improvements and deeper understanding of what it needs to deliver, the trade-offs it must make and how best to make those – are resulting in better outcomes for road users and communities. However, it is important that the company continues to improve how it uses evidence to demonstrate that it is making the best use of public funds as it prioritises its activities. This will better enable it to evidence that it is delivering positive outcomes that benefit road users and efficient use of public funds. We expect this to be in the form of a plan.

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23. We will work with National Highways and the Department over the interim period, and as RIS3 is developed, to ensure that these lessons are embedded and applied. This will help to set the company up for long term success and deliver better outcomes for road users, taxpayers and communities and support economic growth.

2. Performance specification

- 2.1 ORR's role is to hold National Highways to account to deliver the road investment strategy (RIS). The Performance Specification forms part of the RIS. It is published by the Department for Transport (DfT) and sets out what it expects National Highways to deliver in the road period. For the second road investment strategy (RIS2) it includes 12 key performance indicator (KPI) targets covering the outcome areas of:
- improving safety for all;
 - providing fast and reliable journeys;
 - a well maintained and resilient network;
 - being environmentally responsible;
 - meeting the needs of all users; and
 - achieving efficient delivery.
- 2.2 These are supported by a suite of performance indicators (PIs), detailed in the [Operational Metrics Manual](#). This chapter sets out National Highways' performance against all its KPIs, and selected PIs where stakeholder interest is greatest. Data for all KPIs and PIs, are published on our [website](#).

Performance overview

- 2.3 National Highways met seven of the 12 KPIs that it was set for the second road period (RP2). The company missed four KPIs and is forecast to miss its KPI for safety that runs to the end of December 2025.

Table 2.1 End of RP2 performance overview

KPI and Target	End of road period performance	Target outcome
Killed or seriously injured casualties – 50% reduction by end of 2025 compared the 2005 to 2009 baseline	At the end of 2023, National Highways had achieved a 39% reduction in people killed or seriously injured	Final data for RP2 will be reported in September 2026

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KPI and Target	End of road period performance	Target outcome
Average delay – ambition to be no worse at the end of RP2 than it was at the end of RP1	Delay was 11.8 seconds per vehicle mile, which is higher than 9.5 seconds per vehicle per mile in February 2020	Ambition not met
Roadworks network impact – Not to exceed 51 million lane metre days	Roadworks network impact was 41.8 million lane metre days	Target met
Incident clearance rate – 86% of motorway incidents cleared within one hour	88.7% of incidents were cleared within one hour	Target met
Pavement condition – 96.2% of road surface (all lanes) in good condition	96.5% of road surface was in good condition	Target met
Noise – 7,500 households mitigated in noise important areas	7,776 households were mitigated from noise	Target met
Biodiversity – No net loss of biodiversity by the end of RP2	National Highways delivered a net gain of 596 biodiversity units	Target met
Air quality – Bring sections of the network into compliance with legal nitrogen dioxide levels in the shortest time possible	19 sections of the network remain non-compliant. National Highways has made acceptable progress	Target met
Corporate carbon emissions – 56% reduction by the end of RP2 compared to the 2017 to 2018 baseline	Corporate carbon emissions are 51% lower compared to the baseline	Target not met
Road user satisfaction – 71% of users satisfied with their journey	68.6% of road users were satisfied with their journey	Target not met
Roadworks information and timeliness – 75% of overnight road closures accurately notified 7 days in advance	74.1% of overnight road closures were accurately notified in advance	Target not met

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KPI and Target	End of road period performance	Target outcome
Efficiency - £2.0 billion of capital and operational efficiency	£2.2 billion of capital and operational efficiency	Target met

Improving safety for all

KPI: number of people killed or seriously injured on the SRN

- 2.4 National Highways has a target to halve the number of people killed or seriously injured (KSIs) on the strategic road network (SRN) by the end of December 2025, compared to a 2005 to 2009 average baseline.
- 2.5 In March 2025 we published our [third annual assessment of safety performance on the SRN](#). We reported that by the end of 2023, National Highways has achieved a 39% reduction in the number of KSIs on the SRN compared to the baseline. These data continue the long term trend of decreasing deaths and serious injuries on the SRN, with the latest statistics showing the fewest KSI casualties ever recorded, excluding 2020 and 2021, when there was significantly less traffic using the SRN due to the pandemic.
- 2.6 In previous annual safety reports we highlighted that the safety KPI target was at risk and required National Highways to produce a plan setting out how it aims to meet the target. At the end of March 2025, the company had delivered 33 actions of the 43 actions that were included in its enhanced safety plan. It plans to deliver eight more by the end of 2025, with one scheme removed from the plan following objections from a local authority. The remaining action is related to the [Roads Policing Review](#) and will be taken forward once government publishes its response to the review.
- 2.7 Despite these interventions, National Highways remains off course to achieve its December 2025 target. We consider that, in 2025, the company is doing everything that it can in the final year to try and meet the target, but it is improbable that it will achieve this by the end of December 2025.
- 2.8 While we recognise that not all actions to reduce KSIs on the SRN are fully within National Highways' control, it is important that the company continues to use its position in the sector to influence, and work closely with other agencies, to support its longer term vision of zero harm on the SRN.

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- 2.9 We will report on the final position against the RIS2 safety KPI after DfT publishes 2025 road casualty data in September 2026.

PI: Accident frequency rate for National Highways' staff and supply chain

- 2.10 National Highways has two PIs that measure the safety of workers. The accident frequency rate (AFR) for its own employees, and those working in its supply chain, is based on the number of RIDDOR ([Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013](#)) incidents per 100,000 hours worked.
- 2.11 National Highways' employee AFR has remained at a similar level throughout RP2. At the end of year 5 it was 0.06 per 100,000 hours worked, compared to 0.05 in the first year of the road period and 0.07 at the end of year 4.
- 2.12 The year 5 supply chain AFR was 0.09 per 100,000 hours worked, an increase from 0.05 in the first year of the road period and from 0.07 in year 4.
- 2.13 National Highways has told us that, as a result of the increase in the supply chain AFR, it is engaging directly with suppliers to fully understand the reasons for the increase. We are actively monitoring the company's progress in this area and will review the actions that it plans to take following completion of its review.

Providing fast and reliable journeys

KPI: Average delay

- 2.14 [Research](#) by Transport Focus shows that satisfaction with journey time has the greatest impact on road users' overall satisfaction with their journey. Businesses, including bus and coach operators and logistics firms also rely on predictable journey times on the SRN.
- 2.15 For RIS2, government set National Highways an ambition for average delay on the SRN to be no worse at the end of RP2 than it was at the end of RP1. This was 9.5 seconds per vehicle per mile (spvpm). At the end of RP2, average delay was 11.8 spvpm. This fell short of National Highways' RIS2 ambition of 9.5 spvpm for average delay.
- 2.16 Throughout the road period, National Highways demonstrated that it was taking action to address delay, by delivering its plan for [managing delay on the SRN](#), published in 2021. At the end of RP2, 15 out of 17 actions in the original plan were complete. The company did not fully deliver actions related to:

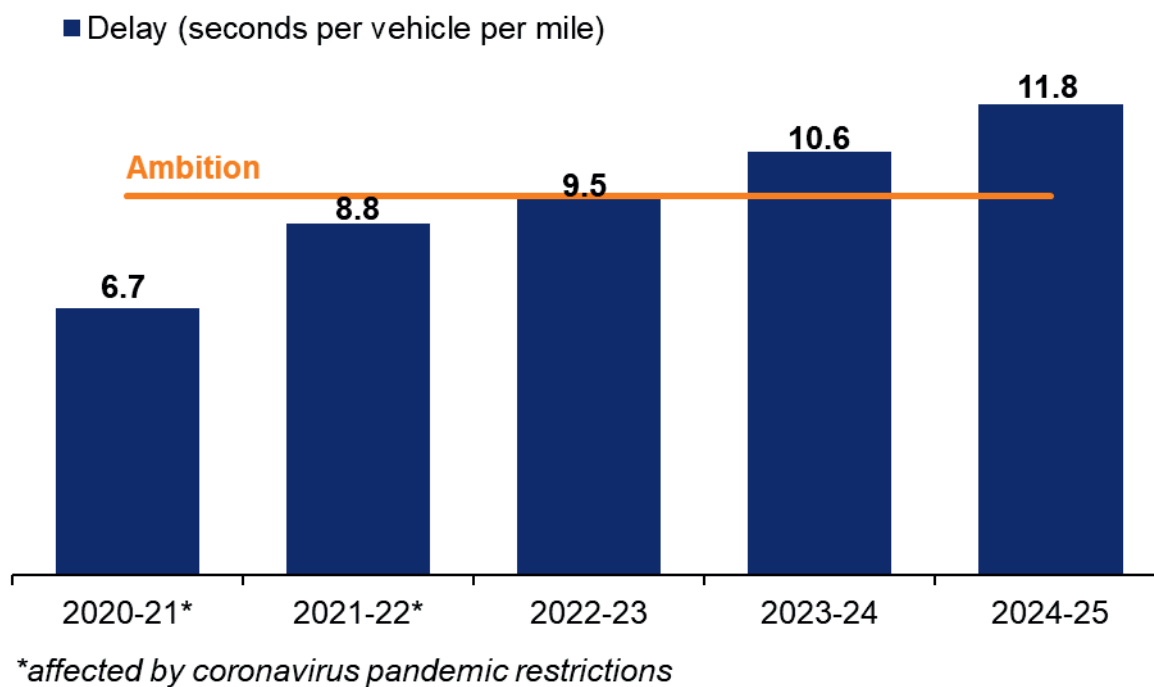
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- travel demand management initiatives for roadworks, where it did not pursue a travel demand initiative on the M25 due to the impact of the pandemic and associated reduction in traffic; and
 - the use of vehicle data to improve knowledge of incidents, where it continues to evaluate potential uses of vehicle data.
- 2.17 Delay on the SRN is impacted by several factors within and outside of National Highways' direct control. For example, some factors within its control that influence journey times on the network include how effectively the company manages roadworks and clears incidents. It has achieved KPI targets in both areas in RP2 (discussed in more detail below).
- 2.18 The volume of traffic using the SRN is a significant factor outside of National Highways' control that influences delay. DfT forecasted SRN traffic volumes to increase during RP2 by 5%. Following a decrease during the pandemic, traffic volumes in 2025 are similar to pre-pandemic levels. Therefore, National Highways has benefited from lower traffic volumes than expected in the final year of RP2. Despite this, average delay at the end of RP2 was 2.3 spvpm higher than the pre-pandemic baseline.
- 2.19 In April 2023, when National Highways was missing its ambition level, ORR challenged the company to explain why delays were increasing at a higher rate than traffic growth, and how its actions from [managing delay on the SRN](#) were mitigating this. In 2024, the company demonstrated that some of the increase was due to the impact of the national emergency area retrofit (NEAR) programme. This was estimated to contribute an additional 0.7 spvpm to average delay. However, it was unable to fully explain why delays increased as much as they have over RP2 compared to previously predicted levels.
- 2.20 We investigated this further, as part of our [2024 investigation](#) into National Highways' delivery of RIS2. We raised concerns about the company's ability to gather, understand and provide evidence on the impact of the activities it was undertaking to mitigate delay. In response to our investigation, the company developed an improvement plan that includes a programme of analysis and research to increase its understanding of delays on the SRN and develop regional delay plans. This now forms part of the company's Customer and Delay plan for the interim period that we will hold it to account to deliver.
- 2.21 Going forward, National Highways must be able to better target interventions to alleviate delay. To do this it needs to improve its evidence and understanding as to

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why delays have increased at a higher rate than traffic volumes since the end of the pandemic. Notably it should quantify the extent to which changes in the use and variation in the vehicle fleet (for example the increase in light goods vehicles) since the pandemic has impacted delay. This will allow it to adjust its approach to respond and improve the effects of its interventions for users.

Figure 2.1 Average delay KPI, annual data, April 2020 to March 2025



KPI: Roadworks network impact

- 2.22 This KPI incentivises National Highways to mitigate the impact of roadworks for road users by keeping lanes open or using higher speed limits where it is safe to do so. Measured in 'lane metre days', it assesses the impact of roadworks on the SRN based on the length of roadworks; the amount of time they are in place; the number of lanes affected; and any width or speed restrictions applied.
- 2.23 National Highways' original year 5 target was to remain below 47 million lane metres days. In April 2024, the company proposed to change the target. This was to take account of the NEAR programme that required additional lane closures not expected when the original target was set. Government agreed to increase the target to 51 million lane metre days.

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- 2.24 National Highways met its target in each year of RP2. At the end of the road period, roadworks network impact was 41.8 million lane metre days, better than its year 5 target to be less than 51 million lane metre days.
- 2.25 However, in year 5, the impact of the NEAR programme did not result in the change in performance that National Highways expected. This highlighted a shortcoming in the company's ability to understand how different factors affect performance and resulted in a revised target being set that reflected a high level of uncertainty in expected outturn performance that was not needed.
- 2.26 At the time, ORR advised that the revised target should be sufficiently stretching to incentivise National Highways to minimise the impact of roadworks on road users. The company should consider how it can improve its capability to predict performance and reduce the size of confidence factors to ensure it maximises the opportunities to drive improvements for road users.

KPI: Incident clearance rate

- 2.27 National Highways' RIS2 outcome of providing fast and reliable journeys on the SRN is supported by a KPI to clear incidents on motorways in a timely manner. The target was for the company to clear at least 86% of motorway incidents affecting traffic flow in under an hour.
- 2.28 National Highways has exceeded the target throughout RP2, consistently maintaining performance above 86% and achieving 88.7% at the end of the road period. The company has attributed its strong performance in this area to work it has undertaken to optimise patrol strategies, and improvements in how it shares information internally to allow traffic officers and staff in control centres to access key network information through a single platform.
- 2.29 During RP2, National Highways was also tasked with achieving an average attendance time of under 10 minutes for traffic officers responding to live lane stops on all lane running smart motorways where emergency areas were further than one mile apart. [ORR's intervention in this area during 2022](#) has supported the company to develop a better understanding of how the actions it takes can deliver a better service for road users and also contributed to improved KPI performance during RP2.

A well maintained and resilient network

KPI: Pavement condition

- 2.30 Maintaining the SRN is a key component of meeting customer expectations. Efficient maintenance and renewals delivery minimises disruption for road users. This KPI measures the percentage of the road surface in good condition.
- 2.31 National Highways had an annual target for 96.2% of pavement (road surface) to be in good condition. In December 2022, performance dropped below target. We worked with the company to understand the causes of the issue and its plans to improve, including conducting our 2024 investigation. We found that the company was unable to demonstrate its regional road surfacing plans were aligned to its national target. In response, the company improved its use of data to identify the sections of the network that have the greatest impact on the KPI. Through improved forecasting and delivery of specific resurfacing schemes, it now delivers a more targeted programme of work focused on the highest-risk areas, that better supports achievement of the national target.
- 2.32 Consequently, in year 5 National Highways exceeded its target, with 96.5% of the road surface in good condition at the end of RP2.

PI: Technology availability

- 2.33 The availability of technology, such as variable message signs and signals, on the SRN is a high priority for road users. This PI measures the percentage of time that roadside technology services are available and functioning.
- 2.34 The PI has no specific target, but the company set an internal target of 95% availability. The PI includes all technology on the SRN, including smart motorways, however, the availability of technology on smart motorways is reported separately in our [annual assessment of safety performance on the SRN](#). Availability for key smart motorway technology assets at the end of year 5 was 94.3%.
- 2.35 Technology availability on the SRN as a whole reduced to 90.0% at the end of RP2, compared to 97.6% in 2022, the earliest comparable data. In 2023, National Highways made changes to improve the accuracy of how these data were reported. This change was intended to better identify service affecting faults and improve how fault resolution is prioritised and had the effect of reducing reported performance figures by an estimated 2.5 percentage points.

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- 2.36 National Highways' progress in relation to technology availability on the SRN and our next steps are described in more detail in the [Operations, maintenance and renewals chapter](#).

PI: Drainage resilience

- 2.37 Drainage resilience captures the length of the network with a drainage catchment that does not have a high-risk flood hotspot within it.
- 2.38 At the end of RP2, drainage resilience was 72%. This equates to 28% of the SRN having observed significant susceptibility to flooding. This was the same level as 2022, the earliest comparable data. Performance excludes rainfall events that exceed a 1 in 5 year rainfall event. When all rainfall events are included, performance worsens to 70% of the network. National Highways' progress in relation to drainage resilience and our next steps are described in more detail in the [Operations, maintenance and renewals chapter](#).

Being environmentally responsible

KPI: Corporate carbon emissions

- 2.39 National Highways is required to support the [Greening Government Commitments](#), a set of actions that UK Government departments and their agencies will take to reduce their environmental impact. As part of this, the company had a KPI target to reduce its corporate carbon emissions by 56% by the end of RP2, compared to an April 2017 to March 2018 baseline.
- 2.40 In October 2024, government agreed to change National Highways' RP2 corporate carbon target from a 67% reduction compared to the baseline to a 56% reduction. This was due to slower decarbonisation of the electricity grid than was expected when the target was originally set and a change in emission factors for plug-in hybrid vehicles.
- 2.41 Electricity usage is the biggest contributor to National Highways' corporate carbon emissions. At the end of RP2, the company reduced its electricity use by 17% compared to its April 2017 to March 2018 baseline, behind its forecast for a 22% reduction. The biggest single action that the company is taking to reduce its electricity usage is its programme to replace conventional streetlights with LED lighting.
- 2.42 In 2024, we identified that this target was at risk and challenged National Highways to accelerate its LED programme to achieve its carbon KPI. It provided

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us with evidence showing it had considered this but concluded the benefits would be outweighed by the detrimental impact on road users caused by the lane closures that would be required.

- 2.43 National Highways' performance against this target was affected by several factors that resulted in higher carbon emissions than expected during RP2. These included higher than expected traffic officer mileage, and slower than expected adoption of electric vehicles by hire car companies, resulting in higher than modelled emissions from business travel. Some of this was offset by changes to the company's commitments in RP2, for example the cancellation of smart motorway schemes.
- 2.44 In the final year of RP2, National Highways' survey of its streetlighting identified more lighting columns and higher-power bulbs than expected, leading to additional assets contributing to the company's total electricity use. This resulted in a larger gap between the company's performance and the target than previously forecast. This highlights the need for the company to improve its asset data to support better forecasting and target setting.
- 2.45 At the end of RP2, National Highways achieved a 51% reduction in its corporate carbon emissions compared to the baseline. Therefore, the company did not meet this KPI target of a 56% reduction for the road period. It emitted 45,232 tonnes of carbon dioxide equivalent (CO₂e) from activities undertaken in the course of its day to day work in the final year of RP2. This is 4,895 tonnes worse than targeted, equal to 54,600 petrol car journeys from London to Glasgow.

KPI: Air quality

- 2.46 Government identified 128 sections of the SRN that may exceed legal limits for nitrogen dioxide, a pollutant common in vehicle exhaust emissions. In RP2, National Highways had a target to bring nitrogen dioxide levels on these sections into legal compliance in the shortest time possible. We engaged regularly with government and the Joint Air Quality Unit (JAQU) on monitoring progress in mitigating the effects of air pollution on the SRN.
- 2.47 During RP2, National Highways installed monitoring devices alongside these sections to review the actual nitrogen dioxide levels. At the end of the road period, there remain 19 sections that exceeded the legal limit for nitrogen dioxide. Of these, the company had two sections with mitigation measures in place, five sections with no viable measures and 12 sections with measures in development.

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- 2.48 We recognise that National Highways has limited control over many factors that influence air quality. Based on the evidence, and engagement with JAQU, we consider that the company made all reasonable efforts to deliver its obligations on air quality. For those sections which continue to exceed the legal limits, we will continue to engage with government, JAQU and the company to assess its progress in implementing mitigation schemes at these locations.

KPI: Biodiversity

- 2.49 Biodiversity is the variety of animal and plant life, with a vital role in sustaining our natural environment. A biodiversity unit is linked to the size, condition and location of a habitat or piece of land. In 2020, National Highways calculated that across its estate it had 130,848 biodiversity units. This covers all the company's land, including verges either side of the carriageway.
- 2.50 National Highways' target was to deliver no net loss in biodiversity by the end of RP2. The company estimated that without any additional biodiversity mitigation, there would be a loss of 6,148 biodiversity units over the road period.
- 2.51 National Highways responded well to our challenge earlier in RP2, when it was forecasting to miss its target. By developing and delivering a pipeline of biodiversity schemes, the company performed well against this KPI. It delivered a total of 6,744 biodiversity units, resulting in a net gain of 596 biodiversity units. It therefore exceeded its target to achieve no net loss in biodiversity by the end of the road period.

KPI: Noise

- 2.52 Households near the SRN experience substantial noise pollution, mostly from vehicle tyres and engine noise. National Highways has a programme to mitigate noise, through either laying lower noise surfacing, upgrading insulation in affected households or installing noise barriers.
- 2.53 National Highways' KPI target was to mitigate noise for 7,500 households by the end of RP2. It exceeded that target and mitigated noise from 7,776 households through a mixture of lower-noise road surfacing, noise barriers and upgrading insulation of affected properties.

PI: Litter

- 2.54 Litter is a concern for road users and the public. It is the responsibility of National Highways and local highways authorities to clear litter from the SRN and work with stakeholders to reduce levels of littering, as explained in the [company's litter](#)

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[strategy](#). We report the level of litter on the network through the untargeted litter PI. However, the company has responsibility for collecting litter under the Environmental Protection Act 1990.

- 2.55 In RP2, performance improved, with National Highways surveying the SRN and reporting that 59.8% of its network was rated at Grade A or B according to Defra's litter code of practice. This was better than 49.2% at the start of the road period.
- 2.56 The best performing region was the North West, with 81.5% of its network rated Grade A or B, the worse performing region was the Midlands, with 43.7% of its network rated Grade A or B.
- 2.57 National Highways must continue to work in partnership with local authorities to improve coordination of activities which would allow access to its network for litter picking.

Meeting the needs of all road users

KPI: Road user satisfaction

- 2.58 The [Strategic Roads User Survey](#) (SRUS) measures users' satisfaction with a single journey on one road of the SRN within the last 28 days. The online survey, managed by Transport Focus, measures different aspects of users' journeys including their overall satisfaction.
- 2.59 In each year of RP2, National Highways produced an annual customer service plan. The company uses information from SRUS, customer research and input from Transport Focus to develop a set of actions that aim to address the issues that are most important to road users.
- 2.60 In the final year of RP2, National Highways' customer service plan comprised 41 initiatives. The company successfully delivered 39 of these. The two initiatives not delivered related to the use of digital, data and technology to trial litter enforcement, and better information provision for travellers using the new National Traffic Information Service (NTIS). The litter enforcement trial was delayed due to the need to clarify the company's legal powers, while the delay to better information provision for travellers was caused by the slower than scheduled rollout of the new NTIS. These initiatives are now planned for delivery in the interim period.
- 2.61 Government set National Highways a satisfaction target of 71% for year 5, down from 73% in the previous year. This reflected the expected impact of the NEAR

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programme and the limited amount of data that were available for target setting, following a pause in the survey during the pandemic and a subsequent change in methodology.

- 2.62 Road user satisfaction is closely related to the amount of disruption from roadworks experienced on the SRN. National Highways highlighted that increases in delay due to lane closures as part of the NEAR programme, which the company estimated to have peaked at 0.7 seconds per vehicle per mile, were likely to have a negative impact on user satisfaction in the final year of RP2.
- 2.63 Results from SRUS for the final year of RP2 showed that 68.6% of road users were fairly satisfied or very satisfied with their journey on the SRN, against a target of 71%.
- 2.64 Analysis of SRUS data in the final year of RP2 confirmed that lower levels of satisfaction correlated with locations where NEAR roadworks were in place, which explains some, but not all, of the observed decrease in performance. It also showed that overall satisfaction increased by a small amount in the final two months of the period, coinciding with the completion of these roadworks.
- 2.65 Our discussions with Transport Focus indicated that National Highways made progress in the road period to better understand and influence road user satisfaction in the future. It is important that the company continues to develop this work. It has set out details for how it intends to achieve this in a combined Customer and Delay plan for the interim period that recognises the close relationship between these two key areas. We will hold the company to account to deliver this plan in the interim period and the improvements it promises.

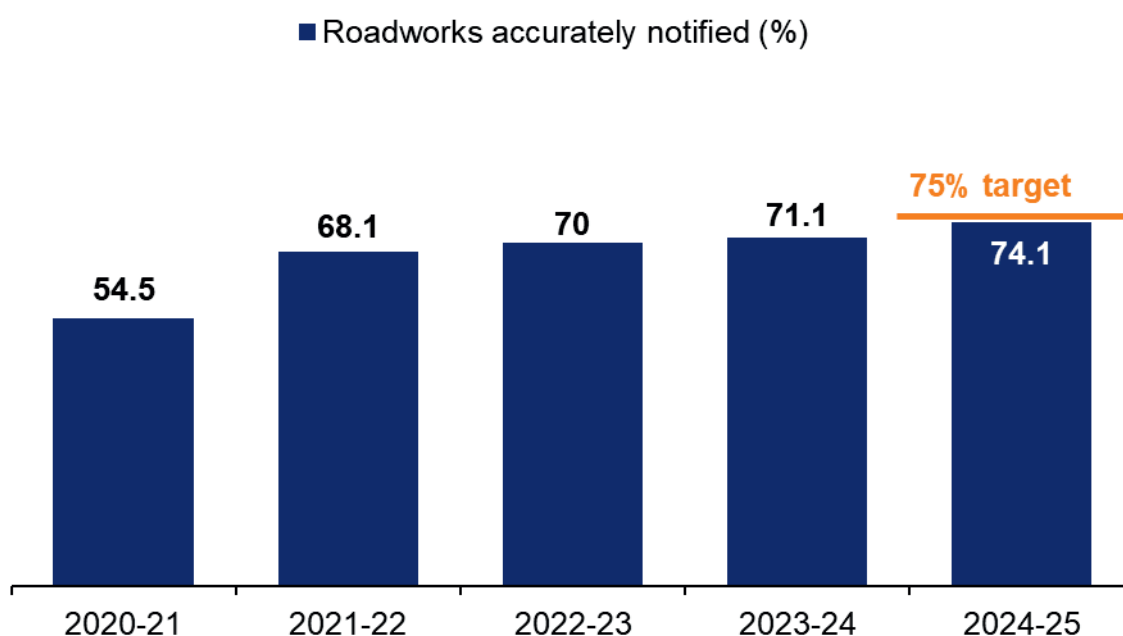
KPI: Roadworks information timeliness and accuracy

- 2.66 Road users, especially freight and logistics firms, rely on timely and accurate notice of road closures, especially overnight closures that require road users to use diversion routes.
- 2.67 When RIS2 was published, the target for this KPI was originally set at 90% of overnight road closures to be accurately notified seven days in advance by the end of RP2. At the start of RP2, performance was at 54.5%.
- 2.68 Following our intervention and challenge in 2023, National Highways produced and delivered performance improvement plans. This led to improved performance in the final two years of RP2.

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- 2.69 Subsequently, National Highways' analysis showed that the original target of 90% was unachievable, for example 12.8% of closures in the final year of RP2 were due to reasons outside the company's control, such as unplanned safety repairs. The company proposed a lower target of 75% for the end of RP2. We considered this to be challenging and that it would continue to drive the right behaviours from it to deliver the best possible outcome for road users. This target change was agreed by government in 2024.
- 2.70 Although National Highways missed its RIS2 target, with 74.1% of closures accurately notified seven days in advance at the end of the road period, the company has significantly improved the timeliness and accuracy of roadworks information since the start of RP2, as shown in Figure 2.3.

Figure 2.2 Roadworks timeliness and accuracy KPI, annual data, April 2020 to March 2025



- 2.71 In addition, National Highways' data shows that it improved performance against this KPI in all of its regions during RP2. Four of its six regions achieved accuracy rates of 75% in the final year of RP2. The company should continue to learn lessons from the best performing regions to ensure that it drives further improvements in the interim period and beyond.

3. Enhancements delivery

- 3.1 National Highways has delivered significant enhancements to the strategic road network (SRN) for road users across the second road period (RP2). The company started work on 17 major enhancements schemes and opened 30 schemes for traffic.
- 3.2 National Highways has not achieved everything that it originally planned in RP2 for reasons both within and outside its control. It ultimately missed 11 of its enhancements commitments for reasons within its control. The company identified the causal factors for this, and we support its plans to improve in these areas. We will hold it to account to demonstrate success.
- 3.3 The forecast cost of completing enhancements increased significantly during RP2. However, delays and cancellations meant that the costs within the period were below originally expected levels.

Overview of RP2

- 3.4 National Highways committed in its [2020-2025 delivery plan](#) to start construction, known as start of works (SOW), on 43 schemes, and open for traffic (OFT) 52 schemes. These commitments reduced across RP2 due to government changes that were outside of the company's control.
- 3.5 National Highways successfully started construction of 17 enhancements schemes and opened 30 schemes to traffic in RP2, as shown in Figure 3.1 and Figure 3.2 below. This included the company achieving its [2024-2025 delivery plan](#) commitments. In the final year of RP2, it successfully started work on three enhancements schemes and opened seven schemes to traffic.
- 3.6 There were eight RIS2 schemes that were held subject to Spending Review 2025 (SR25). The government subsequently decided to fund and progress six of these schemes and cancel two. The six funded schemes are shown in Figures 3.1 and 3.2 as "deferred – following SR25 announcement". Further data can be found in our [interactive dashboard](#).

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Figure 3.1 2020 to 2025 delivery plan SOW commitment status at the end of RP2

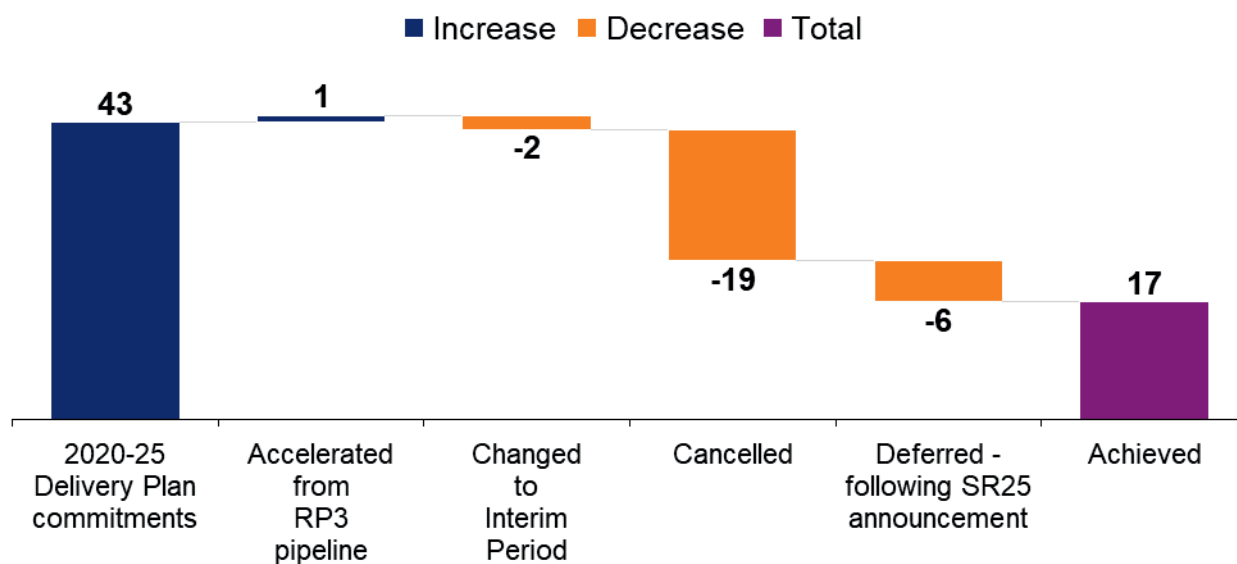
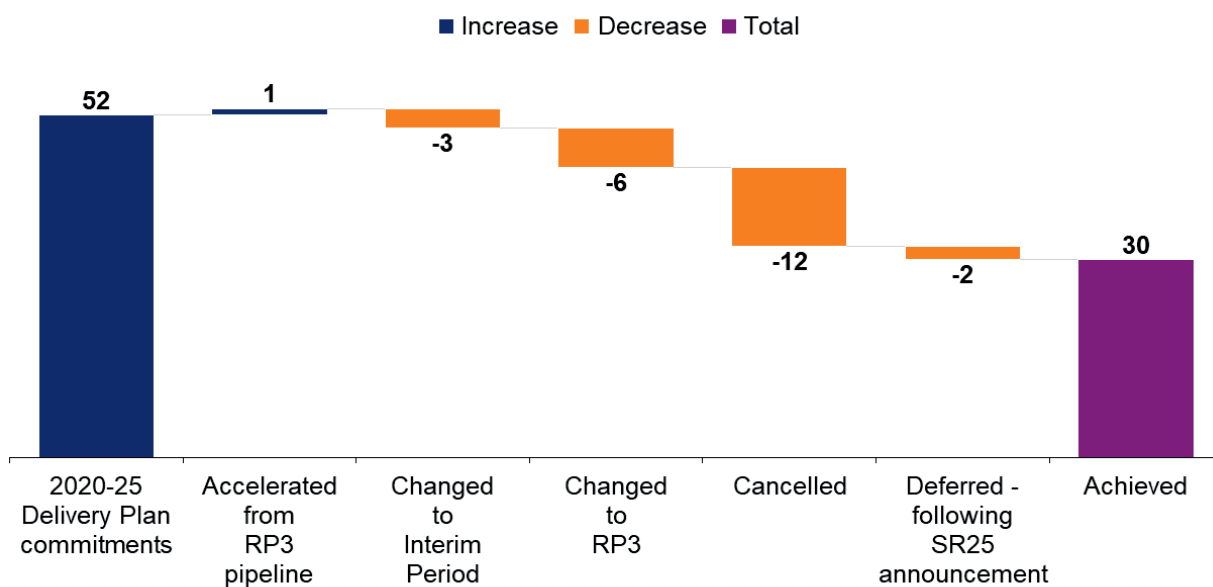


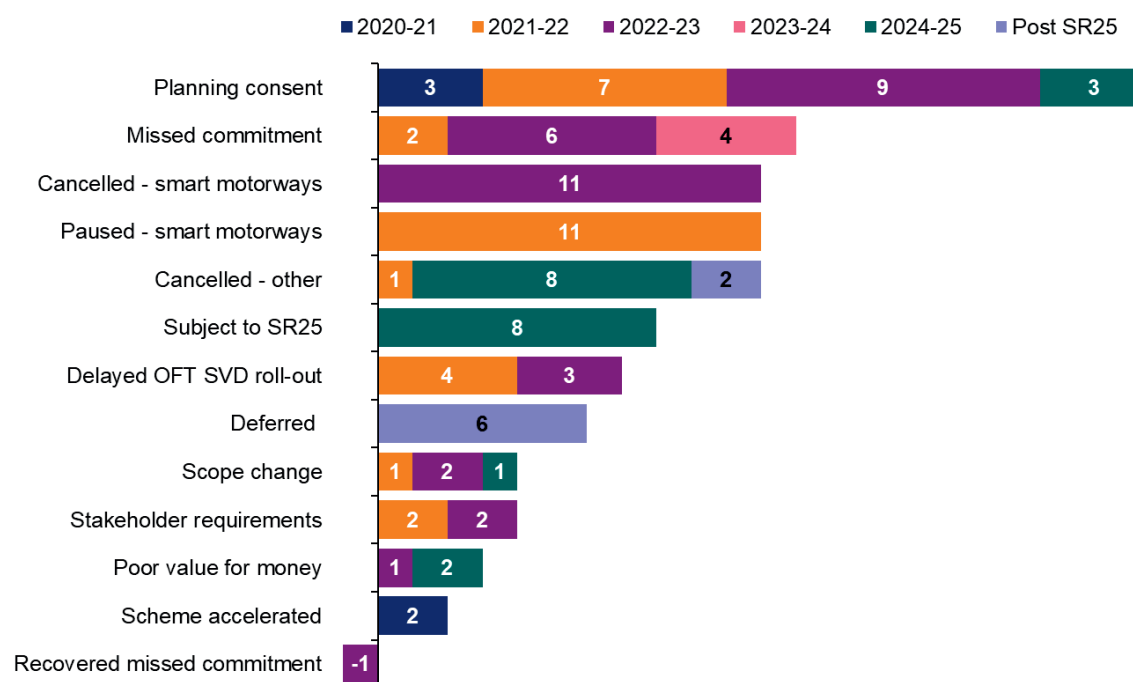
Figure 3.2 2020 to 2025 delivery plan OFT commitment status at the end of RP2



Commitment changes

- 3.7 Throughout RP2, National Highways' enhancements programme was subject to change. This resulted in alterations to the SOW and/or OFT committed dates of many second road investment strategy (RIS2) enhancements schemes. Therefore, the programme agreed at the start of the period was significantly different to the one that the company delivered.
- 3.8 Often, these changes, agreed by government, were due to factors that fell outside of National Highways' control. However, in some instances they were due to reasons within its control. These are known as missed commitments.
- 3.9 The reasons for these changes and the year of RP2 in which they took place is set out in Figure 3.3 and further detail can be found in our [interactive dashboard](#).

Figure 3.3 Government agreed changes and National Highways' missed commitments to 2020 to 2025 delivery plan enhancements schemes by reason, annual data, April 2020 to March 2025



- 3.10 In total, there were 89 government agreed changes to the RIS2 capital enhancements portfolio. These changes impacted the cost, schedule and original intended benefits of National Highways' RIS2 enhancements portfolio.
- 3.11 In addition to formal change control, the previous government required that the national emergency area retrofit (NEAR) programme be delivered by National

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Highways during RP2. The company was able to adopt this additional work through the utilisation of resources and funding made available by government's cancellation of the smart motorways programme.

Change outside of National Highways' control

- 3.12 Figure 3.3 shows that the biggest cause for enhancements portfolio changes in RP2 was due to development consent planning issues.
- 3.13 In the early years of RP2, securing development consent orders (DCOs) for enhancement schemes was a significant problem for National Highways. There were 22 scheme start dates that were changed because of DCO delays, with some schemes altered more than once. The company worked collaboratively with the Planning Inspectorate to understand the reasons for these delays, learn lessons and put in place actions to reduce the risk of further problems. As a result, there were fewer DCO issues in the latter years of RP2.
- 3.14 In year 3 of RP2, the previous government decided to cancel the rollout of 11 smart motorway schemes. Additionally, during RP2 successive governments cancelled a further nine schemes for affordability and value for money reasons, as shown in Figure 3.3. National Highways reported that a total of £523 million of spend was written off as a loss and the original intended benefits of these schemes will not be realised.
- 3.15 Additionally in July 2025, following SR25, government took the decision to cancel a further two RIS2 schemes. National Highways expects to report losses from these two schemes in its 2026 annual report and accounts.

Missed commitments

- 3.16 A missed commitment is classed as an alteration or delay to the delivery of a RIS2, or delivery plan, commitment that was deemed by government to be caused by something within National Highways' control.
- 3.17 There were 12 missed enhancements commitments at the end of RP2 in total. However, one of these declared missed commitments was ultimately delivered on time to its original commitment date. Therefore, we consider that National Highways missed 11 commitments. This was more than the first road period, when the company missed five of its enhancements commitments. However, in the final year of RP2, the company improved on previous years and did not miss any commitments, see Figure 3.3.

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- 3.18 Throughout RP2, and as part of our 2024 investigation into National Highways performance and delivery, we challenged the company to identify the root causes of its missed commitments and to put in place plans to improve.
- 3.19 Following our intervention, National Highways identified the following recurring themes:
- commercial supply chain issues:
 - issues/capability gaps regarding commercial practices and procurement;
 - problems managing the supply chain.
 - scheme asset design data input:
 - inaccurate asset data;
 - insufficient technical and asset management expertise.
- 3.20 Subsequently, National Highways developed a set of interventions aimed at delivering improvements to the identified themes. This included improving how it captures and shares knowledge across the organisation. These interventions should help the company learn and avoid future related issues that lead to schedule and cost increases. We will continue to work with the company to ensure that these interventions are embedded in the business and deliver the intended benefits.

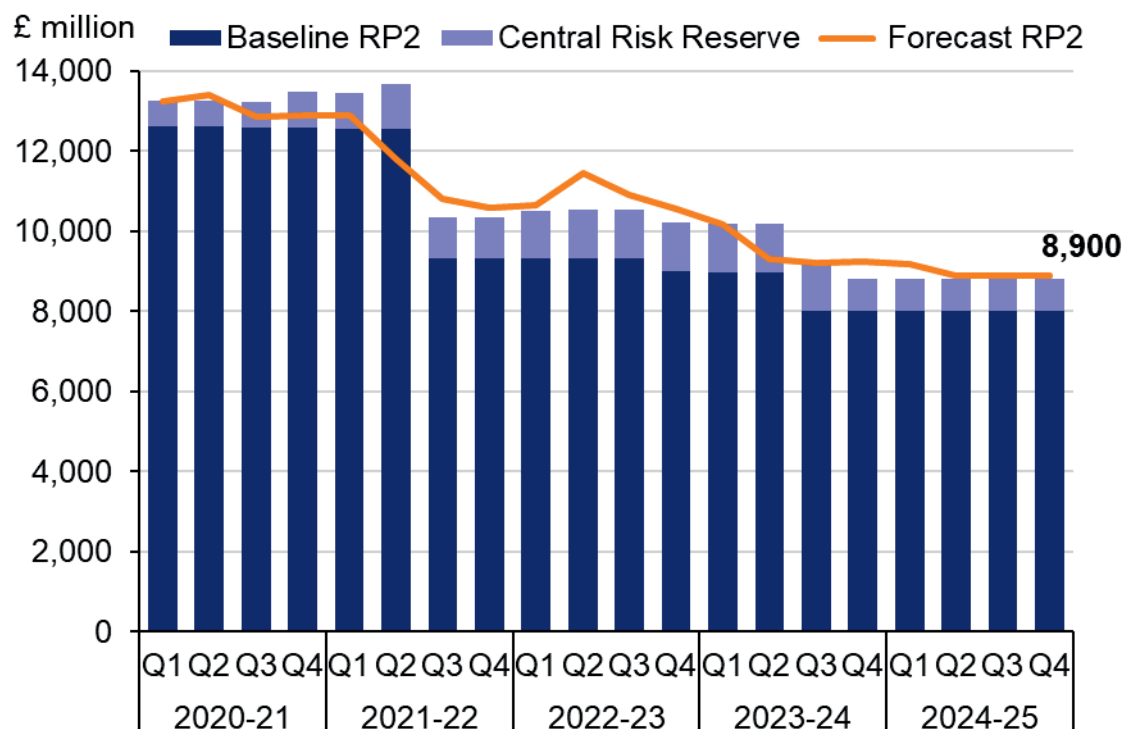
Forward look

- 3.21 National Highways did not miss any enhancements commitments in the final year of RP2. However, we continue to see delays to enhancements schemes beyond RP2. Notably, the M25 Junction 10 and A63 Castle Street schemes that were forecast to OFT in Summer 2025, are now not expected until 2026. The company has attributed delays to these schemes to scheme asset data, where schemes have been impacted by poor ground conditions and unexpected underground utilities.
- 3.22 National Highways must ensure that it continues to keep stakeholders and road users informed of changes to scheme commitment dates and that it has taken reasonable steps to manage risks that could cause schedule delays.

RIS2 enhancements financial performance

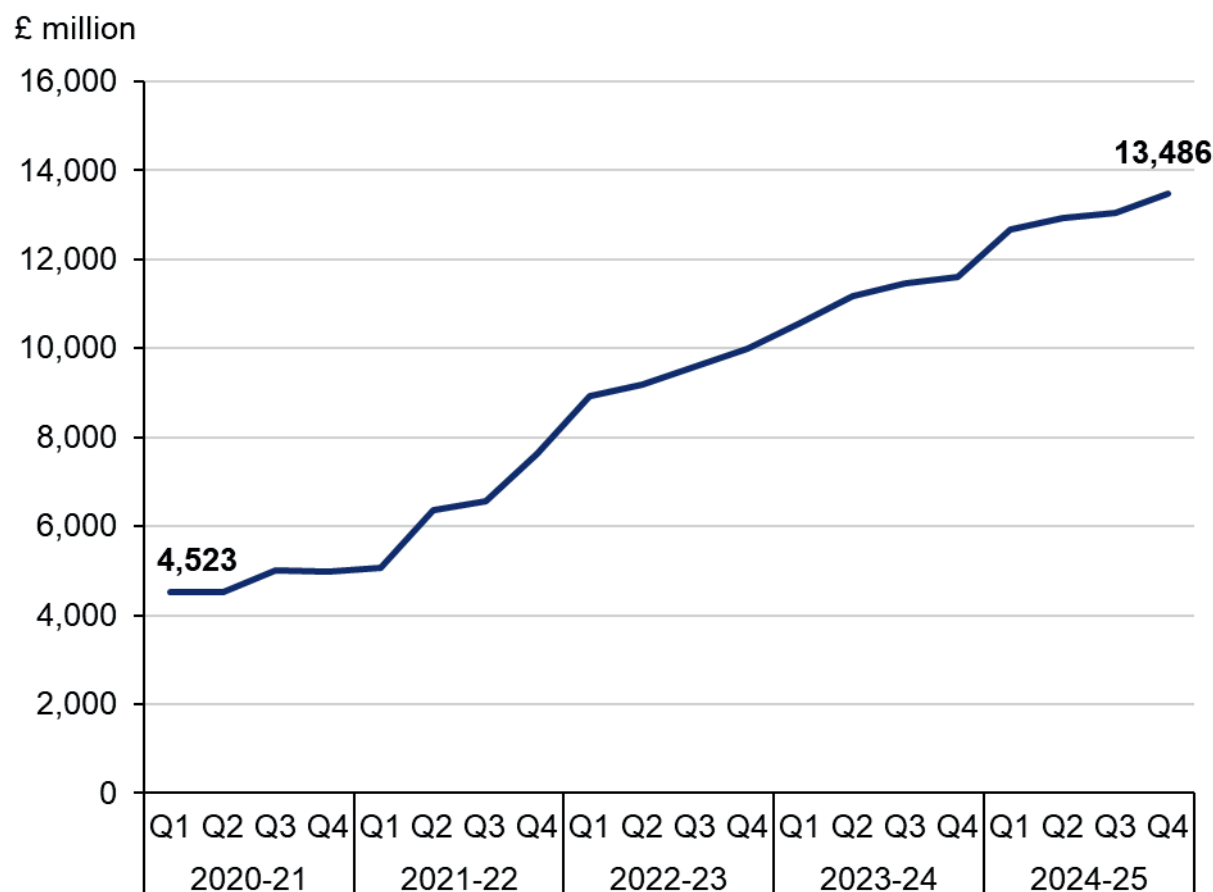
- 3.23 The overall forecast cost of completing RIS2 enhancements increased significantly during RP2. However, the costs within the period were below expected levels due to delays and cancellations of parts of the programme.
- 3.24 National Highways spent £8,900 million on enhancements in RP2 covering enhancement schemes and other enhancement expenditure, for example on smart motorways safety improvements. This was in line with its final funding. However, expenditure and RP2 funding both reduced from the levels originally expected. Figure 3.4 shows that the company's forecast spending on enhancements during RP2 reduced from £13,256 to £8,900 million across RP2. This is £4,356 million (33%) less than was forecast at the start of RP2.
- 3.25 National Highways' RP2 enhancements spending was impacted by some significant external factors affecting cost and delivery. Inflation was higher than expected during year 2 and 3 of RP2. However, delays in schemes achieving development consent (including Lower Thames Crossing), cancellation of some schemes (including the A303 Amesbury to Berwick Down (Stonehenge)) and cancellation of the smart motorway programme more than offset this impact. In addition, in the later years of RP2, government cancelled some lower value for money schemes to address cost increases and wider government spending pressures.

Figure 3.4 Enhancement (including Lower Thames Crossing) cost forecasts for RP2 in total, as reported each quarter, April 2020 to March 2025, (£ million)



3.26 The forecast cost of enhancements schemes in future road periods (the 'RIS2 tail' cost, covering the interim period, the third road period (RP3) and beyond) continues to rise because of delays and cost increases. Figure 3.5 shows that over RP2 the expected cost of 'RIS2 tail' enhancement schemes increased significantly from £4,523 million to £13,486 million since the start of RP2 because of slippage, inflation and increased scope. These figures are presented on a like for like basis and exclude schemes cancelled during RP2, including A303 Amesbury to Berwick Down (Stonehenge), the further rollout of the smart motorway programme in year 3 of RP2 and the two schemes cancelled following SR25.

Figure 3.5 Enhancement scheme (including Lower Thames Crossing) cost forecasts for the RIS2 tail, as reported in each quarter of RP2, April 2020 to March 2025, (£ million)

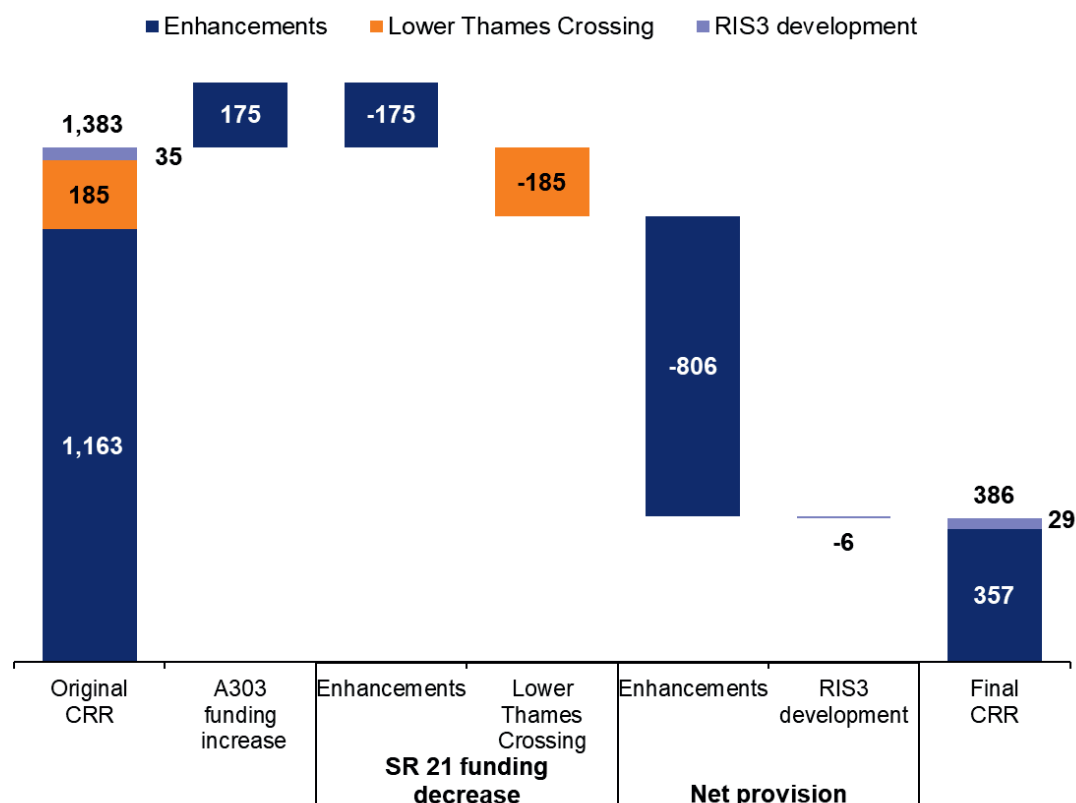


- 3.27 The overall forecast cost of RIS2 enhancements (across all road periods) increased by £7,151 million (43%) on a like for like basis, excluding schemes that were cancelled in RP2 and following SR25. The costs of the Lower Thames Crossing scheme, the largest in RIS2, increased by £2,835 million (47%), the largest contribution to the overall increase.
- 3.28 During RP2, National Highways did several studies to understand the causes of its cost increases and how they compared to external benchmarks. While some of the identified reasons for the cost increases are outside the company's control, it also identified a set of actions it could deliver to improve accuracy, such as increasing the risk contingency allowances in early-stage estimates. It should continue to implement, embed and monitor the effects of this action plan, to continuously improve its estimating and cost control, providing greater certainty to government and taxpayers.

Use of Central Risk Reserve on enhancements

- 3.29 For RIS2, government allocated National Highways £1,383 million central risk reserve (CRR) funding for portfolio level risks on enhancements, Lower Thames Crossing and RIS3 Development. Additional risk funding, which had originally not been included in the CRR, for A303 Amesbury to Berwick Down (Stonehenge) was offset by an equivalent reduction in the CRR in Spending Review 2021, due to the delay and cancellation of schemes, alongside the removal of the Lower Thames Crossing allowance.
- 3.30 In year 2 of RP2, we commissioned a review of National Highways' use of the CRR. This identified improvements that could be made to governance, monitoring and reporting in RP2. We worked with the company on implementation of the recommendations which delivered more transparency and assurance. We expect these to be carried forward and built upon in future road periods.
- 3.31 At the end of year 3 of RP2, National Highways had over allocated its enhancements CRR by £46 million as inflation impacted scheme costs. However, in a review of cost and schedule commitments at the end of year 4 of RP2 it was able to add back £403 million forecast underspends to the CRR. This was in part enabled by delays to schemes in RP2 pushing cost back to later road periods. In year 4 of RP2, the company made no further use of the enhancements CRR.
- 3.32 Overall, National Highways used £806 million of the CRR for enhancements and £6 million for RIS3 development (net values including the £403 million add back). This left a £386 million balance of CRR remaining on enhancements and RIS3 development. However, the funding reductions in year 4 of RP2 and inflation driven cost pressures elsewhere in the business meant this 'underspend' of the CRR was required to offset overspends on renewals and business costs. This ensured that the company spent within its overall RIS2 capital funding.

Figure 3.6 Use of CRR allocated to enhancements, Lower Thames Crossing and RIS3 development, (£ million)



Earned value metrics

3.33 Earned value metrics (EVM) are RIS2 performance indicators that measure National Highways' supply chain performance against contractual cost and schedule commitments during construction. At the end of RP2, of the nine schemes in construction, the EVM reporting showed that six schemes were both above budget and behind schedule. Further detail can be found in our [interactive dashboard](#).

3.34 During RP2, we worked closely with National Highways to assess the effectiveness of EVM as a performance indicator. Following a jointly commissioned consultancy review the company and ORR worked to develop improved reporting for EVM. This helped to give increased context to the metrics and a clearer line of sight between performance against contractual commitments and the delivery plan commitments. We welcome the company's commitment to continuing this improved reporting in the interim period and beyond.

National Emergency Area Retrofit Programme

- 3.35 In October 2021, the [Transport Select Committee report into smart motorways](#) identified the importance of additional emergency areas (EAs) in providing public confidence that there is safe place to stop in an emergency on all lane running (ALR) sections of the smart motorway network.
- 3.36 National Highways was subsequently instructed by the previous government to build more EAs across ALR smart motorways to make them a maximum of one mile apart, decreasing to 0.75 miles apart wherever possible.
- 3.37 National Highways identified 400 locations that could potentially be a location for a new EA. Through a prioritisation exercise, 15 schemes were selected that would construct 151 additional EAs by the end of RP2. The company called this its national emergency area retrofit (NEAR) programme.
- 3.38 The delivery of this nationwide NEAR programme meant that at its peak, there were extensive roadworks covering 43% of the ALR smart motorway network. National Highways managed the NEAR programme well, given the constraints it had. It set up sound governance, risk mitigations and worked collaboratively with ORR on reporting its delivery progress.
- 3.39 National Highways delivered the NEAR programme and met its commitment to deliver 151 additional EAs by the end of RP2. This was a noteworthy success. It was a complex nationwide programme delivered to ambitious timescales, introduced during RP2, when the company was already delivering its challenging RP2 capital programme.

4. Operations, maintenance and renewals

- 4.1 National Highways is responsible for the operation, maintenance and renewal of the strategic road network (SRN).
- 4.2 Throughout the second road period (RP2), National Highways has demonstrated effective operation of the SRN. The early years of RP2 were marked by significant operational challenges, due to the pandemic. Despite these pressures, the company upheld service continuity. However, the company needs to address longer term priorities, including improving the climate resilience of its drainage infrastructure and enhancing the reliability of critical operational technology.
- 4.3 To keep the SRN functional National Highways maintains it. Across RP2 there were drops in the time taken to rectify urgent defects. However, in the last year of RP2, the company improved its performance to above its target level. The company also improved its performance in rectifying non urgent defects and delivering its cyclic maintenance programme. This achievement was in the context of an increasing number of defects reported, highlighting that the need for maintenance is rising on the SRN. It is imperative that the company delivers maintenance effectively, mitigating the risk to road user safety, as it continues to manage a degrading asset.
- 4.4 National Highways made commitments to deliver specific volumes of key asset renewals in RP2. It successfully delivered three of the five committed volumes. The other two were missed commitments for reasons within the company's control. More generally, across all asset types, the company had significant fluctuations when comparing its planned programme at the start of the year to the volumes it delivered. Generally, this was through over delivery when utilising additional funding. It was also through having incomplete asset data that led to assets unexpectedly reaching a life expired state and necessitating a renewal. This is an area for improvement in the third road period to ensure efficient delivery.

Operations

- 4.5 National Highways is responsible for ensuring the effective operation and safety improvement of the SRN. This includes operational activities such as the

management of severe weather events and improving the reliability of operational technology systems.

Drainage resilience

- 4.6 Surface water on the SRN is a safety risk to road users and can detrimentally impact asset integrity. National Highways manages the risk through understanding its drainage resilience. It has a performance indicator (PI) that measures the percentage of drainage catchments that have high-risk flood hotspots. This provides an indication of the susceptibility of the SRN to flooding.
- 4.7 At the end of RP2, National Highways' PI reported an eight percentage point improvement from year 4 of RP2 performance to 72% of the SRN's drainage as resilient. This means that 28% of the SRN is susceptible to flooding.
- 4.8 However, it should be noted that a five percentage points increase comprised of a change to the way that the company calculated its catchment model, to more accurately represent the drainage network and using higher resolution data, resulting in the numbers and lengths of catchments changing. A further two percentage points improvement were included to account for increased rainfall intensity due to climate change being included in the calculation (i.e. rainfall events that exceed a 1-in-5 year rainfall event). Taking this into account, we therefore consider that at the end of RP2 33% of drainage catchments on the SRN have a significant susceptibility to flooding.
- 4.9 Whilst there has been an in year performance improvement compared with year 4 of RP2, performance has worsened across the road period since data collection began in 2022 and performance was at 72% resilience. Therefore, we can infer that by considering the data modelling increases, drainage resilience worsened by five percentage points when considering all rainfall events at the end of RP2.
- 4.10 It is important that National Highways considers how it prioritises improvement in this area so it can effectively and efficiently manage surface flooding on the SRN. The company must also continue to work on understanding whether its drainage asset offers appropriate climate resilience, as we experience periods of more intense rainfall, and how it can respond to this challenge. Noting that removal of 1-in-5 year rainfall events from the PI can mask the true performance of the SRN's drainage asset experienced by the road user.
- 4.11 In the final year of RP2, we worked with National Highways to understand its approach to drainage asset management. The company recognises both that

drainage asset information is one of its least mature asset datasets and the importance of delivering a sustainable long term plan. Therefore, it has created a National Drainage Strategy Programme Board to deliver several workstreams including improvements to drainage inventory data and systems, flooding incident reporting, and asset interventions.

- 4.12 We will continue to engage with National Highways in the next reporting period and hold it to account for the delivery of its National Drainage Strategy Programme.

Technology availability

- 4.13 The availability of technology, such as variable message signs and signals, on the SRN is a high priority for road users. National Highways uses technology assets to support its operation of the SRN. These include CCTV, electronic signs and weather stations. The technology availability performance indicator (PI) measures the percentage of time that roadside technology assets on the entire SRN are available, functioning and unaffected by faults or outages. Although this metric was untargeted in RP2, the company set an internal target of 95% availability. At the end of RP2 it reported an availability of 89.95%. It should be noted that the availability of technology on smart motorways is reported separately in our [annual assessment of safety performance on the SRN](#).
- 4.14 National Highways recognised that it was challenging to meet the internal performance target for its technology in RP2 following an issue with its spares supply and repair contracts. Consequently, we asked the company to set out actions it was taking to improve performance. It set out several actions, including the creation of a new spares supply and repair contract, alongside a working group to manage the backlog and prioritisation.
- 4.15 It is vital that National Highways continues to take action to improve technology availability so that it can better monitor its roads and improve its operational decisions for road users. Consequently, this will ensure users have better and more accurate information when travelling on the network. We will continue to report on its progress in the interim period and future road periods, and we will hold the company to account for delivering its committed planned improvements.

Operational continuity during the pandemic

- 4.16 National Highways performed well to uphold operational continuity, despite the challenges of the pandemic in the first year and into the second year of RP2. The company adapted quickly to remote working and implemented Coronavirus-safe

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practices on its construction sites and single crewing of its traffic officer vehicles. It adapted its plans and delivery in response to ongoing challenges and changes to working requirements whilst maintaining service standards and delivery commitments despite the prolonged effects of the pandemic.

Severe weather planning

- 4.17 National Highways defines severe weather as including a variety of weather events such as rain, high winds, snow and ice, elevated temperatures and fog. In year 4 of RP2, we engaged with the company to understand its approach to severe weather planning, management and service (SWPS). This year, we reengaged with the company's SWPS team to ensure that lessons were being learnt and that its plans were taking account of climate change. We reaffirmed it as a mature severe weather operator providing a quality service with a high level of compliance with its policies, processes and procedures.

Maintenance

- 4.18 National Highways' maintenance activities aim to keep the SRN safe and serviceable by rectifying defects and undertaking routine cyclical maintenance work, such as cutting vegetation and clearing drains.

Urgent defects

- 4.19 Defects are classified as urgent if they could affect the safety of road users, in accordance with National Highways' standards. The company's [2023-2024 delivery plan update](#) and [2024-2025 delivery plan updates](#) included a commitment to rectify 90% of defects that it identified as urgent within 24 hours.
- 4.20 In our [2024 annual assessment](#), we reported a continued decline in National Highways' urgent defect rectification performance. It ended that year below target. We challenged the company to improve its rectification of urgent defects and conducted region specific engagement to understand the reasons for poor performance.
- 4.21 Following our intervention, the company demonstrated an improvement to its urgent defect rectification rate performance to 94.7% in the final year of RP2. This is above target and demonstrated the success of its recovery plans, and a reduction in the number of urgent defects which are not rectified in time.
- 4.22 Over RP2, the number of urgent defects increased year on year. There was a total increase in urgent defects reported annually between year 1 to year 5 of 5,723.

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This is a 33% increase over RP2. However, year 5 of RP2 saw a reduction in the number of urgent defects, whereas the previous three years saw year on year growth. National Highways does not have a full understanding of the causes of this reduction, however it is reasonable to conclude that the mitigations it has put in place have contributed. The company should continue to work to quantify the benefits that its interventions are responsible for.

Non urgent defects

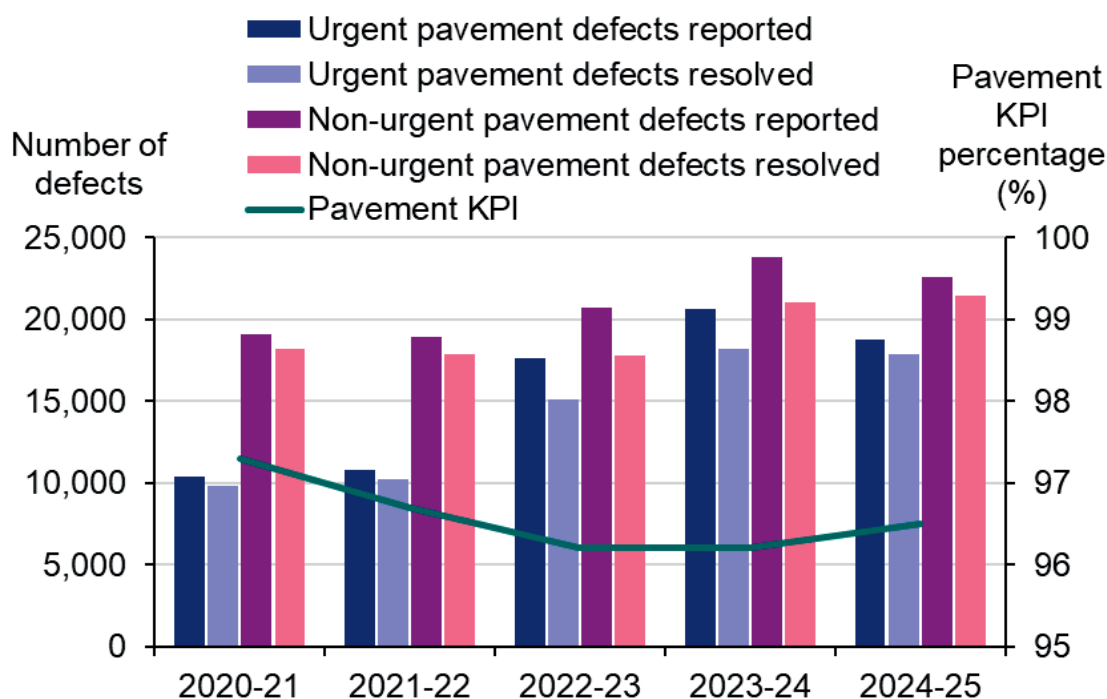
- 4.23 Non urgent defects do not meet the threshold to be classified as urgent and therefore do not have an immediate safety risk. However, if non urgent defects are not rectified within the required timescales there is potential for urgent defects to increase and an increased rate of asset health deterioration. National Highways does not stipulate a delivery plan target for non urgent defects.
- 4.24 In the final year of RP2, the rectification rate for non urgent defect rectification performance improved to 93.4%. This was a 7.5% improvement from the previous year.
- 4.25 Over RP2, the amount of non urgent defects increased year on year. The total increase between year 1 to year 5 was 11,395 non urgent defects, which is a 28% increase over RP2.
- 4.26 National Highways has demonstrated its ability to maintain the SRN and rectify both urgent and non urgent defects. However, across RP2 there was a significant increase in the number of urgent and non urgent defects reported. This is a leading indicator that demonstrates a deterioration of the overall asset condition and an increasing demand on the company to keep its asset safe and serviceable in future road periods. The company needs to ensure that its future plans take account of this trend.

Pavement defects

- 4.27 The pavement asset is critical to the road user and has an associated key performance indicator (KPI). In the final year of RP2, 55% of all defects reported were pavement defects. Therefore, it is necessary to understand National Highways' defect management performance, regardless of urgent or non urgent category, that is specific to this asset type.
- 4.28 The number of pavement defects increased throughout RP2, from 29,468 in the first year to 41,344 in the last year. This meant that National Highways had to intervene more regularly to ensure that the pavement remained safe and in good

condition to meet its pavement KPI. For further data please refer to our [interactive dashboard](#).

Figure 4.1 Pavement condition performance and pavement defect rectification in RP2, annual data



4.29 This increase in pavement defects aligns with National Highways' pavement condition KPI performance. Figure 4.1 shows that in years 3 and 4 of RP2, the combined amount of urgent and non urgent defects were at their largest. Simultaneously, the company's pavement KPI performance dropped to the minimum performance level permissible, 96.2%. In year 5, the number of defects reduced, and the pavement KPI performance level rose to above target. Therefore, the number of pavement defects in the future could impact the company's future performance of the pavement KPI if not proactively managed.

4.30 The company needs to continue to closely monitor the defect rate on its road surface asset, the type and geographical location of defects that occur. This will allow it to identify trends and help with long term asset management, through to the prioritisation of its renewals works in future road periods.

Cyclic maintenance

4.31 Cyclic maintenance is activity that National Highways schedules to ensure that the SRN is serviceable. Non completion of cyclic maintenance does not have an immediate safety risk. However, if the company's cyclic maintenance programme

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is not fully completed, there is potential for urgent defects to increase and an increased rate of asset health deterioration. Consistent under delivery of cyclic maintenance has a direct long term impact on asset condition that could worsen road user safety risk and reduce asset life, thereby also reducing efficiency and value for money.

- 4.32 National Highways sets a baseline frequency for its cyclic activities that it delivers through its maintenance response plans. The company varies these frequencies according to factors such as asset risk, maintenance history and reactive repairs to defects such as potholes.
- 4.33 In our [2024 annual assessment](#), we highlighted a decline in National Highways' performance in delivering its programmed cyclic maintenance. The company completed 83.2% of its cyclic maintenance programme. During year 5, we worked with the company to identify areas where improvements could be made to cyclic maintenance. These areas focused on improvements to defect definition, data capture and commercial consistency. At the end of year 5, cyclic maintenance completion improved to 90%. This was a significant improvement across RP2, from 77% at the end of year 1. Further details can be found in our [interactive dashboard](#).
- 4.34 We will continue to work with National Highways to ensure that it considers its maintenance requirements plans as part of a whole life cost approach to managing its assets. These plans should also be delivered in a timely manner to achieve value for money, and effective management of delay. The company should also ensure that where it makes deviations from the baseline frequencies it is able to evidence its decisions through risk assessments and explain the long term impact on the SRN and road users, in terms of performance and cost.

Planned inspections

- 4.35 National Highways delivers a wide ranging programme of planned inspections of its assets to understand the asset condition and if any interventions are required. Failure to carry out scheduled inspections has the potential to lead to reduced asset intelligence. Subsequently, there is a risk of a less robust assessment of asset need, and a reduced ability to proactively plan interventions. This in turn can lead to increased costs and disruption for road users.
- 4.36 In the final year of RP2, National Highways did not deliver the full programme of planned asset inspections for its structures (by 1.2% or 40 inspections) and vehicle restraint systems (by 8.8% or 450 inspections). The company reported that

challenges with access to the network and delays in the reporting process were the causes of the non completions. These inspections were reprogrammed and prioritised for completion.

- 4.37 National Highways over delivered its inspection programme for three asset types (Geotechnical, Traffic Signs and Technology and Lighting). The company reported that over delivery was due to utilising other schemes' booked road space to allow inspections to be carried out at the same time, demonstrating efficient planning. Our [interactive dashboard](#) shows the percentage completion rates for each asset inspection.

Operations and maintenance finance summary

- 4.38 National Highways spent £2,444 million on operations and maintenance during RP2. Spend was relatively consistent in the final three years of the road period, ranging from £462 million in year 3 to £474 million in year 5. This was down slightly from spend of over £500 million in both year 1 and year 2. The company continued to provide a consistent level of maintenance and operational service throughout RP2, despite spend remaining steady and constrained, as it managed factors outside of its control such as inflation pressures.

Renewals

- 4.39 Assets on the SRN, such as road surfacing and bridge structures, are renewed when they have reached the optimum asset life or are life expired and need significant intervention to restore them to provide the function that is required of them.

Final year renewals delivery

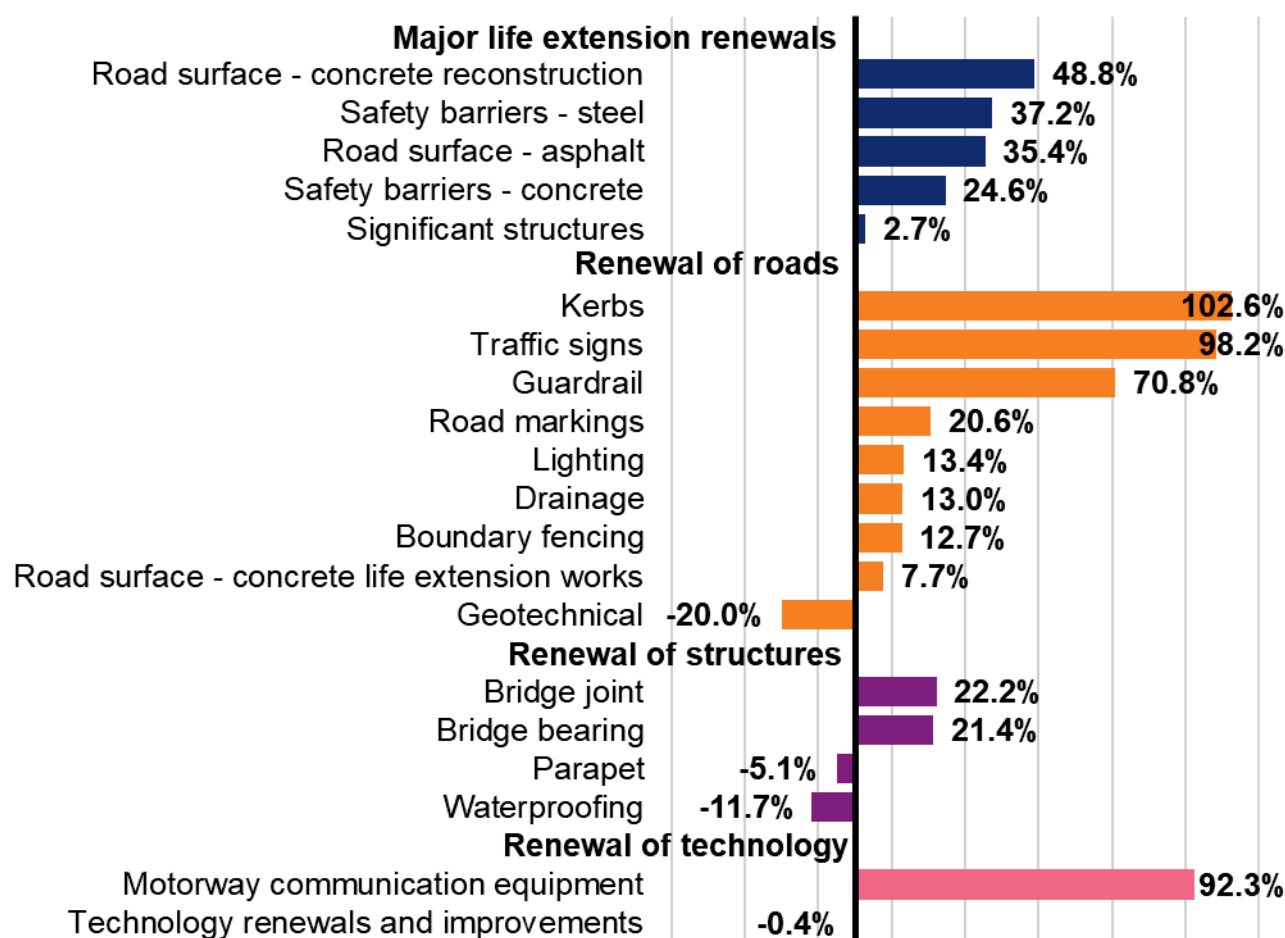
- 4.40 National Highways delivered a national programme of renewal activities in the final year of RP2 across all its asset types.
- 4.41 In the final year of RP2, National Highways over delivered on all five key asset types of planned major renewals and on 11 of its 15 other non-key cyclical asset renewal types, including a variance of more than double on kerbs (102.6%). Further data can be found in our [interactive dashboard](#).
- 4.42 National Highways reported that four asset renewal types were under delivered in the final year of RP2, with geotechnical being the most under delivered asset type. However, the company explained that the primary reason for this under delivery was due to a single scheme where it was able to develop an alternative vehicle

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restraint system solution that negated the need for a geotechnical asset intervention.

- 4.43 In the final year of RP2, National Highways delivered a volume of renewals output that exceeded its initial plan. While this over performance is notable, it raises concerns regarding the robustness of the company's planning processes at the start of the financial year. Following engagement with the company, we have reviewed the underlying factors contributing to this variance and are satisfied that the over delivery is primarily attributable to the acceleration of renewal schemes originally scheduled for future years. This acceleration was funded by in year underspends from the enhancements programme that was repurposed for renewals. We consider this reallocation to be an efficient use of available funding. It enabled the company to bring forward beneficial works, thereby delivering value to road users and maintaining its level of service.

Figure 4.2 Variance of asset renewals outputs delivered against planned, between April 2024 and March 2025



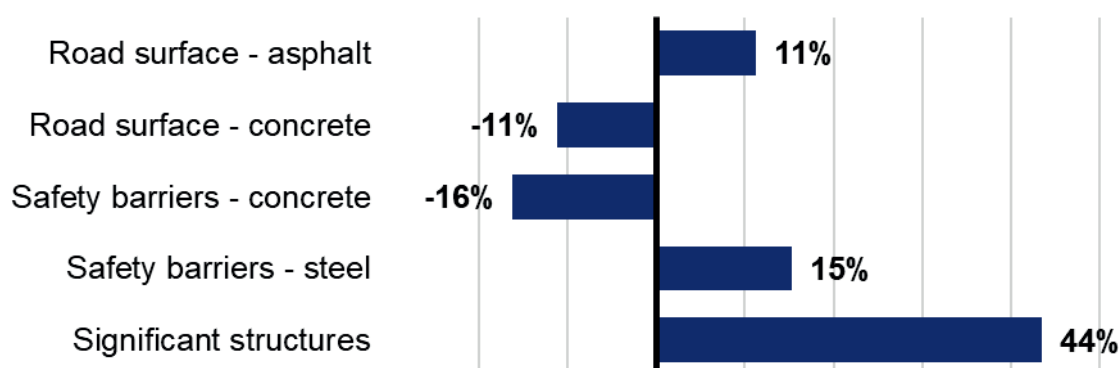
RP2 renewals delivery

- 4.44 National Highways delivered a national programme of renewals for each year of RP2 for each of its asset types. This programme was significantly bigger than the previous road period.
- 4.45 National Highways spent £4,915 million on renewals during RP2, £80 million higher than its revised RP2 funding of £4,835 million. This spend increased in each year of the road period, with 48% of the spend occurring in the final two years when funding also increased. During the latter part of RP2, the company repurposed some enhancements funding to help meet cost increases from inflationary pressure in renewals which resulted in spend above the revised RP2 funding.

Renewals – key asset major renewals commitments delivery in RP2

- 4.46 At the beginning of RP2, National Highways published its [2020-2025 delivery plan](#). The plan set out five key asset renewals commitments to be achieved during the road period.
- 4.47 By the end of RP2, National Highways had achieved three out of five of its key asset renewals commitments, as shown in Figure 4.3. The company did not meet its commitments for reconstructing concrete pavements and installing concrete safety barriers. This data is held in our [interactive dashboard](#).

Figure 4.3 Variance of outputs delivered against planned key asset renewals during RP2



Key asset major renewals missed commitment – reconstructing concrete pavements

- 4.48 National Highways' delivery plan renewals commitment for concrete pavement was to fully reconstruct sections of legacy concrete road surface with new asphalt surface, in accordance with current standards. The company missed its

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commitment by 14 lane kms (11%). This shortfall was due to one overrunning scheme, the M27 J5 to 7, that it did not complete in RP2. Because of the complexity of the work and its programme, the company stated that there were no opportunities to bring forward other schemes to achieve the committed RP2 output volume. This scheme is now scheduled to complete in the interim period.

- 4.49 At the start of RP2, National Highways acknowledged that the treatment of concrete roads would be a steep learning curve. This has become apparent as the programme has been delivered. The company had no experience of delivering a similar programme and the work required to reconstruct concrete roads is challenging. The company stated that it has learnt lessons and its delivery of the future concrete roads programme in RP3 will improve by having a more capable and experienced resource, as well as planning a more resilient programme of work.
- 4.50 Although National Highways missed its delivery plan commitment for full concrete reconstruction in RP2, it successfully delivered 436 lane kms of concrete life extension works. This was 117 lane kms more than it planned to deliver. This extensive programme of repairs enables these sections to remain safe and extends its life until full reconstruction is unavoidable.

Key asset major renewals missed commitment – concrete safety barriers

- 4.51 National Highways had a delivery plan renewals commitment for concrete safety barriers. The company missed its commitment by 16%. However, the company exceeded the delivery volume of steel safety barriers by 15%.
- 4.52 During RP2, National Highways recognised that the extent of safety barriers that required renewal or repair to current standards exceeded the funding provided. To renew as much substandard barrier as possible, within its allocated budget, the concrete barrier renewal programme was reduced and more steel safety barrier was installed, utilising departures from standard. Steel safety barrier is cheaper, easier and quicker to install than concrete safety barrier. However, concrete safety barriers have almost a twice as long expected service life and lower maintenance costs than steel safety barriers. Concrete safety barriers are also stronger on impact in the event of an incident, particularly heavy goods vehicle cross overs.
- 4.53 Although National Highways missed its commitment for concrete safety barrier renewals, the decisions it took meant that it was able to achieve 14% more renewal of the road safety barrier asset than it had originally forecast at the start of RP2.

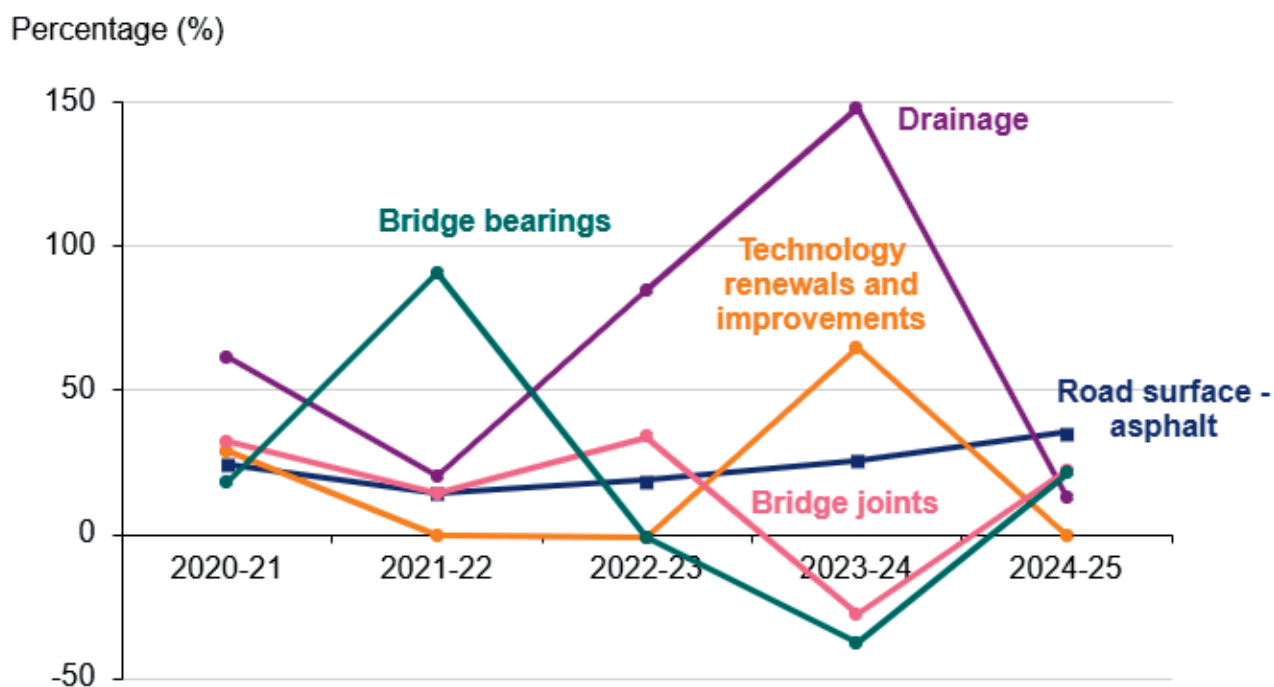
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- 4.54 National Highways was given a budget at the start of RP2 to deliver an agreed level of safety performance. The company decided to change its plans and therefore change the risk profile of the solution it was installing. The company did so without prior notification to the Department and ORR that it was unable to achieve its original commitment. However, the company was able to rationalise its decision and determine that the departures were an acceptable level of risk. The company must ensure that it informs ORR and the Department in a timely manner if it is unable to meet a commitment for which it has been funded.

Renewals – non-key cyclical asset delivery in RP2

- 4.55 At the start of the road period, National Highways did not publish forecast quantities for its 15 non-key cyclical asset type renewals to be delivered during RP2. Therefore, these asset types did not have overall RIS2 output quantities for which we were able to hold the company to account. To provide assurance of delivery, the company provided output quantities at the start of each individual year via its delivery plan updates and reported its outturn status at the end of each year.
- 4.56 When each annual delivery plan update forecast outputs is compared with what was delivered there are typically significant disparities, both under and over delivery, see Figure 4.4. This data is held in our [interactive dashboard](#).
- 4.57 As is the case with the committed volumes for key asset major renewals, this shows that National Highways is unable to robustly plan at the start of a year for the work it will undertake. Generally, in each year of RP2, the last quarter sees the biggest incremental delivery output that results in over delivery. The skew of renewals works at the end of the financial year is not an optimal approach for delivering capital works. It is likely to be inefficient and work carried out in the winter months is generally more expensive. Adverse weather can also limit the quality of the renewal delivered and therefore reduce its asset life. Multi-year funding settlements, that allow the company to better plan, are intended to avoid this occurrence.

Figure 4.4 Variance in volumes of renewals delivery compared to plan for a selection of assets, April 2020 and March 2025



Renewals forward look

4.58 Looking ahead to the third road period (RP3), National Highways must seek to have a better understanding of the condition of its assets and the likelihood and profile of additional funds being released, so that it can more accurately set its programme of renewals and be more efficient in its delivery. The company needs to ensure that it can demonstrate that the decisions it takes mean that the right asset is renewed at the right time in its lifecycle. The company should also ensure that it informs ORR and the Department in a timely way if it is unable to meet its obligated commitments for which it has been funded.

Operational technology modernisation and refresh

4.59 In November 2022, National Highways committed £105 million to renew existing operational technology assets on its all lane running sections of the smart motorway network. This activity was over and above its [2020-2025 delivery plan](#).

4.60 The ambition set for the investment was to deliver an average of 97% availability for CCTV, MIDAS, signs and signals on all lane running smart motorways. Knowing that age and obsolescence are the two biggest contributors to availability,

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National Highways targeted those assets that had already reached end of life and/or had become obsolete.

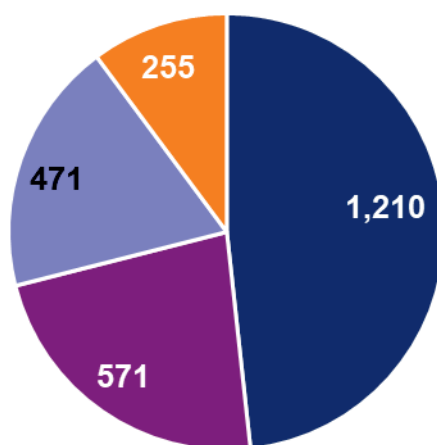
- 4.61 Average availability across all four assets at the end of year 5 was 94.3%. This includes average availability for signs and signals in year 5 of 91.2% and 94.0% respectively.
- 4.62 National Highways did not fully deliver its programme of technology renewals that it set out in November 2022, and this is reflected in the overall availability performance. One of the reasons for lower availability scores was following a change made by the company in how it records fault data.
- 4.63 National Highways cited several other challenges that impacted its delivery programme, including procurement and contracting issues for new and replacement technology. The roll out of the national emergency area retrofit (NEAR) programme in the final year of the road period, covered in detail in our [latest safety report](#), also affected the company's ability to carry out works. These challenges meant that not all aspects of the company's modernisation and refresh programme were delivered in RP2. This work will be carried over into the interim period.
- 4.64 With a likely increase in technology renewals in RP3, the company must improve its asset management knowledge in this area, and enhance its technology commercial and procurement capabilities, if it is to achieve its plans and reliability of its operational technology assets.

Designated funds programme delivery

- 4.65 The designated funds (DF) programme consists of capital investments intended to deliver measurable improvement to the SRN. Ring fenced funding is provided to support projects that deliver a range of benefits for road users, neighbouring communities, the environment and the economy. These include initiatives such as enhanced roadside welfare facilities for freight drivers; replacement of street lighting with LED lanterns; various congestion relief; and safety improvement schemes. The spend details for these funds is set out in paragraphs 5.58 and 5.59.
- 4.66 A total of 2,507 DF schemes had allocated funding in RP2, broken down as shown in Figure 4.5.

Figure 4.5 Number of schemes invested in during RP2 for each designated fund

- Environment & Wellbeing
- Safety & Congestion
- Users & Communities
- Innovation & Modernisation



- 4.67 National Highways needs to improve the way in which it captures and reports data on the successful delivery of DF schemes for which funding has been allocated. This will allow the company to better understand and evidence the benefits of the DF programme and improve the allocation of funds going forward.
- 4.68 We understand that National Highways is undertaking a monitoring and evaluation exercise to determine the success of its DF programme. This work will measure the benefits achieved for road users; understand what lessons can be learnt; and to inform the programme for RP3.

Business improvement and preparation for the future

- 4.69 Part of our wider role is to understand how National Highways seeks to improve its capability and preparedness for future years. In the final year of RP2 we looked at several key themes.

Asset management

- 4.70 During RP2, National Highways developed and published a [series of companywide documents](#), aimed at improving its asset management approach. These documents provided strategic direction and set out specific business improvement actions.

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- 4.71 We challenged National Highways to demonstrate how these actions would improve capability and ultimately its efficiency. We found that the company was not always able to consistently articulate how actions are being embedded and able to evidence the business benefits being generated or improvements for road users. We expect the company to be able to evidence how, through spending of public funds, these actions are generating business benefits, such as improving its capabilities, efficiency and performance. It is putting in place measures to address this.
- 4.72 In our [2024 annual assessment](#), we reported that National Highways achieved certification against the requirements of ISO55001. This standard provides a framework for organisations to deliver good asset management through actively managing risk to improve performance. Condition 5.11 of the company's licence states that it should adopt a long term approach to asset management consistent with ISO55000 standards. To have achieved certification is a notable success for the company and demonstrates that it is committed to improving its asset management capability. An external audit was completed in June 2025 that identified no non-compliances. Therefore, the company continues to meet the requirements of the ISO 55001 standard.
- 4.73 During RP2, National Highways improved how it reported and used its data related to the governance and delivery of renewals, following ORR's intervention. Of note, the company developed its national programme stability report. It used this to demonstrate both the reasons and costs for changes that it made to its renewals programme in year. From this reporting we gained confidence that the right asset renewals decisions were made, efficiently.

Improving capability

- 4.74 We observed that individual directorates also delivered plans intended to improve directorate level asset management capability. For example, the Operational Excellence 2025 (OE2025) programme in the Operations Directorate. A budget of £50 million was allocated to this programme.
- 4.75 The ambition for OE2025 was to transform what National Highways does and how it works and achieves. The company reported that the programme achieved financial benefits of over £550 million and non financial benefits, such as improved safety and internally developing improved operational capabilities.
- 4.76 Whilst business improvement activities were taking place at both company wide and directorate level, National Highways determined that there would be

advantage in having a more coordinated approach. Moving forward, the company established a dedicated team to direct and manage all its business improvements. The programme set up in readiness for RP3 is to facilitate the company's intention to move from a builder/operator role to a customer service provider by 2030. The company should improve how it shows that these programmes directly lead to efficiency savings and performance improvements and demonstrating value for money for taxpayers. We will continue to work with it to gain assurance of the benefits being delivered through this programme of work and the efficiency it creates.

Large renewals governance

- 4.77 In our [2024 annual assessment](#), we reported that the SRN continues to age and is now at a point where a large and disruptive national programme of strategic renewals is required. It is expected that National Highways will need to deliver more strategic, larger, high cost and complex renewal schemes, such as significant structures and concrete roads renewals. The company has named such schemes 'large renewals'.
- 4.78 Given this growing asset need and the risk of substantial on-network road user disruption, we engaged with National Highways to understand its governance approach for these strategic large renewals to ensure that it was commensurate with other capital schemes of this scale.
- 4.79 In December 2024, National Highways presented its proposed governance process to us. The company has combined elements of existing methods from two delivery directorates into a hybrid governance and assurance process. We will work with the company through the interim period to assess the application and embedment of these governance processes and any improvements required for RP3.

Design, Build, Finance and Operate (DBFO) contracts

- 4.80 Design, Build, Finance and Operate (DBFO) Contracts are private finance initiatives (PFI) used historically by National Highways. These contracts transfer responsibility for managing specific routes on the SRN to private companies.
- 4.81 There are eight DBFO contracts that were awarded in the 1990s that are ending in 2026 and 2027. This means that these routes will be handed back to National Highways. This amounts to an approximate 10% increase in the SRN road length and all other asset types will also return to the company's direct management upon hand back.

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- 4.82 We have worked with National Highways to gain assurance that these routes will be handed back to it in accordance with each contract's hand back criteria and all programme dates will be achieved. The company's approach is robust and well managed, and it continues to work with its DBFO contractors to ensure that the eight routes will be handed back to the company in an acceptable condition.
- 4.83 However, the DBFO contracts specify compliance to standards at the time they were agreed. Some of these standards have since changed. Therefore, National Highways may have to manage a step change in asset condition on these returning DBFO routes. We will continue to work with the company to hold it to account for the successful transfer of these DBFO routes back into its full control and that it has a plan, where required, to bring these assets back to the same level of performance as the existing network.

5. Efficiency and finance

- 5.1 This chapter sets out how National Highways delivered efficiency in the second road period (RP2, 2020 to 2025), as measured by the efficiency key performance indicator (KPI), and the company's financial performance.

Efficiency

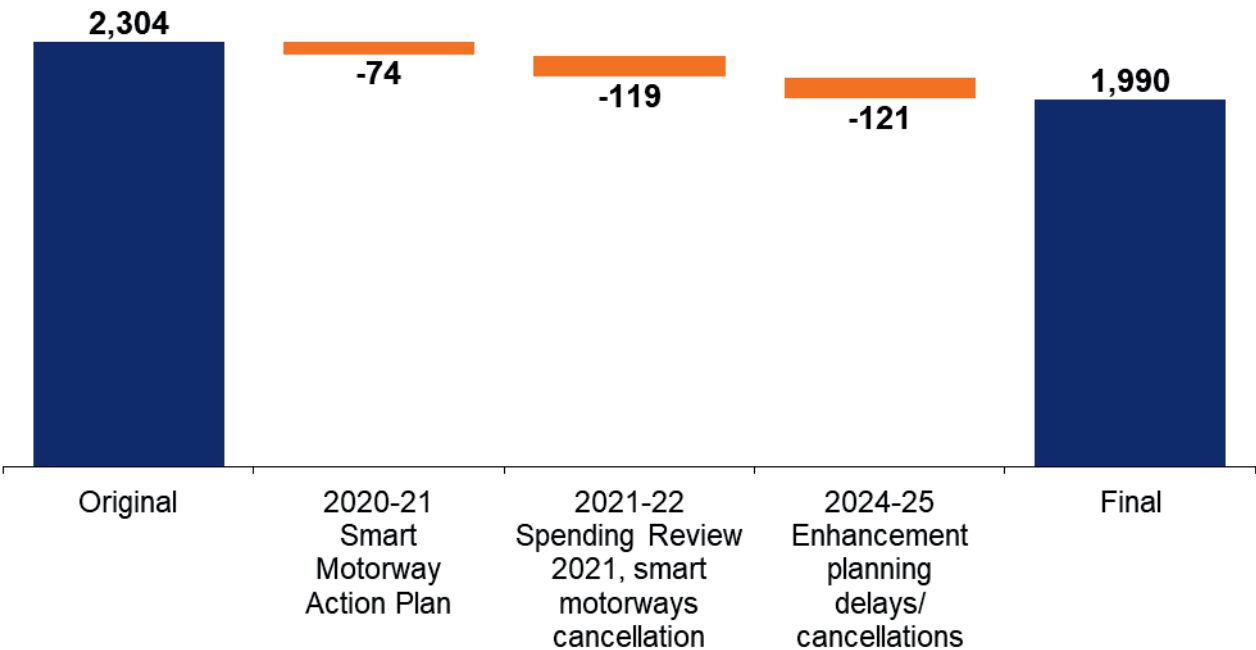
- 5.2 National Highways met its second road investment strategy (RIS2, 2020 to 2025) target to achieve £2.0 billion of efficiencies in RP2. The company's reported efficiency is supported by sufficient evidence of efficient delivery, and in response to ORR challenge, its reporting has matured in several areas. Overall, less efficiency was delivered in RP2 than originally anticipated. However, this reflects changes to RIS2 programme, and its funding, that meant the efficiency target was reduced.
- 5.3 National Highways reported £2.2 billion of efficiency improvements against its target of £2.0 billion. The company made the largest efficiency improvements in renewals (£764 million) and the operating costs of its business (£538 million).
- 5.4 During RP2, ORR highlighted concerns about National Highways' forecasting of efficiency, supporting evidence and management of risks to efficient delivery. The company responded positively and made improvements in these areas that it should build on in future road periods.
- 5.5 Government made changes to RIS2 outputs during RP2 that reduced National Highways' funding. This was in response to a period of high inflation, delays to achieving planning consent for enhancements schemes, smart motorway programme changes and wider cost pressures on public funds. As a result, government reduced the efficiency target three times during RP2, following reviews by ORR to assess the company's proposed changes.
- 5.6 National Highways has incorporated inflation and other adjustments to the way efficiency is reported to account for cost increases outside its control. We have worked closely with the company to ensure these 'headwind' adjustments are reported appropriately, alongside our core role of monitoring and reviewing evidence for its reported efficiency.

5.7 The following sections describe the efficiency KPI and how it has changed, National Highways' reported efficiency and our assessment of its efficiency evidence.

KPI total efficiency

5.8 When RIS2 was set, National Highways had an efficiency target of £2.304 billion. Changes during the road period led to this target being reduced to £1.99 billion. The changes shown in Figure 5.1 related to smart motorway safety improvements and ceasing of further rollout; and planning delays to, and cancellation of, enhancement schemes. ORR closely scrutinised the proposed changes and advised government on their validity as part of our role in the formal change control process.

Figure 5.1 Changes to the Efficiency KPI target during RP2, (£ million)



National Highways' reported efficiency over RP2

5.9 Figure 5.2 shows National Highways' reported cumulative efficiency of £2,185 million during RP2. This includes adjustments for the impact of higher than funded inflation and changes to non-recoverable VAT that increased the company's costs. The total reported efficiency also accounts for the company delivering more renewals output and pavement depth than planned, offset by delivering fewer outputs in non-roads capital expenditure (for example, in its estates programme). This is captured under 'other adjustments' in Figure 5.2.

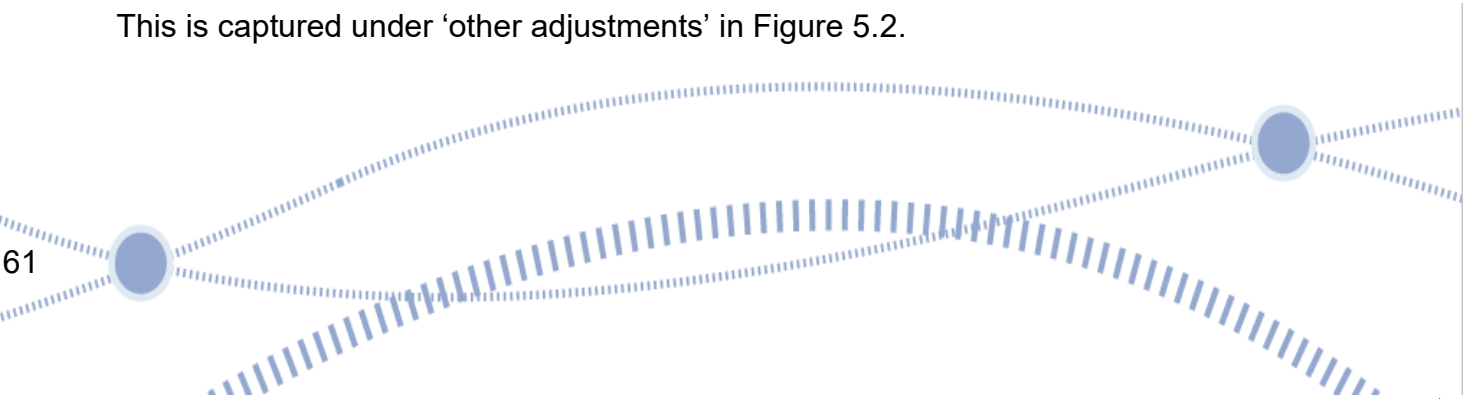
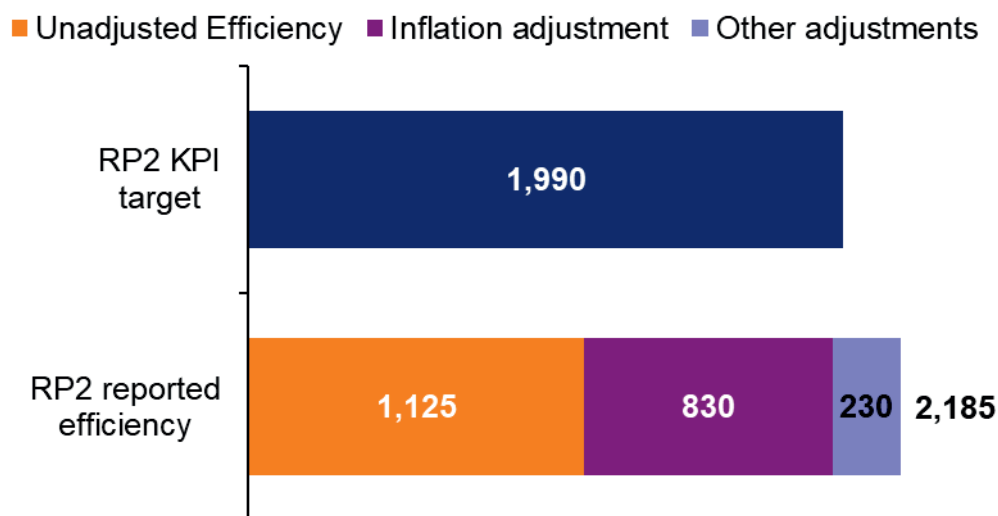


Figure 5.2 Reported cumulative efficiency against the KPI, (£ million)



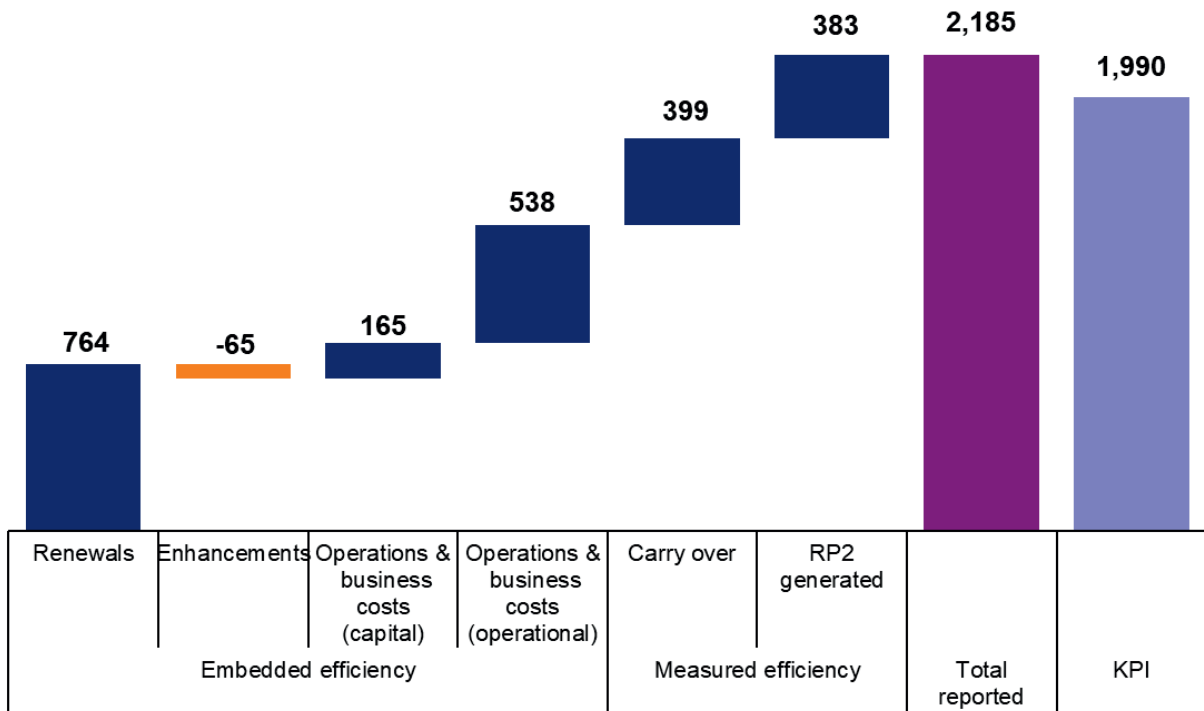
5.10 National Highways' target is split between:

- embedded efficiency, where efficiency was 'baked in' to RIS2 plans through reduced funding; and
- measured efficiency, including:
 - the carryover of the RP2 element of efficiency delivered in RP1; and
 - RP2 generated efficiency where funding is not reduced but the efficiency reduces cost in future road periods.

5.11 National Highways reported that it delivered broadly in line with its planned embedded efficiency (after adjustments) and delivered more than expected RP2 generated efficiency on larger enhancement schemes in development and initiatives to reduce whole life costs.

5.12 National Highways delivered less embedded efficiency on enhancements in part due to delivery challenges on some schemes within the company's control. However, the company outperformed against its efficiency plans on operations, business costs and renewals. This was in part due to funding being diverted from enhancements that resulted in more opportunities to deliver efficiencies.

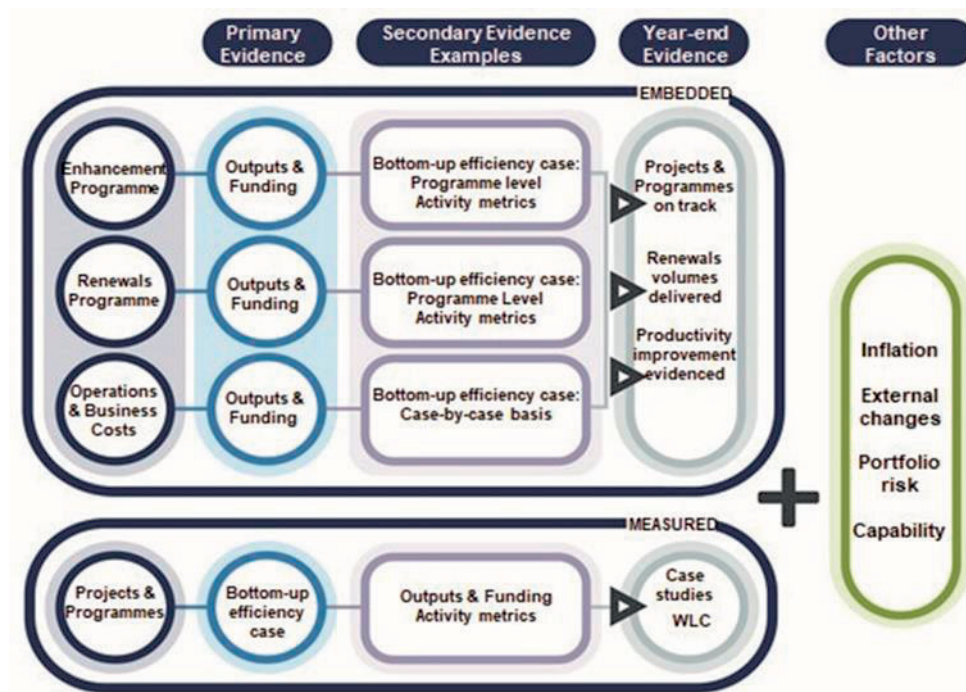
Figure 5.3 Reported cumulative efficiency by type, (£ million)



ORR role in assessment of efficiency evidence

5.13 One of our primary functions as set out in legislation is to promote efficiency. It is therefore important that we scrutinise the quality of evidence that National Highways provides to demonstrate efficient delivery and that it is delivering true savings for taxpayers. Figure 5.4 shows the different types of efficiency and the supporting primary and secondary evidence that the company presents to support the reported values. The company's [Efficiency and Inflation Monitoring Manual](#) provides definitions of types of efficiency used in this chapter.

Figure 5.4 Sources of evidence for types of efficiency by expenditure category



Assessment of cumulative efficiency evidence across RP2

5.14 Tables 5.1 and 5.2 show how National Highways' reported cumulative efficiency is broken down against different categories. They also present ORR's assessment of the evidence supporting each category, on which we provide more detail below.

Table 5.1 Embedded efficiency reported and our assessment of supporting evidence

Embedded efficiency	Reported cumulative (£1,402 million)	Primary: outputs and funding	Secondary: activity metrics	Secondary: case studies
Enhancements	£-65 million	Good evidence	Good evidence	Good evidence
Renewals	£764 million	Good evidence	Good evidence	Good evidence
Operations and business costs (capital)	£165 million	Good evidence	Not available	Good evidence
Operations and business costs (operational)	£538 million	Good evidence	Not available	Good evidence

Table 5.2 Measured efficiency reported and our assessment of supporting evidence

Measured efficiency	Reported cumulative (£782 million)	Primary: case studies	Secondary: outputs and funding	Secondary: activity metrics
Carry over	£399 million	Good evidence	Not applicable	Not applicable
RP2 generated	£383 million	Good evidence	Not applicable	Developing evidence

ORR view of efficiency evidence – outputs for funding

- 5.15 National Highways, in response to feedback on efficiency adjustments and forecasts from ORR during RP2, has improved its primary evidence for embedded efficiency on enhancements. We consider the adjustments it has made for inflation and non-recoverable VAT are appropriate and, overall, there is good evidence for the reported efficiency.
- 5.16 During RP2, National Highways' renewals programme changed to accommodate evolving needs on the network. We required the company to develop its reporting to ensure it can show that it is still being efficient when it delivers differently to its original plans. This includes:
- where it has over or under delivered originally planned outputs for key assets; and
 - the depth of its asphalt pavement renewals, as this affects longevity and cost.
- 5.17 National Highways' reporting now appropriately reflects delivery at different levels than planned on key assets and greater asphalt pavement depth than assumed. There is good evidence for the reported efficiency following this adjustment and inflation which the company should continue to roll out across its portfolio.
- 5.18 For capital spending on operations and business costs, National Highways reduced the reported efficiency because it did not deliver all the funded outputs (due to delay in its estates programme) in the road period. There is good evidence for the reported efficiency recognising this adjustment and an adjustment for inflation.
- 5.19 Our monitoring shows efficiency delivery in National Highways' operational spending on operations and business costs includes maintenance and privately

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financed projects. Outside of these areas, outputs are less defined and measurable for efficiency purposes. However, on balance, we consider there is good evidence for reported efficiency after applying the efficiency adjustment for inflation for this area of spend.

- 5.20 National Highways provided financial data for the Tier 1 enhancement schemes that were included in the measured RP2 generated efficiency category as a form of secondary evidence. In the final year of RP2 the cost baseline for these schemes was updated to reflect the latest RP2 forecast position. Therefore, as the baseline was updated to reflect the latest forecast, financial performance against this baseline would not reflect efficiency over RP2 and is not applicable for evidence purposes.

ORR view of efficiency evidence – activity metrics

- 5.21 A key piece of secondary evidence is activity metrics, where the cost of a specific unit of activity can be compared over time.
- 5.22 National Highways' activity metrics secondary evidence for enhancements has increased in scope during the road period to now cover all lane running smart motorways, bypass and widening schemes and major junctions. At the end of RP2 this provided good supporting evidence for reported efficiency.
- 5.23 National Highways' use of activity metrics to provide renewals efficiency supporting evidence has also increased during the road period and indicates that it is delivering efficiency at a similar scale to the level shown in primary evidence.
- 5.24 During the road period, National Highways explored with us options for activity metrics to be utilised as secondary evidence for both operational and capital operations and business costs. While the company is open to developing more metrics in the future, in RP2 it deemed the metrics unsuitable in these areas. This was due to the diversity of activity and complexities in correlating the potential metrics with efficiency performance. We welcome the engagement the company displayed in exploring these options and its openness to developing these metrics in future road periods. It is important that it considers the strength of efficiency evidence as a whole for an expenditure category and ensures that when one type of evidence is not available or weak, this is compensated for by greater depth/strength in other types of efficiency evidence.
- 5.25 National Highways undertook some high level analysis of the IP5 Maintenance Delivery Performance Monitoring Statement, which reports outputs, to understand general trends in activity and cost. Whilst not formally reported as an activity

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metric this analysis helped to show efficiency, as the number of reactive outputs has increased while maintenance spend has remained flat over RP2.

- 5.26 Throughout RP2 we encouraged National Highways to develop secondary evidence to support the primary evidence (efficiency case studies) for RP2 generated measured efficiency. During the road period the company undertook a pilot to explore how existing activity metrics could be applied to the enhancement schemes that fall within this category. This was successful and has been utilised to demonstrate efficiency on two of the schemes. For both schemes the activity metrics supported the reported value from primary evidence. This is a promising developing area of efficiency evidence that should be extended and further utilised in the interim period and beyond.

ORR view of efficiency evidence – efficiency case studies

- 5.27 National Highways reported 139 efficiency case studies across RP2. Case studies are narrative descriptions of efficiency initiatives and their financial benefits. These case studies represent the gross value of a wide range of efficiency initiatives delivered by the company in RP2.
- 5.28 In most instances, the value of embedded secondary case study evidence represented at least 90% of the reported primary embedded efficiency. However, for renewals the final value of case studies provided less support of the primary reported efficiency, with 71% coverage of the reported efficiency (84% coverage of the renewals milestone 'target' efficiency). While coverage of the primary reported efficiency is lower for renewals than other categories the renewals efficiency value includes significant adjustments for delivery beyond the plan, for example deeper pavement renewal depths. It is important that the company continue to develop in future sufficient secondary evidence to support its reported efficiencies and demonstrate value for money for taxpayers.
- 5.29 National Highways also reported case studies as primary evidence for RP2 generated measured efficiency. The value of these case studies was in line with the reported efficiency showing good evidence of the types of efficiency generated. Given that for measured efficiency case studies are the primary source of evidence it is important that the company continues to make improvements in quality to these case studies to ensure a clear, concise record of the initiatives delivered.
- 5.30 Throughout RP2, some efficiency case studies were reported with the value realised to date and a forecast value for the whole road period. In the final year of

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RP2 we challenged National Highways around the accuracy of these forecast values. The company undertook an exercise to review and update the forecast efficiency values where appropriate, sharing relevant supporting evidence with us to assess the revised values. This ensured the reported efficiency was an actual rather than a forecast value.

- 5.31 National Highways' £399 million of carry over efficiency is from projects and programmes that commenced in the first road period (RP1, 2025 to 2020), with expenditure that spans both RP1 and RP2. This is supported by case studies that we reviewed during RP1. The carry over efficiency includes £39 million relating to schemes that were cancelled during the road period. This includes both efficiencies that were and were not realised prior to the schemes' cancellations. While strictly speaking the element that had not been realised should be removed from the efficiency reported by the company, the target should also be reduced by the same amount to reflect the cancellations. Therefore, including the full £39 million does not impact our conclusion or National Highways' delivery of its target.
- 5.32 Similarly, the reported value and KPI target include efficiency relating to the schemes cancelled following the 2025 Spending Review, some of which likely will, and some likely will not, have been realised before the cancellations. For the same reasons as above, this does not affect our conclusions or National Highways achieving its target.

Other factors

- 5.33 ORR worked closely with National Highways throughout the road period to improve the way it reports and provides evidence for efficiency. This is a complex area and the impact of external factors and change to the road investment strategy (RIS) has required close engagement to ensure we can provide confidence to government in the company's reported efficiency.
- 5.34 As discussed above, for several expenditure categories the reported embedded efficiency based on delivering outputs for post efficient funding was adjusted to reach a final reported value. These adjustments reflected costs outside National Highways' control for inflation differing from the funded level and non-recoverable VAT affecting enhancements and, to a small extent, renewals. There were also efficiency adjustments for the over/under delivery of renewal outputs, including related to the depth of pavement renewals, and for under delivery of capital operations and business costs.

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- 5.35 During RP2, we commissioned a review of how National Highways had used its central risk reserve (CRR) and the implications for how the company reports, and we scrutinise, its efficiency. The company now reports annually on how its use of CRR impacts its reported efficiency. This provides greater transparency for our monitoring.
- 5.36 National Highways' efficiency evidence includes descriptions of key capability building change programmes (controlled through its wider Transformation Programme) used to support delivery of efficiency improvements during RP2. These support the company's overall efficiency case and describe how it has developed during RP2 to deliver its programme of efficiency. It is important that the company monitors and can demonstrate the impact and value for money of its business improvement programme through the interim period and during RP3. It is important that the company monitors and can demonstrate the impact and value for money of its business improvement programme through the interim period and during RP3.

Forward look

- 5.37 The 2025 to 2026 Interim Settlement requires National Highways to demonstrate efficiency through its performance reporting to ORR. This single year commitment recognises that step changes in efficiency are normally achieved over a longer period, so government determined it would not be appropriate to set a KPI target for a single year. However, it is still important that the company continues to evidence that it is efficient and effectively spending public money.
- 5.38 We worked with National Highways early in 2025 to agree principles for efficiency reporting and monitoring in the interim period. These were agreed in June 2025 and are described at a high level in the Operational Metric Manual. The principles are based on established practice from RP1 and RP2 but place greater emphasis on activity metrics to demonstrate efficient delivery.

Conclusion

- 5.39 National Highways' efficiency evidence taken as a whole is sufficient to demonstrate delivery of its efficiency KPI. The lower level of efficiency delivered in RP2 than was originally anticipated in the RIS reflects the funding changes to the RIS. We are satisfied that the agreed revisions to the KPI were appropriate and that (at least) the same level of efficiency challenge for the company was maintained.

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- 5.40 The adjustments that National Highways made to reported efficiency (taken directly from its financial reporting) to recognise the impact of external factors, have been significant to its final position. We have focused our work with the company to ensure that these adjustments are appropriate and robust. The approach to inflation adjustments in RP2 builds significantly on that taken in RP1.
- 5.41 The improvements National Highways made to how it evidences efficiency will have value in future road periods and should enable greater confidence and transparency for funders and road users.
- 5.42 As described above we expect activity metrics to have a greater role within efficiency frameworks in future. We will also work with National Highways to identify how the efficiency case studies process could be improved to reduce reporting and regulatory burden.

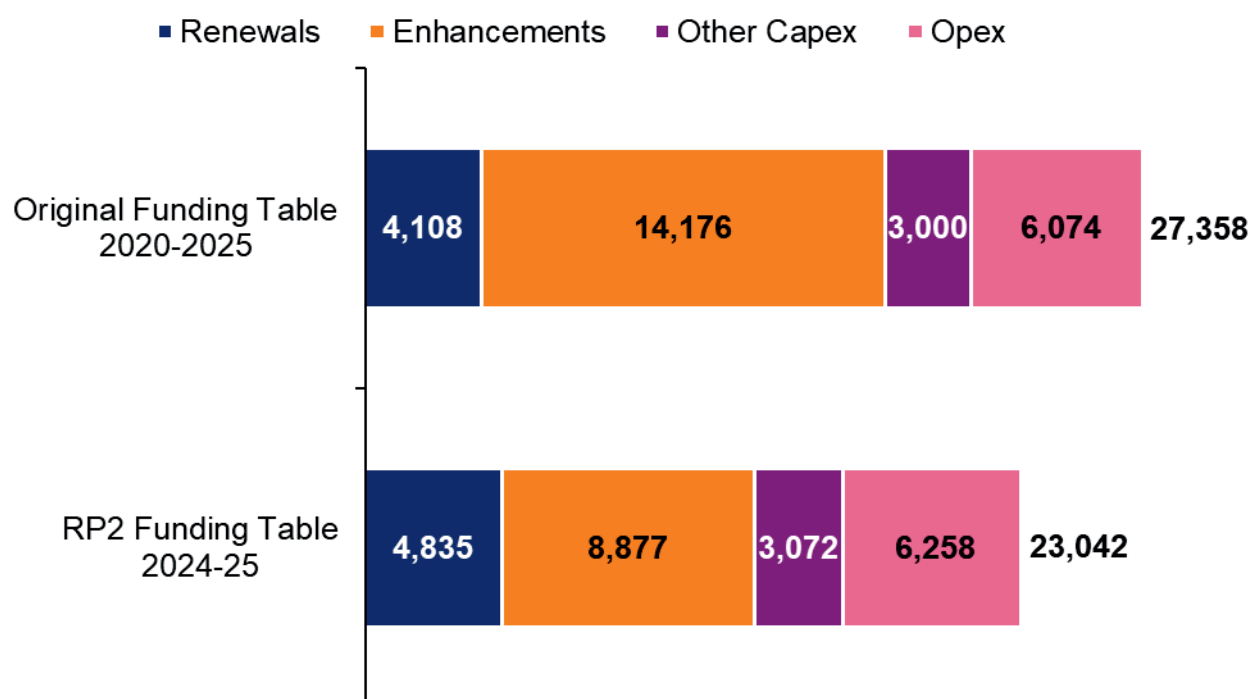
Financial Performance

- 5.43 This section discusses changes to National Highways' RIS2 funding, the company's expenditure during RP2, its forecast enhancements total outturn expenditure and use of the CRR.
- 5.44 There have been several significant external impacts on National Highways' spending and funding during RP2: a period of high inflation, delays to planning consent for enhancement schemes and government changes to the enhancements programme. The impact on the company's financial performance is discussed below.

Funding changes throughout RIS2

- 5.45 National Highways' RIS2 funding was subject to change at several points throughout RP2. Figure 5.5 compares the funding as outlined in the original [2020-2025 delivery plan](#), a total of £27,358 million compared with the funding presented in the final [2024-2025 delivery plan update](#), a total of £23,042 million.

Figure 5.5 Change in RIS2 funding from the start of RP2, (£ million)



- 5.46 There were two significant reductions in capital funding during RP2. The 2021 Spending Review reduced National Highways' funding by £3,428 million because of changes to 12 schemes with known or predicted schedule delays due to statutory planning or local stakeholder challenges. The [2024-2025 delivery plan update](#) confirmed a further reduction of £1,067 million for similar issues and the cancellation of some lower value for money schemes to ensure future RISs were affordable given wider government cost challenges.
- 5.47 National Highways increased its funding for renewals by making use of some CRR funding originally earmarked for enhancements. Smaller capital funding changes related to additional funding in year 1 of RP2 to accelerate works on the A66 Northern Trans-Pennine (£146 million) and a year 4 of RP2 transfer to operational expenditure (£100 million).
- 5.48 National Highways also met a government request to reduce its capital spending by £50 million in the final year of RP2 and reported that it was asked to deliver £15 million of unfunded activity, due to constraints on public spending.
- 5.49 Across RP2, National Highways operated with constrained budgets for operational expenditure as it was required to cover costs outside of its control and requests for additional work by government. The company received additional funding of £50

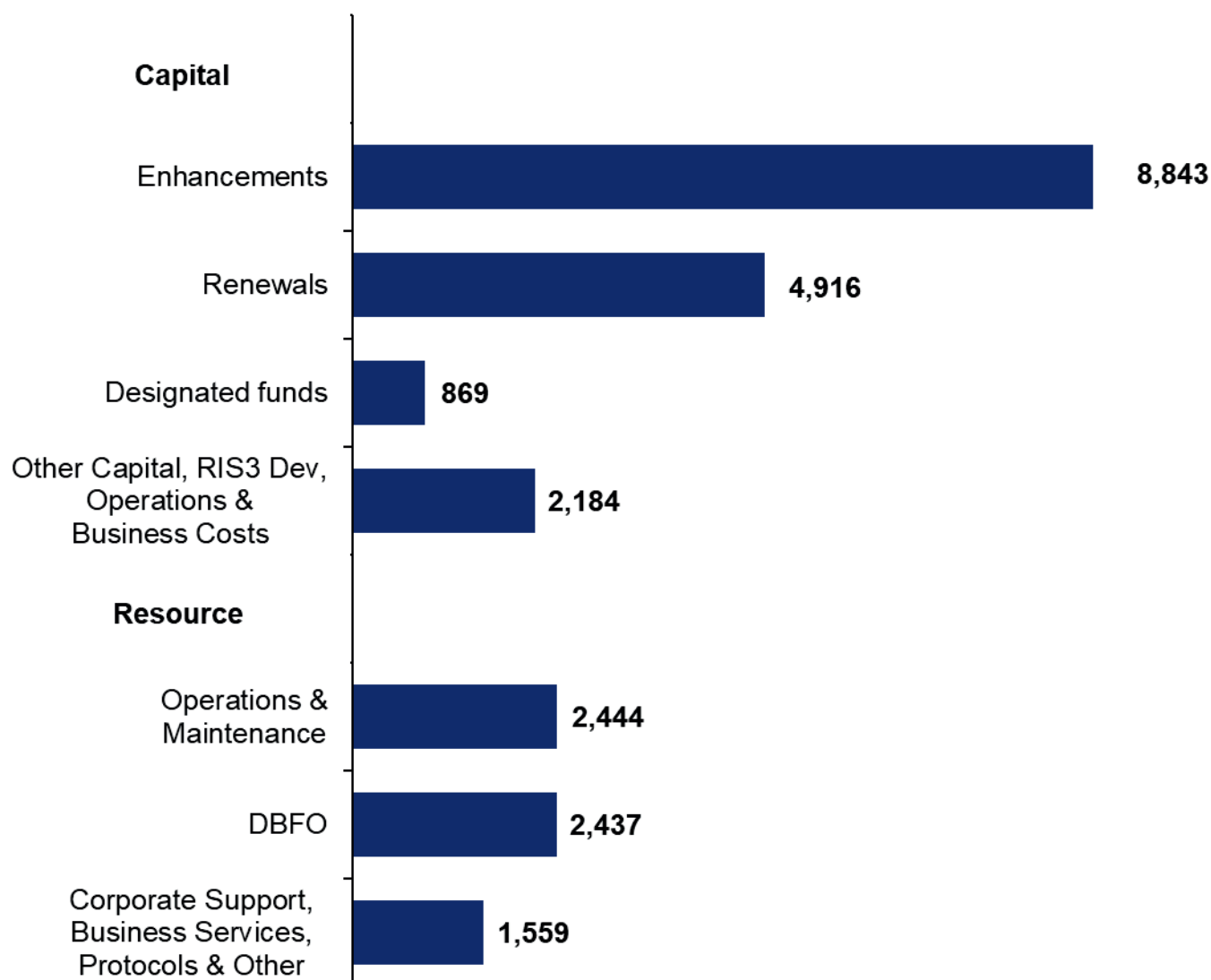
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million in the final year of RP2 from government to cover inflationary pressures, support Operation Brock (traffic management on the M20 to facilitate channel crossings from Dover) and close out costs for cancelled schemes.

Expenditure

- 5.50 National Highways spent £23,252 million during RP2, broken down to £16,811 million of capital expenditure and £6,441 million of resource expenditure. This included £235 million on non RIS activity and £23,020 million delivering RIS2. Government provided £23,042 million funding for RIS2 which included £6,258 million for resource expenditure and £16,785 million for capital expenditure. The company spent within its overall RIS funding and its resource and capital allocations in delivering the RIS.
- 5.51 Figure 5.6 shows the expenditure across both capital and resource since the start of RP2 broken down by categories of spend. This shows how the largest proportion of spend relates to the delivery of capital enhancements and renewals.

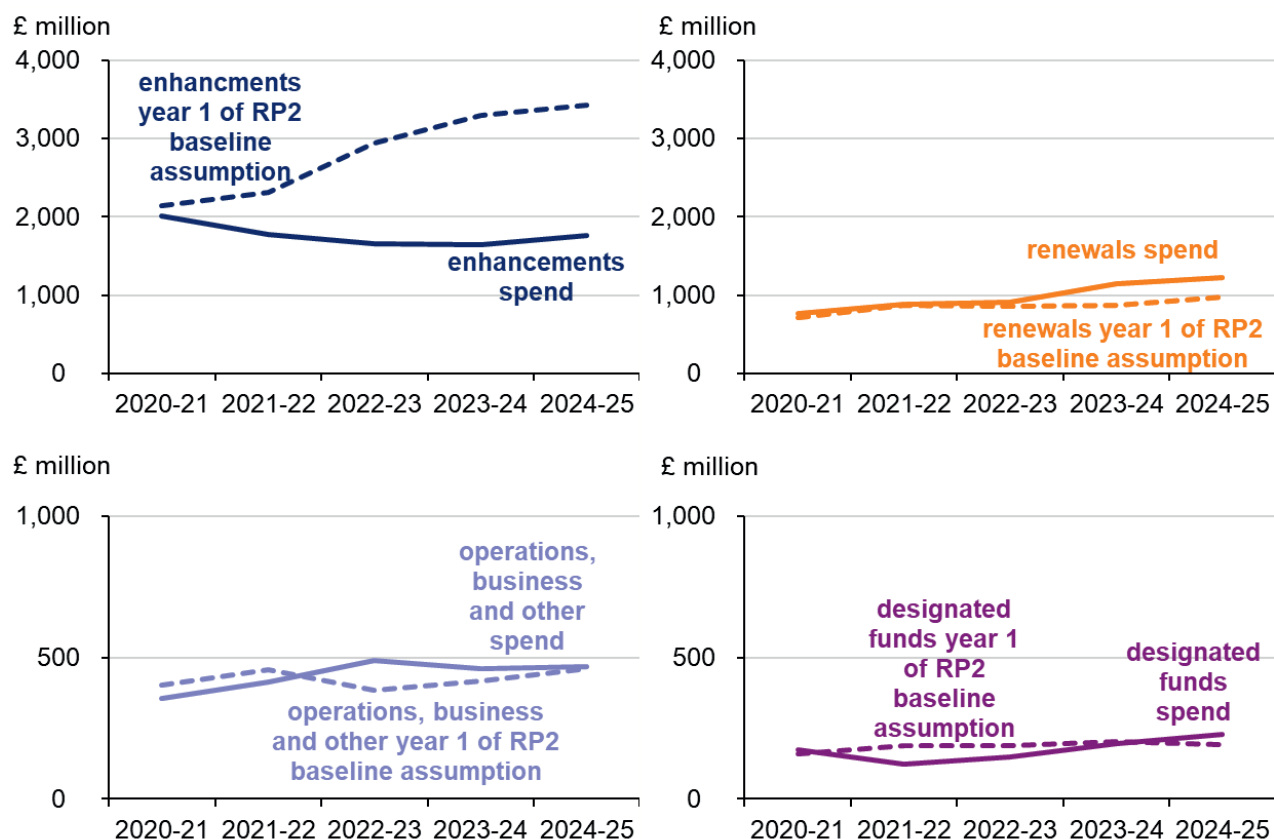
Figure 5.6 Total expenditure since the start of RP2 by category, (£ million)



Capital expenditure in RP2

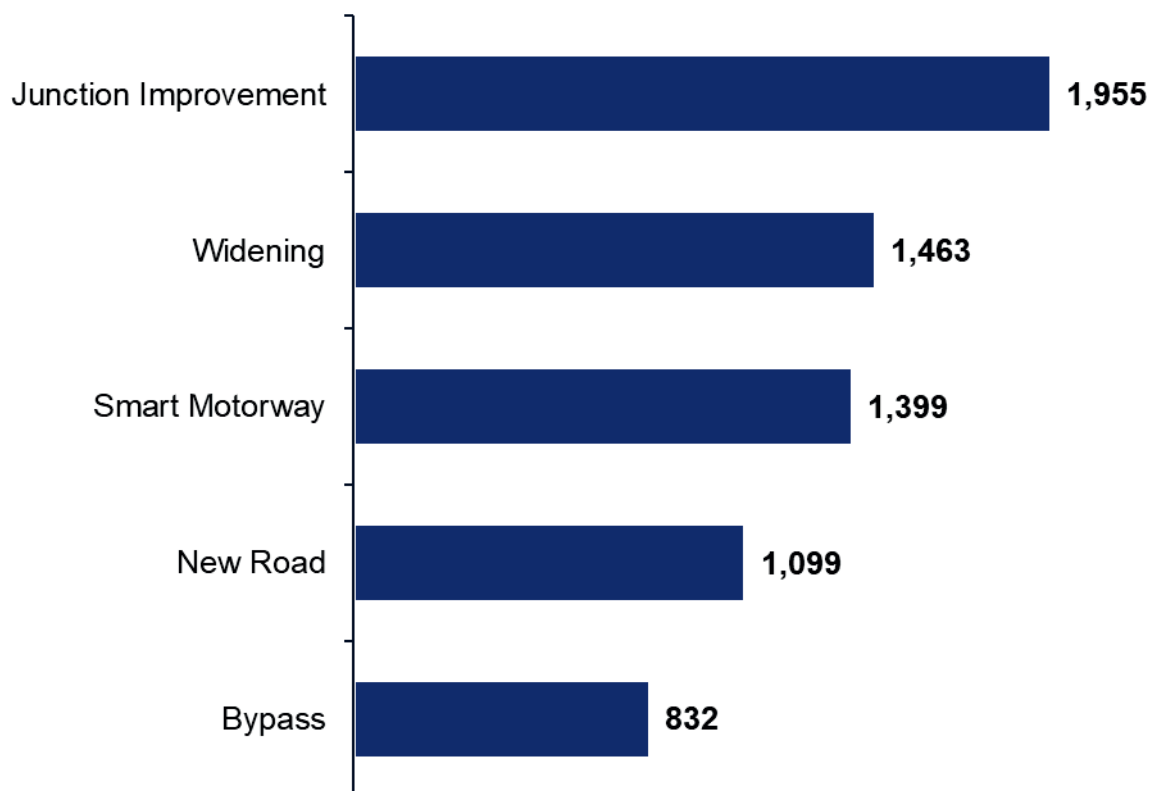
5.52 National Highways' total spending on capital was broadly in line with its final funding. However, the amount and profile differed significantly from the original plans for RIS2 because of the funding reductions during RP2 discussed above. Figure 5.7 shows how the company's spending compares to initial baseline funding plans.

Figure 5.7 Capital expenditure in RP2 compared to year 1 of RP2 baseline assumptions, (£ million)



- 5.53 National Highways spent £8,843 million on enhancements during RP2, closely aligned with the final, revised funding of £8,877 million. This was the largest category of spend. This spend was relatively evenly spread across the five years of the road period.
- 5.54 Scheme delays throughout RP2 resulted in spend against enhancements being much lower than expected against the original baseline as seen in Figure 5.7, especially towards the end of the road period. Further detail on enhancements delivery performance is in the [Enhancements delivery chapter](#).
- 5.55 Figure 5.8 shows a split of spend in RP2 across the 49 delivery plan enhancement schemes, excluding cancelled schemes, by project type. The largest proportion of spend related to junction improvement schemes, although this category also represents the largest number of schemes. Of the five different project types, four spent over £1,000 million across the road period.

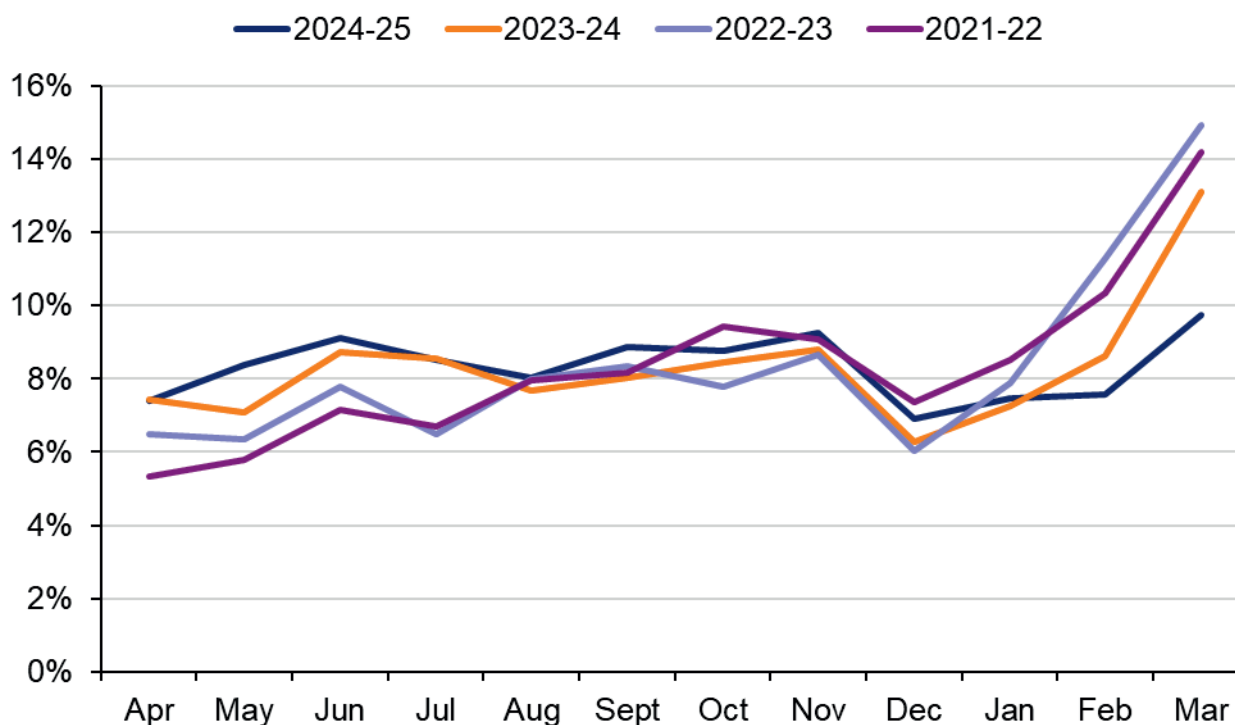
Figure 5.8 Spend by project type, excluding cancelled schemes, (£ million)



5.56 National Highways spent £4,916 million on renewals during RP2, slightly above the final, revised RP2 funding of £4,835 million. The company delivered higher than expected volumes of most asset types. However, it fell short of the target for two key asset types, concrete pavement and concrete safety barriers. Delay to enhancement schemes in the road period also resulted in the company repurposing some funding for renewals activity. Further detail on renewals delivery performance can be seen in the [Operations, maintenance and renewals chapter](#).

5.57 Figure 5.9 shows how the annual profile of renewals delivery. Spend was often higher in the later months of the year. This can be considered inefficient. Schemes delivered at the end of the year are more affected by cold and/or wet weather, limiting the working time available and requiring more shifts to deliver the same volume of work. Also, many materials are susceptible to cold and wet weather that can limit their lifespan when the renewal is carried out at the end of the year. Figure 5.9 shows how this profile improved in year 5 to be generally flatter across the financial year. The company should aim to continue this trend delivering a more sustainable profile in the interim period and beyond.

Figure 5.9 Profile of renewals spend across RP2, (%)



5.58 National Highways spent £869 million across four designated fund (DF) categories during RP2, in line with the final funding. The company spent:

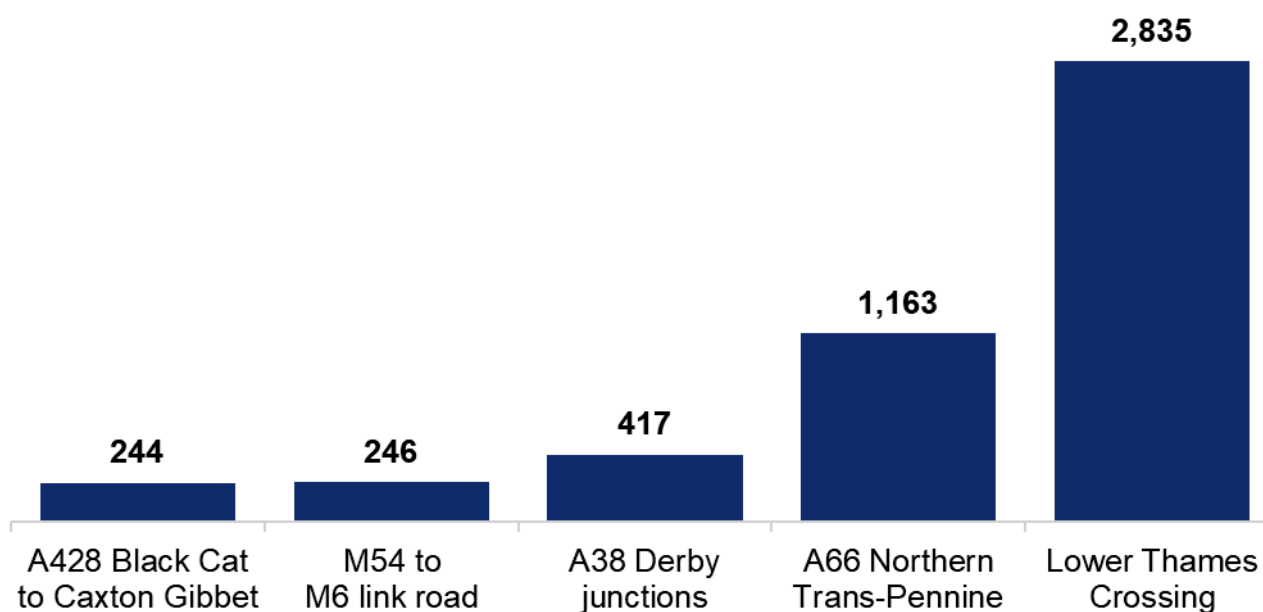
- £422 million on Environment and Wellbeing;
- £157 million on Innovation and Modernisation;
- £147 million on Safety and Congestion; and
- £143 million on Users and Communities.

5.59 Expenditure generally increased each year of the road period and in year 5 National Highways delivered its highest ever expenditure on DF of £227 million. Positively, this ramp up of activity ensured that the company utilised all of its DF funding in RP2. The company needs to ensure that it continues to have robust plans in place so that it is effectively and efficiently using these funds to deliver benefit and support its wider delivery commitments. It should also improve how it captures and reports data on the successful delivery of DF schemes for which funding has been allocated.

Capital expenditure forecast total outturn for enhancements

- 5.60 The total outturn forecast for an enhancement scheme is the total cost expected to completion. National Highways reported to us the forecast total outturn costs for each of the named delivery plan schemes across RP2.
- 5.61 Figure 5.10 shows the five enhancement schemes that had an increase in total outturn forecast of greater than £200 million since the start of RP2. This was calculated by comparing the forecasts produced at March 2025 and June 2020. The largest increase relates to the Lower Thames Crossing scheme where the forecast increased by £2,835 million driven primarily by delays in approval of the scheme. As noted in section 3, National Highways should continue to implement, embed and monitor the effects of the actions it has identified to continuously improve its estimating and cost control.

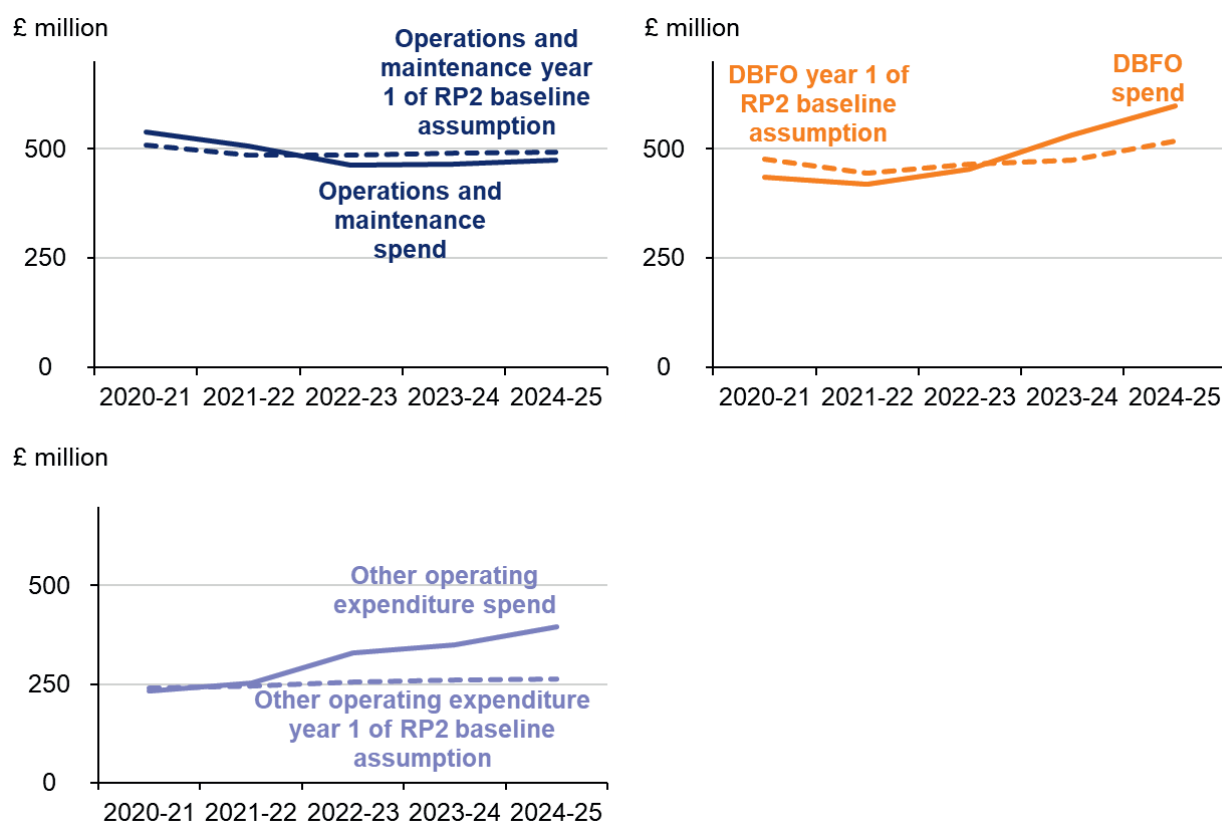
Figure 5.10 Largest increases to total outturn forecast since the start of RP2, (£ million)



Operational expenditure

- 5.62 National Highways' operational expenditure across RP2 was higher than originally expected in the plans for the RIS because of the impact of inflation and additional activity requested by DfT during the road period. Figure 5.11 shows that this mainly impacted the company's Design Build Finance and Operate (DBFO) contracts and 'other expenditure' on corporate support, business services, and protocols.

Figure 5.11 Operational Expenditure in RP2 compared to year 1 of RP2 baseline assumptions, (£ million)



5.63 National Highways spent £2,444 million on operations and maintenance during RP2. During RP2 operations and maintenance activity was impacted by several cost pressures, including higher than expected inflation, increased incidents on the network, and maintenance backlogs. Operational costs were affected during RP2 by recruitment delays, higher than expected third party income (or 'green claims') in some years and damage to network property costs being capitalised, which reduced operational pressure. Further details on operations and maintenance delivery performance can be found in the [Operations, maintenance and renewals chapter](#).

5.64 National Highways spent £2,437 million on its DBFO contracts. Figure 5.11 demonstrates that the company spent a smaller proportion of the budget at the beginning of RP2. This was due to external factors such as the pandemic that reduced traffic volumes during the early years of RP2 and therefore led to lower service charges. Further savings were also identified through contract reviews and adjustments to repayments.

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5.65 Corporate support, business services, and protocols combined spend was £1,559 million across RP2. Expenditure in these categories increased over the period. A significant portion of this was driven by Operation Brock and close out costs for cancelled schemes in year 5, although National Highways received additional funding to help cover this.

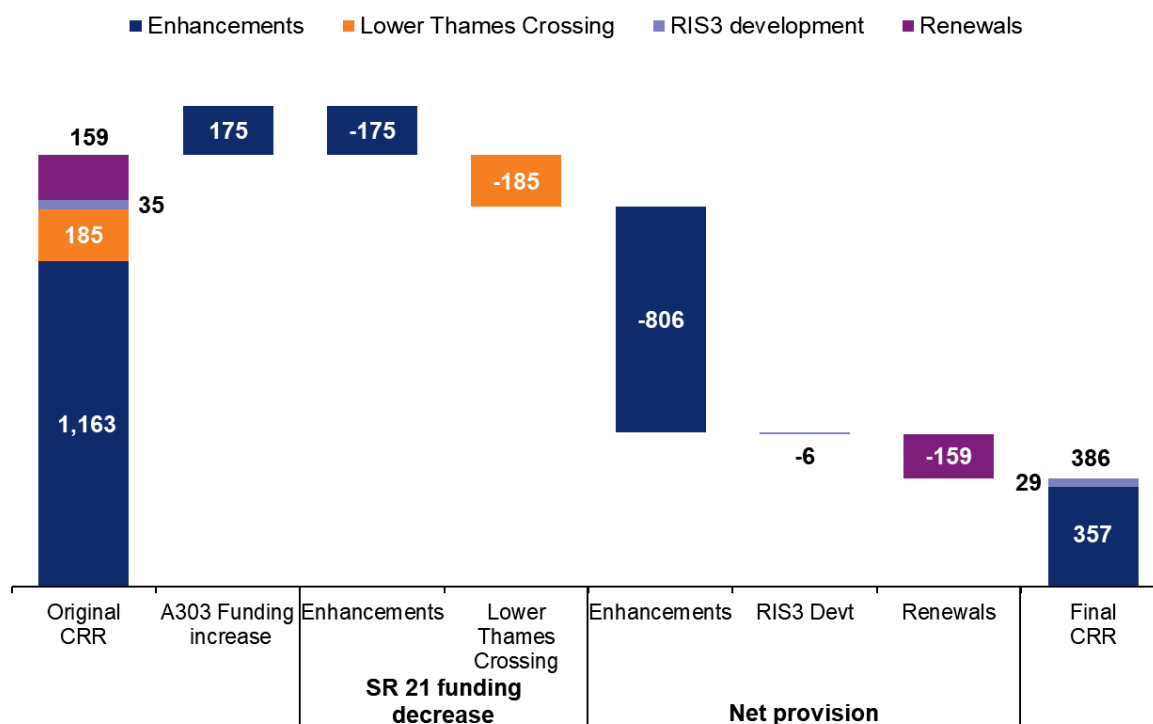
Central risk reserve

5.66 Figure 5.12 shows how the CRR value varied alongside changes to enhancements funding. Following the 2021 Spending Review, the CRR was reset to £1,357 million with the removal of a specific CRR allocation for the Lower Thames Crossing scheme.

5.67 Enhancements schemes and other enhancements budgets received a net £806 million from the CRR. However, this included the CRR receiving funds back from some schemes with underspends in RP2 because of delays. The renewals programme received £159 million and RIS3 development schemes received £6 million.

5.68 There was £386 million of the CRR unallocated at the end of RP2. However, this fully offset remaining cost pressures on capital budgets, meaning that National Highways spent in line with its RIS2 capital funding.

Figure 5.12 Use of Central Risk Reserve (CRR) during RP2, (£ million)



6. Looking ahead and future growth

As National Highways seeks to build on its performance and delivery in the second road period (RP2), it must reflect on the lessons learned from both its successes and where it has fallen short of expectations. In particular, we expect the company to have more robust plans in place to enable it to better evidence the consequence of the decisions it takes during the road period. This is important to ensure that the company continues to deliver improved outcomes for road users and better value for taxpayers.

RIS2 delivery

- 6.1 National Highways had to manage several challenges to its delivery over RP2.
- 6.2 The start of RP2, in April 2020, coincided with the outbreak of the pandemic. This meant that National Highways began the period responding to events that were not anticipated when government set the second road investment strategy (RIS2). As the period progressed, the company was required to manage significant uncertainty and financial pressures due to delays in planning decisions – including legal challenge; high inflation; smart motorway programme changes; delays in government decisions; and wider pressures on public spending. Consequently, it had to repeatedly revise its original plans to respond to these challenges.
- 6.3 As set out across this assessment, during RP2 we prioritised gaining a clear understanding of the challenges and risks to National Highways' evolving programme. We placed an emphasis on early identification to prevent these risks becoming issues that affect road users. We did this by seeking to understand – and helping the company to better understand – the decisions it took and the evidence on which it did so. This has allowed us to take proportionate and targeted action, considering the environment within which the company had to operate, to promote improvements in its performance and delivery.

Promoting improvements in performance

- 6.4 During the first two years of RP2, we highlighted concerns about National Highways' capability underpinning its performance and delivery. For example, we identified that the company's plans were insufficient to deliver its key performance indicator (KPI) target of no net loss of biodiversity by the end of the road period.

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Our challenge and increased engagement prompted the company to develop a stronger plan that ultimately enabled it to achieve the target.

- 6.5 We identified other areas where National Highways' capability and planning similarly did not match the expected outcomes in the early part of the road period. This included the company's performance in relation to road surface condition and traffic officer response times on smart motorways. Again, through our proactive interventions the company identified and made the necessary improvements to meet its targets, so road users experienced smoother, safer journeys.
- 6.6 Even so, as the road period progressed, we saw an increasing number of areas where National Highways' performance had dipped, and risks that we raised previously had crystallised. The number and breadth of our concerns, and the proximity to the end of the road period, meant that, in February 2024, we launched an investigation to understand the reasons for the dip in the company's performance and to identify improvements that it could make to rectify this.
- 6.7 Our investigation found National Highways to be non-compliant with its licence (condition 7.3(e)) in relation to information the company must collect, record and provide to us to enable us to carry out our statutory functions to ensure that it is delivering efficiently and effectively for road users and taxpayers. We subsequently identified improvements that the company needed to make to address this.
- 6.8 The investigation further identified areas that National Highways needed to improve, particularly on how it gathered and provided evidence on how it made decisions and how it learned lessons and applied them to improve performance and/or delivery. For example:
- in relation to the RIS2 pavement condition KPI, we found that National Highways was unable to demonstrate that the regional level plans it had put in place were well aligned to achieving its national target; and
 - for the KPI target to mitigate delays on the strategic road network (SRN), we found that National Highways was unable to consistently quantify the benefits of the actions it was taking to improve performance. This limited its ability to assess whether these actions were effective and therefore provided good value for money.
- 6.9 Improvements in the timeliness and detail of the information that National Highways provides to us will better support it, and our, understanding of the risks

and mitigating actions the company is implementing, or needs to do so, in future. The company's continuous improvement in these areas will support our own efforts to be proportionate and targeted in our approach and ensure that we can provide timely and well evidenced advice to government, and transparency to the public, about the performance and efficiency of the company.

- 6.10 National Highways responded positively to the investigation and developed a [comprehensive improvement plan](#) to respond to the findings. The actions in the plan aim to improve the company's capability, evidence and assurance, and planning. In particular, it set out how it aimed to improve the quality, relevance and timeliness of the evidence and information it provides to ORR.
- 6.11 National Highways made good progress delivering the plan over the last year of the period, as set out in the [six month update to the plan](#). It is continuing to do so into the interim period. It is important that the company continues to implement at pace the improvements it identified in its plan. This includes improving its ability to understand the basis upon which it makes interventions, their impacts and how these translate into improved performance and delivery for road users.

Continuous improvement

- 6.12 As we look to ahead to a potentially more financially constrained future, it will be increasingly important for National Highways to clearly evidence and effectively articulate the needs of the network, along with the associated risks. Doing so will be essential to securing the appropriate level of funding for a multi-year period and ensuring this nationally significant asset continues to meet the evolving needs of the country.
- 6.13 The future success of National Highways depends on its ability to meet emerging challenges and changes to demands placed on the network. This will require improvements in its ability to identify issues, evidencing decisions and actions, acknowledging shortcomings, understanding root causes and implementing lessons learned. The company needs to take forward improvements it has already identified, notably entering each multi-year road period with clear, unambiguous plans. Any deviation from these plans must be robustly justified, with transparent evidence and a clear articulation of the impact on network performance, road users and the investment of public funds.
- 6.14 Through our engagement with National Highways during this end of road period assessment, it has identified further lessons learned that it will apply moving

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forwards to drive better efficiency, delivery and performance. Specifically, the company has:

- developed a decision making framework to support whole company improvements to how it gathers and understands the evidence it uses to make decisions. From the interim period, we expect this to start generating better information and to allow National Highways to more proactively identify and react to emerging risks;
- set out a programme of analysis and research to improve its understanding of delays on the strategic road network (SRN) and support development of regional delay plans. The aim of which is to improve National Highways' ability to prioritise the actions that it takes to reduce delays to ensure that these are as targeted and effective as possible; and
- developed and implemented improved regional plans that demonstrated a more assured approach to achieving its national pavement condition KPI in the final year of RP2 compared to earlier in the period.

6.15 In addition to those lessons identified by National Highways, on the basis of what we have observed of the company's performance and delivery, and the work we have commissioned and undertaken over RP2, the company should also demonstrate going forward how it:

- has learned from RP2 the importance of evidencing the reasons for deviation from its original plans;
- continues to improve its capability to demonstrate the impacts of its decisions on the performance of, and future risks to, the network;
- continues to improve its asset management capability and understanding of its asset base, maturing its capability and governance to support growing renewals delivery; and
- has mitigated the causal factors of missed commitments (specifically commercial management and scheme asset data issues) to reduce the likelihood of future recurrence.

6.16 We have seen evidence that the improvements that National Highways has delivered in RP2 – internal capability improvements and deeper understanding of what it needs to deliver, the trade-offs it must make and how best to make those – are resulting in better outcomes for road users and communities. However, it is

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important that the company continues to improve how it uses evidence to demonstrate that it is making the best use of public funds as it prioritises its activities for the benefit of road users. Based on the commitments from the company to implement the improvements that it has identified, that we expect to be in the form of a plan, on balance, we have not identified any non-compliance that warrants further action by us.

- 6.17 We will work with National Highways and the Department over the interim period, and as the third road investment strategy (RIS3) is developed, to ensure that these lessons are embedded and applied. This will help to set the company up for long term success and deliver better outcomes for road users, taxpayers and communities and support economic growth.